The revised annotated bibliography contains abstracts of 345 documents published between January 1960 and March 1968 on specific instructional methods and techniques for groups and individuals. Among methods included are: job instruction, apprenticeship, demonstration, coaching, internship, correspondence and independent study, programed instruction and materials, lectures, group discussion, conferences, case method, role playing simulation, and sensitivity training. A subject index is included. (pt)

# training
# METHODOLOGY

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## PART III : INSTRUCTIONAL METHODS AND TECHNIQUES

### An Annotated Bibliography

This annotated bibliography is the third of four indicating current thought on training methodology. Content for the four publications was selected from over 6,000 items. Most were published from January 1960 to March 1968. A few earlier items are also included because of their significance. Some useful material had to be omitted because of budgetary limitations related both to search and final printing; the sheer scope of the field precluded complete coverage of the literature. Certain annotations were borrowed from other publications (details are explained on the Credits page).

In the expectation that these bibliographies will be ongoing, the project administrators (listed in the Introduction) welcome comments and suggestions with respect to additions, deletions, classification system, indexing, and technical or typographical errors.

ERRATA SHEET

*Training Methodology*
Part III: *Instructional Methods and Techniques*

p.  3  Reference #14:        pp. 18-26, 28, 30, 34-35

p.  7  Reference #21:        title:  The autonomous adult learner.

p.  7  Reference #33:        Cooperative Extension Service, not Extensive

p. 17  1st Reference
       (Daniel, P.):        pp. 11-15, not 1-5

p. 20  Reference for
       Pettes:              180 pp.

p. 29  Reference #96:        252 pp., not 262 pp.

p. 36  Reference #124:       pp. 44-46, not pp. 44-51

p. 37  Reference #135:       pp. 141-148, not pp. 105-113

p. 40  Reference #143:       Spring 1948, not 1968

p. 42  Reference #150:       vol. 59:3, not 29:3
p. 47  Reference #170:       Published as The Official Conference Guide, not Conference
p. 56  Reference            Management Handbook
       after #204:          at end of entry add: (Located too late for indexing)
p. 56  Reference #205:       1st line in description:  change outselves to ourselves

p. 56  Reference #206:       129 pp., not 173 pp.

p. 58  Reference #212:       second author:  HELMER MARTINSON, not HEIMER
                             pp. 323-334, not 310-323

p. 59  Reference #214:       August 1966, not 1964

p. 64  Reference #233:       503 pp., not 821 pp.

p. 65  Reference #235:       in title:  incident process of case study, not incident method

p. 67  Reference #246:       pp. 23-24, 54

p. 67  Reference #248:       pp. 2-6, not pp. 2-5

p. 69  Reference #251:       author:  BARBARA WAND, not WARD

p. 72  Reference #265:       pp. 23-25, not 4-7

p. 74  Reference #273:       pp. 17-23, not 17-22

p. 77  Reference #289:       103 pp., not 50 pp.

p. 80  Reference #301:       pp. 11-15, not 11-16

p. 94  INDEX:  Group Observer, Recorder (Instructional Technique):  233, not 232

p. 95  INDEX:  Involvement, Participation in Instruction:  last line:  267, 278, 284,  307,
               318, 331

p. 96  INDEX:  Laboratory (Instructional Method)--Sensitivity Training:  297-345, not
               297-344

# TRAINING METHODOLOGY

## Part III: Instructional Methods and Techniques

## An Annotated Bibliography

### (REVISED)

Public Health Service Publication No. 1862, Part III

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# INTRODUCTION

This bibliography pertains to specific instructional methods and techniques. It contains selected references on methods and techniques for individuals and groups. It is the third of a group of four on training methodology. References in all four are arranged in classified order, annotated, and indexed. Additional information about concepts emphasized in this publication may be located by reference to indexes of other publications in the group. (In some references coverage of a particular concept was secondary or even peripheral to the major topic, but its inclusion was noted in the indexing to emphasize relationships.)

Other titles in the group are:

*Training Methodology—Part I: Background Theory and Research*

*Training Methodology—Part II: Planning and Administration*

*Training Methodology—Part IV: Audiovisual Theory, Aids, and Equipment*

In a related group of classified, annotated, and indexed bibliographies on mental health inservice training, training concepts are highlighted in annotations and indexing. The group consists of three publications:

*Annotated Bibliography on Inservice Training for Key Professionals in Community Mental Health*

*Annotated Bibliography on Inservice Training for Allied Professionals in Community Mental Health*

*Annotated Bibliography on Inservice Training in Mental Health for Staff in Residential Institutions*

These seven publications were developed as a joint effort of the National Institute of Mental Health and the National Communicable Disease Center of the Health Services and Mental Health Administration, Public Health Service, U.S. Department of Health, Education, and Welfare. The project was administered by the National Institute of Mental Health's Community Mental Health Center's Staffing Branch of the Division of Mental Health Service Programs; the Continuing Education Branch of its Division of Manpower and Training; and the Training Methods Development Section of the National Communicable Disease Center's Training Program.

## ACKNOWLEDGMENTS

# CREDITS

## CONTENTS

# METHODS AND TECHNIQUES (GENERAL)

AKER, GEORGE F. (comp.). Adult education: proce-
dures, methods and techniques; a classified and
annotated bibliography: 1953-1963. Syracuse:
The Library of Continuing Education at Syracuse
University and University College of Syracuse
University, 1965. 163 pp.

This bibliography was prepared for the Univer-
sity of Chicago Program of Studies and Training in
Continuing Education and is restricted to those writings
in which attempts have been made to accurately describe
and define certain adult education processes and
phenomena. The author was motivated to compile this
bibliography after discovering that the literature did not
contain a single source of information that summarized
the major descriptive writings, theoretical interpreta-
tions, and research findings in the area of adult
education methodology and/or technology. The book is
divided into five parts. Part I is devoted to general
references in adult education procedures; Part II
contains a series of articles and papers written about the
specific area of residential centers and continuing educa-
tion; and Parts III to V present the literature that relates
to specific methods and techniques which are designed
to facilitate the dissemination of information or to
foster the acquisition of knowledge. Parts III to V are
subdivided according to individual methods (apprentice-
ship, correspondence, internship, tutorial); group
methods (class, clinic, community development,
conference, convention, demonstration, institute, labora-
tory, seminar, study group, short course, trips, tours and
travel, workshop); and specific techniques (brainstorm-
ing, buzz groups, colloquy, debate, forum, group
discussion, interview, lecture, panel, role-playing,
symposium). An author index is included. The compiler
states that writings in the area of inservice education
among the various professions were not searched. At the
completion of his work (1963), he found that the
bibliography revealed an almost complete lack of
theoretical writings in the areas covered, a moderate
amount of research, and "an abundance of articles which
purport to explain when and how to make the best use
of the various methods and techniques about which so
little is known!"                                    (1)

BEECROFT, ROBERT S. The effectiveness of different
training methods in school situations (Staff
memorandum, HumRRO Division No. 1, System
Operations). Alexandria, Va.: Human Resources
Research Office, September 1955.

Objective investigations of the effectiveness of
different training methods in school situations are
reviewed. Principal conclusions are that (1) although
some lessons are learned better under one overall
method of presentation than others, with different
subject matter there is no clear evidence of superiority
of one method of presentation; (2) effective instruction
seems to depend largely on factors that are internal to a
lesson rather than being dependent on the method of
presentation. Such factors as repeating points within a
lesson, telling students specifically what they should
learn, and summarizing the principal points are likely to
produce effective instruction. (HumRRO)          (2)

BERGEVIN, PAUL and DWIGHT MORRIS. Group
processes for adult education. Bloomington,
Ind.: Community Services in Adult Education,
1951. 86 pp.

Presented in outline form are a number of
suggested techniques which should prove helpful in the
development of adult educational activities. The book
was designed to serve as a textbook in a two-day clinic
conducted by Community Services Clinic in Adult
Education in Indiana for practical demonstrations and
background information on the use of the devices
outlined in the book. The contents are: Part I, Explana-
tory Statement; Part II, Devices for Group Meetings—
Speech, Speech-Forum, Panel, Panel-Forum, Symposium
(Modern Concept), Symposium-Forum (Modern
Concept), Colloquy, Group Discussion, Conference,
Convention, Committee, Institute, Seminar, and Work-
shop; Part III, Appendix, A—Abbreviated Table of
Advantages and Limitations, B—Methods Listed in Order
of Formality; Part IV, Selected Bibliography (Books,
Pamphlets, Magazine Articles).                     (3)

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BERGEVIN, PAUL, DWIGHT MORRIS and ROBERT M. SMITH. Adult education procedures: a handbook of tested patterns for effective participation. Greenwich, Conn.: The Seabury Press, 1963. 245 pp.

The book is designed as a handbook for the selection and use of adult education procedures in a great number and variety of institutions. The procedures described have been developed and tested with many thousands of persons in hundreds of settings and situations. Materials are presented in a simple, direct form for use by large numbers of adults of varying educational background. Chapters are: (1) Introduction: Keeping Adult Education in Perspective (Some Key Terms; The Limitations of Procedures; Some Suggestions; Trained Leadership is Not Enough); (2) Planning Adult Education Activities (The Need for Systematic Planning; Why Planning Is Important; Who Plans?; A Flexible Procedure for Planning—Six Steps; How to Use the Six-Step Planning Procedure—An Example; An Analysis of the Example; Résumé of Some Factors to Consider When Selecting Adult Education Procedures); (3) Fourteen Educational Techniques (Colloquy; Committee; Demonstration; Field Trip; Forum; Group Discussion; Interview; Panel; Quiet Meeting; Role-Playing; Seminar; Speech; Symposium—Ancient Concept; Symposium—Modern Concept); (4) Six Subtechniques (Audience Reaction Team; Buzz Sessions; Idea Inventory; Listening and Observing Groups; Question Period; Screening Panel); (5) Some Educational Aids (The Annotated Reading List; The Case History; The Exhibit; Films, Filmstrips, and Slides; The Information Brief); (6) Designing and Conducting Clinics, Institutes, and Workshops. An appendix provides an annotated reading list concerning adult education procedures and a glossary of terms relating to the procedures.                    (4)

DePHILLIPS, FRANK A., WILLIAM M. BERLINER and JAMES J. CRIBBIN. The accomplishment of skill training. IN THEIR Management of training programs. Homewood, Ill.: Richard D. Irwin, 1960. pp. 298-309.

Included in this section are brief discussions of advantages, disadvantages, and procedures for on-the-job training, apprentice training, vocational and technical education programs, vestibule training, and military simulation training.                    (5)

DePHILLIPS, FRANK A., WILLIAM M. BERLINER and JAMES J. CRIBBIN. Methods of instruction—variety is the spice of training. IN THEIR Management of training programs. Homewood, Ill.: Richard D. Irwin, 1960. pp. 165-189.

Criteria for selecting a given approach are outlined and the nature, advantages, limitations, and suggestions for use are delineated for: lecture, case study, role-playing, discussion and conference procedures, demonstrations. Also considered briefly are: panel discussions, resource people, committee reports, question boxes, debates, experimentation, problem-solving exercises, and brain-storming.                    (6)

EELLS, WALTER CROSBY. General teaching methods. IN HIS College teachers and college teaching: an annotated bibliography on college and university faculty members and instructional methods. Atlanta, Ga.: Southern Regional Education Board, July 1957. pp. 169-219.

Annotated entries (534) for books and articles on the following methods are presented: (1) general (references on more than one method); (2) audiovisual (general, films, radio, recordings, television); (3) case method; (4) cooperative education; (5) demonstration; (6) discussion; (7) individualized instruction (including independent study, tutorial, field work); (8) laboratory teaching; (9) lecture; (10) library; (11) recitation; (12) seminar (including workshops).                    (7)

GOETZ, BILLY E. and WARREN G. BENNIS. What we know about learning and training. Personnel administration 25:2, March-April 1962. pp. 20-29, 63.

The article presents principles of human learning within the classroom and evaluates methods of teaching, particularly as they concern business education. It examines principles of simulation, the laboratory approach, involvement, diagnosis-action, and variety as applied to the lecture, audiovisual techniques, the case method, role-playing, discussion seminars, experiment, the laboratory approach, reading, and teaching. The conclusion emphasizes the importance of experimental flexibility on the part of the teacher. (USCSC 2, edited) (8)

GOLDEN, OLIVE H. Training techniques; a bibliographic review (Significant Sources in Management-Organization-Industrial Relations, no. 5, September 1955). Chicago: University of Chicago Industrial Relations Center, 1956. 24 pp.

This booklet covers the conference method, the case method, role-playing, forced leadership training,

audiovisual aids. Evaluative reviews and annotations are included. *(USCSC 2, edited)* (9)

GOODMAN, LOUIS S. Training—how many methods do you know? **Supervisory management** 4:11, November 1959. pp. 32-33.

A chart is presented explaining sixteen training methods in these terms: what it is; how it works; and when to use it. *(USCSC 2, edited)* (10)

HALSEY, GEORGE. Other training methods and devices. IN HIS Training employees. New York: Harper & Brothers, 1949. pp. 80-97.

A brief listing of some advantages and disadvantages of the lecture method is followed by discussion of eleven suggestions for the preparation and presentation of talks. Other methods briefly discussed are: correspondence training, guided reading, travel, asking questions of the group being lectured to (example given), role-playing (example included), and the true-false questionnaire (example given). (11)

**How to use role playing and other tools for learning** (Leadership pamphlet no. 6). Washington, D.C.: Adult Education Association of the U.S.A., 1956. 48 pp.

After cautioning against being concerned with methods *per se* at the expense of learning goals, suggestions for using a variety of methods are given in the following articles: Learning Through Role Playing, by Grace Levit and Helen H. Jennings; A Case Example (of role-playing), by G. Levit and H. H. Jennings; Check-list of Tools for Learning, by Elbert W. Burr and Donald P. Smith; Audience Role Playing, by Norman R. F. Maier; Some Program Patterns, by Homer N. Calver and Wiltrude L. Smith; Why a Problem Census? by Harold Proshansky; How to Get Feedback, by H. Proshansky; Choosing the Right Audio-Visual Aid, by Samuel Freeman and Miriam Lipman; Take a Field Trip, by Mayme D. Kritzmacher; Inventing New Tools, by Russell Hogrefe. The Checklist of Tools for Learning is a chart briefly presenting special purposes and uses of specific resources organized under the headings: human resources (speaker, debate, symposium, panel, group interview, book review, chalk talk, dramatics, consultant or resource person, demonstration, recital, performance); printed materials (books, pamphlets, study guides, discussion guides, manuals, current events publications, bibliographies, reading lists); audiovisual aids (blackboard, motion picture, slides, opaque projections, filmstrips, charts, graphs, maps, globes, photographs, exhibits, bulletin boards, dioramas, models, mockups, specimens, puppets, radio, television, phonograph

records, tape or wire recordings) and group activities (field trips, excursions, pageants, role-playing, discussion, arts and crafts activities, skits). (12)

KIRKPATRICK, DONALD L. Training meetings— enjoyable versus beneficial. **Training directors journal** 19:12, December 1965. pp. 20-26.

In planning a training meeting, the objective, the method, the subject content, and the training technique must be determined. Brief descriptions of films, case studies, buzz groups, audiovisual aids, demonstrations, and role-playing as techniques are given. Steps in the incident process and tips for using films effectively are listed. Chalkboard, slides, overhead projector, and hook n'loop board are all described under audiovisual aids. (13)

LATIMER, JAMES. Psychological aspects of training in industry. **Training directors journal** 18:5, May 1964. pp. 18-26, 28.

An extensive review of various training methods now in use is presented in response to the need for initial and continued training on all levels, from director to apprentice. Different methods are cited, such as audiovisual programs, verbal methods (lecture, conference), case study, role-playing and psychodrama, gaming, experimentation, and sensitivity training. Psychological applications of these methods are discussed. *(USCSC 2, edited)* (14)

LEEMANS, ANNE F. Teaching methods: a survey. IN Stone, Donald C. (ed.). **Education in public administration; a symposium on teaching methods and materials.** . . . Brussels: International Institute of Administrative Sciences, 1963. pp. 29-43.

While the emphasis is on teaching public administration, the techniques could be applicable in any training situation. Methods discussed include: lecturing, seminars, case studies, role-playing and use of imaginary cases, group project assignments, demonstrations, field work, supervised internships, reading, and tutorials. *(USCSC 2)* (15)

LYNTON, ROLF P. and UDAI PAREEK. Training methods. IN THEIR **Training for development.** Homewood, Ill.: Richard D. Irwin and The Dorsey Press, 1967. pp. 107-172.

Two training theories are challenged. The first formulation challenged is the juxtaposition of training and experience, and the second is the juxtaposition of theory and practice. It is important for trainers to make

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a distinction between an event (a training session) and the participants' experience. Effective training can hope to ensure opportunities for the occurrence of relevant experiences; but it does not juxtapose the two. Training tries to relate theory and practice; these cannot be juxtaposed either. Nine training requirements for on-the-job training are: (1) to provide successive glimpses of the job so the required skill can be grasped, practiced, and combined with other parts; (2) to provide time and resources so that the trainee can convert the training event into an experience for himself; (3) to protect the participant and his organization against personal harm and error arising from lack of knowledge and skill; (4) to make the learning process itself conscious for the participant so that he knows how to set about dealing with new situations as they arise and can go on learning; (5) to expose participants to ideas and methods beyond those now available within the organization; (6) to provide opportunities for experiment beyond the tolerance of an operating organization and for feedback of results; (7) to give participants the experience of belonging to groups beyond the organization; (8) to provide opportunities to step back from day-to-day tasks to think about one's job as a whole; and (9) to provide opportunities for very intensive experience through a degree of consistency and training skill. The definition, advantages, and limitations of seven methods are discussed in detail: (1) training in the field; (2) simulating real life: role-playing and business games; (3) laboratory training for personal and organizational development; (4) sampling real life: incidents and cases; (5) individualized training; (6) seminars and syndicates; and (7) the lecture. Training methods are discussed in terms of objectives, stages of the learning process, and trainer skills. Four readings are included: (1) Simulating Reality: Role-Playing, by Udai Pareek; (2) What is Laboratory Training, by Edgar H. Schein and Warren G. Bennis; (3) The Case Method, by Harriet Ronken Lynton and Rolf P. Lynton; and (4) Programmed Instruction, by H. Oliver Holt. (16)

MAGNER, GEORGE W. and THOMAS L. BRIGGS. Resources and methods of staff development used in mental health facilities. IN THEIR Staff development in mental health services. New York: National Association of Social Workers, 1966. pp. 121-126.

Specific methods are discussed under the two headings, Community Resources and Resources of the Social Work Department. Under Community Resources, area professional and undergraduate schools, professional meetings and conferences, specific resource people from the community, collaborative case conferences, and field trips are discussed. Under Resources of the Social Work Department, methods described are: provision of social work supervision (individual, group, and peer); social work staff meetings; specific case aide

or trainee staff development projects; journal clubs; provision of funds and/or time off for attendance at conferences and institutes; consultation; provision of funds for graduate training; provision for a staff development or training position; and general institutional resources (professional and film libraries; interdiscipline training committees; coordinated lecture series; joint or coordinated orientation programs; interdiscipline teaching staffs; attendance at lectures and seminars of other disciplines; and specific institution-sponsored projects or conferences). (17)

McGEHEE, WILLIAM and PAUL W. THAYER. Methods and techniques in industrial training. IN THEIR Training in business and industry. New York: John Wiley & Sons, 1961. pp. 184-224.

Production employees are trained through rather broad methods such as on-the-job, vestibule, and apprentice training. Executive training includes broad methods of coaching, apprenticeship, and formal classroom procedures. Within these broad areas a variety of techniques are used such as role-playing, case study, lectures, visual aids, demonstrations, and mock-ups. Methods are first discussed in terms of the amount of instruction received on and off the job (on-the-job training, vestibule training, integrated on- and off-the-job training). A general approach to the selection of specific techniques is next presented. Finally, specific techniques are each discussed: lectures; conferences; case study; role-playing; sensitivity training; television and films, training devices and simulators; programmed learning/automated teaching; teaching machines; self-instructional texts; and business games. (18)

MILLER, GEORGE E. (ed.), STEPHEN ABRAHAMSON, IRA S. COHEN, HAROLD P. GRASER, ROBERT S. HARNACK and ADELLE LAND. Basic techniques of instruction. IN THEIR Teaching and learning in medical school. Cambridge, Mass.: Harvard University Press, 1962. pp. 95-129.

The basic techniques of instruction at most medical schools include a combination of lectures, group discussions, laboratory work, and individual projects. Lecture objectives are informational. Group discussion objectives may be: examination, analysis, exploration, reinforcement of attitudes of critical inquiry, and experience in interpersonal relationships. Individual projects may serve many objectives: gaining greater knowledge of a specific subject, stimulating interest in a broader field, gaining an appreciation of research methodology, encouraging development of critical skill, gaining specific technical skills, or recruiting to the service of a particular field. Lab work also may serve many objectives: the acquisition of a firm understanding

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of facts heard in a lecture, read, observed, or wondered about in discussion; acquisition of new facts; stimulation to pursue a topic further; acquisition of certain attitudes; gaining specific skills in equipment usage, math concepts, recording instrument usage, observation, documentation, analysis of data, and synthesis of results. Six advantages and 5 limitations of the lecture method are given. Three advantages and 4 limitations for group discussions; 6 advantages and 5 limitations for the project method; and 5 advantages and 4 limitations of lab work are cited. Nine specific suggestions for effective use of lectures, 4 suggestions for group discussion, and 11 suggestions for lab work are included. There is a general discussion of effective use of projects. Each technique is effective only if it is used for an appropriate and clearly specified objective. The instructor must be aware of the principles, advantages, and limitations of the technique he uses and must be skilled in its practice if it is to be used beneficially. (19)

MILLER, GEORGE E. (ed.), STEPHEN ABRAHAM-SON, IRA S. COHEN, HAROLD P. GRASER, ROBERT S. HARNACK and ADELLE LAND. More techniques of instruction. IN THEIR Teaching and learning in medical school. Cambridge, Mass.: Harvard University Press, 1962. pp. 130-151.

Techniques considered in this chapter are generally used to supplement or complement other basic techniques. Instructional objectives obtainable, advantages and limitations, and suggestions for use of the following are included: questioning, drill, problem-solving (clinical work), and student-teacher planning. (20)

MILLER, HARRY L. The autonomous adult. IN HIS Teaching and learning in adult education. New York: Macmillan, 1964. pp. 203-235.

The problem of helping the adult to become more autonomous as a learner requires two different lines of development for its solution, although the two are interdependent. One is the existence of technical resources to help people learn by themselves; the second is to help in acquiring the skills of learning in a more general sense. In relation to the first of these requirements, the chapter examines what may be the most important technical resource of the future—programmed instruction; the potential of our most important existing resource—correspondence programs; and the idea of the tutorial method as one deserving some attention in adult education. (21)

MILLER, HARRY L. The large group: from lecture series to workshops. IN HIS Teaching and learning in adult education. New York: Macmillan, 1964. pp. 237-264.

When the problem of the large group is confronted with a significantly educational intention, a wide variety of interesting alternatives to the standard lecture arise. Adult educators, in experimenting with large group formats, have developed three general models discussed in depth in this chapter: the lecture with audience involvement (varying presentation: the panel, the symposium, the film forum; involving the group: the question period, audience listening panels, problem census, buzz groups, the clinic); the controlled workshop (an illustration is included); the pure workshop (also illustrated). (22)

MILLER, HARRY L. Small groups: in the classroom. IN HIS Teaching and learning in adult education. New York: Macmillan, 1964. pp. 85-122.

The formal classroom and the relationships between teacher and students that it assumes can be made a flexible instrument for a variety of learning objectives using a variety of teaching styles. Teaching styles and suggestions for their effective application in the formal classroom setting are discussed under the headings: Models of Teaching Styles: The Socratic, The Town Meeting, Apprenticeship, Boss-Employee, The Good Old Team (a description is included of a particular class in an adult program, illustrating the relationships among objectives, class activity, and teacher style); Variations on the Model: Small Discussion Groups, The Seminar; Learning Materials: Books and the Use of Libraries, The Case Study, Role-Playing (illustrations are included). (23)

MORGAN, BARTON, GLENN E. HOLMES and CLARENCE E. BUNDY. Formal or stage presentations: common forms. IN THEIR Methods in adult education. Danville, Ill.: The Interstate Printers and Publishers, 1960. pp. 64-70.

The definition and objectives of five forms of formal presentation are briefly discussed: the lecture or speech; the symposium; the panel discussion; the colloquy; and the forum. (24)

MORGAN, BARTON, GLENN E. HOLMES and CLARENCE E. BUNDY. Selecting methods in adult education. IN THEIR Methods in adult education. Danville, Ill.: The Interstate Printers and Publishers, 1960. pp. 45-52.

An overview of the various methods in adult education, with classification of methods according to

types of group activity, is presented. In the area of group learning situations, voluntary groups, formal classes, the informal approach, and personal inspiration are discussed. Types of meetings are described: convention, conference, institute, workshop, seminar, formal classes, informal discussion, short course, lecture series. Specific methods and variations are briefly discussed: (1) formal or stage presentation (lecture or speech, symposium, panel discussion, colloquy); (2) discussion techniques (open discussion; co-leaders in group discussion; buzz sessions; "Phillips 66" techniques; leadership team; listening teams; role-playing; dramatic skit; symposium forum; lecture forum; panel forum); (3) demonstration and laboratory (method demonstration, result demonstration, laboratory procedure); (4) field trips; (5) audiovisuals; (6) written communication. **(25)**

MORGAN, BARTON, GLENN E. HOLMES and CLARENCE E. BUNDY. Special discussion techniques. IN THEIR Methods in adult education. Danville, Ill.: The Interstate Printers and Publishers, 1960. pp. 88-116.

A number of techniques have been devised to stimulate participation and improve the effectiveness of group discussion. Each device has been developed for a specific type of discussion situation. Discussion leaders who are familiar with these techniques can greatly improve the effectiveness of the discussion by analyzing the situation and using effectively the supplemental technique or techniques best adapted to the situation. Specific values of the techniques include systematizing the discussion, increasing participation, adding variety, creating suspense, and pepping up the discussion. Techniques discussed include co-leaders in group discussion; huddle groups; buzz groups; "Phillips 66" technique; discussion guides (persons and outlines); leadership team; listening team; role-playing; brainstorming; dramatic skit. **(26)**

PLANTY, EARL G., WILLIAM S. McCORD, CARLOS A. EFFERSON. Methods of presupervisor, supervisor, and executive training. IN THEIR Training employees and managers for production and teamwork. New York: The Ronald Press, 1948. pp. 181-192.

Training methods and techniques are the vehicles for subject matter and as such must be adapted to content and objectives. Methods discussed are: formal group methods (lecture, free conference, planned conference, and variations of these); handbooks and bulletins; role-playing (an example of a session is outlined); demonstrations; problem cases; rotation training; on-the-job practice; individual counseling; and seminars.

Specific criteria for determining content and methods are presented for the three levels: presupervisory, supervisory, and executive training. **(27)**

PLANTY, EARL G., WILLIAM S. McCORD, CARLOS A. EFFERSON. Technical and professional training. IN THEIR Training employees and managers for production and teamwork. New York: The Ronald Press, 1948. pp. 193-199.

Three types of initial technical and professional training are defined and discussed: educational guidance, out-of-plant training (including cooperative training), and in-plant training. The need for refresher training is also discussed. Such techniques as training libraries, seminars, and lectures and discussions led by outside experts may be used. **(28)**

PLANTY, EARL G., WILLIAM S. McCORD, CARLOS A. EFFERSON. Trade and semiskill training. IN THEIR Training employees and managers for production and teamwork. New York: The Ronald Press, 1948. pp. 200-212.

There are many variations on the three major categories of trade and semiskill training: apprentice training, vestibule training, and on-the-job training. Each of these major categories is discussed. A detailed procedure for on-the-job training (applicable to any situation requiring this type of training) is outlined, including sections on: selection of the trainer; pay; duties and authority of instructors; training of instructors; steps in teaching (4-step plan); the line supervisor function; supervision of instructors; assignment of training jobs; supervision of quality standards; technique of supervision; and function of the training department in on-the-job training. Also considered are measuring and controlling progress of training by learning curves and the necessity for training in social and work attitudes. **(29)**

PROCTOR, JOHN H. and WILLIAM M. THORNTON. Group instruction. IN THEIR Training: a handbook for line managers. New York: American Management Association, 1961. pp. 71-100.

The following group instruction techniques are discussed: discussion techniques—conference methods (directed, problem-solving, leaderless), case studies, buzz groups, vertically structured training groups; roles and their use—role-playing, decision simulation, in-basket game or test; large group instruction—the lecture, panel discussions, demonstrations; automated instruction—teaching machines, educational television. **(30)**

PROCTOR, JOHN H. and WILLIAM M. THORNTON.
Man-to-man training. IN THEIR Training: a hand-
book for line managers. New York: American
Management Association, 1961. pp. 56-70.

Man-to-man training is reliable and saves time,
money, and effort. It can take the form of skills training,
coaching, job enlargement, or developmental assign-
ments. Skills training, or on-the-job training, is used to
teach an individual a specific task. Job-instruction
training (JIT) is discussed as one proven method for
teaching skills. Aspects of coaching include: setting a
good example; setting specific goals acceptable to
subordinates; establishing what is expected; being con-
cerned with results primarily and method secondarily;
praising good work; and reviewing coaching progress
frequently. There are three aspects of job enlargement:
the employee should be brought into decision-making,
allowed more participation, and delegated more author-
ity; distrust of the profit-motive should be dispelled by
profit-sharing, share ownerships, and economic educa-
tion; and the job should be presented as part of a cycle
so that the employee will assume more responsibility
and become interested in broadening his own job.
Developmental assignments should follow skills training
and be accompanied by coaching. Eight types of
developmental assignments are discussed: job rotation,
staff meetings, assistant-to-assignments, committee
assignments, "sending a man upstairs," junior boards,
fill-in assignments, and special assignments. **(31)**

RANDALL, LYMAN K. Training methods. IN **Targets**
**for in-service training** (Report of a seminar
convened in Washington, D.C., May 4-5, 1967,
by the Office of Law Enforcement Assistance
and the Joint Commission on Correctional Man-
power and Training). Washington, D.C.: Joint
Commission on Correctional Manpower and
Training, October 1967. pp. 15-25.

A general overview of training methods and a
discussion of how to select appropriate methods for
given kinds of learning are presented. Terminal behavior,
medium and message in instruction, and means of
changing behavior are briefly discussed. Four groups of
individual learning methods are categorized according to
the basic activity involved: (1) data input (lecture,
books, articles, audiovisual methods, and programmed
instruction); (2) data-processing and decision-making
(case study, incident process, and in-basket);
(3) personal interaction (role-playing, task exercise,
laboratory methods, and psychodrama); and (4) com-
binations of 1, 2, and 3 (management games, dyadic
programming and diagnostic data task group). The four
groups of methods are discussed in relation to the level
of experience involved, and it is shown that the methods
of groups 3 and 4 elicit a higher level of involvement on
the part of the learner. **(32)**

REEDER, WILLIAM W. **Some methods and tools to**
**increase interest participation and teaching effec-**
**tiveness** (Cornell extension bulletin 907). Ithaca,
N.Y.: New York State College of Agriculture,
Cooperative Extensive Service, 1956. 31 pp.

Some techniques considered are: small-group
discussion; large-group discussion; opposing panel;
question-and-answer techniques; sociodrama; lecture;
symposium; forum; panel. *(USCSC 2)* **(33)**

ROYAL AIR FORCE. TECHNICAL TRAINING
COMMAND. RESEARCH SECTION. Training
methods: an analysis of research findings
(Research task no. 234). Brampton, England:
Royal Air Force, June 1, 1966. 63 pp.

The analysis of various training and instructional
methods in terms of their overall effectiveness is the
main concern of the research project of which this study
is the report. Its specific aims are (1) to review the
different research findings from the viewpoint of the
methodology and variables involved; (2) to indicate the
limitations of the experimentation; and (3) to suggest
criteria by which decisions can be made as to which
particular teaching method might or might not be most
suitable for realizing specific learning outcomes. Specific
methods treated are lectures, group discussion, lesson-
demonstration, tutorials, leaderless groups, role-playing,
system training, programmed learning, discovery
training, and student-centered learning. A bibliography is
included. **(34)**

SULKIN, HOWARD A. Some considerations in choosing
training methods. **Adult leadership** 16:3, Septem-
ber 1967. p. 115.

Three factors to be considered in choosing
teaching methods are (1) the environment in which the
training will occur, (2) the job situation, and (3) the
characteristics of the trainee. A training environment
physically separated from the job and its pressures
increases the range of methods available. Team assign-
ments and discussions can, in an unhurried atmosphere,
be added to the use of lectures and the critical incident
technique. If the job situation is such that a specific task
is all that is to be learned, then lectures, demonstrations,
and limited skill practice may be used. If a deeper
development of knowledge, skills, and attitudes is
desired, the techniques of videotapes, role-playing,
panels, and discussions may be added. An effort should
be made to fit the technique to the trainee. "Although
there are numerous methods and techniques in adult
education in general, and training specifically, for
helping learners bring ideas and experience into focus,
when these methods have been studied, the results have

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not been significant probably because group measures are used resulting in the effects upon different people canceling out each other." (35)

U.S. AIR UNIVERSITY. ACADEMIC INSTRUCTOR AND ALLIED OFFICER SCHOOL. Other teaching methods. IN ITS Principles and techniques of instruction. Maxwell Air Force Base, Alabama: Air University, 1966. pp. 149-154.

Teaching methods are briefly outlined and discussed under the headings: Team Teaching, The Assignment, The Field Trip, The Laboratory Method, Socialized Recitation, Discussion Methods (Informal Student-Led Discussion, The Teaching Interview, Panel, Symposium, Dramatization, Lecture Forum). A bibliography is included. (36)

U.S. CIVIL SERVICE COMMISSION LIBRARY. Executive development methods (Personnel bibliography, series no. 5). Washington, D.C.: The Library, August 1961. 50 pp.

This annotated listing is selective, both in area included and in the individual items listed, and only works of particular value to federal government programs are included. The majority of the material was published in the five years preceding the publication of the bibliography. The titles are grouped under the following headings: Considerations in Selection of Methods; On-The-Job Training (Rotation, Developing Understudies, Coaching, Self Aids); External Sources of Training (University-Sponsored Courses in Management, University-Sponsored Courses in the Humanities, Programs of Advanced Study for Executives); Selected Group Methods (Case Method, Role-Playing, Incident Process, Group Relations, Participatory Training Methods). (37)

U.S. DEPARTMENT OF THE INTERIOR. NATIONAL PARK SERVICE. Techniques of management development. IN ITS A plan for the man; a tool to unleash creativity and potential in the National Park Service (In-Service Training Series). Washington: U.S. Govt. Print. Off., 1963. pp. 52-68.

"The success of any training program (and therefore any management development program) depends upon the resources and the resourcefulness of the trainers and trainees." Specific methods discussed are: coaching by superior; delegation; job rotation; special assignments; committee assignments; temporary replacement; observation and inspection tours, field trips; participation in staff meetings; participation in policy development; participation in community and civic affairs; membership in professional organizations; attendance at professional meetings and conferences; systematic reading; outside study (schools, correspondence courses); conference leadership training; training in public speaking, human relations, communications, and administrative practices; and training in technical fields. (38)

U.S. SOCIAL SECURITY ADMINISTRATION. DIVISION OF MANAGEMENT. OFFICE OF EMPLOYEE DEVELOPMENT. TECHNICAL SERVICES SECTION. Teaching methods and techniques. Reprinted by the Internal Revenue Service, 1966. 10 pp.

"There is no sharp line of demarcation between methods and . . . no label can completely describe exactly what an instructor is doing. . . . The various methods are classified here only for purposes of explanation." Definitions, advantages, and disadvantages are delineated for "telling," "showing" and "doing" methods: (1) Telling Methods, both talking and listening—lecture, panel/symposium, conference forum, seminar, case study, incident process (debate, recordings, oral quiz are also classified here); (2) Showing Methods—written words, pictures, motion pictures, charts, diagrams, physical objects, demonstrations, skits and role-playing (for observers), tours/inspections; (3) Doing Methods—role-playing, skits, simulated situations (for participants), project and committee work, understudy, on-the-job experiences (supervised practice, guided experience, performance tests). (39)

VERNER, COOLIE. A conceptual scheme for the identification and classification of processes (Adult Education Theory and Method). Washington, D.C.: Adult Education Association of the U.S.A., February 1962. 34 pp.

Proceeding from a formal definition of adult education, which includes institutional involvement and its organizing concepts, the distinction between method and technique in adult education is explained and shown to be essential to a workable classification system. Identification and classification of methods and techniques are dealt with in detail in chapters III and IV respectively. In the final chapter, Theory and Research, the theory of method is summarized: "Desirable changes in adult behavior are accomplished when the processes employed for organized systematic learning are effective in transmitting the necessary knowledge in a manner appropriate to the organizational and cultural patterns of the adult participants involved and when they facilitate the acquisition of knowledge by those participants through procedures appropriate to the content, the learning situation, and the individual participant. When methods employed to introduce proposed changes

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accomplish learning systematically and when a variety of techniques are utilized to facilitate the acquisition of knowledge from which systematic learning results, then the alterations in behavior that occur will have a greater degree of permanency.... Methods ... will disappear when no longer appropriate to the culture; while techniques are essentially independent of any specific cultural context...." Research on methods falls into three major areas: institutional-centered research, studies of cultural influences, and studies evaluating effectiveness of processes. Problems in past research which the proposed theory of method can help to overcome are discussed. Sixty-two references are cited.          **(40)**

*NOTE: Verner's general classification theory was used in indexing this bibliography.*

WARREN, VIRGINIA B. (ed.). Apply creativity to your teaching. IN HER **A treasury of techniques for teaching adults.** Washington, D.C.: National Association for Public School Adult Education, 1964. pp. 20-25.

The need for considering variety and specific usefulness in methods of teaching is emphasized.

Advantages and suggestions for organizing methods and techniques are discussed: exhibits planned jointly by teacher and class; buzz group; round-table discussion (a variation of panel discussion); role-playing (an example is given); three variations of the symposium; demonstration; lecture; forum dialogue; debate; group interview; movie; television-viewing.          **(41)**

WOHLKING, WALLACE. Teaching effectiveness and feedback mechanism: a survey of feedback factors in various teaching methods. **Training and development journal** 21:6, June 1967. pp. 2-10.

Feedback is information on performance; its value is directly related to the interval between performance and receipt of information about performance. The importance of feedback in achieving educational objectives is demonstrated. Educational methods may be chosen by determining the amount of feedback they supply. More feedback is available in modern methods such as role-playing than is available in the more traditional methods, but teaching methods should be determined by educational objectives. The amount of feedback available in lectures, lectures with question and answer periods, discussions, student-centered training, and role-playing is discussed.          **(42)**

# JOB INSTRUCTION (FOUR-STEP METHOD)

DePHILLIPS, FRANK A., WILLIAM M. BERLINER and JAMES J. CRIBBIN. The four-step method of instruction. IN THEIR **Management of training programs.** Homewood, Ill.: Richard D. Irwin, 1960. pp. 158-161.

The four-step plan, evolved in World War II and based on Herbart's teaching technique (garbed in twentieth–century terminology), is discussed under its four parts: (1) preparation (including preparing the environment and the trainee); (2) presentation (tell the trainee, have him tell you, show him); (3) application (trainee tries the task but is corrected and coached by the instructor); (4) test and evaluate (trainee performs without guidance, oral or written tests are given, and records are kept). **(43)**

MAGILL, SAMUEL B. and JOHN E. MONAGHAN. Job instruction. IN Craig, Robert L. and Lester R. Bittel. **Training and development handbook.** New York: McGraw-Hill, 1967. pp. 113-128.

The need for job instruction, basic indicators of such need, and the advantage of preparing job outlines of important steps and key points as an aid to planning training are discussed. The four parts of instruction are discussed in 20 subheading sections under the four main parts: (I) Prepare the Worker, (II) Present the Operation, (III) Try-out Performance, and (IV) Follow-up.

Variations on this basic method are discussed and special problems of jobs involving judgment, dealing with the public, and using valuable materials are considered. The applicability of the method to management development is demonstrated. Background of the method's development by the Training Within Industry Service of the War Manpower Commission in World War II is elaborated. Sample "training time table" and "job breakdown sheet" forms are included and discussed. The chapter concludes with treatment of the development and use of job instructors and training manuals and aids. **(44)**

PROCTOR, JOHN H. and WILLIAM M. THORNTON. Skills training. IN THEIR **Training: a handbook for line managers.** New York: American Management Association, 1961. pp. 57-61.

The terms on-the-job training and skills training are used interchangeably to describe the procedure of teaching an individual a specific task or job. The Job Instruction Method (JIT) developed by the War Manpower Board during World War II has been used extensively and applies to training, with simple modifications, for personnel at all levels of the organization. Sixteen specific steps arranged under the headings: Prepare, Get Set, Instruct, Check, and Follow-up, are presented in a one-page outline exhibit, with accompanying discussion of each point in the text. **(45)**

# APPRENTICESHIP

BERGIVIN, PAUL. Industrial apprenticeship. New York: McGraw-Hill, 1947. 280 pp.

The book is designed to present in a compact and brief manner some essentials of good apprenticeship education for vocational educators and supervisors of apprenticeship training in industry. It is intended to: (1) enable an interested person to begin a program of apprenticeship and establish it on a sound foundation; (2) assist supervisors of educational programs to evaluate their already existing apprenticeship programs in terms of principles based on accepted practice in the best apprentice schools; and (3) guide students of apprenticeship along the line of modern practices in this type of education. Historical background material is presented in an initial part of the book, followed by a detailed discussion of the principles of industrial apprenticeship under four main headings: Planning and Administering, Shop Instruction, Related Instruction, and Selection. A final chapter on the application of these principles in evaluating or initiating a program concludes the book. (46)

CURTIN, JOHN S. Apprentice training and Arizona's manpower challenge of the 60's. Employment security review 28:3, March 1961. pp. 18-20.

This article points out some of the ways in which the Arizona Employment Service has contributed to the gain in the State's Apprentice Training Program in the past few years. With the increased need for trained manpower in the state as well as the nation, it became apparent that improved methods of training must be used. This article reports that in Arizona this challenge was partially met by the Apprentice Training Program. (ASTD) (47)

KURSH, HARRY. Apprenticeships in America: a report on golden opportunities in industry for students, parents, teachers, guidance counselors, and leaders in education, civil rights, labor industry. Revised edition. New York: W. W. Norton & Company, 1965. 200 pp.

The chapters and their contents are: (1) Apprenticeships in America (a brief overview of the current situation); (2) Wanted: More Skilled Workers (the manpower story, who are skilled workers?, why the shortage?, the immediate problem for industry, what about population growth?, what about automation?); (3) Does it Pay to Learn a Skill? (the differences in wages, the skilled worker and unemployment, how much do skilled workers earn?, other wages for comparison, union benefits, pay for apprenticeships, the hidden advantages of apprenticeships); (4) The Apprentice Story: Yesterday and Today (the history of apprenticeship, the meaning of apprenticeship, a typical apprenticeship agreement, standards of a typical apprenticeship agreement, the registration, how to check an apprenticeship, draft deferment of apprentices, types of registered programs, the apprentice and related instruction, the distribution of apprentices, on-the-job training: Manpower Development and Training Act); (5) The Apprentice and Apprenticeship (how industry chooses its apprentices, the apprentice and his education, free aptitude tests and counseling, what we should know about the public employment services, choosing an apprenticeship, sources of assistance, state apprenticeship agencies, directors of federal and state agencies); (6) Uncle Sam's Apprentices (skilled workers in civil service, drawbacks of government apprenticeship, advantages of government apprenticeship, how to get a government apprenticeship); (7) The Bureau of Apprenticeship and Training (how the Bureau functions; the divisions of Registration and Review, Field Operation, State-Federal Relations, National Industry Promotion, and Research; The International Branch); (8) The Negro and Apprenticeships (the second revolution, the lessons of economic history, prospect and problems, what the Negro apprentice should do, list of Urban League offices); (9) Some Vital Questions for Industry, Labor, and the Nation; (10) A Guide to the Most Popular Crafts (the building, printing, mechanics-repairman, and machining occupations, The Occupational Outlook Handbook); (11) A List of Apprenticeable Occupations, with cross-index, A selected bibliography and index are included. (48)

LIEPMANN, KATE. Apprenticeship: an inquiry into its adequacy under modern conditions. New York: The Humanities Press, 1960. 204 pp.

The study is based on research on the apprenticeship system in England gathered from the following sources: (1) regional and local offices of the government departments concerned with apprenticeship, particularly the Ministry of Labour and National Service; (2) local

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education authorities; (3) employers' associations and trade unions; (4) managers and employees at all levels at a number of firms; and (5) miscellaneous meetings and personal contacts. The part and chapter titles are: Part 1, Background and Framework of the Apprenticeship System—Background; Framework of Apprenticeship: Industrial, Education, Supplementary; A Note on the National Schemes for Recruitment and Training of Young Persons in Industry; Part 2, The System in Operation—The Number of Apprentices; Recruitment; Selection and Probation; Practical Training and Productive Work; Technical Education; Completion of Apprenticeship; Trade Unions and Apprenticeship; Apprenticeship in a Rural Area; Conclusions. The book is indexed. **(49)**

Special apprenticeship section. **Journal of the American Society of Training Directors** 12:6, June 1958. pp. 22-51.

Articles in this section are: Apprenticeship and Technology, by W. C. Christensen; Build the People... The People Will Build the Planes, by Robert H. Hudson; Film Review—"The Tools and Rules for Precision Measuring"; A Comparison of Building Industry Apprenticeships in the U.S.A. and Western Australia, by Norman F. Dufty; Age No Handicap in Paper and Pulp Apprenticeship, by Margaret M. Troxell; Apprentice Training at Harig Manufacturing Company, by Herbert Harig; ASTD Research Committee Report—Apprentice Training, by Earl R. Williams; Community Manpower Centers, by James H. Quackenbush. **(50)**

WALKER, WALTER L. and LONNIE E. MITCHELL. Group decision making in an apprenticeship program for youth. **American journal of orthopsychiatry** 37:1, January 1967. pp. 101-106.

The Center for Youth and Community Studies has proposed that professional roles in the helping professions be analyzed and those portions of the actual jobs which do not require professional training be relegated to aides or nonprofessional personnel. A program was established with the Center for Youth and Community Services and the National Institute of Mental Health to train socially disadvantaged youth for nonprofessional roles in human services which would enable them to cope successfully with and solve personal, group, and community problems. An orientation program took up the first two weeks in the core skills training each day. Four weeks of specialty training followed with a $20 salary per week. After this period, the stipend was $50 weekly and the trainees began to work as full-time aides in the agencies. They continued to meet twice a week for three hours as a continuation of the Core Program. The CYCS believes that the experience of having adults have faith in their ability to solve problems made the training program "unique" for those youth. **(51)**

# DEMONSTRATION

ALVORD, C. B. Don't tell them . . . show them! Super-
visory management 3:10, October 1958. pp.
19-20.

The difficulty an inexperienced employee has in
distinguishing between proper and improper methods
makes it important to ensure that demonstrations be
correctly enacted. *(USCSC 2)*                               **(52)**

DePHILLIPS, FRANK A., WILLIAM M. BERLINER
and JAMES J. CRIBBIN. Demonstration
methods. IN THEIR Management of training
programs. Homewood, Ill.: Richard D. Irwin,
1960, pp. 183-185.

A demonstration has an element of realism and is
a model to be imitated. It attracts, holds, and sustains
attention and interest. If followed by supervised prac-
tice, it is good reality training and practical experience.
An expert should always make the demonstration using
the most modern equipment and offering simple
explanations that cover not only what he is doing, but
why. Demonstration must go slowly; the trainee must
see what is going on, and repetition of explanations is
helpful. Performance standards for trainees must be
high, but mistakes must be pointed out patiently.
Trainees should be encouraged to continue in spite of
occasional failure and must not be made to feel stupid
when they ask questions. The method is costly in
money, personnel, and facilities. It stresses "know-how"
rather than "know-why." It is better for inculcating
technical finesse than for teaching ideas.        **(53)**

STATON, THOMAS F. The demonstration-performance
method. IN HIS How to instruct successfully:
modern teaching methods in adult education.
New York: McGraw-Hill, 1960. pp. 83-96.

The demonstration-performance method is most
useful in teaching manual skills and simple manual-
mental skills or processes. Planning for such instruction
must include establishing the objective of the program
and determining the required specific learning outcomes,
choosing the equipment for the demonstration,

rehearsing the demonstration and explanation, and
preparing an introduction to the demonstration proper.
Effective planning facilitates the actual demonstration-
performance, whose main steps are: (1) let the trainee
do the job under close supervision; (2) call on one of the
trainees to demonstrate and explain the procedure;
(3) decrease the intensity of supervision as trainees learn
their jobs; (4) keep on-the-job demonstration-
performance instruction sympathetic and constructive.
Suggested readings are cited.                   **(54)**

U.S. AIR UNIVERSITY. ACADEMIC INSTRUCTION
AND ALLIED OFFICER SCHOOL. Demon-
stration-performance method of teaching. IN ITS
Principles and techniques of instruction. Maxwell
Air Force Base, Alabama: Air University, 1966.
pp. 115-120.

The demonstration-performance method puts
theory into practice, and it is only through practice that
individuals are able to learn certain skills and techniques.
Because performance puts the student in contact with
the acts that make up the motor or mental skills he is
learning, he is likely to learn more rapidly by this
method. The five essential phases of the method are
explained: (1) explanation; (2) demonstration; (3) stu-
dent performance; (4) instructor supervision; and
(5) evaluation. A sample lesson plan for the
demonstration-performance method and a bibliography
are included.                                   **(55)**

U.S. DEPARTMENT OF AGRICULTURE. FOREST
SERVICE. SOUTHEASTERN AREA AND
SOUTHERN REGION. Demonstration method.
IN THEIR Instructor training course. n.p., n.d.,
pp. 279-307.

Demonstration is described as the accurate
portrayal of a procedure, a technique, or an operation.
The following aspects of the method are discussed:
advantages, uses, steps in preparation, steps in
presentation, and application. A sample lesson plan is
included.                                       **(56)**

# COACHING

CLARK, L. REED. Managerial development through the superior-subordinate relationship. **Advanced management journal** 29:4, October 1964. pp. 70-73.

This article discusses the premise that management development is essentially a series of interrelationships, constant and continuous, and that to make development effective one must learn to use the power and influence already existing in the superior-subordinate relationship in the management structure. Four steps in the management development program where a superior-subordinate relationship exists are offered and discussed. **(57)**

HUGGENS, STERLING D. Through coaching—progressive training and development. **Advanced management,** September 1959. pp. 24-26.

An instructor does not develop people—he controls or effects change in external conditions influencing their development. The four approaches to training and development are: (1) the conference method handled by a trained leader; (2) the conference method handled by a supervisor or member of the conference group; (3) individual coaching conducted by an immediate supervisor; and (4) self-development training conducted by the individual himself. It is estimated that 80 percent of all training takes place as on-the-job coaching. Four important aspects of coaching are discussed: (1) what coaching is: a way of living and working effectively with others on the job; (2) what effects it has on the employee work group: it trains people by controlling or effecting changes in the external conditions influencing their development; (3) what a good coach needs to know, a nine-point guide for coaching; and (4) what can be done to put the coaching approach into effect: make a concerted effort to practice the various coaching guides when working with people to be trained (perhaps concentrating on one guide at a time). **(58)**

KELLOGG, MARION S. Closing the performance gap; results-centered employee development. New York: American Management Association, 1967. 224 pp.

The prime responsibility for employee development belongs in the hands of the individual manager.

This handbook explains how the manager can create a climate conducive to individual growth and explores a wide variety of development tools and techniques available: performance appraisal, goal setting, testing and career counseling, task-force assignments, job rotation, sensitivity training, managerial grid, coaching and simulation (role-playing, case method, business games, in-baskets). Chapters are: (1) Employee Development: A Business Must; (2) Understanding the Manager's Responsibility for Development; (3) Focusing Development Goals on Work Commitments; (4) Factoring Climate into Development Goals; (5) Building on Individual Talent and Motivation; (6) Choosing and Accepting Development Goals; (7) Using Work to Stimulate Development; (8) Creating a Development Climate; (9) Encouraging Interest in Self-Development; (10) Outlining the President's Development Job; and (11) Implications—Ethical Considerations—Cautions. Appendices are (A) Development Quiz for Managers, and (B) Development Quiz for Presidents or General Managers. There is an index. **(59)**

LEIGH, DAVID R. Development or developers? Developing others as a management development method. **Training and development journal** 20:10, November 1966. pp. 42-46.

The manager-subordinate relationship is the environment within which the major part of employee development occurs. A point often overlooked by both top management and managers themselves is the fact that, in developing subordinates, the manager himself is developed to a significant degree. Accordingly, training efforts should be directed toward assisting supervisors with the necessary coaching and counseling skills and the motivation to do a better job of development. Three suggestions for encouraging more interest in development are briefly discussed. **(60)**

LOEN, RAYMOND O. How you can put more development into management development. **Advanced management journal** 29:4, October 1964. pp. 85-90.

A description and explanation of the Individual Development Guide (IDG) employed by the Fireboard Paper Products Corporation is presented. The IDG lists specific growth recommendations for a person in any of

the company's 13 product or staff divisions at every management level. Eight steps in preparing and using the guide are outlined: (1) What kinds of individual development needs should you identify?; (2) What methods can you devise for meeting individual development needs?; (3) What should an individual development program look like?; (4) How does a manager use the IDG?; (5) What should each section of your IDG contain?; (6) What steps should you take to prepare your IDG?; (7) How can you be certain that managers are utilizing the IDG effectively for individual development?; (8) Why should your firm prepare and utilize the IDG? A summary guide for conducting individual development conferences is included. (61)

MACE, MYLES L. Coaching. IN HIS **The growth and development of executives**. Boston: Harvard University Press, 1950. pp. 107-156.

The objective of the coach's job is to utilize the abilities and capacities of others. Coaching is not a technique to be used as a tool; it is a way of administration. Management development requires coaching by the executive or immediate superior. Opportunity to perform is a basic element of coaching. This opportunity gives the subordinate the chance to fulfill on-the-job administrative responsibilities. The extent to which subordinates can be given the opportunity to learn by doing is varied. Opportunities to perform provide superiors with the occasion for affirmative counseling. This counseling augments and strengthens the learning process. Counseling is provided for (1) subordinates assuming a new position; (2) development of specific administrative skills; (3) review of subordinate's growth; and (4) advice on personality shortcomings. The nature and character of the relationships between the superior and subordinates—the climate—determines whether or not the subordinates will grow and develop. A climate of confidence is important for growth. The establishment of standards of performance is directly related to the climate of confidence. Standards of performance on the job give value to the superior's approval. Another general element of coaching is the creation of a team. Creating a team is related to motivation because a sense of belonging to a group and being known are important to employees. In creating a team, the administrator must know his people, must encourage participation, and must provide fair treatment. (62)

MANSKE, FRED A., JR. Supervisory training. **Training and development journal** 20:9, October 1966. pp. 44-51.

Coaching, job rotation, and developmental assignments are effective methods for developing the skills, knowledge, and attitudes of first line supervisors

because they (1) fulfill the three requirements necessary for learning; (2) provide individual and continuous instruction; and (3) permit learning by emulation and identification with competent superiors. Coaching has the advantage of being economical and efficient. Job rotation, while having these advantages, also helps the trainee acquire overall understanding of production management techniques, exposes the trainee's special skills, and brings new ideas into training departments. Job rotation before promotion is more effective than after promotion. On-the-job training is very effective; however, it does have some disadvantages: (1) coaching may interfere with the trainee's logical sequence of learning and fail to give him an overall understanding of company and production operations; (2) job rotation creates morale problems; and (3) developmental assignments create confusion and may perpetuate ineffective supervisory techniques and practices. (63)

STATON, THOMAS F. Principles of employee counseling. IN HIS **How to instruct successfully: modern teaching methods in adult education**. New York: McGraw-Hill, 1960. pp. 219-236.

Like any other educational experience, a counseling session must be planned and prepared for to achieve best results. In conducting a counseling interview, the counselor will obtain best results if he (1) obtains as much information as possible before the interview; (2) seems to determine the length of the interview by the counselee's needs, not the clock; (3) gets the counselee into a cooperative attitude before plunging into touchy matters; (4) encourages the counselee to solve his own problem insofar as possible; (5) keeps a record of all counseling; and (6) terminates each counseling interview as a recess in a continuing process. (64)

STOLZ, ROBERT K. Executive development—new perspective. **Harvard business review** 44:3, May-June 1966. pp. 133-143.

Executive development includes intentional action taken to speed or improve the development of managers. Today it is practiced not by personnel specialists, but by line managers and top executives. Management review and development of man-power still follow established procedures, but the rigid and highly systematized procedures of the 1950's have been abandoned; executives have great freedom in helping subordinates to develop themselves. Executive development activities in leading companies have certain other common denominators: line executives have assumed responsibility for developing their immediate subordinates and for seeing that their subordinates accept responsibility to develop the persons under them; each individual's plan is unique but is part of an overall

thoughtfully designed, and well organized program; and appraisal is continuous and cumulative. But off-the-job education is still important, and the executive development specialist is still needed for advice and support. (65)

U.S. DEPARTMENT OF THE INTERIOR. NATIONAL PARK SERVICE. A plan for the man; a tool to unlease creativity and potential in the National Park Service (In-Service Training Series). Washington: U.S. Govt. Print. Off., 1963. 71 pp.

According to the foreword, ideas outlined in this booklet follow three principles for a system believed basic to the development of all managers and supervisors: (1) provision for "passing on to subordinates, in a systematic way, the knowledge and skills we ourselves already have acquired (this is essentially a responsibility to the Service to function as an enthusiastic coach); (2) a plan for the individual's development which has been worked up on a mutual basis by him and his superior; (3) the fullest possible encouragement and help to one's subordinate to see that such development takes place." The terms "manager" and "supervisor" are used interchangeably throughout the booklet. Titles of sections indicate contents: Do You Have a Management Philosophy?, Why Management Development?, Principles of Development; Climate, Motivation and Creativity; Relation to Performance Rating Plan; Relation to Promotion Program; How to Start the Development Job; How to Develop a PLAN FOR THE MAN; After the Interview; Techniques to Develop Managers; Making the PLAN FOR THE MAN Idea Succeed; Appendices: I—A Guide to the Conduct of Interviews on Performance and Development; II—Planned Performance Targets; III—Standards of Performance; IV—A PLAN FOR THE MAN (sample); V—Techniques of Management Development. Eleven references are recommended for further reading. (66)

# INTERNSHIP, FIELDWORK, SUPERVISED
# PROFESSIONAL PRACTICE*

DANIEL, P. Fieldwork training—responsibilities of the agency. Case conference 14:1, 1967. pp. 1-5.

The enormous expansion occurring in social work training in Great Britain provides a variety of opportunities for imaginative placements and supervision and requires more initiative from agencies in contributing to the educational partnership. By making efforts to generalize and conceptualize knowledge about and experience with clients and methods of work with them, agencies would be in a better position to help formulate fieldwork learning and to make a contribution toward solving some of the educational questions in social work training. The partnership is currently strained because it has only one strand: the production of more social workers and social administrators. Joint research efforts would make the relationship stronger through the formulation and testing of theory and practice against each other and would help in the development and improvement of practice. (Abstracts for Social Workers)

DEVIS, D. A. Teaching and administrative functions in supervision. Social work 10:2, 1965. pp. 83-89.

Lucille Austin's proposals to realign casework supervisory functions by separating staff development and administrative roles and assigning one of these to staff persons other than supervisors have been in use in army social service clinics and departments for some-time. Such separation has been practiced partly because of the late introduction of social service into a well-established bureaucratic system—the United States Army Medical Service. It is hypothesized that a suitable laboratory exists in United States Army social work for field evaluation and assessment of the practice of social work supervision that does not generate objection, dissatisfaction, or staff turnover. (Abstracts for Social Workers)

DORN, ROBERT M. The pleasures and dangers of educating and being educated—supervision. Reiss-Davis Clinic bulletin 3:2, Fall 1966. pp. 105-112.

Two antithetical viewpoints about the student-teacher relationship are that (1) the educational process encourages student-faculty friendships, and (2) good teaching is ultimately destructive of the bond between students and teachers. (Since dependent students over-idealize a teacher, there is a potential for lifelong tyranny of the teacher over the student. The teacher must then actively seek to liberate the student to think and feel for himself.) Psychoanalysis deals with both of these aspects and shows them to be a part of good teaching. Thus the teaching situation is seen as a potentially powerful instrument for good and/or evil. Where teacher and/or pupil develop feelings for each other more appropriate for parent and child, and the parties are unaware of them, inappropriate behavior can take place. However, the student's wish for a love relationship can be turned toward a love of learning. These factors are illustrated in recent reviews of the literature of psychoanalytic supervision as well as the author's own experience. The child therapy supervision experience is particularly susceptible to anxiety and countertransference. However, the psychoanalytic supervisor has the advantage of not sharing the overidealized fantasies attributed to him by the new student. He can invite the student to see the supervisory-learning venture as one of mutual observation and participation. "When the teaching alliance incorporates such a model, accepting of unconscious forces, anxieties and defenses, probing for their meanings, and consciously intent on expanding the learning process, the experience should be . . . predominantly rewarding for all participants. . . . Serious and lifelong friendships come from sharing meaningful learning."

EKSTEIN, RUDOLF and ROBERT S. WALLERSTEIN. The teaching and learning of psychotherapy. New York: Basic Books, 1958. 334 pp.

This monograph concerns the theory and technique of the supervisory process—specifically the learning

*This section was developed after the original indexing was done and too close to the publication deadline to be added to the index. The category was considered too important to omit.

and teaching of psychotherapy through supervision. Not a textbook of psychotherapy, it is based on experiences of the authors in teaching psychotherapy at the Menninger School of Psychiatry. Part and chapter titles: I. The Training Setting—(1) The Basic Model of Supervision; (2) Administration and Learning; (3) The Clinical Setting and its Structure; (4) Training for Research; (5) The Professional Identity of the Psychotherapist; II. The Beginning Phase—(6) The Supervisor Meets the Student; (7) The Therapist Meets the Patient; (8) The Supervisor and the Student-Therapist Discuss the Patient; III. The Learning Process—(9) Supervisor and Student—Problems About Learning; (10) Therapist and Patient—Learning Problems; (11) Supervisor and Student—Therapist and Patient—The Parallel Process; (12) On the Psychology of Emergencies; (13) Following the Process of Supervision; (14) Supervision vs. Psychotherapy; IV. The End Phase—(15) The Utilization of Recordings; (16) Evaluation and Selection; (17) Guide to the Literature (literature of training in general clinical work, psychoanalysis, social casework, and psychotherapy). There is an index.

FINESTONE, S. Selected features of professional field instruction. Journal of education for social work 3:2, 1967. pp. 14-26.

Four selected features of field instruction in professional education for social work are examined: conceptual teaching and learning, a range of content reflecting the entire class curriculum, preparation for changes in social work practice, and feedback from field to class. The essential nature of conceptual teaching, basic elements in conceptualization, and methods of conceptual teaching are elaborated. Illustrations of field content reflecting other than courses in social work method are given, with special reference to the potentialities of the field in providing teaching content related to social policy and social services, organizational impact on practice, and scientific inquiry. Although more difficult to achieve, the goal of feedback of knowledge from field to class—a reversal of the usual principle that the field should reflect the class curriculum—merits consideration. The achievement of this goal would require devising new channels and discovering effective devices for its implementation. (Abstracts for Social Workers)

FINN, MICHAEL H. P. and FRED BROWN (eds.). Training for clinical psychology: proceedings of the Springfield—Mount Sinai conferences on intern training in clinical psychology. New York: International Universities Press, Inc., 1959. 186 pp.

Fourteen papers based on presentations given at the conference noted in the title are included. Each

(except a final overview of the issues raised at the conference) deals with particular aspects of internship training for future clinical psychologists. The chapter titles describe the papers' contents: I. The Selection of Psychological Interns, by Thomas Kennelly; II. Structuring the Training Situation, by Renata Calabresi; III. Areas of Training and Their Specific Implementation: Research, Therapy, and Testing, by Elaine Kinder; IV. The University in Clinical Psychology, by John Stafford; V. The University and Clinical Psychology Training, by Gordon Derner; VI. Conflict and Identification in the Training Process, by Edward Shoben, Jr.; VII. Supervisory Functions and Relations in Internships, by Benjamin Pope; VIII. Supervision in Social Work, by Doris Segal; IX. Psychodynamics of the Supervisor-intern Relationship, by Abraham Zeichner; X. Problems of Communication in the Training Situation, by Edward Stocklower; XI. Research Training During the Internship, by Jules Holyburg; XII. Psychotherapy and the Intern, by William Langerth; XIII. Policies and Standards for Evaluating Intern Training in Clinical Psychology, by Bruce Moore; XIV. An Overview, by Michael Finn and Fred Brown.

GREEN, S. H. Field instructor judgments: practice expectations for casework students. Social work (London) 24:4, 1967. pp. 3-11.

A study of field instructor judgments of student performance was conducted at a school of social work to ascertain the contribution of practice-wisdom to the conceptualization of assessment criteria in field instruction. Data regarding 15 first-year casework students were collected from 12 field instructors, who submitted two incidents of performance weekly—one judged effective and one ineffective—drawn from students' records, direct observation, and supervisory conferences. Five major learning areas were identified: working within the agency form, interaction with field instructor, interaction with clients, self-awareness, and knowledge. The major focus was found to be on interaction with clients; knowledge received the least attention, reflecting an expectation that knowledge is more significant when demonstrated in performance. There was a lack of formality and precision in descriptive and judgmental language, indicating standards of social work that can not always be formulized in conceptual terms. Field instructors should not be expected to conceptualize practice as it is done in the classroom because categories of thought used in academic settings do not seem to be effective in describing the exercise of skill. The main concern of the field instructor is to guide the student in learning to act knowledgeably within the agency as he provides its services to clients. (Abstracts for Social Workers)

HAMMOND, P. H. Patterns of learning in fieldwork. Case conference 13:3, 1966. pp. 83-88.

Graduate students of social work show identifiable patterns of learning in fieldwork that can be utilized to facilitate a forward-moving process of assimilation and adaptation of knowledge to professional performance. Students must apply knowledge acquired from a multiplicity of academic courses within an agency framework. Inexperienced students may show anxiety in initial client contacts. Experienced students are threatened by the need to reevaluate previous performance in the light of new knowledge; unlearning and relearning create anxiety. Relevant experience on which to graft this new material is, however, an advantage. By understanding students' learning patterns, supervisors can minimize regression. Students appear to start fieldwork in three ways: with excitement, caution, or with a need to temporarily reject new knowledge. They vary in their need for a theoretic framework for action, and the supervisor's method must allow for this. The intuitive student may hesitate to examine mechanics of practice. All learning will progress with fewer difficulties if individualized learning patterns are understood. (Abstracts for Social Workers)

KLOPF, GORDON J., CAROLYN SECHREST HENSON, VIRGINIA H. LOVE, RICHARD M. GUMMERE, ROBERT T. MERRITT. Interns in guidance, a new dimension in counselor education. New York: Columbia University Teachers College Bureau of Publications, 1963. 60 pp.

Chapters are: (1) The Nature of the Internship Program; (2) The Intern in the School; (3) The Roles of the Supervisors; (4) The School and Community Setting; (5) A Case Approach to Studying Students; (6) Supervised Counseling of Individuals; (7) Working with Students in Groups; (8) Evaluation of the Internship Program. Suggested readings at the end are grouped under the following headings: General; Appraisal and Counseling; Case Studies; Group Guidance; Community and School Studies; Test and Measurement; Educational and Occupational Information; Supervision.

LEVIN, M. Learning and teaching in field work. Journal of Jewish communal service 43:3, 1967. pp. 270-274.

A frame of reference for the organization of content in field teaching can be the NASW "Working Definition of Social Work Practice." Primarily, the student needs to see how his practice is related to social work purpose. To achieve this, teaching should emphasize (1) fundamental principles of the strengths for self-help as they underlie the growth and development of the individual, the group, and community structure and process, (2) the significance and use of relationship in promoting individual and group growth and social change, (3) the nature of process, the unfolding of the relationship with another individual, a group, and a community, (4) the significance of the worker as a person, for which self-awareness and consciousness of role are basic, (5) an awareness of the social context and some fundamental principles that underlie social organization and change, and (6) an understanding of social work method as a concept of self-help. (Abstracts for Social Workers)

LEVY, C. A conceptual framework for field instruction in social work education. Child welfare 44:8, 1965. pp. 447-452.

A framework for the kind of conceptualization that is necessary to distinguish field instruction from agency supervision is proposed. The graduate school of social work, through its faculty, is charged with the pursuit of three broad kinds of objectives: academic proficiency, professional skill, and professional development. These dictate both the realms of student, faculty, and field-instructor activity and the grounds for appraisal of the performance of student, faculty, and field instructor. To the extent that all three objectives can be represented in field instruction, the field instructor must seek opportunities to achieve them through provision of learning opportunities. These, in turn, should make possible the field instructor's appraisal of the student's present and potential academic proficiency and professional skill and development. This imposes a pressure on the field instructor that is not imposed on the agency supervisor. (Abstracts for Social Workers)

ORCHARD, B. The use of authority in supervision. Public welfare 23:1, 1965. pp. 32-40, 61-62.

Two kinds of authority are inherent in the supervisor's role: the authority of competence and the constituted authority derived from role occupancy. Social workers have tended to deny the authority aspects of their professional relationships. Authority provides structure and support in the supervisor-supervisee situation. Through his authority of competence a supervisor can teach a worker the methods that are most effective in meeting clients' needs and that enable him to develop to his maximum potential. Through his constituted authority a supervisor facilitates the workers' use of agency policy and procedures. Supervisors must be aware of their feelings toward authority if they are to use it constructively. (Abstracts for Social Workers)

PETTES, DOROTHY E. Supervision in social work, a method of student training and staff development. Mystic, Conn.: Lawrence Verry, 1967.

Major parts are entitled: I. Introduction to Social Work Supervision; II. Student Supervision (including a chapter on some methods of field teaching); and III. Staff Supervision.

ROSE, S. D. Students view their supervision: a scale analysis. Social work 10:2, 1965. pp. 90-96.

A study undertaken at the University of Amsterdam utilizes the student's point of view in describing and evaluating the supervisor. Although it is not meant to provide a clear and readily interpretable picture of the supervisory relationship, it does provide information to add to our understanding of the over-all dynamics of supervision. The purpose of this study is (1) to explore the characteristics of student reactions to supervision, (2) to ascertain the meaning of these reactions in order to understand better the dynamics of supervision, and (3) to test the hypothesis that the intensity of criticism of the supervisor by the student is in part a function of the phase of learning in which the student is involved. The major areas of supervisory activity studied are emotional support, intellectual teaching, self-actualization, and power. It is assumed that these are essential ingredients in any helping relationship. A special instrument, the Relationship Scale, was developed to estimate the intensity of criticism. Subjects consisted of 122 students of the second-, third-, and fourth-year classes of the Social Academy in Amsterdam and 21 advanced students. Evidence from the study supports the theory that the intensity of criticism is in part a related function of the phase of learning in which the student is involved. Students within some specializations tend to criticize their supervisors more than students within others. (Abstracts for Social Workers)

RYAN, F. J. and D. R. BARDILL. Joint interviewing by field instructor and student. Social casework 45:8, 1964. pp. 471-474.

Joint field instructor-student interviewing has been found to be a useful teaching device in an evaluation of a two-year experience at Walter Reed General Hospital. It is used only when two or more clients are interviewed at the same time, as in family group and marital counseling. Conferences are held soon after each interview to examine and evaluate the interaction. In addition to the new learning opportunity provided by a conference in which the instructor's work can be viewed and evaluated as well as the student's, it is possible for the teacher to observe the student and to assess the interview more accurately than when reliance is on recorded material alone. Also, there is opportunity

to examine nonverbal communication that both have observed. Because treatment often progresses more rapidly than in one-to-one interviews, satisfactions derived by the student from his earlier successes provide additional motivation to him. This method is supplementary to the usual ways of learning, not a substitute for them. (Abstracts for Social Workers)

SIMON, B. K. Design of learning experiences in field instruction. Social service review 40:4, 1966. pp. 397-409.

The unique contribution of field instruction to professional social work education is that it provides the student with an opportunity to experience himself as a developing professional social worker. Learning objectives for the student relate to (1) the use of knowledge for practice and enhancement of his understanding of principles, (2) self-analysis and self-assessment of professional performance, (3) discipline and self-awareness in purposeful professional relationships, (4) professional identity, and (5) a critical approach to theory and practice. Implications of each for planning and teaching content are elaborated. Testing of knowledge and development of skill are considered as objectives of an order above the student level. It is necessary to spell out the student's learning experiences particularly in the interest of (1) a minimum equality of learning opportunity, (2) orderly learning (in a disorderly situation), and (3) professional self-dependence. If the field teacher is asked to be equally responsible for all aspects of the curriculum, his already difficult job becomes impossible. He shares with other teachers the responsibility for teaching the student to be a social worker and not just a practitioner of a method. His major content responsibility is practice theory and knowledge, the essential areas of which are listed. In field teaching content is related to its use in a unit of the student's practice. Creative possibilities for teaching and learning in the field placement are emphasized. (Abstracts for Social Workers)

SOMERS, M. L. and P. GITLIN. Innovations in field instruction in social group work. Journal of education for social work 2:1, 1966. pp. 52-58.

Data on the development and nature of innovations in field instruction in social group work were obtained through questionnaires sent in 1964 to the forty-four schools of social work in Canada and the United States then offering a two-year sequence in group work. A theoretical frame of reference based on the concept of innovation as a mode of adaptation to change was used in analyzing the responses from three-fourths of the schools. Innovations were categorized in terms of (1) settings, fields of practice, and auspices, (2) opportunities to teach the same students more than one social

work method, and (3) use of personnel, e.g., field instructors educated and experienced in one method instructing students in a second method. Five approaches to innovation were identified: demonstration, consultation, education of caseworkers in the use of the group work method, employment of a group worker as a staff member, and identification of service needs. Less reliance on prior finding, more inclusion of research components, greater risk-taking, and the establishment of teaching centers in which to design new teaching models are needed to promote innovations. (Abstracts for Social Workers)

STONE, JAMES C. and CLARK N. ROBINSON. The graduate internship program in teacher education; the first six years. Los Angeles: University of California Press, 1965. 99 pp.

Sections of this report are entitled: I. Genesis; II. Recruitment, Screening, and Selection; III. The Interns; IV. The Curriculum; V. The Intern as a Public School Employee; VI. Mobility and Permanency of Interns as Teachers; a Concluding Word. The appendix contains statistical data and an evaluation form used in the program.

TANRUTHER, EDGAR M. Clinical experiences in teaching for the student teacher or intern. New York: Dodd, Mead & Company, 1967. 297 pp.

Part and chapter titles indicate content and organization: Part I, Preparation and Resources for Clinical Participation—(1) Planning for Teaching; (2) The Clinical Situation; (3) The Teacher Development Team; Part II, Learning to Teach Through Clinical Experience—(4) Planning for Learning; (5) Directing Learning; (6) Evaluating Pupil Progress; (7) Using Instructional Materials and Teaching Aids; (8) Guiding Pupils Toward Desirable Behavior; (9) Working in the Total School Program; (10) Evaluating Growth in Teaching Skill; Part III, Planning for a Career in Teaching—(11) Working Toward a Successful First Year; (12) Planning for Continued Professional Growth.

Appendix A, Evaluation of Supervised Teaching Experience; Appendix B, References for the Supervising Teacher and College Supervisor. There is an index.

WILLIAMSON, MARGARET. Supervision—new patterns and processes. New York: Association Press, 1961. 176 pp.

The chief focus is on the practice of supervision in those social work agencies which make primary use of group methods in their program of services to people. Chapters are: (1) The Group Service Agency Setting; (2) Objectives and Functions of Supervision; (3) Supervision as an Educational Process; (4) The Supervisory Relationship; (5) Recruitment and Selection of Personnel; (6) Interviewing—A Basic Skill; (7) Job Assignment, Orientation, and Organization; (8) The Supervisory Conference; (9) Recording and the Use of Records; (10) Use of Group Methods in Supervision; (11) Evaluation of Worker Performance; (12) The Supervisor a Learner, Too. There is a 3-page bibliography.

WOODCOCK, G.D.C. A study of beginning supervision. British journal of psychiatric social work 9:2, 1967. pp. 66-74.

The responses of 40 supervisors to a questionnaire inquiring into their reactions to their first student supervision indicated that beginning supervision is a career crisis that, like any new learning, involves a threat to homeostasis and arouses resistance. The experience initially provoked considerable anxiety and fears, including fears of inadequacy, of being responsible for another person's work, and of being judged and found wanting. It also stirred up residual, unconscious attitudes toward one's own past teachers and supervisory experience. However, with the continued guidance and support from the agency and school, including regular supervisors' meetings, the anticipatory alarm was dispelled, and the satisfactions inherent in learning a new skill and achieving a goal came to the fore. Freedom of communication between field and academic staff was stressed as the necessary groundwork for the acquisition of supervisory skills. (Abstracts for Social Workers)

# CORRESPONDENCE STUDY (HOMESTUDY)

An annotated bibliography of correspondence study, **1897-1960** (preliminary form). Minneapolis, Minn.: University of Minnesota, National University Extension Association, Division of Correspondence Study, Committee on Research, 1960. 203 pp.

    A detailed annotated bibliography on correspondence study references from the years 1897 through 1960 is presented. **(67)**

Audiovisual media in correspondence study. **Audiovisual instruction** 8:8, October 1963. pp. 590-593.

    Results of the Austin Conference on Audiovisual Media in Correspondence Study are reported. Emphasized is the fact that despite the many improvements in audiovisual media, such as miniaturization, portability, and lower equipment costs, application of the media to correspondence study has been very small. The findings of a survey on this subject are shown and explanations by various authorities of the causes of the lack of widespread use of audiovisual media in correspondence study are offered. Potential applications are discussed, and a sampling of available programs which made use of audiovisual media in correspondence study is included. **(68)**

CHILDS, GAYLE B. Research concerning supervised correspondence study. **The bulletin of the National Association of Secondary-School Principals** 36:190, December 1952. pp. 7-29.

    Dealt with are three phases of research: (1) general research in supervised correspondence study; (2) research concerning the success of correspondence instruction at the college level; and (3) the research evidence in regard to the success of pupils who take work by supervised correspondence study (only the last being treated in full). The general studies reviewed show that there is an increasing acceptance of supervised correspondence instruction on the part of both school personnel and the producers of correspondence courses; indicate a remarkably high record of completions on the part of the pupils who have begun work on correspondence courses; and indicate some reasons why pupils

do not complete courses which they have started. At the college level, it is indicated that correspondence study attracts students of high ability, that grades earned are as high as or higher than those earned in residence study, and that the performance of correspondence students as measured by test results is at least as high as that of students in residence. **(69)**

EAGAN, H. E. Professional development by home-study. **Journal of milk and food technology** 29:11, November 1966. pp. 313-315.

    The development and use of homestudy courses by the Training Branch of the U.S. Public Health Service Communicable Disease Center in Atlanta, Georgia, are discussed. Specific advantages of the method; administration of the courses by the Special Projects Unit of the Training Branch's Community Services Training Section; operating procedures; specific courses available; and additional courses planned are described. **(70)**

FLEMING, ALICE M. A complete guide to the accredited correspondence schools. Garden City, N.Y.: Doubleday & Company, 1964. 83 pp.

    Chapters indicate the contents of this guide: (1) Why Study at Home?; (2) Accredited Schools; (3) About Non-Accredited Schools; (4) Industrial Training Programs; (5) College and University Correspondence Studies; (6) High School by Mail; (7) Elementary Education; (8) The United States Armed Forces Institute; and (9) Looking Ahead. Names and addresses of other sources of information about correspondence education are given at the back. **(71)**

HENRY, MARY E. and VASSER BISHOP (eds.). Guide to correspondence study in colleges and universities, **1966-1967**. Minneapolis, Minn.: University of Minnesota, National University Extension Association, n.d. 40 pp.

    The guide gives general information about correspondence study and lists the subjects taught by universities and colleges affiliated with the National University Extension Association. **(72)**

KELLY, HAL V. Correspondence study. IN Craig, Robert L. and Lester R. Bittel (eds.). **Training and development handbook.** New York: McGraw-Hill, 1967. pp. 297-309.

An overview of correspondence or home study in relation to training in business and industry is presented. The scope and nature of correspondence study in general is first defined and its rationale as a method of training is discussed. The following topics are subsequently discussed: Industry Use of Home Study (several examples are given of how more than 10,000 companies use home study); Materials and Methods (a review of instructional materials and methods of correspondence school and university home study programs is presented; home study and classroom instruction are compared); Home Study Institutions (sources of information are suggested); How to Use Correspondence Study; Limitations of Home Study; Accreditation; Selecting a School. A checklist that training directors can use to determine if correspondence courses could supplement their training programs concludes the chapter.          (73)

NATIONAL HOME STUDY COUNCIL. **Directory of accredited private home study schools, fall 1967.** Washington, D.C.: National Home Study Council, 1967.

The brochure suggests the advantages of home study, defines what home study accrediting means, and describes the home study accrediting commission. A partial list of home study subjects is provided. Ninety-five accredited organizations for home study are listed and described and the subjects taught at each institution are designated.          (74)

NOFFSINGER, JOHN S. **Correspondence schools, lyceums, chautauquas.** New York: Macmillan, 1926. 145 pp.

A study based on the findings of an investigation made under the auspices of the Carnegie Corporation of New York as part of a larger survey of adult education in the United States is presented. Correspondence study and attendance at lecture programs were the methods most often used at the time of the study. The part and chapter titles describe the content. Part I, Correspondence Schools, contains: (1) The Historical Background; (2) The Present Situation; (3) Kinds of Correspondence Schools; (4) Methods of Enrolling Students; (5) An Analysis of the Student Body; (6) Instructional Methods and Content; (7) Costs; (8) Legal Status of Correspondence Schools; (9) Conclusions. Part II, Lyceums and Chautauquas, contains: (1) The Historical Lyceum; (2) The Historical Chautauqua; (3) The Modern Lyceum; (4) The Modern Chautauqua; (5) Other Types of Lyceum and Chautauqua; (6) Conclusions.          (75)

PERRATON, HILARY. Correspondence teaching and television. ABSTRACTED IN Twyford, Loran C., Jr. *Research abstracts.* AV communication review 15:2, Summer 1967. p. 227.

To determine the effectiveness of acceptability of linking television with correspondence study as a means of teaching mathematics, 134 adult students (school teachers, work-study personnel, accountants) were taught a course in statistics over television. Twelve 20-minute lessons were presented and students completed a worksheet which they submitted to the teacher. The technique was reported as being particularly effective as a means of teaching mathematics. Eighty percent of those not using statistics completed worksheets. Since it was impossible to take notes accurately during the program, it was recommended that diagrams used in the broadcasts be reproduced in the study manual.          (76)

STEIN, LEONARD S. Design of a correspondence course. **Adult education** 10:3, Spring 1960. pp. 161-165.

Four principles essential to designing a correspondence course were discussed: (1) the educational objectives must be appropriate to the medium; (2) the medium must be appropriate for the clientele; (3) the learning experience must be appropriate to both; and (4) special care must be taken so that the planned learning experience offers sufficient flexibility.          (77)

U. S. DEPARTMENT OF AGRICULTURE. GRADUATE SCHOOL. **Correspondence program catalog: credit and non-credit courses for correspondence study, 1967-1968.** Washington, D.C.: U. S. Department of Agriculture, 1967. 47 pp.

This annual catalog describes 30 correspondence courses within the general job-oriented clusters of federal courses—administration and supervision, written communications, automatic data processing, math and statistics, Rural Electrification Administration courses (REA), and Statistical Reporting Services courses (SRS) with registration open between August 1, 1967 and July 31, 1968. Also included is information about the graduate school, general administration and officers, the professional staff and committee, and aspects of the correspondence program, such as policies and procedures, academic information, financial information, overseas students, and services.          (78)

WEDEMEYER, CHARLES A. (ed.). **The Brandenburg memorial essays on correspondence instruction—I.** Madison, Wis.: University Extension Division, Correspondence Instruction Program, 1963. 77 pp.

In August 1961, the Brandenburg Foundation made its first memorial grant to The University of Wisconsin Extension Division for the purpose of assisting the university in carrying on seminars in correspondence instruction and publishing every other year a volume of original papers on correspondence instruction, of which this is the first. There is a very brief review of the literature of the field in the Foreword. Titles, authors, and author locations of the collected papers are: Liberal Education for Adults by Mail, by Leonard S. Stein, St. Louis University; The Demands of the Decade, by John L. Davies, State University of Iowa; Supervised Correspondence Instruction, by Gayle B. Childs, University of Nebraska; Tutoring Through the Mail, by Katherine W. McMullen, University of Wisconsin; Problems in Learning by Correspondence, by Charles A. Wedemeyer, University of Wisconsin; W. H. Lighty—Fountain of Idealism, by Roger W. Axford, University of Wisconsin; and Some Aspects of Teaching by Correspondence in Australia, by Reneé Erdos, New South Wales Department of Technical Education, Australia. **(79)**

WEDEMEYER, CHARLES A. (ed.). **The Brandenburg memorial essays on correspondence instruction—II.** Madison, Wis.: University of Wisconsin Press, 1966. 156 pp.

Various aspects of correspondence education are explored in 13 essays by various authors, including the editor. In respective essays, current worldwide trends in correspondence education are summarized, its development in several countries is discussed, its purposes are explored, its weaknesses and advantages are analyzed, methods of evaluating it are proposed, and predictions about its future are offered. The contents are: World Trends in Correspondence Education, by Charles A. Wedemeyer; Correspondence Education in Developing Countries, by Homer Kempfer; Teaching Through Television, by Harold Wiltshire and Fred Bayliss; The Expansion of Educational Opportunity in Venezuela, by Pedro Tomas Vasquez; New Developments in the Production of Swedish Correspondence Courses, by Borje Holmberg; New Horizons in Correspondence Education, by Philip Lambert, Eldo C. Koenig and William O. Vebber; The Search for Purpose in Correspondence Education, by Ripley S. Sims; Words without Gestures, by George Hartung; The Role of the Instructor in

Correspondence Study, by Margaret I. Knowles; Promoting Correspondence Instruction, by Clarence A. Schoenfeld; A Self-Evaluation Study of the Correspondence Method, by Harold Glen Clark; Review of Research in Correspondence Study, by Gayle B. Childs; Extension Education and Its Tools in the Next Half Century, by Charles A. Wedemeyer. **(80)**

WEDEMEYER, CHARLES A. and GAYLE B. CHILDS. **New perspectives in university correspondence study.** Chicago: Center for the Study of Liberal Education for Adults, 1961. 74 pp.

Parts, chapters, and sections indicate the contents: Part One, Correspondence Study Today, contains: Chapter I, Correspondence Study in the United States—An Overview (the scope of correspondence study; organizations which provide it in the U.S.: college and university programs, private correspondence schools, Armed Forces correspondence schools; The National University Extension Association; the nature of correspondence study: the syllabus, the teacher, administration). Part Two, Education for the Individual, contains: Chapter II, Correspondence Study and Individual Needs (individualization within groups; individualization of subject matter; individualization in continuing education; correspondence study and individualization; correspondence study and the gifted student; the low achiever; varied adult interests; cultural needs: technical education; conference and institute programs); Chapter III, The Self-Motivating Learner (education for self-motivating learner; correspondence study and self-discipline; counseling); Chapter IV, The Education of Individuals in a Group (rationale for group correspondence study; development of the group study method; variations in group study method; group study for adults; special problems in small group method; group study in the large university class); Chapter V, The Education of Individuals via the Mass Media (ETV and correspondence study; radio; telefilms; the North Carolina program; basic principles for TV/correspondence study courses; evaluation and experimentation). Part Three, A Look Into the Future, contains Chapter VI, American Educational Problems and Correspondence Study (a coordinated post-high school program; expanding learning opportunities for adults: topical courses, inter-institutional cooperation, liberal and humanistic education); Chapter VII, An International Program for Correspondence Study (correspondence study in an international program; proposal for an international program); Chapter VIII, New Directions and a New Image (the private school image; toward a new image). References are cited throughout the publication. **(81)**

# INDEPENDENT STUDY, READING

BEGGS, DAVID W., III and EDWARD G. BUFFIE (eds.). **Independent study: bold new venture.** Bloomington, Ind.: Indiana University Press, 1965. 236 pp.

Dealt with in twelve essays by various authors are three aspects of independent study: (1) the nature of independent study; (2) the goals of self-assumed learning activities; and (3) the ways schools can organize to get independent study into the mainstream of the school program. The essay titles describe the contents: (1) Schedules, Bells, Groups, and Independent Study, by William Griffin; (2) Independent Study in Self-Directed Learning, by William M. Rogge; (3) The University of Chicago Project, by William J. Congreve; (4) Independent Study with Team Teaching, by William Fromm; (5) Practices and Programs for Elementary Schools, by Anne Patrick; (6) The Brookhurst Junior High School Program, by Gardner A. Swenson; (7) Senior High School Uses of Flexible Programming in Independent Study, by J. W. Formsma; (8) A Model: Independent Study in the Humanities, by Philip Gearheart; (9) Technological Aids and Independent Study, by James L. Olivero; (10) Facilities, Equipment, and Independent Study, by J. H. Beynon; (11) In-Service Programs for Independent Study, by David W. Beggs, III; (12) The Administrator's Role, by Edward G. Buffie. A selected bibliography and an index are included. **(82)**

BONTHIUS, ROBERT H., JAMES F. DAVIS and GARBER J. DRUSHAL. **The independent study program in the United States: a report on an undergraduate instructional method.** New York: Columbia University Press, 1957. 259 pp.

The stated purpose of this book is to explore the development and to analyze the effectiveness of teaching and learning which focuses upon the individual instead of the group, which emphasizes the person-to-person relationship between teacher and student, and which, involving both a philosophy and a method, is called "independent study." The book is a report of an analysis of independent study by the College of Wooster Committee of Educational Inquiry that sought (1) to furnish pertinent information for institutions interested in making special provisions for the development of individual scholarships among undergraduates; (2) to provide a broader perspective for suggesting improvements in the Wooster independent study plan; and (3) to stimulate re-evaluation of the programs on the part of the local administrative officers, faculty members and students in those institutions chosen for study. Chapters are: (1) The Definition, History, and Extent of Independent Study; (2) The History and Description of Twenty Representative Programs; (3) The Twenty Programs as Viewed by Student and Faculty Participants; (4) A Detailed Study of a Required Program: The College of Wooster; (5) Costs of Independent Study Programs; (6) Summary and Conclusions; Appendix A, Research Methods; Appendix B, Questionnaires. A bibliography and an index are included. **(83)**

HASTIE, J. E. DONALD. Related reading. IN Craig, Robert L. and Lester R. Bittel (eds.). **Training and development handbook.** New York: McGraw-Hill, 1967. pp. 285-296.

Related reading programs as an aspect of training in business are discussed. Dealt with are the rationale of related reading, its objectives, its place in training, and some of the problems involved in establishing and conducting a program of related reading. Two concepts of related reading programs are explained: (1) the program is incorporated within a training program as an adjunct to other means of obtaining knowledge, improving skill, or attaining or changing attitude, and consists of specific reading assignments related to the subject at hand; (2) the program is individually discretionary in nature and is designed to improve present job performance and to prepare the individual for promotion. The two programs are outlined, and suggestions are offered for their implementation. The need for improving reading ability, preparing a reading list, and methods of evaluating related reading programs are also considered. **(84)**

HELWIG, FLOY. Evaluation of a clinical pediatric clerkship: the role of the lecture in a clinical discipline (Abstract). **The journal of medical education** 42:3, March 1967. p. 272.

This study of the effectiveness of the lecture used junior medical students who were undergoing pediatric clerkships. Members of the first group had held other clerkships; 35 percent of their training was didactic; they were tested at the end of the clerkship. Members of the second group had also held other

clerkships, received the same amount of didactic training, but were tested at the start of the clerkship. The third and fourth groups had not held clerkships before; 16 percent of their training was didactic. The third group was tested before, the fourth group after, undergoing clerkship. Earlier acquired information influenced learning during this clerkship; students were found to learn as well from guided independent study as from formal lectures. (85)

LEUBA, CLARENCE. Using groups in independent study. **Improving college and university teaching** 12:1, Winter 1964. pp. 26-30.

A combination group study and independent study plan is described in detail. Applicable learning and motivational theories are discussed in connection with the plan, and the role of the instructor, the achievement of feedback, and the evaluation of student achievement are investigated. (86)

SAYLES, LEONARD R. Management development rediscovers books. **Personnel** 40:4, July-August 1963. pp. 45-48.

The widespread use of programmed instruction has caused a reawakening of interest in the use of books as a training method. Books permit the learner to handle material at his own pace, to go back over it as often as need be, and to deal with it flexibly, when and where he is best able to. Books are adjustable to the learner's previous experience, powers of absorption, and intellectual capacities. Discussed are the problems involved in selecting good and useful books for management, and the pitfalls attending such selecting. The need for a professionally-defining and systematic body of knowledge for the management profession is examined. (87)

# PROGRAMMED SELF-INSTRUCTIONAL MATERIALS—EVALUATION AND USE

BURNAP, E. GIFFORD. On-the-job instruction with programmed tapes. **Training directors journal** 19:10, October 1965. pp. 42-48.

While not a formal study, this article provides a factual report of the experience of the Metropolitan Life Company with on-the-job tape instruction. In a situation where classroom training was impossible, audio tapes were prepared for the use of newly-hired employees who had had no previous experience in life insurance work. The program was reported as a success. It was also reported that preparing taped programs rather than written programs resulted in a reduction in the total cost of programmed material preparation. Other savings aspects are discussed. *(ASTD)*            **(88)**

GIBBS, WILLIAM E. The teacher and programmed instruction. **Educational technology** 7:11, June 15, 1967. pp. 9-16.

This article clarifies the role of the teacher in the learning situation and discusses how the use of programmed materials can bring the teacher into more intimate contact with the learning activity of each student. The role of the teacher is to control the learning process by stimulating and guiding the cognitive activity of each student. Programmed instructional materials are simply instructional tools which aid the teacher in structuring an efficient and effective learning situation. The key to an individualized approach is the ease with which programmed materials allow students to pursue a specific content area with little or no direction from the teacher. If used wisely, programmed instruction can extend the effectiveness of the teacher and enable him to do a more efficient job of teaching each student. References are included.            **(89)**

HILGARD, E. R. Teaching machines and creativity. **Programmed learning** 1:2, July 1964. pp. 55-60.

Programmed learning is described and terms such as "frame," "linear," and "branching" are defined for the layman. Some advantages of programmed learning are listed: recognition of individual differences, active participation by learner, immediate feedback, emphasis on the organized nature of knowledge, provision of spaced review, and knowledge on the learner's part that he really is learning something. Programmed instruction

is a supplement to and not a replacement of other teaching methods. It frees the teacher from the routine tasks involved in "expository" teaching or communication of knowledge and allows him to concentrate on "hypothetical" teaching, which emphasizes problem solving, choosing between alternatives, discovery, and invention. Ways in which the human teacher can aid in developing the problem-solving and creative potentialities of his students include: (1) helping them learn how to learn (to discover what facts they need and to personally search them out); (2) helping them to become alert to problems and the general aspects of problem solving; (3) helping them to gain confidence in their own capacities as creative persons by acknowledging and celebrating small achievements; and (4) helping them to learn to live as group members—able to tolerate diversity, to seek compromises between factions so that a common life may go on, to see individual behavior in terms of its consequences for others, and to acknowledge their own responsibility.            **(90)**

HOLLING, K. The feedback classroom. **Programmed learning** 1:1, May 1964. pp. 17-20.

The feedback classroom involves a group teaching machine which can be used as a teacher aid or as an operator-controlled teaching or examination machine. A slide projector presents multiple choice questions to the students, each of whom has a response unit with six answer switches. Results of each student's attempt to answer the question are immediately available to both the student and the teacher through different colored lights. A meter shows the teacher and the class the percentage guessing each incorrect answer. This permits instant evaluation of teaching efficiency. The teacher is also instantly informed of which students are missing what material and can arrange tutorials to bring them up to the level of the rest of the class.            **(91)**

HOLT, H. OLIVER. Programmed instruction. IN Lynton, Rolf and Udai Pareek. **Training for development.** Homewood, Ill.: Richard D. Irwin and The Dorsey Press, 1965. pp. 168-172.

One organization's use of programmed instruction is briefly described. Four characteristics of programmed instruction involve: (1) the small steps in which it is organized; (2) the continued responding;

(3) immediate knowledge of results; and (4) self-pacing. There are several advantages of this technique: the self-pacing aspect allows the individual to complete the program at his office or home; no time is taken away from his work. Rigid scheduling is unnecessary. Slow learners do not feel rushed and fast learners can progress rapidly. Another advantage of programmed instruction is its uniform quality; all participants take the same course. Limitations of this method are that appropriate programs are difficult to find, a good program (one that does an efficient teaching job) is hard to identify, program writing is time-consuming and expensive, and good programs which teach effectively may be irrelevant to the job.
(92)

JACOBS, PAUL I., MILTON H. MAIER and LAWRENCE M. STOLUROW. **A guide to evaluating self-instructional programs.** New York: Holt, Rinehart and Winston, 1966. 84 pp.

A procedure for evaluating self-instructional programs is introduced by consideration of the historical and theoretical background of programmed instruction, its availability, classroom uses, advantages, limitations, and the role of the teaching machine. A checklist and some suggestions are given for selecting programs: Is the material really programmed?; How does the program relate to the curriculums?; Does it cover appropriate topics?; Does it develop appropriate skills and knowledge?; Is its level of difficulty appropriate?; Would the program teach well in your situation?; Were the validation conditions relevant to your situation?; Does the program meet your objectives?; Can you afford it? General procedures are given for evaluating programs; an example of such an evaluation is provided. References and an index are included.
(93)

KRUMBOLTZ, JOHN D. Evaluation of programmed instruction. IN Lysaught, Jerome P. (ed.). **Programmed instruction in medical education** (Proceedings of the first Rochester conference, June 25-27, 1964). Rochester, N. Y.: University of Rochester Clearinghouse for Information on Self-Instruction in Medical Education, 1965. pp. 139-149.

Three methods for evaluating instructional programs are reviewed: the experimental method, the pre-post method, the absolute method. A program can be judged as adequate when all members of the target population demonstrate complete mastery of all the desired behaviors at the time desired by the program writer. A three-point approach to this standard is discussed: state the terminal behaviors desired, state when they will be needed, and have a procedure for assessing the degree to which each behavior has been mastered. Since a perfectly adequate program can

seldom be produced, suggestions for workable compromises are offered. The article concludes with a discussion of inadequate and insufficient bases for evaluation, which include program error rate, reputation of author or publisher, student opinion, and number of experimental subjects.
(94)

LYSAUGHT, JEROME P., CHARLES D. SHERMAN, JR. and HILLIARD JASON. **Programmed instruction in medical education** (Proceedings of the first Rochester conference, June 25-27, 1964). Rochester, N. Y.: University of Rochester Clearinghouse for Information on Self-Instruction in Medical Education, 1965. 235 pp.

Papers included present a summary of five years' exploration and research on programmed instruction in medical education. They consider both theoretical and practical aspects of program development and construction and philosophical considerations of the impact on medical education of the extension of self-instruction. Section headings and titles of papers indicate specific contents: Part I, An Introduction to Programmed Instruction—Underlying Concepts of Programmed Instruction, by Jerome P. Lysaught; Part II, Programming in the Total Learning Process—Programmed Instruction in Professional Education, by John W. Blyth; Research Needed to Evaluate Programming in Medical Education, by Stephen Abrahamson; Medical Education and Programmed Instruction, by Paul J. Sanazaro; Part III, Background for Program Development—A Conceptual Model for Analyzing Instruction, by John R. Ginther; From Theory into Practice, by Edward Green; The Identification of Special Topics for Teaching by Short "Plug-In" Learning Programs, by Halvor N. Christensen; Part IV, Specific Problems in Medical Programming—Behavioral Technology and the Development of Medical Education Programs, by Francis Mechner; Team Programming in Medical Instruction, by Leon Summit; Some Problems in Developing a Psychiatric Program, by Chester M. Pierce, Vladimir Pishkin, James L. Mathis; Programmed Instruction as a Method of Teaching Clinical Problem Solving, by Preston Lea Wilds, Virginia Zachert; A Systems Approach to Analysis and Design of Instruction at the Communicable Disease Center, by Robert L. Reynolds; Cinematic Self-Instruction in Laboratory Pharmacology, by Theodore C. West, William T. Stickley; Part V, Programmed Learning and the Larger Structure of Information Theory in Medical Education—Programmed Instruction and Information Theory: Significance for Medical Education, by James G. Miller; Part VI, Research and Evaluation—Evaluation of Programmed Instruction, by John D. Krumboltz; Speculations on the Impact of Programmed Instruction on the Traditional Lecture, by Murray Dworetzky; A Medical Program of Individualized Instruction, by Eugene N. Garcia; Problems in Developing Programs in Cancer, by Charles D. Sherman, Jr., Jerome P. Lysaught,

Clarence M. Williams; Testing Learning in the Development of a Program, by Paul A. Rondell, George L. Geis, Karl L. Zinn; "Amebiasis: Laboratory Diagnosis"—Self-Instructional Materials for Students of Medicine and Related Professions, by M. M. Brooke, R. L. Reynolds; Research Results of a Year's Use of an Adjunctive Linear Program, by Virginia Zachert, Preston Lea Wilds; Part VII, Summary and Prospective—A Molecular Approach as a Major Contribution to a Basic Science of Education, by Thomas Hale Ham; Programmed Instruction in Medical Education: Perspective and Prospective, by Hilliard Jason. There is a classified, briefly annotated bibliography of general references, journals, articles on medical programming and para-medical programming, and programmed units in medicine and para-medical fields. An index of authors and subjects is included. (95)

LYSAUGHT, JEROME P. and HILLIARD JASON (eds.). Self-instruction in medical education (Proceedings of the second Rochester conference, June 24-26, 1965). Rochester, N. Y.: University of Rochester Clearinghouse on Self-Instructional Materials for Health Care Facilities, 1967. 262 pp.

Papers from the Conference were slightly rearranged for more logical presentation to the reader. Part I, A Framework for Viewing Self-Instruction, is an overview, a summary, and analysis of research to date, and a speculative look at the impacts of self-instruction on the future medical school. Papers are: A Focus and a Change, by Frank W. McKee; What We See Today, by Jerome P. Lysaught; A Glimpse of Tomorrow, by Hilliard Jason. Part II, The Process of Analyzing Self-Instruction, provides an answer to the perplexing question of how to select and evaluate a programmed sequence for the health field. Papers are: Selection of Programs, by William A. Deterline; Criteria for Evaluation, by Robert F. Mager; Applications to Medical Education, by Fred MacD. Richardson. Part III, Research on Self-Instructional Materials, consists of a series of controlled research studies on effectiveness of self-instructional materials in medical education, and includes a study from England and one from Spain to demonstrate the cross-cultural implications of this instructional methodology. Papers are: Programming in Ophthalmology, by Robert D. Reinecke; A Comparison of Linear Programs and Lecture Methods in Radiology, by Phyllis Jackson Moser, Charles M. Nice, Jr., Phillip H. Meyers, George R. Meckstroth; Effectiveness of Two Programmed Texts in Teaching Gynecologic Oncology to Junior Medical Students, by Preston Lea Wilds, Virginia Zachert; A Comparative Study of Lectures, Programmed Texts, and Programmed Films in Teaching Genetics to Medical Students, by Luis Daufi, A. Fernandez-Cruz;

Comparison of a Teaching Machine Program and a Series of Lectures in Electrocardiography, by J. Anderson, S. G. Owen, R. Hall, G. A. Smart. Part IV, Curricular Applications of Self-Instruction, consists of less rigorous studies primarily aimed at exploring the practical curricular implications of new techniques and technologies. Papers are: Self-Instruction in Using the Health Sciences Library: A Traveler's Tale, by John W. Howard; Student Reactions to Self-Instructional Materials, by John S. Lloyd; A Modified Programmed Presentation of Neuroanatomy, by Frederic D. Garrett; Programmed Instruction in Dental Anatomy, by Richard S. Scott, Robert L. Lang; Progress Report on a Program of Individualized Medical Instruction, by Eugene N. Garcia, Kenneth H. Ibsen. Part V, Extensions of the Programming Process, deals with interesting extensions of the basic modality of programming, applying it to lectures, tests, and live simulators or "patients." Papers are: The Programmed Lecture: Programmed Techniques for Oral Presentation to Large Groups, by Phil R. Manning; The Programmed Patient: Evaluation and Instruction in Clinical Neurology, by Howard S. Barrows; Programmed Motion Picture Films, by John Franklin Huber; Programmed Tests in Assessing Clinical Judgment, by John W. Williamson; Computer-Assisted Instruction: Current Applications, by George L. Geis; Computer-Assisted Instruction—The Technology, by Ralph E. Grubb. Part VI is a summary and review paper that seeks to describe what has been learned and to suggest where the next steps ought to be directed: Summary and Perspective, by Lawrence M. Stolurow. There is a classified, briefly annotated bibliography of general references, journals, articles on medical programming and para-medical programming, programmed units in medicine and in para-medical fields, and general health programs. The index is cumulative for the proceedings of both the first and second conferences.(96)

MOORE, D. L. Group teaching by programmed instruction. Programmed learning and educational technology 4:1, February 1967. pp. 37-46.

A series of experiments at primary school, secondary school, and university levels in which programmed instruction is used in a group situation is reported. The assumption that each student, if left to pace himself, will work at his most efficient rate is questioned. A procedure for pacing the group is outlined. Though there was no significant difference between the scores of groups using the group teaching machine and those of groups using self-paced booklets, the group teaching machine proved to have several advantages. It saves time, it keeps the entire class working on the same material, and the cost per pupil is much less than the cost of individual teaching machines. (97)

MURPHY, JOHN R. and IRVING A. GOLDBERG. Strategies for using programmed instruction. **Harvard business review** 42:3, May-June 1964. pp. 115-132.

The objectives, methods, timing, costs, preparations, applications, and values of programmed instruction in respect to business management are discussed. An attempt is made to answer the following questions about programmed instruction: What is its role as a management tool? What are its values and limitations? When does it pay for itself? What decisions should executives make in evaluating its application to their company? How should management proceed to use it? Topic headings further describe the article's contents: Nature and Role; Industrial Development; Forms and Formats; Values to Management; On-the-Job Performance; Terminal Behavior; Other Benefits; Limitations; Economic Analysis; Analyzing the Need; and Getting the Job Done. Key points are illustrated with descriptive tables. **(98)**

OFIESH, GABRIEL D. **Programmed instruction: a guide for management.** New York: American Management Association, 1965. 416 pp.

Educational technology, seeking a set of axioms to support a science of education, is developing efficient educational systems of integrated materials and elements that can reliably perform specific educational tasks for a particular group of students. Programmed instruction is the basis of this development and is the first complete system of instruction planned to induce the most efficient learning possible. It emphasizes the importance of the individual learner and takes as its criteria for effectiveness the performance of the learner. It uses a specific and detailed description of what, after training, the learner is to do and the conditions under which he is to do it. This description is the basis for selecting techniques and instructional media best suited for the training. A section on the development of programmed instruction systems is followed by 35 case histories of program development (the largest section of the text). The book is indexed. **(99)**

ROTHKOPF, ERNST Z. Criteria for the acceptance of self-instructional programs. IN Traxler, Arthur (ed.). **Improving the efficiency and quality of learning** (a report of the twenty-sixth educational conference, New York City, October 26-27, 1961, held under the auspices of the Educational Records Bureau and the American Council on Education). Washington, D.C.: American Council on Education, 1962. pp. 30-38.

Two major alternative sets of criteria are available in choosing a self-instructional program: criteria based on internal characteristics and criteria based on functional characteristics. (Internal characteristics are those conforming to a theory of programmed instruction, such as small steps, active response, immediate knowledge of results, self-pacing, and low error rate. Functional characteristics are the results of a particular program as indicated by comprehensive performance testing. The distinction essentially lies between what a given program should accomplish according to a certain theory, and what a given program has accomplished and can accomplish when actually used.) It is suggested that criteria based on internal characteristics cannot be valid because there is not "at this time . . . a relevant theory . . . that has a sound empirical or theoretical basis." The program must be chosen, therefore, on the basis of its functional characteristics; consequently, the producers of programs should specify (in the form of a label) what they have found their programs to be capable of doing based primarily on comprehensive performance tests. A detailed description of the behavioral goals of the instructional program should be given and results of pre- and post-testing should be reported. **(100)**

RUMMLER, GEARY A. Programmed learning: the whole picture. **Training directors journal** 17:4, April 1963. pp. 30-35.

An organization that intends to use programmed learning must consider two questions: Can it be used in the organization? and How can it be used? The common errors in applying programmed learning are in four areas: (1) management's concept of programmed learning; (2) the role of the programmer; (3) management posture; and (4) mechanics. Programmed learning cannot correct a poorly designed training program, but it can reduce learning time, upgrade performance, and increase the consistency of course quality. The programmer should determine the content of programmed courses, and he should have the support of his supervisor. Management must adopt a broadminded attitude toward the programmer and his courses, give him time, understand the nature of his job, and see that he has proper environmental support. **(101)**

RUMMLER, GEARY A., JOSEPH P. YANEY and ALBERT W. SCHRADER (eds.). **Managing the instructional programming effort.** Ann Arbor, Mich.: University of Michigan Press, 1967. 294 pp.

A collection of 17 essays designed to help the reader to determine if and how to use programmed learning in his organization is presented. The book is not intended to provide a detailed insight into the theory or techniques of programming, but rather offers a basis for evaluating and implementing systems of programmed learning. In Section I, The Technology, two summaries

are presented along with a discussion of where programming fits into the general scheme of behavioral change. Section II, Managing the Technology, covers the management of the programming effort from the initial presentation through implementation and followup, and a supplier-consumer discussion for each major source of programmed materials is presented. In Section III, Special Problems, the management of an industry association programming project, which presents some unique problems, is illustrated by a case study. Two other cases deal with introducing programmed instruction into remote field locations. Included in Section IV, Appendices, are a number of useful support materials in several phases of program management, including management presentations, a guide to analyzing programming problems, and suggestions for reducing costs of program development. An abstract appears at the beginning of each chapter. **(102)**

Selection and use of programmed materials: a handbook for teachers. Washington, D.C.: National Education Association of the United States, Division of Audiovisual Instructional Service, 1964. 71 pp.

This handbook is designed for use with the National Education Association sound filmstrip "Selection and Use of Programmed Instruction." With its discussion of topics presented in the filmstrip plus its comprehensive references, this handbook will enable teachers to determine what programmed materials are available and where they can be obtained. It will assist teachers in determining appropriate use of these materials and evaluating such use. Specific suggestions for teachers are given on how to prepare themselves,

their students, their schedules, and other aspects of the instructional setting when programmed materials are introduced. **(103)**

TRACEY, WILLIAM R. Seven crucial tests for programmed instruction. **Training in business and industry** 2:1, January-February 1965. pp. 38-43, 55-57.

The purpose of this article is to present criteria that can be used in selecting programmed materials for training. The criteria presented are grouped under the categories: (1) training objectives, (2) subject matter, (3) trainee population, (4) the instructional staff, (5) training facilities, (6) time, and (7) costs. According to the author, the application of the criteria presented is useful in preventing the employment of programmed materials in training situations where not applicable. *(ASTD)* **(104)**

YANEY, JOSEPH P. Programmed learning: costs and cost reduction; how to measure the economics of programmed materials. **Training and development journal** 2:3, March 1966. pp. 16-20.

Results of some preliminary steps taken to provide trainers with programming costs are presented. Generalizations based on a study of eleven firms from various parts of the economy are offered, and five field-tested methods for reducing costs are suggested. (This article is based on an earlier publication: "The Cost of In-Plant Programming," by Geary A. Rummler and Joseph P. Yaney, The Center for Programmed Learning for Business, Ann Arbor, Michigan, 1964.) **(105)**

# PROGRAMMED MATERIALS—SOURCES

CAVANAGH, PETER and CLIVE JONES (eds.). Programmes in print 1966. London: Association for Programmed Learning, December 1966. 229 pp.

Programs listed, with the exception of a few, are published in the United Kingdom and deal with the subjects: Biological Sciences, Bridge, Chemistry, Civic Affairs, Commercial Subjects, Computers and Computer Programming, Dentistry, Earth Sciences, Electricity and Electronics, Engineering, English (language and literature), Foreign Languages, Health Education, History, Industry, Librarianship, Logic, Management and Supervision, Mathematics, Medicine, Music, Nursing, Physical Education, Physics, Programmed Instruction, Reading, Religious Education, Slide Rule, Statistics. A section entitled "Some Guides for Evaluating Programmes," a subject index, and an index to advertisers are included. (106)

GEE, R. D. Teaching machines and programmed learning: a guide to the literature and other sources of information. 2nd edition. Hatfield, Hertfordshire, U.K.: Hatfield College of Technology, Hertfordshire County Council Technical Library and Information Service, 1965. 128 pp.

Entries are grouped in three main sections: (1) Bibliography (General—Books, Monographs, Reports; General—Periodical Papers; Literature Reviews; Experimentation; Psychological Aspects; Programming; Application in Specific Areas of Education and Training; The Hardware; The Computer-Based System; Background Reading; Further References); (2) Programmed Texts (Computers and Computer Programming; Electricity and Electronics; Languages, Terminology, and Grammar; Mathematics—Elementary; Mathematics—Physics and Chemistry; A Selection of Other Subjects); (3) Directory (British Manufacturers of Teaching Machines and Devices; Teaching Machines Available on the English Market; British Suppliers of Programs; British Research; British Consultancies and Special Organizations; other British Research and Advisory Bodies; American Organizations; Films; Periodicals). An index of authors, organizations, and machines is included. (107)

HENDERSHOT, CARL H. Programmed learning: a bibliography of programs and presentation devices. 4th edition. San Antonio, Tex.: National Society of Programmed Instruction (distributor), 1967. 401 pp.

Items are entered in four sections: A. Programs Classified by Subject (199 pages); B. Programs Listed by Publisher (182 pages); C. Devices Assisting in the Presentation of Programs (14 pages); and D. References: Periodicals, Books, Other Information (6 pages). Supplements to the basic bibliography (listings received by February 4, 1967) are or will be available for spring and fall of 1967 and spring and fall of 1968. Entries on programs include approximate hours required, number of frames, intended age level, list price, and other non-evaluative information. (Two vinyl binders are provided for this edition.) (108)

KOMOSKY, P. KENNETH (ed.). Programmed instruction materials, 1964-'65: a guide to programmed instruction materials available for use in elementary and secondary schools as of April, 1965 (including a list of programs annotated Programs '63). New York: Columbia University, Teachers College, Institute of Educational Technology, The Center for Programmed Instruction, 1965. 164 pp.

This guide is a compilation of information supplied by 70 programmed instruction producers who responded to a questionnaire sent out in March 1965. A total of 542 programmed instruction units are listed, under the categories: Art, Business Education, Economics, English, Foreign Languages and Literature, Games, Guidance, Mathematics, Music, Programs on Programming, Science, Social Studies, Vocational Education and Industrial Skills, and Miscellaneous Subjects. (109)

LYSAUGHT, JEROME P. Self-instruction for the health professions: trends and problems. Medical times 95:10, October 1967. pp. 1025-1032.

The article deals with the growth in number, variety, and sophistication of programs designed for the health fields. Using medical programs as a primary source of examples, evidence is presented indicating that

self-instructional materials are effective, efficient, accepted by the learners, and capable of increased curricular application. Persistent problems in the health professions are discussed, and trends that seem to lead toward the solution of these problems are indicated. The article concludes with a brief description of the Rochester Clearinghouse for Information on Self-Instruction for Health Care Facilities, its purposes, activities, and plans. References are included.     (110)

**Programmed instruction: an international directory** (compiled under the direction of Seth Spaulding). Pittsburgh: University of Pittsburgh, International Education Clearinghouse, 1967. 189 pp.

Information on programmed instruction from more than 50 countries is divided into sections: Articles, Journals, Books, Bibliographies, Centers, Consultants, Professional Organizations, and Publishing Organizations. The journals included are not necessarily entirely devoted to programmed instruction (occasional relevant articles do appear). The finai section of the book is devoted to terminology and lists 25 words commonly used in programmed instruction in 20 languages.     (111)

**Programmed instruction guide** (Compiled by Northeastern University). Newburyport, Mass.: Entelek Incorporated, 1967. 320 p...

The guide is a computer-based catalog compiled by the Office of Educational Resources of Northeastern

University of Boston to help teachers and industrial trainers, as well as university faculties, find programs in relevant subjects they can use to meet their instructional objectives. The guide (to be published twice a year) consists of four sections: (1) The Index; (2) The Data Bank; (3) Programmed Record Sheets; and (4) General References to Programmed Instruction (a bibliography). The Data Bank includes information about each of more than 4,000 programs: (1) title, (2) author, (3) subject classified by the Dewey Decimal System, (4) publisher, (5) publication date, (6) number of components, (7) type of supplementary material, (8) information about the teachers' manual (if available), (9) test supplied with the program, (10) teaching device specifications, (11) availability of evaluative data: terminal objectives, target population, field test specifications, and results, (12) style: linear, branching, and teach-test, (13) study hours required, (14) level, and (15) cost.
(112)

**Programmed instruction in adult education** (Current Information Sources CIS-15). Syracuse, N. Y.: ERIC Clearinghouse on Adult Education, February 1968. 20 pp.

This annotated bibliography contains 39 indexed and abstracted entries on programmed instruction in adult education, including research and evaluation studies, testing, programs, textbooks, and bibliographies. Materials included were published primarily in 1966 or 1967.     (113)

# LECTURES, PRESENTATIONS, SPEECHES

BATESON, JOHN. Technical presentations; some theories and techniques. Holyoke, Mass.: Technifax Corporation, 1957. 12 pp.

Intended as an introduction to the art of oral technical exposition to encourage the technical man to investigate the subject more deeply, the content of this booklet was adapted for publication from a talk presented at a technical seminar-workshop on visual communication. In Section 1 a theory of learning (which suggests that new ideas can be learned only in terms of old ideas and that new ideas should be presented through experience existing in the recipient mind) and a "selling" theory (making acquisition easy for the customer will sell more goods) are presented. Section 2 briefly treats the relationship between the structural design of a presentation (introduction, main development, conclusion) and the learning mechanism. In Section 3 the three divisions of the design are considered in more detail, along with style of sentence structure and information rate. In Section 4 pitfalls and tips for using slides, including the aspect ratio for legible slides, and the blackboard; distractions (monosyllabic utterances and nervous gestures); elocution; and rehearsals are discussed. There are several references and a brief bibliography. (114)

BROWN, DAVID S. The lecture . . . and how to make it more effective. Journal of the American Society of Training Directors 14:12, December 1960, pp. 17-22.

The virtues of the lecture as a training and teaching device—its information— giving ability, its adaptability, its wide acceptance, and its economy—are evaluated. Techniques to employ to derive optimum benefits from its use are explained. (USCSC 2, edited) (115)

CARTON, ROBERT W. The medical lecture as an art form. The journal of medical education 40:12, December 1965. pp. 1168-1170.

The medical lecture is an art form and is effective only when handled as such. Great medical lectures show common qualities: (1) the lecturer uses his limitations (limited time and large audiences) as a positive frame for his presentation; (2) a reinforcing and stimulating relationship is established between the lecturer and his audience; and (3) the lecturer has free range within a conventional time span. A lecture format as an art form can be patterned like a poem; it has an introduction, development, crescendo, and resolution. (116)

Color wheel. USAF instructors journal 5:2, Fall 1967. p. 70.

A visual answering device for individuals in groups, called the color wheel, is used effectively in the Department of Comptroller Training, 3750th Technical School, Sheppard AFB, Texas. Locally and economically constructed, it aids in accomplishing two of the most important instructional tasks: assurance of active student participation and day-to-day evaluation of student progress. (117)

DePHILLIPS, FRANK A., WILLIAM M. BERLINER and JAMES J. CRIBBIN. The lecture method. IN THEIR Management of training programs. Homewood, Ill.: Richard D. Irwin, 1960. pp. 171-174.

The definition and nature of the lecture method are briefly discussed. Six advantages, 11 limitations, and 10 suggestions for using the method are presented. (118)

Encylopedia of meeting and convention speakers. 1st edition. Washington, D.C.: American Society of Association Executives, March 1967. 112 pp.

The speakers listed in this discovery were compiled from information supplied by the 2,300 members of the American Society of Association Executives. An alphabetical listing of more than 400 speakers includes such information as their positions, addresses, fees, subjects, references, and comments (generally on speaking ability or subjects on which qualified to speak). These persons are not considered the only outstanding ones available, but are those speakers recommended and used during the preceding year by members of the Society. After the alphabetical listing of speakers, a section entitled Guides for Meeting and Convention Management contains the following articles: (1) Getting the Best Speaker and the Best Out of a Speaker, by William C. Mott; (2) The Absent Speaker (late cancellations), by John W. Cawthorne; (3) Turn on the Woman

Power, by Robert G. Welch; (4) How to Obtain a Speaker from the Federal Government, by H. P. Newson; (5) Sources of Speakers from Government Agencies and Departments (names and addresses arranged by departments); (6) Planning a Meeting Overseas, by James H. Kroell, and (7) Using Audiovisuals in Association Management, by James P. Thompson. Speakers are listed in a final section by subject areas. Some of the subjects covered are: business management and philosophy; citizenship; communications; economics; education and training; electronic data processing; entertainment and humor; executive development and recruiting; food; government relations and legislation (business and professional); government relations and legislation (congressional); health, hospital, and sanitation; human relations; inspiration; labor relations; long-range planning; motivation; organization; personnel management; and public relations. There is an index of advertisers. A supplement to this first edition is in press. **(119)**

Guide for Air Force speaking (AU-2). Maxwell Air Force Base, Alabama: Air University, 1960. 92 pp.

This guide to public speaking was designed to meet the needs of Air Force Commanders and staff officers to explain missions and programs to subordinates, to brief their superiors, to participate in staff meetings, to speak to civilian groups, to instruct and inspire other officers and airmen, and to participate in various conferences. Chapter headings indicate contents: (1) Speech in the Air Force; (2) The Speaker; (3) Planning and Preparing to Speak; (4) Organizing to Speak; (5) Developing the Speech; (6) Presenting the Speech; (7) The Informative Speech; (8) The Persuasive Speech; (9) Listening to Speeches; (10) Parliamentary Procedures. Appendices include speech assignments, sample speeches, and sample rating scales. A bibliography lists (with brief annotations) 17 books on principles and methods of speaking (published 1935-1958); 3 books on general semantics, 2 on visual aids, and 2 on parliamentary procedures. **(120)**

HAYAKAWA, S. I. Language in thought and action. 2nd edition. New York: Harcourt, Brace & World, 1963. 350 pp.

Modern semantics (describing language in biological and functional terms) can be used in language study aimed at achieving clear thinking, effective speaking and writing, and perceptive listening and reading. In Book One, The Functions of Language, chapters are entitled: Language and Survival; Symbols; Reports, Inferences, Judgments; Contexts; The Language of Social Cohesion; The Double Task of Language; The Language of Social Control; The Language of Affective Communication; and Art and Tension. Book Two, Language and Thought, contains: How We Know What We Know; The Little Man Who Wasn't There; Classification; The Two-Valued Orientation; The Multi-Valued Orientation; Poetry and Advertising; The Dime in the Juke-Box; Rats and Men; and Towards Order Within and Without. An index and selected bibliography are appended. **(121)**

HIBBITT, GEORGE W. How to speak effectively on all occasions. Garden City, N. Y.: Doubleday & Company, 1947. 312 pp.

The book is divided into three parts, each dealing with one of the broad areas of speaking. Part One shows the reader how to handle himself and his voice in relation to a variety of speech situations. Voice production, the sounds of speech, articulation, and pronunciation are discussed. Part Two emphasizes everyday situations and is concerned with group discussion, speaking at business conferences and business interviews, making sales talks and reports, and after-dinner speaking. Part Three deals with speech composition and provides detailed information on gathering material for a speech, constructing an outline, writing the speech, and rehearsing. An index is included. **(122)**

LEWIS, THOMAS R. and RALPH G. NICHOLS. Speaking and listening: a guide to effective oral-aural communication. Dubuque, Iowa: Wm. C. Brown, 1965. 357 pp.

This is a text for courses in oral communication training. Oral communication is approached as a two-way process with emphasis on the underlying principles of both speaking and listening. Chapter and section headings indicate contents: (1) The Educational System (subject matter and the curriculum, speech in the curriculum, listening in the curriculum); (2) The Communication Process (development of the oral and aural skills, the speaker's role, the listener's role); (3) The Subject Matter (the purposes of speaking and listening, choosing the subjects, effective listening); (4) The Content Elements (content materials and audience interest, finding and choosing speech materials, listening to content materials); (5) The Organization and Analysis (the organizations of speeches in general, types of point arrangement, types of point arrangement and speech outlining, listening to speech organization and arrangement patterns); (6) The Tools of Sending and Receiving (the symbol system of speech, use of language and visual aids, four systems of note-taking); (7) The Personal Elements (emotional control in speaking and listening, the body and voice in speaking, self-control in listening); (8) The Substratum Elements (the analysis of audience and speaker, speaker preparation in general, preparation for listening); (9) The Refined Skills (transferring the thoughts of others, appreciative listening); (10) The Personal Pathway. Part II presents 17 practice

assignments with tear-out outline and evaluation forms. Part III contains appendices on pronunciation and articulation exercise material and tear-out teacher-rating scales for use in student critiques of instructors. **(123)**

LUBETKIN, MAURICE. The TD and the doctor; helping the scientist and engineer make better presentations. Training and development journal 21:6, June 1967. pp. 44-51.

Suggestions are made for teaching scientists and engineers to make better presentations of technical papers. A list of questions to use as a guide in documenting the paper to be presented and seven hints to aid in the actual reading of the paper are included.

**(124)**

McGEHEE, WILLIAM and PAUL W. THAYER. Lecture method. IN THEIR Training in business and industry. New York: John Wiley & Sons, 1961. pp. 196-197.

Lectures can be used to train large groups. This method has several limitations, however: it is useful only in the acquisition of conceptual knowledge; the individual differences of trainees are ignored; and it does not permit practice, reinforcement, knowledge of results, and over-learning. **(125)**

MILLER, GEORGE E. (eds.), STEPHEN ABRAHAMSON, IRA S. COHEN, HAROLD P. GRASER, ROBERT S. HARNACK and ADELLE LAND. The lecture. IN THEIR Teaching and learning in medical school. Cambridge, Mass.: Harvard University Press, 1962. pp. 95-105.

The lecture can provide information, develop new attitudes, and enhance understanding. It can vitalize facts and ideas and supplement a text. It can clarify difficult concepts and convey information that would otherwise require much research. The lecture permits selection, analysis, and synthesis of pertinent information and allows students to ask questions about matters of difficulty or interest at the time the answers are most significant. However, the lecture is often overused. Limited feedback makes it difficult for the lecturer to gauge the student's grasp of the material. It is difficult to get and keep the attention of students who are playing a passive role in the teaching situation. The successful delivery of a lecture requires a technical skill which most lecturers lack. Successful lectures are well planned. Nine steps in planning are delineated, and twelve techniques which complement the verbal skill of a public speaker are discussed. **(126)**

MULLER, RICHARD L. Student responses in lecture instruction. Audiovisual instruction 11:2, February 1966. pp. 94-95.

Two experimental classrooms at Syracuse University are described. One of these rooms includes a six-button panel at each student's seat which allows him to answer questions, to vote on class action, and to ask the teacher to slow down, repeat material, or clarify a point. This response panel allows the student to answer without revealing his answer to another student. Meters on the teacher's lectern give the percentage of the class giving each response. This system is based on the principle that feedback aids the teacher in instructing. The six-button panel includes five choice buttons and a change-of-mind button. The teacher can freeze the answers by locking the system whenever he wishes. There are numerous ways of posing questions, either by a rear-screen projector, by a handout, by an overhead projector transparency, or orally. The meter system provides individual as well as group response. Individual response can be analyzed after the lecture by a punched paper tape which records the individual student's reaction. Comprehension may also be gauged by self-confusion ratings during the lecture on a scale which ranges from "not confused at all" to "help." **(127)**

NATHAN, ERNEST D. The art of asking questions. Personnel, 43:4, July-August 1966. pp. 63-71.

"The illusion of communication," the mistaken belief that communication has actually taken place between people, is the most common cause of the failure to communicate. Discussed are the results of this failure, how failure leads to misunderstanding, conflict, and waste, and how it comes about. The use of effective questions is offered as the most readily available corrective of this failure. Presented are examples of questions that fit the given needs of a situation contrasted with those that do not; the "do's" and "don'ts" of questioning; 22 check-points on asking questions and 4 on answering them; and a 51-part catalog of the reasons we normally ask questions. **(128)**

OLIVER, ROBERT, HAROLD P. ZELKO and PAUL D. HOLTZMAN. Communicative speech. New York: Holt, Rinehart and Winston, 1962. 418 pp.

This book presents an integrated study of the broad spectrum of the individual's oral-communicative needs. It serves as a comprehensive guide to the theory and practice of communicative speech. It attempts to integrate a threefold approach to communicative speech that will serve every speaker in every type of speaking situation: (1) to analyze the subject to determine what is true and relevant, (2) to clarify his own purposes in

using the subject matter, and (3) to adapt his presentation to the response potentials of his listeners. Part and chapter titles indicate contents: Part I, The Bases of Communicative Speech—(1) Oral Communication; (2) Standards of Effective Speech; Part II, Developing Communicative Speech—(3) You Prepare to Speak; (4) Purpose and Central Idea; (5) Your Speech Materials; (6) Organizing; (7) Developing Ideas; (8) Attention, Interest, and Style; (9) Delivering the Speech; (10) Listening; (11) Using Visual Needs; Part III, Forms of Communicative Speech—(12) Informative Speaking; (13) Persuading; (14) Entertaining; (15) Discussion and Parliamentary Law; (16) Special Applications; and Part IV, Looking Ahead—(17) Responsibility for Future Growth. An index is included. (129)

PAYNE, STANLEY L. **The art of asking questions.** Princeton, N. J.: Princeton University Press, 1951. 249 pp.

The wording of simple questions is important. Each chapter takes up a different reason for studying the subject: Why Concern Yourself?—the importance of asking good questions; May We Presume?—too much is taken for granted; Who Left It Open?—the free-answer question and its demerits; Boy or Girl?—the two-way question and its duplicities; Win, Place, or Show?—the intermediate nature of the multiple-choice question and its misconstructions; How Else?—special types of questions and their faults; Still Beat Your Wife?—care and treatment of respondents; Can You Make It Brief?—the virtues of brevity and simplicity? What's the Good Word?—a futile search for a list of perfect words and a list of 1,000 well-known words; What's Wrong with "You"?—problem words and their case histories; Isn't That Loaded?—an admission of guilt, with extenuating particulars; How Does It Read?—punctuation, phonetics, abbreviations; Is It Possible?—a visual demonstration of the development of a passable question; How's That Again?—100 considerations in asking questions. A general index, an index of examples, and a bibliography complete the volume. (130)

PROCTOR, JOHN H. and WILLIAM M. THORNTON. The lecture. IN THEIR **Training: a handbook for line managers.** New York: American Management Association, 1961. pp. 92-94.

The lecture should be used when: (1) new material is being presented; (2) there is a large group; (3) another instructional method is being introduced; (4) time is limited; (5) material developed by another method needs to be summarized. This method should be avoided when: (a) a participative method can be used; (b) the group is small; (c) familiar material is reviewed; (d) the group has already been exposed to several

lectures. Eleven suggestions are offered for improving lecture presentations. (131)

STATON, THOMAS F. The lecture method. IN HIS **How to instruct successfully; modern teaching methods in adult education.** New York: McGraw-Hill, 1960. pp. 65-82.

The lecture is probably the most flexible and widely used method of instruction, yet it is one of the hardest methods to use effectively. Because of lack of immediate feedback from the audience, the faults of lectures are more easily concealed. Most inadequate lectures are due to lack of a lesson plan (the outline of a talk is part of the lesson plan but by no means all of it). Specific advantages and applications of the lecture method are delineated. Most weaknesses in the method are weaknesses in the lecturer which may be overcome by assiduous practice. A guide for properly planning a lecture is presented, with orientation to learning outcomes and learner activities rather than outlines of talks. Specifically discussed are: gathering material, tailoring the lecture to people, pinpointing the exact purpose, examining the audience, orienting the talk to their knowledges and interests, partitioning the talk into a few briefly worded ideas, limiting materials, using examples, and rehearsing. (132)

TRADE AND INDUSTRIAL EDUCATION SERVICE. **Effective speaking, for supervisory personnel; leaders manual.** Columbus, Ohio: Ohio State University College of Education, Trade and Industrial Education Instructional Materials Laboratory, 1954. 86 pp. + appendix.

A leader's manual, student handouts, and flannel board cards are provided for this course in effective speaking before groups. Composed of ten lessons designed to be used for a group of ten persons, a minimum of twelve hours is recommended for completing the course. The leader's manual presents a step-by-step guide to instruction, with objectives listed for each phase. The appendix contains copies of 20 handouts for trainees. Separate folders of handouts for trainees are available. (133)

U. S. AIR UNIVERSITY. ACADEMIC INSTRUCTOR AND ALLIED OFFICER SCHOOL. Lecture method of teaching. IN ITS **Principles and techniques of instruction.** Maxwell Air Force Base, Alabama: Air University, 1966. pp. 105-113.

Four types of lectures are defined and discussed: (1) the illustrated lecture, in which the lecturer relies heavily on visual aids to convey his main ideas to the

listener; (2) the briefing, in which the lecturer presents a concise array of facts to listeners who do not expect elaboration or supporting material; (3) the formal speech, in which the lecturer's purpose is to inform, persuade, or entertain; and (4) the teaching lecture, for which the instructor must plan and deliver an oral presentation in a manner that helps students reach the desired learning outcomes. A sample lesson plan and a bibliography are included. **(134)**

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE. PUBLIC HEALTH SERVICE. NATIONAL COMMUNICABLE DISEASE CENTER. **Lecture preparation guide: an instructive communication** (Public Health Service Publ. no. 1421). Washington: U. S. Govt. Print. Off., March 1966. 60 pp.

This guide for preparing effective lectures takes the user through the following steps of lecture preparation: analyzing the situation, formulating an objective, choosing a title, outlining the body, selecting presentation aids, writing the introduction, writing the conclusion, rehearsing and revising, planning for emergencies, preparing for questions, writing a summary, having the lecture reviewed, and compiling the final draft. A situation analysis worksheet, a what-to-take checklist, a list of references, and field demonstration data for the guide are included. **(135)**

ZELKO, HAROLD P. and FRANK E. X. DANCE. **Business and professional speech communication.** New York: Holt, Rinehart and Winston, 1965. 244 pp.

This indexed text is designed primarily for use in a course in the application of principles and concepts of speech communication to business and professional settings. The emphasis is on the need for the student to be well grounded in the business and professional climate and setting that give rise to a need for speech communication, to have a knowledge of the modern philosophies and practices of management that make speech communication imperative, and to see the wide variety of speech communication needs and skills that are required within business and professional settings. Part and chapter titles further describe the contents: Part One, Communication in Business and the Professions—(1) The Communication Process; (2) Speech Communication in Business and the Professions; (3) Your Responsibility as a Speech Communicator; Part Two, Developing Basic Speech Communication Abilities—(4) Speechmaking; (5) Listening; Part Three, Communicating in Various Situations—(6) Interpersonal Relations and Speech Communication; (7) Interviewing and Counseling; (8) Conference and Group Process; (9) Speaking from Manuscript; (10) Selling and Persuading; (11) Telephone, Radio, and Television; (12) Situational Speeches. **(136)**

# GROUP DISCUSSION

ADULT EDUCATION ASSOCIATION. **How to lead discussions** (Leadership pamphlet no. 1). Washington, D. C.: Adult Education Association, 1960. 48 pp.

Suggestions for improving discussion leadership are made in the articles: Why Group Discussion?, by Ida Stewart Hill; The Leader's Role, by Franklyn S. Haiman; How Am I Doing?, by Thomas Gordon; Planning for Discussion, by Thomas Gordon; When Books Participate, by John Walker Powell; Drama as a Starter, by Allen V. Atkins; Releasing Group Resources, by Thomas Gordon; Evaluating Your Skill, by Thomas Gordon; Are There Any Questions?, by Leland P. Bradford; Education through Deliberation, by Wayne A. R. Leys; a bibliography (briefly annotated) of books published from 1949 to 1954 and of four films on discussion methods is included.                                    (137)

AUER, J. JEFFERY and HENRY LEE EWBANK. **Handbook for discussion leaders.** Revised edition. New York: Harper & Brothers, 1954. 153 pp.

The discussion method is an essential tool for everyday democratic living. Skill in discussion, in group and public meetings, is one important element in developing mutual understanding and solving common problems. This book provides a step-by-step procedure for planning, organizing, and leading g·ɔup discussions. Chapters are: (1) Understanding the Nature of Discussion; (2) Understanding the Nature of Group Behavior; (3) Planning for Discussion; (4) The Leader of Group Discussion; (5) The Leader of Public Discussion; and (6) Evaluating Discussion. Appendix A offers Projects for Discussion Leaders; Appendix B is a list of selected references and resource materials. The text is indexed.                                    (138)

BARNLUND, DEAN C. and FRANKLYN S. HAIMAN. **The dynamics of discussion.** Boston: Houghton Mifflin Company, 1960. 461 pp.

The purpose of the book is to analyze the process of group discussion. Part I, The Setting of Discussion, describes the place of discussion in our society, the varied forms it takes, and the goals of those who engage in it. Chapters are: (1) Discussion and

Democracy; (2) Groups and the Individual; (3) Motives and Conflict. In Part II, Group Thinking, the content of discussion is analyzed—kinds of problems dealt with, methods by which problems may be explored, raw materials of discussion, and rational aspects of conflict. Chapters are: (4) The Origin and Nature of Problems for Discussion; (5) Organizing Group Thinking; (6) The Raw Materials of Discussion; (7) The Uses of Authority and Reason; (8) Resolving Differences. Part III, Interpersonal Relations, deals with ways in which interpersonal relationships develop and become stabilized, and the attendant problems of apathy, emotional conflict, and communication. It is pointed out that parts II and III are interrelated in reality and are only separated here for analysis and explanation. Chapters in Part III are: (9) Group Norms and Social Pressure; (10) Apathy and the Problem of Involvement; (11) Interpersonal Conflict; (12) Obstacles to Communication. Part IV, Leadership, considers specific functions of discussion leadership, the locus and styles of leadership, and the problem of control versus freedom. Chapters are: (13) Functions of Leadership; (14) Styles of Leadership. Part V considers some of the uses and abuses of discussion and some modern world changes that will influence the future of democratic processes—mass media, increased specialization, growth of centralized government and large-scale business organizations. Chapters are: (15) The Uses and Abuses of Discussion; (16) Discussion in Contemporary Life. On the premise that self-consciousness about the way in which one is learning is an integral part of what is being learned, Appendix A, A Philosophy and Method of Change, presents methods of training in discussion which involve discussion: lecture-discussion method, role-playing, case method, and laboratory method. Appendix B, Evaluating Discussion, considers both unstructured evaluation (timing, content) and structured evaluation (post-meeting reaction sheets, group observers, interaction analysis, leadership rating scale, light board, and sociogram). Appendix C contains exercises for preparing topical and book discussions, setting up and conducting role-playing scenes, and using case materials in discussions. Illustrative cases and role-playing scenes are included. There are author and subject indexes.     (139)

BASS, BERNARD M. An analysis of the leaderless group discussion. **Journal of applied psychology,** vol. 33, 1949. pp. 527-533.

Though studies have reported the use of the

leaderless group discussion situation as an aid in selecting candidates for positions involving leadership, little has been done to evaluate the technique quantitatively or to investigate the possibility of making objective measures of individuals in this situation. The purposes of this study were to investigate the extent of agreement among raters of discussion participants and the relation between the total amount of time a participant spent talking in the leaderless group discussion and the rating he was given. (140)

BASS, BERNARD M. The leaderless group discussion. Psychological bulletin 51:5, 1954. pp. 465-492.

The purpose of this review is to describe the leaderless group discussion (LGD)—its history, applicability, reliability, and validity as a technique for assessing leadership potential. Studies of variations in group size, length of testing time, type of problem presented, directions, seating arrangement, number of raters, and rating procedure are discussed, and the effects of these variations on LGD reliability and validity are indicated. (141)

BLOOM, B. S. The thought process of students in discussion. IN French, Sidney J. (ed.). Accent on teaching. New York: Harper & Brothers, 1954. pp. 23-46.

The rationale, methods, and results of a series of studies are reported. The research method used was stimulated recall. The underlying idea is that a subject may be enabled to relive an original situation with great vividness and accuracy if he is presented with a large number of cues or stimuli which occurred during the original situation. In this study, the original situations were class discussions. The discussions were recorded, then played back to individual students who were to recall their thoughts at critical junctures in the discussion. These recalled "thought units" were used as the data of the study. Categories of thought-units applicable to active or passive participation were first established. The effect of method, teacher, and time, and the influence of student characteristics on the reported thoughts are analyzed and discussed. The major problem of improving the discussion method of instruction for purposes of developing problem-solving abilities, in the light of the data studied, is that of reducing the proportion of thoughts which center on the self or on other persons present. (142)

BRADFORD, LELAND P. and JOHN R. P. FRENCH, JR. (ed.). The dynamics of the discussion group (entire issue). The journal of social issues 4:2, Spring 1968. 77 pp.

The issue contains a series of reports on a joint experiment investigating basic concepts and skills of successful group discussion, decision-making and acting conducted by the National Training Laboratory for Group Development. The major theoretical and methodological orientation of the experimental project was an attempt to combine two approaches theretofore often separated: (1) by studying group productivity at the level of group concepts with methods for measuring group process and group structure; and (2) by studying the individual personality using the clinical approach. The overall design of the research was to study the personality of the individuals, the functioning of the subgroups, and the organization and operation of the total laboratory. A wide variety of measurement techniques was employed, including interviews, objective tests, and projective tests for the measurement of personality; observation, standardized test situations, and questionnaires for study of subgroups; and observations and records of the laboratory as a whole. The articles describe various aspects and results of the laboratory and present case study material, data, and suggestions for those concerned with group discussion and group productivity. In Case Study of a Basic Skill Group, by M. E. Barron and G. K. Krulee, discussion centers on two aspects of the group's behavior—the activities entered into by the group and how the group organized itself and how the members interacted with one another. In Leadership in the Small Group, by Morton Deutsch, Albert Pepitone, and Alvin Zander, the nature of the values and idiologies and the basic personality structures of small group leaders are examined. Functional Roles of Group Members, by K. D. Benne and Paul Sheats, discusses the identification, analysis, and practices of leader and member roles as corelative aspects of overall group growth and production. (143)

HALSEY, GEORGE D. Guided discussion. IN HIS Training employees. New York: Harper & Brothers, 1949. pp. 66-79.

Guided discussions are those where it has been determined in advance (by more senior groups or by higher levels of authority) exactly, or within narrow limits, what is to be the standard practice in the handling of each problem that may arise. Training is much more effective, however, if the group is convinced, through discussion, that the conclusions presented are correct. Consequently, the group must be guided to reach the predetermined conclusion and be convinced that this conclusion is correct. The discussion may be guided by the type of case used or by the form of the question. An

outline and charts for a guided discussion are presented, and suggestions for using them are offered. (144)

HILL, RICHARD J. A comparative study of lecture and discussion methods. Chicago: The Fund for Adult Education, 1960. 153 pp.

"The major purpose of the present study is to assess the relative effectiveness of discussion group methods, directed by nonprofessional leaders, as compared with lecture methods employed by professional subject-matter specialists." Effectiveness is in terms of objectives of liberal adult education. The two methods are compared in respect to (1) development of mental abilities or skills, (2) changes in values, interests or attitudes, and (3) increased knowledge. (USCSC 2) (145)

LEVINE, JACOB and JOHN BUTLER. Lecture vs. group decision in changing behavior. Journal of applied psychology 36:1, February 1952. pp. 29-35.

A study in which group decision is compared with formal lecture as a method of producing changes in socially undesirable behavior is reported. Both methods are then compared with one in which no attempt is made to bring about any change. Thus, the experiment was designed to answer two questions: (1) is the acquisition of knowledge enough to lead a group of individuals to change a socially undesirable behavior pattern? and (2) is group decision a more effective method of producing a change in behavior than is the formal lecture? Specifically, a formal lecture method was compared with group decision in inducing 29 supervisors of 395 factory workers to overcome their biased performance ratings. The results showed that only the group of supervisors involved in group decision improved in their ratings. The lecture group did not change and persisted in overrating the more highly skilled workers and underrating the less skilled. The conclusion was drawn that group decision is more effective than the formal lecture in overcoming resistance to change in behavior. Illustrative tables and graphs are included. (146)

MAIER, NORMAN R. F. and RICHARD L. HOFFMAN. Using trained "developmental" discussion leaders to improve further the quality of group decisions. Journal of applied psychology, vol. 44, August 1960. pp. 247-251.

Previous studies by Maier and Maier in 1957 reported that a "developmental" technique on the part of the leader produced a higher quality group decision than a free discussion technique. This study was designed to show the effects of training leaders in the

principles of the "developmental" technique. A case problem was discussed by groups whose leaders had been exposed to varying degrees of "developmental training" and group decisions were made. This was a case having only two alternatives; a seemingly obvious one and another which only after thorough analysis would appear to be the higher quality decision. Twenty-two leaders were trained in varying degrees. Each leader was given the case and told to present it to two separate groups of three people for discussion and recommendations. Results showed that the leaders with more training in the developmental technique got a higher percentage of the quality decisions. (ASTD) (147)

MILLER, GEORGE E. (ed.). The group discussion. IN HIS Teaching and learning in medical school. Cambridge, Mass.: Harvard University Press, 1962. pp. 105-116.

The group discussion method allows the student to struggle with a specific issue, explore and analyze it, and form a synthesis with related data. The student is provided with an opportunity to interact with the instructor and with his peers in a setting which encourages objective analysis and debate. Group discussion has several limitations. The predetermined subject matter may not be explored thoroughly by the group as some students are often unprepared and do not contribute. The topic may not be of equal interest to all students. Too large a group may impair the discussion effectiveness; 20 persons constitute the maximum number for meaningful participation. For the method to be effective, the instructor must know the subject matter. As discussion leader, the instructor must be willing to guide rather than lecture, be patient with the group's slow progress toward understanding, be alert to the tendency of a group to wander, and be familiar with the subtleties of interpersonal relations as expressed in a group. The instructor should outline the specific problem or issue and should call upon individuals to clarify, analyze, and summarize. It is emphasized that group discussion is discussion by a group; not discussion by the instructor of questions of individual members. (148)

MILLER, HARRY L. Small groups: informal discussion. IN HIS Teaching and learning in adult education. New York: Macmillan, 1964. pp. 155-202.

Two criteria define the limits of the type of discussion dealt with: (1) the discussion must have a conscious educational purpose, and (2) the discussion group cannot have professional leadership. General objectives of discussion groups are described, and a discussion model is set forth. An illustration of the discussion model, taken from a transcription of an actual discussion, is presented. The article concludes with

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suggested methods of training for discussion—training the leader and training the group. **(149)**

PORTER, ROBERT M. Relationship of participation to satisfaction in small-group discussions. **The journal of educational research** 29:3, November 1965. pp. 128-132.

This study categorized the participation of members in small-group discussions at Temple University. Questionnaires administered at the end of each session measured stated member satisfaction with the meeting. The goal of the study was to determine the relationship between the amount of participation and member satisfaction. Findings indicated a significant positive correlation between stated member satisfaction and group-oriented types of participation. **(150)**

POTTER, DAVID and MARTIN P. ANDERSEN. **Discussion: a guide to effective practice.** Belmont, Calif.: Wadsworth Publishing Company, 1963. 261 pp.

This is a workbook designed as a classroom tool; it can be used as a supplement to a discussion text or as the major teaching aid in groups in which the emphasis is on practice. Chapters are: (1) Introduction to Discussion; (2) Private Discussion; (3) Improving Participation in Discussion; (4) Improving Leadership in Discussion; (5) Improving Problem-Solving in Discussion; (6) Role-Playing in Discussion; (7) Public Discussion: Form and Techniques; (8) Special Discussion Techniques; (9) Evaluating Discussion; and (10) Planning for Effective Large-Group Meetings. Analysis forms, planning worksheets, and checklists are found throughout the book. A bibliography and index are appended. **(151)**

PROCTOR, JOHN H. and WILLIAM M. THORNTON. Discussion techniques. IN THEIR **Training: a handbook for line managers.** New York: American Management Association, 1961. pp. 71-82.

The discussion technique is widely used because of its flexibility and its similarity to man-to-man training. Complicated material can be handled in detail with immediate feedback. Two types of discussion techniques are conference methods and case studies. There are three basic types of conferences. In directed conferences leaders instruct and trainees are there to learn. This method should be used when (a) an extension of knowledge already possessed is desired; (b) discussion of familiar material is needed for clarification and amplification; (c) amendments are being discussed; and (d) policies and practices are being reviewed. It should be avoided when: (a) new material is introduced; (b) free

discussion is desired; (c) the trainees are well-educated and intelligent or are specialists in the field. In problem-solving conferences, the leader guides and the individuals make decisions partly or entirely by themselves. This technique should be used when: (a) no solution can be found for a problem; (b) operating personnel need to be closer in their work; (c) team work is needed. This method should be avoided when (a) one man will make the final decision; (b) the group's decision might be undesirable; (c) background is unfamiliar to the group; (d) the personnel are new and inexperienced; (e) time is of the essence. In leaderless discussions, the leader simply maintains order. Some advantages of the conference method are that: (a) interplay of discussion is brought into sharp focus; (b) the group provides feedback; (c) trainees have to command respect without pulling rank; (d) trainees learn to point out unsound arguments without rejecting the other person; and (e) participants find themselves. In the case-study, trainees are given a case-summary of a patient or situation that exists in order to study the background information available for decision-making. In this way, they arrive at the best solution. This method should be used when: (a) employees need to be trained to identify and analyze complex problems and to frame their own decisions; (b) they need to be exposed to a variety of approaches, interpretations, and personalities; (c) they are sophisticated enough to draw principles from actual cases and formulate solutions to problems by themselves; (d) a challenge is needed for overconfident individuals. This technique encourages thoughtful criticism of dogmatic viewpoints. Case studies should be avoided when: (a) the group is made up of beginners; (b) internal jealousies, tensions, and fears make executives reluctant to have their ideas and opinions aired before their associates; (c) lack of maturity prevents trainees from functioning in any situation other than a "school" situation. **(152)**

SPRADLIN, WILFORD W. Drama as an adjunct to teaching human behavior. **The journal of medical education** 41:4, April 1966. pp. 377-380.

When teaching human behavior, there can be no substitute for carefully supervised participation by the student in a one-to-one relationship with those who have problems in living. However, the use of recorded plays in discussion groups may serve to help the student understand the complexity of the multiple levels of human interaction. It also de-emphasizes the artificial boundary between "normal" and "abnormal" behavior and, thus, decreases the need for rigid categorization. Several plays which are appropriate for this type of discussion group are suggested. **(153)**

STATON, THOMAS F. The group discussion method. IN HIS How to instruct successfully: modern teaching methods in adult education. New York: McGraw-Hill, 1960. pp. 97-123.

The chapter shows how the group discussion method of instruction can be used in a training course to capitalize on the body of knowledge possessed by the trainees. A guide is presented to the topics: preparing a discussion period; starting a discussion along profitable lines; keeping the discussion moving successfully; concluding the discussion; special types of discussion (the directed discussion, the conference, the seminar); steps in group problem solving. Suggested readings are cited.
(154)

TRADE AND INDUSTRIAL EDUCATION SERVICE. Leadership in discussion techniques for supervisory personnel; leaders manual. Columbus, Ohio: Ohio State University College of Education, Trade and Industrial Education Instructional Materials Laboratory, 1964. 118 pp. + appendix.

A leader's manual, student handouts, and flannelboard instructional aids are provided for a course in discussion leadership to be conducted in seven two-hour conferences. Topics for the seven sessions are: (1) Presentation of Foundations in Discussion; (2) The Four-Step Method and Outlining the Conference; (3) Practical Demonstrations, Emphasis on Introduction or Approach; (4) Practice Demonstrations; (5) Panel, Buzz Groups, Circular Discussion, and Discussion "66"; (6) Visual Aids, Seminar, Role-Playing, and Case Study; (7) Brainstorming, Listening Teams, Slip Techniques, and Symposiums. Appendices include reference materials on informational conferences, shaped conferences, and demonstration conferences, a sample of a developmental conference, ideas on the use of the chart pad or chalkboard, the functions of the discussion leader, and aspects of discussion leadership. Thirty-five handouts for trainees are included. These are also available in separate folders for trainees.
(155)

U. S. AIR UNIVERSITY. ACADEMIC INSTRUCTOR AND ALLIED OFFICER SCHOOL. The guided discussion method of teaching. IN ITS Principles and techniques of instruction. Maxwell Air Force Base, Alabama: Air University, 1966. pp. 123-130.

The guided discussion allows students to express their ideas and to pool their knowledge in arriving at the lesson objective. It gives the teacher direct contact with his students, enables him to adjust his teaching to their individual rates of learning and individual needs. Questions are the lifelines of guided instruction; they can be categorized by function and by characteristic. The skilled use of questions is discussed. Planning a guided discussion, guiding a discussion, group dynamics, and discussing technical materials are briefly examined. A sample lesson plan for guided discussion and a bibliography are included.
(156)

U. S. DEPARTMENT OF AGRICULTURE. FOREST SERVICE. SOUTHEASTERN AREA AND SOUTHERN REGION. Training conference method. IN THEIR Instructor training course. n.d. pp. 247-272.

The training conference may be defined as a controlled discussion. The discussion is guided by means of logically organized key questions designed to stimulate student thinking along predetermined channels. The objective is to lead students to consider all facets of a situation and from this to draw certain conclusions that have been established by the instructor. Under the heading Selection of Method, the training conference is compared with four other variations of conferences. Specific aspects of planning and conducting the training conference are discussed in sections entitled: Conducting a Training Conference; The Training Conference Lesson Plan; The Questioning Technique; Requirements for a Training Conference; Advantages and Disadvantages; Practical Application. A sample lesson plan is included.
(157)

UTTERBACK, WILLIAM E. Group thinking and conference leadership: techniques of discussion. New York: Rinehart & Company, 1950. 248 pp.

This book promotes more effective group thinking. It concentrates on a detailed, practical consideration of the informal discussion in the small group. The first major section presents general principles applicable to all discussion involving group thinking; the second considers some of the logical and psychological aspects of thinking, with special reference to the tasks of preparing for and participating in discussion; the third deals with the special problems encountered in several typical discussion situations. Chapter titles are: (1) Decision through Discussion; (2) When is Discussion Profitable; (3) Preparing for Discussion; (4) Mapping the Problem; (5) Thinking Together; (6) Participating in Discussion; (7) Moderating Discussion; (8) Beneath the Surface of Argument; (9) Pitfalls in Thinking; (10) The Community Round Table; (11) The Radio Panel; (12) Discussion in the Classroom; (13) Discussion in Industry; and (14) The Discussion Conference. The appendix includes a collection of bibliographies on controversial questions, two radio panel discussions for use as illustrative material, and suggestions regarding the organization of courses in discussion. The text is indexed.
(158)

43

WAGNER, RUSSELL H. and CARROLL C. ARNOLD. Handbook of group discussion. Atlanta: Houghton Mifflin Company, 1950. 332 pp.

This volume is an attempt to guide the reader toward more effective practice of the art of discussion through fuller understanding of its fundamental principles. Theories of group action are not developed; rather, the elemental principles of group discussion are selected and explained; maximum assistance for their practice is provided through exercises, illustrations, and models. Titles of chapters indicate contents: (1) The Nature of Discussion, (2) The Bases of Belief, (3) Subject Problems, (4) Preparation, (5) The Process, (6) Leadership, (7) Participation, (8) Speech and Language. Appendices include: Selections from Essays on the Bases of Belief; Specimens of Discussion (Case Conference Discussion, a Student Committee Hearing, Panel Discussion, Symposium, Forum, Forum Lecture); A Student's Preparatory Outline; Materials for Case Conferences; Parliamentary Discussion and Procedure; and Supplementary Sources. An index is included. **(159)**

WARREN, VIRGINIA B. (ed.). Tested techniques for discussion. IN HER A treasury of techniques for teaching adults. Washington, D. C.: National Association for Public School Adult Education, 1964. pp. 26-30.

The importance of the discussion method, as the basic method of adult education, is emphasized. Its uses for exploratory learning and for factual learning require two kinds of teaching approaches. The tasks of the teacher in discussion for exploratory learning and for factual learning are delineated. How to use questions, providing an appropriate environment for discussion, and points to consider in planning the discussion are also treated. **(160)**

ZELKO, HAROLD P. Successful conference and discussion technique. New York: McGraw-Hill, 1957. 264 pp.

The discussion process is analyzed as it occurs in all group situations, private or public, and its application to the conference method and the public discussion method is investigated. Though the discussion process does not change materially as one goes from a private to a public meeting, or from a conference to a panel discussion, there are important adaptations and flexible applications that have to be made. Set forth in the book is a practical treatment of the basic concepts, attitudes, methods, and skills needed to discharge discussion responsibilities; also, specific suggestions are made for putting principles into effect and for checking their use. The book is arranged in a sequence from private to public situations. The part and chapter titles describe the contents: I, The Conference and Discussion Process— (1) The American Scheme of Things (discussion in daily living, discussion in democracy, discussion in business and industry); (2) Specific Group Situations (the total process: discussion dynamics, types of group situations); (3) Thought Process and Group Analysis (thinking and reasoning, tools of evidence and support, emotion and motivation, individual and group analysis); II, The Nature of Conference—(4) Types and Patterns of Conferences (the place of the conference in the organization, types of conferences, conference patterns); (5) Conference Planning (the steps in conference planning, the conference agenda, the conference outline, conference facilities and materials); III, Conference and Discussion in Action—(6) Leadership (the leader's attitude, the leader's qualities, the leader-group relationship, the leader's responsibilities, leadership tools and methods, leading various types of conferences); (7) Participation (the dynamics of participation, interpersonal relations, the participant's responsibilities); (8) Decision-making and Evaluation (basic considerations in decision-making, methods of decision-making, evaluation, the role of the observer, measurement and evaluation methods); IV, The Nature of Public Discussion—(9) Types and Patterns of Public Discussion (the nature of public discussion, group, forum, panel, symposium, debate, lecture, radio, and television, the discussion pattern); (10) Planning for Discussion Programs (steps in discussion program planning, topic selection and wording, facilities, the discussion outline); (11) Leadership and Participation in Discussion Programs (the role of the chairman, the role of the participant, leadership and participation in various types of programs). The appendix contains: Parliamentary Procedure; Agenda for Multiple Meeting Conference or Workshop; Topics and Questions for Conference and Discussion Programs; and Brief Cases for Discussion and Role-Playing. A selected bibliography, a list of visual aids, and an index are included. **(161)**

ADULT EDUCATION ASSOCIATION. Planning better programs (Leadership pamphlet no. 2). Washington, D. C.: Adult Education Association, 1955. 48 pp.

A program planner's job is to bring order and sequence to the activities of a group so that members may find satisfaction and enjoyment in the shared experience. These articles provide guidelines for the program planner: A Good Program Should . . .; Introduction: Obstacles to Overcome, by Leland Bradford, Ronald Lippitt and Herbert Thelen; What's in a Program? by David H. Jenkins; The Planning Committee, by Malcolm S. Knowles; Finding Group Interests, by Malcolm S. Knowles? What Are Your Goals? by Malcolm S. Knowles; Checklist of Program Methods (a chart listing lecture, film, reading, forum, symposium panel, debate, discussion, project, field trip, exhibits, buzz groups, and group interview and giving information about each under the headings: chief characteristic, pattern of participation, special usefulness, limitations), drawn by Cissie Peltz; What to Do in Emergencies, by David H. Jenkins; Speaker or Panel? by Alice V. Myers and Ryerson Johnson; Briefing List for Moderators and Panel Members, by Alice V. Myers: Evaluating the Program, by Malcolm S. Knowles; Participation for Democracy, by Kenneth Benne, Leland Bradford, Baker Brownell and Wilbur Hallenbeck; Sources for Program Materials. (162)

BROWN, DAVID S. A guide to the use of advisory committees (Prepared for the Division of Special Health Services, Bureau of State Services). Washington, D. C.: U. S. Department of Health, Education, and Welfare, Public Health Service, September 1959. 104 pp.

The purpose of the guide is to provide a source of information that can be used for improving the effectiveness of those who work with advisory committees. Chapters are: (1) Advisory Committees and What They Can Do; (2) Factors Affecting Their Use; (3) Establishing the Committee; (4) Staffing the Committee; (5) Making the Committee Work; (6) The Preparation of Agenda; (7) Preparing for the Meeting; (8) Conducting the Meeting; (9) Evaluating the Meeting; (10) Following-up the Meeting; (11) Improving the Minutes. Appendices: Checklist for Advisory Committee

Meetings; Sample Agenda; Sample Report of Meeting; Methods of Evaluating the Meeting. (163)

GROUP FOR THE ADVANCEMENT OF PSYCHIATRY. COMMITTEE ON MEDICAL EDUCATION. Small group teaching in psychiatry for medical students (GAP report no. 40). New York: Group for the Advancement of Psychiatry, 1958. 32 pp.

The report considers the uses of "small group" methods in medical teaching, especially by departments of psychiatry. Relevant overall attributes of the medical school culture are first briefly considered in relation to the functions and problems of the department of psychiatry. The second section reviews some principles of group organization related to the education process. The third section discusses conditions for achieving educationally productive groups. Section four describes examples of small group teaching currently used by departments of psychiatry in the preclinical and clinical years, with special reference to the distinction between educational inquiry and group therapy. The concluding section presents ways of evaluating the effectiveness of small group teaching. [Located too late for indexing]

Improving large meetings: the tool kit. Adult leadership 1:7, December 1952. pp. 15-22.

Examples are given of platform problems and undesirable audience reactions that arise when planning is attempted during the course of the presentation instead of prior to it. A flow chart for large meetings illustrates the steps in the developmental phases of a large meeting and indicates the relationship of the planners to the audience and platform. Six platform presentation methods discussed are (1) speech or film; (2) panel-symposium forum; (3) speaker with visual exhibit; (4) presenting an action situation; (5) dramatizing a conflict; and (6) demonstrating a skill or technique. Audience participation can be increased by using listening teams, observing teams, buzz groups, section meetings by subgroups, question cards, and audience reaction teams. A meeting arrangements checklist is outlined and questions to ask for finding needed facts are listed. (164)

KING, THOMAS C. and JACK M. ZIMMERMAN. Application of group dynamics to medical education: the student-centered group. Journal of medical education 38:10, October 1963. pp. 871-878.

A system of instruction used at the University of Kansas School of Medicine for a 3rd-year clerkship program in surgery is outlined. Groups of 20 to 25 students spend 6 weeks in the clerkship at a veterans hospital. In addition to their standard responsibilities— admission histories and physical examinations and aspects of patient care that are within the students' sphere of competence—the students spend 3 to 4 hours each day in conferences, rounds, lectures, and other organized learning experiences designed for the transfer of information to the student. Students participate in the formulation of objectives for the clerkship, and then, using a standard outline of a format of a group discussion seminar, hold a 45-minute discussion of subject matter of their own choosing. This discussion is taped, then monitored by instructors, and discussed with the groups. Without staff direction, students then select a list of topics that they will discuss in similar seminars throughout the 6-week period. This learning experience was devised as a conscious effort to promote the development of some higher cognitive skills in medical students through the utilization of information accumulated by educational psychologists in other educational environments. Since the experimental data upon which the group approach is based is not easily available to the medical educator, a review of the more pertinent issues and data is presented and discussed in relation to the experimental student-centered group program outlined above. *[Located too late for indexing]*

MENDEL, WERNER M., MURRAY WEXLER and SANFORD BROTMAN. Group psychotherapy as a technique for teaching psychiatry to medical students. Journal of medical education 39:5, May 1954. pp. 497-501

The use of a group psychotherapy situation as a teaching vehicle is described. The technique is seen as useful in demonstrating principles of psychopathology and psychotherapy, the characteristics of verbal and non-verbal communication, methods of facilitating human interactions, simple techniques of group leadership, and the emergence of the role of the physician as experienced by the junior medical student. Six references are cited. *[Located too late for indexing]*

TRECKER, HARLEIGH B. and AUDREY R. TRECKER. How to work with groups. New York: Woman's Press, 1952. 167 pp.

The book was written to serve as a guide for those who work with groups. Chapter headings indicate contents: The Group Leader—How the Democratic Leader Works; Getting Things Done in Groups—the Democratic Way; Using What We Know About Groups; How to Know Your Group; How to Conduct a Business Meeting; How to Lead Discussion; How to Work With a Large Group Meeting; How to Work With Committees; Planning and Follow-Up—The "Before-and-After" of Work With Groups; How to Plan and Carry Out Publicity; How to Handle Group Finances; How to Take Group Action; How to Deal with Common Problems of Groups; How to Check Up on Group Accomplishments; and Toward New Perspectives in Group Leadership. A primer of parliamentary law and a bibliography are appended. **(165)**

WIKSELL, WESLEY A. How to conduct meetings: a programmed instruction manual on parliamentary procedure. New York: Harper & Row, 1966. 212 pp.

The primary objective of this manual is to develop comprehension of the basic principles of democratic and efficient leadership as they are embodied in the meeting. The roles in the meeting of the member, chairman, vice-president, secretary, and treasurer (of any kind of organization) are dealt with in respective chapters. The appendix includes: Sample Constitution of the State Parliamentary Law Association; By-Laws of the State Parliamentary Law Association; The Contents of Minutes; Sample Minutes for the State Parliamentary Law Association; Sample Committee Report; Sample Notice of a Regular Meeting; and Sample Notice of a Special Meeting. An index is included. **(166)**

# CONFERENCES

ADULT EDUCATION ASSOCIATION. **Conferences that work** (Leadership pamphlet no. 11). Washington, D. C.: Adult Education Association, 1956. 48 pp.

The goal of the work conference is to secure the active participation of every delegate in working on problems, developing policies, and learning new ways of working. Aspects of planning and conducting work conferences are discussed in the following articles: The Conference of the Future, by Thomas R. Carskadon; Building the Conference Community, by Kenneth D. Benne and Charlotte K. Demorest; Conference Operations Chart; The Planning Committee; Planning and Management; Organizing for Work; Rehearsal for Leadership, by Watson Dickerman; and Job Sheets for Discussion Leaders, Recorders, Observers, and Resource People, adapted from material prepared by Kenneth D. Benne. Articles with no authors indicated were prepared collaboratively by Florence Anderson, Presco Anderson, Richard Beckhard, Marjorie B. Davis, Paul Good, Robert A. Luke. The Conference Operations Chart was designed to show the planning committee structure and the functions and services which must be planned for in a conference or workshop. It is suggested that not all the functions are necessary in every conference and that one person or committee may perform a number of functions and services. **(167)**

BECKHARD, RICHARD. **How to plan and conduct workshops and conferences.** New York: Association Press, 1956. 64 pp.

The material in this book has been developed from the experience of conference and workshop planning clinics. If conferences and workshops are to provide effective media for learning and for solving problems, several factors must be considered in the planning. Each chapter considers one of six "musts": (1) Initial Planning; (2) Fact Finding and Evaluation; (3) Program Development; (4) Conference Preparation; (5) Planning the Conference Operations; and (6) Reporting and Follow-Up Action. **(168)**

BECKHARD, RICHARD. **Conference planning** (Selected reading series no. 6). Washington, D. C.: National Training Laboratories and National Education Association, 1962. 73 pp

The articles in this selection deal with the physical and psychological settings, the on-the-spot factfinding and steering mechanisms, and the collaborative skills to be developed to produce good conferences. They are entitled: Building the Conference Community; Ten Traps in Program Planning; Program Development; Improving Large Group Meetings; Group Self-Analysis of Productivity in the Work Conference; What Makes a Convention Tick; Evaluating the Effectiveness of Meetings; Your Group Leader Needs Training; The Conference as an Educational Experience; Planning an International Conference; and The Fact-Finding Conference. **(169)**

BURSK, EDWARD C. and JOSEPH A. TUCKER, JR. (eds.). **Conference management handbook.** New York: Conference Service Corporation, 1968. 448 pp. (in press).

This new basic handbook will be distributed on a subscription basis with quarterly updating. Parts and sections of the basic handbook are: I. Theory and Techniques of Conference Communications; II. Conference Logistics (selecting the site; transportation; housing, food and beverage functions; credit and billing arrangements; the meeting rooms; audiovisual techniques); III. Selecting Meeting Sites (evaluations of selected meeting sites arranged by 6 geographic regions of the U.S.); IV. Appendices (convention sites; general services and information, by city; bibliography; meeting site evaluation forms). **(170)**

DEE, JAMES P. Effective conference leadership. **Training and development journal** 20:8, September 1966. pp. 46-52.

A course in conference leadership is described. The objectives of the course are: (1) an awareness and an appreciation of the conference as a management tool; (2) an understanding of the basic concepts and principles of conference leadership; and (3) a minimal level of skill in such things as selecting and limiting the conference topic, and selecting and preparing an agenda. A complex

and detailed description of course content is given, and the techniques used are discussed. Evaluation of the course is indicated by confidential evaluations of the participants. (171)

DePHILLIPS, FRANK A. How to activate the quiet man in the conference. Training directors journal 14:4, April 1960. pp. 34-40.

The forced response method controls and forces the participants in a conference to respond and enter into active discussion. This method operates on the theory that control and cautious pressure, when applied intelligently, can produce advantageous changes in the mental habits of participants. The method is limited because not all individuals can be influenced in a favorable direction. The method involves the use of a stop watch to time each participant, a rotary card rack to select participants, and a response list which includes the names of all the participants. To administer the forced response, a series of meetings should be held in the normal manner to determine the nonparticipants. Next, as the group becomes familiar with the method, the time intervals should be increased slowly. Then, when some changes become apparent in the quiet man, the method should be dropped. The instructor should continually evaluate behavioral changes. (172)

DePHILLIPS, FRANK A., WILLIAM M. BERLINER and JAMES J. CRIBBIN. Discussion and conference procedures. IN THEIR Management of training programs. Homewood, Ill.: Richard D. Irwin, 1960. pp. 180-183.

The definition and nature of discussion and conference procedures, 9 advantages in their use, 6 disadvantages, and 14 suggestions for using the methods effectively are presented. (173)

DEKKER, TUNIS H. The conference coordinator: educator-administrator. Adult education, Autumn 1965. pp. 37-40.

The role of the adult education conference coordinator as educator-administrator, as opposed to that of the coordinator simply as administrator, is discussed. The latter's role is concerned merely with the mechanical aspects of the conference, whereas the role of educator-administrator is a much more demanding and far-reaching one. This role is discussed in relation to the conference cycle, in which the coordinator has nine specific tasks: (1) determining the characteristics of students; (2) determining the educational objectives and outcomes of the conference; (3) selecting the content and learning experiences to accomplish objectives; (4) selecting instructors and leaders, and organizing

learning experiences for effective instruction; (5) arranging for finances; (6) selecting and making arrangements for physical facilities and services; (7) promotion; (8) coordinating and shepherding the conference during presentation; and (9) evaluating the conference. (174)

DILLEY, DAVID R. Effective conference planning and leadership. Michigan business review 13:5, November 1961. pp. 35-39.

A step-by-step guide to greater returns from the management conference through more effective planning and leadership is offered. Ten important factors in successful conference planning are discussed: (1) knowledge about the nature of a conference; (2) formulation of objectives; (3) consideration of other methods of accomplishing objectives; (4) initiation and maintenance of an idea file; (5) selection of the chairman; (6) preparation of the conference agenda; (7) selection of participants; (8) determination of appropriate timing and scheduling; (9) formulation of preconference assignments; and (10) provision of all necessary facilities. Five phases of the conference and their attendant leadership problems are then discussed: (1) presentation of the problem; (2) presentation of information; (3) discussion; (4) evaluation of ideas; and (5) summarization. (175)

A guide to successful conference leadership (reprinted from Personnel, 1948). New York: American Management Association, 1948. 31 pp.

A digest of the manual for a course in conference leadership presented to supervisors of Standard Oil Company of New Jersey is presented. The material includes discussion of the role of the leader, preplanning, conference procedures, conference aids and devices, and evaluation of the leader. Checklists, rating scales, and procedural lists are included. (176)

HALSEY, GEORGE D. The conference as a training method. IN HIS Training employees. New York: Harper & Brothers, 1949. pp. 51-65.

Though training conference members learn from each other rather than from formal instruction, a conference should have specific and definite objectives. A good leader will have these objectives clearly in mind and will have prepared a definite plan for reaching them. The conference leader's responsibilities are discussed: (1) to state the problem clearly and in such manner as to arouse interest and start discussion; (2) to keep discussion moving, to keep it on the subject and try to get everyone present to take part; (3) to bring out friendly differences of opinion but to let the group settle who is right and not try to settle it himself; (4) from time to time to summarize the conclusions reached thus far,

occasionally asking for a vote when it is difficult to establish a consensus any other way; (5) to draw final conclusions and either to write these on the board or have a secretary take notes to be handed out later. (177)

HANNAFORD, EARLE S. Conference leadership in business and industry. New York: McGraw-Hill, 1945. 289 pp.

Practical step-by-step procedures for conference leadership training are presented in this indexed book. The problems peculiar to day-to-day business conferences are defined, and misconceptions are clarified to stimulate use of conference leadership methods. True-false, completion, and matching tests, as well as exercises, are provided, and some flow diagrams summarize the key ideas in the chapters. Chapter titles are: (1) Conference Leading and Its Everyday Business Applications; (2) Meetings and Conferences Defined; (3) The Normal Thought Process and How We Learn; (4) The General Conference Process; (5) The Fundamentals of Leadership Technique and Our Involuntary Mental Reactions; (6) The Basic Types of Discussion and Discussion Operation; (7) The Three Specific Conference Discussion Processes; (8) Hints on Handling the Steps in the Conference Process; (9) Questions and Their Use in Conference Leading; (10) Characteristics of Individuals as an Aid to Guiding Conference Discussions; (11) Situations and Problems in Conference Leading; (12) Desirable Traits and Characteristics of a Conference Leader; (13) Discussion Control and Guidance; (14) Conference Discussion Planning; (15) The Conference Setting; (16) Conference Leadership Training Program; (17) Women and the Conference; and (18) Some Do's and Don't's for the Leader. (178)

HEYEL, CARL. Dynamic business-conference technique. Swarthmore, Pa.: *Personnel journal*, 1966. 70 pp.

This handbook for the business conference leader includes 136 rules organized first for consecutive reading, then for ready reference. Review checklists on important points are included. *(ERIC 2, edited)* (179)

LAIRD, DUGAN. How do you tell if a seminar is worth sending your people to? Training in business and industry 5:1, January 1968. pp. 17-18, 51.

Because he recognizes the vast number of conferences available, many of which are not worthwhile, the author suggests several guidelines to follow in considering the value of the conference: stay away from those conferences that advertise no specific speaker; check the conference design; check the agenda for action

training; check to see if the sponsoring agency insists upon feedback from conferences. (180)

McGEHEE, WILLIAM and PAUL W. THAYER. Conferences. IN THEIR Training in business and industry. New York: John Wiley & Sons, 1961. pp. 197-200.

A conference is a carefully planned meeting with a specific purpose and goals. It may help overcome resistance to changing behavior. Modification of attitudes is most apparent in the decision-making conferences, where the leader has a crucial role. He must define the problem area and obtain agreements on the nature of the problem; direct the group's attention to various aspects and try to lead them to a solution; and provide information not available to the group. A conference can lead to the better understanding and acceptance of new information. Some disadvantages of this method are that group size is limited and discussions occasionally get off the track. But a conference encourages expression of viewpoints and therefore incorporates motivational techniques to a greater extent than the lecture. Participants are more active and content is more meaningful. (181)

ROSS, JAMES A. Misconceptions in conference leadership. Training directors journal 14:2, February 1960. pp. 12-20.

Conferences are being misused today. Nine misconceptions about conferences are attacked and refuted: (1) the conference is a democratic process and individual decisions must be limited; (2) the leader and participant should study rules, techniques, and procedures to do a good job; (3) since leaderless discussion is the most democratic type of leadership, it is the best; (4) the leader should discourage debate; (5) the leader should not permit the use of parliamentary procedure; (6) the leader should never express his opinions or draw conclusions in group discussions; (7) leaders should be sure that all conferees participate in the conferences; (8) the leader should de-emphasize the use of visual aids; and (9) the brainstorming conference can be substituted for the problem-solving conference. (182)

SCHMIDT, WARREN H. and RICHARD BECKHARD. The fact-finding conference (Adult education monographs). Chicago: Adult Education Association of the U.S.A., 1956. 28 pp.

The four basic types of conferences are: the information-giving conference, the problem-solving or decision-making conference, the information-exchange conference, and the fact-finding conference which is distinguished from the other three by its primary

objective to get information and opinions which will form the basis of future planning and action. The participants are selected on the basis of their resources, and though action is often a by-product of the fact-finding conference, it is not an essential aim. The second chapter defines the role of the fact-finding conference in a national adult education project. The third chapter describes ten features of the fact-finding conference: (1) it can bring together people who would not come together otherwise; (2) it provides a comfortable setting in which to express ideas and attitudes; (3) it helps to clear up misunderstandings; (4) it establishes many new informal channels of communication among participants; (5) it produces more information and insights than are possible through other survey methods; (6) it stimulates followup action growing out of real needs; (7) it paves the way for cooperative action; (8) it enables participants to understand more fully the objectives, boundaries, and problems of other organizations; (9) it is rewarding to the individual participant; and (10) it produces an unusually good setting for creative thinking. The final three chapter titles are: Planning and Conducting the Fact-Finding Conference; A Word about the Conference Consultant; and To Sum Up.            (183)

WELDEN, J. EUGENE. **Program planning and program effectiveness in university residential centers** (Ph.D. thesis). Chicago: University of Chicago, June 1966. 168 pp.

The purpose of this study was to determine the differences between (a) 22 conferences planned without participation representation and (b) 25 planned with participation representation, on 3 measures of program effectiveness — (1) participants' perception of its relevance to personal motives, (2) their expressed satisfaction with it, and (3) their expressed interest in continuing educative activity. A Conference Evaluation form was constructed, pretested, and administered to 1026 men and women attending conferences in 1965 at 5 university residential centers. These conferences were randomly drawn within the 2 types of planning. The majority were directed to increasing vocational or occupational competency. Demographic factors of age (36-55), sex (mostly men), educational level (mostly college graduates), and previous attendance at conferences (59 percent) showed no differences between the groups of participants. Findings showed that participant perception of conference relevance to his personal motives and his satisfaction with it were greater in type-b conferences. The interest inventory did not show significant differences between the 2 groups. It did appear, however, that programs without participant representation ranked higher on acquisition of knowledge and programs with representation ranked higher in associational-participation dimension. *(ERIC 3)*
(184)

## OTHER GROUP METHODS AND TECHNIQUES

ADULT EDUCATION ASSOCIATION. **Conducting workshops and institutes** (Leadership pamphlet no. 9). Washington, D. C.: Adult Education Association, 1960. 48 pp.

Workshops and institutes, two of the most frequently used forms of organized adult learning, are defined and their value as concentrated learning experience is pointed out. Aspects of conducting these types of activities are discussed (the value of the suggestions for other types of group meetings is noted): Human Values in the Workshop Method, by Karl C. Kelley; Planning for Participation, by Hubert S. Coffey and William P. Golden, Jr.; The Workshop Training Process, by Gordon Hearn; That Crucial First Session, by A. A. Liveright; Organizing Work Groups, by Florence Anderson and Marjorie B. Davis; Using Resource People, by Presco Anderson; Points for Participants, by Hubert S. Coffey and William P. Golden; Learning through Play, by Roland C. Faunce; Back-Home Application, by Hy Kornbluh; Evaluation, by Robert A. Luke.　**(185)**

ADULT EDUCATION ASSOCIATION. **Training in human relations** (Leadership pamphlet no. 16). Washington, D. C.: Adult Education Association, 1959. 48 pp.

Some feasible objectives for a three-day human relations institute are: to increase sensitivity to human relations situations; to increase ability to diagnose human relations situations; to provide opportunities to practice certain human relations skills; to provide theoretical and research knowledge as a basis for sensitivity and action skills; to relate the learnings of the institute to one's back-home situation. Aspects of developing such an institute are discussed in the articles: Human Relations Training Institute, a Case-History of an Institute Held at Valley City; Meeting the Trainee's Needs, How New Needs Develop During Training; Planning and Staffing, Preparation for the Meeting; Selecting and Training the Trainers, Setting Up the Training Course; Leadership: The Art of Developing People. The first four articles are from a workshop, Human Relations Training in Three Days, by Leland P. Bradford, Jack R. Gibb, and Gordon L. Lippitt. The latter was excerpted from *The Monthly Letter*, The Royal Bank of Canada, Montreal.　**(186)**

BURTON, WILLIAM H. The buzz group. IN HIS **The guidance of learning activities.** 3rd edition. New York: Appleton-Century-Crofts, 1962. pp. 204-205.

The buzz-group or "six-six" procedure consists of six persons consulting for six minutes. Buzz groups are usually used in large meetings to (1) clarify the problem, (2) list the agreements or disagreements within groups, or (3) list questions to which the large group should adhere in place of random discussion. The advantages are that: (1) explanation of any topic or process can be given more effectively in small groups, (2) getting acquainted more rapidly can be achieved, and (3) wider participation is encouraged.　**(187)**

CLARK, CHARLES H. **Brainstorming.** Garden City, N. Y.: Doubleday & Company, 1958. 262 pp.

An overview of the art of brainstorming is presented. The first two chapters illustrate the importance of ideas to individuals, groups, and nations and describe how the subconscious has been harnessed by creative people. Subsequent chapters are concerned with the following topics: history and rationale of brainstorming; how to plan a session; tips for the session chairman; follow-up procedures; how to sell brainstorming and new ideas to supervisors in an organization; case histories of sessions; how to brainstorm alone, in small and large groups, at home, and in the community; how to turn problems into profits via brainstorming; tips for personal brainstorming in solving problems; and the implications of this technique for the future.　**(188)**

GINSBURG, ETHEL L. **Public health is people.** New York: The Commonwealth Fund, 1950. 241 pp.

The methods and results of an institute on mental health in public health held at Berkeley, California, 1948, are reported. Psychiatrists, pediatricians, and public health leaders served as faculty, and health officers were students. The introduction describes the methods, which included lectures, small daily section meetings, clinic visits, and interaction meetings. Course content is summarized. Chapter 1, A Learning Experience, describes the dynamics of the group. Chapters 2 through 7 are a resume of the subjects covered in the institute. Chapter 8, The Institute as a Teaching Method,

reports on the organization and results of five similar institutes and on the essential characteristics of the institute method. An index is included. **(189)**

KELLEY, EARL C. **The workshop way of learning.** New York: Harper & Brothers, 1951. 169 pp.

This book is a detailed, practical guide for establishing and conducting an instructional program such as the Wayne University Education Workshop for prospective teachers. Some guiding principles are: (1) the most important thing about any person is his attitude toward other people; (2) the primary need in the building of people is to learn better human relations; (3) every individual has worth and has a contribution to make to the common good; (4) learning leads to more learning, and the human organism is infinitely curious; (5) the most crucial learning at any given time has to do with the individual's current problems; and (6) cooperation as a technique and as a way of life is superior to competition. In accord with these principles, the following purposes of the workshop method are established: (1) to put teachers in situations that will break down the barriers between them so that they can more readily communicate; (2) to give teachers an opportunity for personal growth through accepting and working toward a goal held in common with others; (3) to give teachers an opportunity to work on the problems that are of direct, current concern to them; (4) to place teachers in a position of responsibility for their own learning; (5) to give teachers experience in a cooperative undertaking; (6) to enable teachers to learn methods and techniques which they can use in their own classrooms; (7) to allow teachers to have an opportunity, in collaboration with others, to produce materials that will be useful in their own efforts; and (9) to give teachers an opportunity to improve their own morale. Other topics presented are: how to get started; the interest group; resources; the general sessions; ways of reducing barriers between learners; evaluation; outcomes; unsolved problems; the short workshop. An index is included. **(190)**

PARKER, J. CECIL. **The Alameda Mental Health** Institute: an evaluation (Research project of the California Cooperative Study of Inservice Education). Berkeley: University of California, School of Education, n.d. Mimeo. 129 pp.

This book describes and evaluates an eight-day institute on mental health problems, financed by the California State Department of Public Health and the Alameda City Schools and held in June of 1950. Among the objectives of the institute were: (1) to extend the practice of good mental health in public schools in Alameda; (2) to make possible new ways of integrating mental health into the work of various agencies and organizations in Alameda; (3) to consider ways of making the mental health committee of the community council more influential in the total community; (4) to give each member a broader understanding of mental health in the total community; (5) to assist the individual to recognize the dynamics of human relationships; and (6) to extend the understanding of emotional growth and development. There were 60 participants from various segments of the local social service community; the institute was lead by an interdisciplinary team from the medical, psychiatric, educational, and academic fields. Daily lectures were featured, followed by small group discussions lead by members of the leadership staff. Initial chapters of the report are concerned with organization and operation of the institute. The third, fourth, and fifth chapters describe and analyze evaluative material gathered before, during, and after the institute. A final chapter discusses what was learned as a result of the institute. Appendices include a log of events, the content of the institute, and evaluation inventories. **(191)**

# SIMULATION (GENERAL)

AMERICAN MANAGEMENT ASSOCIATION. Simulation and gaming: a symposium (AMA management report no. 55). New York: American Management Association, 1961. 135 pp.

As an operations research tool, simulation makes it possible to analyze and synthesize the most complex systems and processes; as a behavioral-research tool, it provides the nearest thing to a laboratory for the student of group dynamics and human relationships; as a teaching tool, simulation or gaming is fast earning a place beside the case method as a standard technique. Papers in this volume were presented at AMA's first National Simulation Forum at Saranac, New York, in 1960; presented at AMA seminars in 1960 and 1961; or prepared especially for inclusion in this report: (1) Model Building for Management Games, by Joel M. Kibbee; (2) A Survey of Business Games, by Lois Stewart; (3) How Valuable is Simulation as a Teaching Tool?, by Jack D. Steele; (4) Some Aspects of Management Gaming: A Panel Discussion; (5) Training Managers in Decision Making Through Simulation, by Zora Kubic; (6) The Use of Simulation in Logistics Policy Research, by W. W. Haythorn; and (7) Simulation and Human Behavior, by Robert L. Chapman. A selected bibliography is appended. **(192)**

BOOCOCK, SARANE S. and E. O. SCHILD (eds.). Simulation games in learning. Beverly Hills, Calif.: Sage Publications, 1968. 273 pp.

The book is a progress report on recent thinking and findings of various authorities in the field on simulation games as a teaching device. It is intended both for educational practitioners and for behavioral scientists. Papers are divided into four sections: Part I, The Rationale—Social Processes and Social Simulation Games, by J. S. Coleman; From Luxury Item to Learning Tool: An Overview of the Theoretical Literature on Games, by S. S. Boocock; Games for Learning, by C. C. Abt; Goals and Design: Games in a New Social Studies Course, by M. Clayton and R. Rosenbloom; Interaction Games, by E. O. Schild; Part II, The Impact—An Experimental Study of the Learning Effects of Two Games with Simulated Environments, by S. S. Boocock; A Pre-Civil War Simulation for Teaching American History, by E. H. Baker; The Shaping of Strategies, by E. O. Schild; Two Computer-Based Economics Games for Sixth Graders, by R. L. Wing; Part III, The

Parameters—Individual and Group Effects on Enjoyment and Learning in a Game Simulating a Community Disaster, by M. Inbar; Competition and Learning for Underachievers, by D. C. Farran; Degree of Participation and Learning in a Consumer Economics Game, by G. Zaltman; Variation in Administrative Techniques in Two Business Games, by J. L. McKenny, W. R. Dill, W. H. Starbuck, and E. Kobrow; Part IV, Perspectives for the Future—Political Science Games and the Problem-Solver State, by P. M. Burgess and J. A. Robinson; The Life Career Game: Practice in Decision-Making, by B. Varenhorst; Conclusion—The Future of Simulation Games, by S. A. Boocock and E. O. Schild. A selected bibliography on simulation games as learning devices and a listing of major centers involved in research and development of games with simulated environments are included in two appendices. **(193)**

COLEMAN, JAMES S., SARANE S. BOOCOCK and E. O. SCHILD. Simulation games and learning behavior (entire issue). American behavioral scientist 10:2, October 1966. 32 pp.

Articles in this issue are: Introduction: In Defense of Games, by James S. Coleman; Some Current Research on Effectiveness of Educational Simulations: Implications for Alternative Strategies, by Cleo H. Cherryholmes; An Experimental Study of the Learning Effects of Two Games with Simulated Environments, by Sarane S. Boocock; The Differential Impact of a Game Simulating a Community Disaster, by Michael Inbar; Influences on Learning in Simulation Games, by James L. McKenny and William R. Dill. **(194)**

COLEMAN, JAMES S., SARANE S. BOOCOCK and E. O. SCHILD. Simulation games and learning behavior (entire issue). American behavioral scientist 10:3, November 1966. 36 pp.

Articles in this issue are: The Shaping of Strategies, by E. O. Schild; Development of Strategies in a Simulation of Internal Revolutionary Conflict, by Holly J. Kinley; The Game of Chicken, by Anatol Rapoport and Albert M. Chammah; The Effects of Advisors on Business Game Teams, by William H. Starbuck and Ernest Kobrow; Two Computer-Based Economics Games for Sixth Grades, by Richard L. Wing. There is a selected bibliography on simulation games as learning devices,

and a list of major centers involved in research and development of games. **(195)**


CRAWFORD, MEREDITH P. Dimensions of simulation. **American psychologist** 21:8, August 1966. pp. 788-796.

This paper explores the uses of simulation from the point of view of research and development in training. Simulation is considered in systems terms. The distinction between open-loop versus closed-loop systems is made. In open-loop systems aspects of environment affect the human involved, but he takes no action to control them. Closed-loop systems involve control of environmental variables. A further distinction can be made among closed-loop systems between those which involve only represented human components and those involving real people. The purposes of simulation include its use for design, for training, and for testing. Members of an occupation carry out their work by dealing with limited aspects of their total environments in a more or less uniform manner. The dimensions on which the job environment and job responses may be laid out range from the raw environment to some symbolic representation of it. Between these two dimensions is the job encumbent who effects transformations which his duties require him to perform. The problem of education or training is to modify his abilities at transformations to bring them up to job specifications. The question of whether the individual structures his environment or discovers structure inherent in it is discussed. This antithesis may require contrasting approaches to training. An overview of the degrees of simulation in on-the-job and off-the-job training is given. Aspects of simulation have been illuminated by research in three areas: real size system simulation (vehicular operation); techniques of miniaturization (operations training); and simulation with emphasis on the people involved. Simulation can be used as a proficiency measure, but it is difficult to create the stress and tension that accompany an occupation. Thus this measurement may not indicate capability during the actual occupation. Five dimensions of simulation in education and training are suggested: (1) the scope, extent, or segment of the environment represented in the simulation, (2) the duration of the experience provided by simulation, (3) the degree of mediacy between the person and the raw environment, in terms of both perceptual and effector interactions; (4) the degree of centrality of interpersonal relationships, (5) the degree of apparent cognitive involvement. **(196)**

DAWSON, RICHARD E. Simulation in the social sciences. IN Guetzkow, Harold (ed.). **Simulation in the social sciences: readings.** Englewood Cliffs, N. J.: Prentice-Hall, 1962. pp. 1-15.

Simulation, when used to investigate and learn about behavior in individual and group processes, is the construction and manipulation of a model that physically or symbolically represents all, or some, aspects of that process. The knowledge obtained can be used for design, for training, and for teaching. The vocabulary associated with exclusively machine simulation, simulation including human actors, games, real-time simulation, and the Monte Carlo method is discussed. Applicability, cost, simplicity, and communicability should be considered in comparing simulation with other research methods. Simulation permits the experimenter to study processes in ways that nature prohibits, it permits the researcher to compress or expand real time, it permits the study of problems that would be difficult or impossible to contrive in real life, and its freedom from complex mathematics makes its use feasible for researchers unfamiliar with mathematical abstractions. It is, however, expensive, and there are difficulties in representing real systems. **(197)**


GAGNE, ROBERT M. Simulators. IN Glaser, Robert (ed.). **Training research and education.** Pittsburgh: University of Pittsburgh Press, 1962. pp 223-246.

This is a general discussion of the uses of simulators in training, and includes (1) what is meant by simulation, (2) purposes of simulation, (3) what is simulated, (4) simulators in their training function, (5) simulators in performance assessment, and (6) implications for education. *(HumRRO)* **(198)**


GARVEY, DALE M. A preliminary evaluation of simulation (Paper presented at 46th Annual Meeting of the National Council for the Social Studies, Cleveland, Ohio, November 23-26, 1966). Emporia, Kan.: Kansas State Teachers College. 18 pp.

The objective of this paper is to examine some of the evaluations which have been made of simulation as an instructional technique. It is concerned with the effectiveness of simulation as a method of contributing to the political socialization of the student as well as an appraisal of its effectiveness as an instructional technique. An experiment by the author involving an inter-nation simulation with eight American government classes in two high schools is reported. The major opinions concerning simulation as an instructional technique at that time are summarized. Among the conclusions are that some tentative generalizations worthy

of concentrated study are: "(1) that simulation is a technique which a teacher may utilize at any grade-level; (2) that isomorphic, appropriate simulation models can be developed which are operable and useful at all grade levels; (3) that simulation is a technique which an overwhelming majority of students find to be enjoyable; (4) that a technique which is enjoyable is more conducive to good learning than is a technique which is not enjoyable; (5) that simulation provides a laboratory experience for the student, thus serving experimental purposes comparable to those served by the laboratories of the physical and the life sciences. . . ."    **(199)**

GARVEY, DALE M. Simulation, role-playing, and sociodrama in the social studies. **The Emporia State research studies** 16:2, December 1967. pp. 5-21.

The first three sections of this paper consider (1) the values of role-playing, sociodrama, and simulation in social studies education; (2) definitions of the three terms as well as "model," "social process," "system," and "gaming"; and (3) examples of classroom uses of the three techniques. Section (4) is a discussion of the development of simulation models, with suggestions for the beginner. Section (5) provides suggestions for developing sociodrama situations in social studies classes. Prior to developing a situation for use with any one of the techniques, it is essential that the teacher determine what objectives and concepts are to be selected as goals. Examples of objectives and concepts are presented.    **(200)**

GARVEY, SANCHA K. An annotated bibliography on simulation, role-playing, and sociodrama in the social studies. **The Emporia State research studies** 16:2, December 1967. pp. 22-34.

This bibliography is a selected list of materials (articles, books, other publications) about simulation and the related subjects of sociodrama, role-playing, and gaming with emphasis on its usefulness to teachers of the social studies. Contents are divided into three sections. The first section, Theory, contains materials which provide a general background concerning the learning situations in which either simulation or role-playing are likely to be useful, and the rationale for their use. The second section, Application, includes materials which describe experiences and the results of experiments with role-playing and simulation as a learning technique. The last section, Analysis and Model Building, contains a few materials to assist the teacher to conceive of a "political system," to analyze that system, and to construct a verbal model in preparation for staging his own simulation. Materials are arranged alphabetically by author.    **(201)**

GUETZKOW, HAROLD (ed.). **Simulation in social science: readings.** Englewood Cliffs, N. J.: Prentice-Hall, 1962. 199 pp.

This book, with glossary, bibliography, and index, explains efforts to simulate complex individual and group processes. Chapter titles and authors are: Simulation in the Social Sciences, by Richard E. Dawson; Computer Simulation of Thinking, by Carl I. Hovland; Some Considerations in the Design and Use of Dynamic Flight Simulators, by Jack A. Adams; Simulated Bureaucracies: A Methodological Analysis, by Morris Zelditch and William M. Evan; Analysis of Social Structures and Simulation of Social Processes with Electronic Computers, by James S. Coleman; The Simulmatics Project, by Ithiel de Sola Pool and Robert Abelson; A Use of Simulation in the Study of Inter-Nation Relations, by Harold Guetzkow; Simulation of Economic Systems, by Guy H. Orcutt; The Carnegie Tech Management Game, by K. J. Cohen, *et al.;* In-Basket Tests and Factors in Administrative Performance, by Norman Frederiksen; System Simulation—a Fundamental Tool for Industrial Engineering, by Donald G. Malcolm; Computer Simulation of Peak Hour Operations in a Bus Terminal, by Norman H. Jennings and Justin H. Dickins; Simulation as an Aid in Model Building, by R. P. Rich; and The Systems Research Laboratory's Air-Defense Experiments, by Robert L. Chapman, *et al.*    **(202)**

HARMAN, HARRY H. **Simulation: a survey.** Santa Monica, Calif.: System Development Corporation, July 1961. 25 pp.

Various definitions of simulation are reviewed and simulation is defined as the representation of some aspects of actuality by symbols that can be manipulated more readily than their actual counterparts. Simulation can be classified according to the relationship between the model and its counterpart. At one extreme of such a classification is the real system itself as the model. As simulation increases, we find the real system replicated as an operational model, the replication accomplished in the laboratory instead of in the actual environment, computer simulation of an actual system, and the highest degree of abstraction—representation of the actual system by a mathematical model. Another classification offers the deterministic-stochastic, deductive-inductive, analytical-physical, and computerized-manual categories. Yet another can be made according to the purpose of the simulation: evaluation, training, or demonstration. Simulation can compress or expand real time and it permits the replication of an experiment under varying conditions. It is economical of time and money for this reason and because it provides a means of experimenting, testing, and evaluating before making commitments. The extent of the literature of simulation is indicated. Management games are discussed as tools

for training executives, but operational gaming is named as the aspect of simulation now attracting the most attention. Other aspects of growing importance are social behavior and vehicular traffic control. Simulations in man-machine laboratory research (several systems are identified) are described and discussed. **(203)**

HOGGATT, AUSTIN C. and FREDERICK E. BALDERSTON (eds.). Symposium on simulation models: methodology and applications to the behavioral sciences. Cincinnati: South-Western Publishing Company, 1963. 289 pp.

The purpose of the symposium was to attempt an overview of the growing activity in the use of simulation models in the social sciences. The 16 studies by various authorities making up the book concentrate on definition and meaning of simulation as an approach to model construction, the reporting of substantive applications, and evaluation as a method of research in the social sciences. The contents are: Section I, The Methodology of Simulation—An Analysis of the Concept of Simulation, by C. W. Churchman; A Language for Simulation, by H. D. Huskey; The Changing Structure of Computer Programs for Describing Complex Processes, by G. W. Brown; Problems in Modeling a System from Observed Statistical Data Only, by O. J. M. Smith; Section II, Simulation of Cognitive Processes—Empirical Explorations of Binary Choice Behavior, by J. Feldman, F. Tonge, and H. Kanter; Elementary Perceiver and Memorizer: Review of Experiments, by E. Feigenbaum and H. A. Simon; A Program for Pairing Sentences and Making Inferences about Kinship Relations, by R. K. Lindsay; Balancing Assembly Lines Using the General Problem Solver, by F. M. Tonge; Section III, Applications of Simulation in Economics, Sociology, Business Administration, and Mathematics—Long Cycles—a Simulation Experiment, by I. Adelman; Simulation Models: Analytic Variety and the Problem of Model Reduction, by F. E. Balderston and A. C. Hoggatt; A Study of the Effects of Delays in Changes in a Work Force, by M. H. Gotterer; Simulating the Behavior of a Multiunit, Multipurpose Water Resource System, by M. M. Hufschmidt; Views on Simulation and Models of Social Systems, by G. H. Orcutt; Steepest Ascent Under Constraint, by R. Dorfman; Simulation as Experimental Mathematics, by J. R. Jackson; A General Model of Price and Output Determination, by K. J. Cohen, R. M. Cyert, J. G. March, and P. O. Soelberg. **(204)**

Instructional simulation newsletter. Monmouth, Oregon: Oregon State System of Higher Education, Teaching Research Division. March 1968 to date.

This newsletter, published quarterly (approximately) is intended to disseminate information from the U.S. Office of Education-sponsored project,

"Instructional Simulation: A Research Development and Dissemination Activity," Paul A. Twelker, Director. Objectives of the project include: (1) conducting a continuing comprehensive search of simulation literature, including military and industrial sources; (2) developing guidelines of instructional simulation design; (3) identifying research directions and stating these in the form of hypotheses; (4) specifying applications of instructional simulation; and (5) disseminating information.

KAPLAN, ABRAHAM. Functions of models. IN HIS The conduct of inquiry: methodology for behavioral science. San Francisco: Chandler Publishing Company, 1964. pp. 268-275.

Models do not allow us to comfort outselves with the notion that we are following up an "idea" when we are only moving from one observation to the next in the hope that something will turn up. The model allows the scientist to make clear to others just what he has in mind. Models distinguish between definitions and empirical propositions. They also make possible an economic summary of our actual or anticipated findings. Four different kinds of models are discussed: physical models, semantical models, formal models, and interpretive models. **(205)**

LINDSAY, FRANKLIN. New techniques for management decision making. New York: McGraw-Hill, 1958. 173 pp.

This report is designed as a bridge between specialists and managers who must have some understanding of the capabilities and limitations of new decision-making tools such as operations research, systems analysis, probability theory, game theory, input-output analysis, and operational gaming. The report is divided into four parts: (1) an outline of the different ways these tools can be used and an explanation of the central function of the mathematical model; (2) a description of the various analytical techniques such as linear programming, which are available for solving management problems; (3) an examination of the actual and potential applications of these techniques to practical management problems; and (4) an evaluation of the capabilities and limitations of these tools and of the key factors in their use. The report is written for those who have had little or no mathematical training. The contents of the four parts are: Part I—An Introduction to Mathematical Analysis: Management's Need to Understand the New Tools; Ways of Using the New Tools; The Role of the "Model"; Part II—Techniques of Mathematical Analysis: Mathematical Approaches to Decision Making Under Uncertainty (Statistics and Probability, Queuing or Waiting-Line Theory, Information Theory, Game Theory); Mathematical Solutions to Problems of

Great Complexity (Linear Programming, Quadratic Programming, Dynamic Programming, Input-Output Analysis, Mathematical Logic); Trial-and-Error Solutions by Simulation (Simulation, Monte Carlo Techniques, Operational Gaming, Systems Analysis); Computers as a Tool in Solving These Problems; Part III—Applications of Mathematical Analysis to Management Problems: Overall Planning and Control (Financial Planning, Accounting and Cost Analysis); Production and Related Functions (Production, Systems Reliability, Maintenance, Purchasing, Transportation, Research and Development); Marketing (Distribution and Sales, Pricing and Bidding, Advertising, Inventory Control); Part IV—Conclusion: How These Techniques Stand Today; Requirements for Successful Application. (206)

NATIONAL EDUCATION ASSOCIATION. DEPARTMENT OF AUDIOVISUAL INSTRUCTION. **Selected sources of information on the use of simulation and academic games in education.** Washington, D. C.: National Education Association, 1966. Mimeo. 4 pp.

Included are sources grouped in the following categories: (1) sources of periodical publications on simulation; (2) selected research centers; (3) reference articles and research projects; (4) manufacturers and distributors; (5) games as teaching devices; and (6) general (three specific addresses of persons using programmed multimedia materials and self-instructional tapes). (207)

SHUBIK, MARTIN (ed.). **Game theory and related approaches to social behavior: selections.** New York: John Wiley & Sons, 1964. 390 pp.

The book is designed to sketch in a non-technical manner a part of the new developments in game theory and allied topics. An introductory exposition of game theory and the study of social behavior is offered by the editor and is presented under the following headings: (1) Mathematics and Models in the Behavioral Sciences; (2) What is Game Theory?; (3) The Characterization of a Game; (4) The Normalized and Extensive Form of a Game; (5) Solutions, Intent, and Behavior; (6) Cooperative Solutions: Power, Bargaining, and Fair Division; (7) "Pseudogames" and Problems of Behavioral Sciences; (8) Gaming and Simulation. The selected writings by various authorities in the field are divided into three main groups: The first is aimed at giving a broad coverage of game theory and at indicating its relevance to social analysis; the second deals with political choice, power, and voting; the third is addressed to applications of game theory to bargaining, threats, and negotiations; and the last is devoted to gaming. A bibliography and index are included. (208)

# CASE METHOD

ANDREWS, KENNETH R. Executive training by the case method. **Harvard business review** 29:5, September 1951. pp. 58-70.

Two company experiments using the case method for management education are described. The evaluation of the two suggested that the selection of cases for an organization demands attention to the needs and facilities of individual organizations. The characteristics and procedures of each company in the experiments are described to illustrate the need for different types of cases. **(209)**

BOYD, BRADFORD B. Developing case studies. **Training directors journal** 18:11, November 1964. pp. 2-6.

The difficulty in finding appropriate cases for special needs may be overcome by choosing material from the training director's own environment and developing it by a six-step method here briefly outlined: (1) defining principles, (2) creating setting that illustrates principles, (3) developing symptoms to be taught, (4) describing the characters, (5) writing the case, and (6) providing questions to guide the thinking of the group. *(USCSC 2)* **(210)**

DAILEY, CHARLES A. A **new method of human relations training** (Paper presented at the National Convention of the American Society of Training Directors). Chicago, May 7-8, 1963.

This paper is concerned primarily with the search for a new and better method of human relations training. The "Programmed Case Method" of training is the approach presented. The programmed case is a series of observations of the behavior of another person, so arranged that the trainee learns to make accurate forecasts of what the person will do in the future. In the design of the programmed case, the trainee is presented with information in small amounts; he is required to anticipate the consequences of that data; his forecast is confirmed or denied; the cycle is repeated over and over; thus during one case, the trainee receives increasing amounts of information and as a result makes increasingly accurate forecasts based on factual data. Some problems in the use of programmed cases are: (1) some training managers feel one should not give students

"right" answers in cases, even when the right answers are factual; (2) the "right" answers do not always appear plausible and logical to the students; (3) some persons have great difficulty in learning to make forecasts; (4) the cases are solved under low pressure in that the cases are "on paper" and not live. Advantages of the programmed case method are: (1) the performance of the trainee is measured; (2) the use of life history adds intrinsic interest to the method; (3) the average trainee does improve; (4) the use of actual cases adds authenticity; (5) the possibility of failure as well as success adds challenge and a sense of risk to training; (6) the self-instructional factor has great economic advantages; and (7) further research should produce continuing improvement. *(ASTD)* **(211)**

FREDERICKSON, C. W. and HEIMER MARTINSON. Helping supervisors train themselves in human relations. **Personnel** 31:5, January 1955. pp. 310-323.

In the method of case study described, the trainees themselves suggest the cases because trainees immediately become involved in the conferences, the needs and interests of the group become known more clearly and with more economy, and supervisors identify more readily with the problem. These problem cases must be disguised to avoid personal jealousies and feelings and the reluctance of trainees to air their problems. Cases are researched between meetings, and background facts allow a deeper probing of the problem. The need for adequate information becomes apparent, and pertinent information can be provided in a realistic setting. Role-playing is used to bring actuality into the cases, but the case is analyzed, discussed, and evaluated in the usual manner. **(212)**

HUNT, PEARSON. The case method of instruction. **Harvard educational review** 21:3, Summer 1951. pp. 175-192.

The case method of instruction focuses learning on concrete problems from real life and encourages the active participation of all students. The functions of the teacher in the discussion process are outlined, and the difficulties of the method are examined. The heart of the method is the use of problems to train the student to discover and then to fix in his mind ways of thinking

trainee and arouses his interest, and serve as a tool to measure the trainee's background. Films instead of oral or printed material can present a case. Such films, both cinema and TV, can be obtained commercially and usually portray enough of a situation that it can be analyzed in some depth. Films, however, have the disadvantage of transience, and the conditioning to view films as entertainment handicaps the trainee. There are several varieties of cases, among which is the incident, in which a brief description of an event is left deliberately incomplete to stimulate trainees to decide what additional information they need and to conceive and ask questions to elicit this information. This method usually yields several conclusions because of the varied assumptions underlying the questions. In all training, regardless of the mode, the teacher is vital in setting the climate and raising questions to help the trainee evaluate his own thinking and analysis. (229)

CHAMPION, JOHN M. and FRANCIS J. BRIDGES. Critical incidents in management. Homewood, Ill.: Richard D. Irwin, 1963. 292 pp.

Forty-nine managerial incidents that involve some managerial principle, concept, or practice are presented, followed by one or more critiques written by authorities in the management field (91 contributions in all). A suggested list of readings is included for each incident. The incidents are based on true situations encountered by the authors in their consulting activities and on situations related to them by managers who have been participants in various management training programs conducted under the authors' direction. The incidents are short in length and designed so that a decision can be made from each situation. The typical incident begins with a brief history of the situation, immediately develops a decision-making environment, and concludes with a decision made by the reader or central figure of the incident. Each critique is limited to approximately 400 words; it mentions some of the basic issues of the incident, expresses views regarding probable action, suggests how the incident might have been avoided, and recommends future policy. The various incidents and their critiques in most instances do not exhaust the respective problems at issue, but are meant to provide the basis for discussion of broader topics.

(230)

PIGORS, PAUL and FAITH PIGORS. Case method in human relations: the incident process. New York: McGraw-Hill, 1961. 413 pp.

Written as an interim report on the authors' observations and experiments, the book serves as a guide to the experimental application of the case method in actual situations as a means of gaining and sharing experience. Part and chapter titles describe the contents: Part One, Case Method as a Way of Learning—(1) Cases in Social Relations: What Are They and Why Study Them? (Case 1); (2) Features of the Case Method; Part Two, A Method of Analyzing Social Situations— (3) Typical Factors in Social Situations (Case II); (4) "Getting Around," by Analyzing Cases (Case III); (5) General Semantics in Case Analysis (Case IV); Part Three, The Incident Process and a System of Job Rotation—(6) The Incident Process of Case Analysis; (7) During a Series of Case Discussions, What Skills Are Practiced?; (8) Treating Difficulties as Case Material;

Part Four, Case Method and Experience—(9) How Does One Get Experience?(Case V); (10) What is Distinctive about "Social" Experience?; and Part Five, abstracts of eleven full-length case reports and reading references. Name and subject indexes are included. (231)

PIGORS, PAUL and FAITH PIGORS. Case method on the spot. Adult leadership 3:6, December 1954. pp. 7, 8, 28, 29.

The case method has been used at the Massachusetts Institute of Technology in teaching a kind of understanding in social relations involving intellectual capacity, capacity to appreciate, and practical judgment. Certain difficulties are often inherent in the cases themselves, in subsequent discussion, and in case analysis. To overcome some of these problems, the Incident Process of Case Study, which emphasizes learning by doing, was developed at M.I.T. Basic steps of the process are outlined, and the advantages of the technique are discussed. (232)

PIGORS, PAUL and FAITH PIGORS. Director's manual. The incident process; case studies for management development—series II: government cases—federal, state and local. Washington, D.C.: Bureau of National Affairs, Inc., 1958. 821 pp.

This is the director's manual for a series of government management cases to be used in instruction by the incident-process technique. Contents include sections entitled: (1) How to Use This Manual; (2) How the Incident Process Works; (3) Job Descriptions (for a discussion member, a team leader, an observer-reporter, and the director; (4) The Incident Process in Action; (5) Case Material; (6) Supply Kits; (7) Bibliography and Index (suggested readings are listed under categories of general administration, managerial functions, and management development and group discussion techniques). (233)

PIGORS, PAUL and FAITH PIGORS. The incident process—learning by doing. Adult leadership 3:7, January 1955. pp. 5-7, 30.

Five steps in the Incident Process are outlined, and the process is further explained by citing an actual

case and the questions and group process leading to a beginning resolution. The roles of team leader, observer-reporter, and director are discussed, and the particular kinds of social learning developed by the process are summarized. [This article also published in Bennis, Warren G., Kenneth D. Benne and Robert Chin (eds.). The planning of change. New York: Holt, Rinehart and Winston, 1962. pp. 710-716.]                    (234)


PROCTOR, JOHN H. and WILLIAM M. THORNTON. The incident method. IN THEIR Training: a handbook for line managers. New York: American Management Association, 1961. pp. 82-84.

The incident process is designed to: (1) start the group working much closer to actuality than is possible in a finished case report; (2) involve the participants in the actual preparation and administration of the training; and (3) direct the group's thinking along the same line followed by a leading participant in a group. The recommended approach consists of studying the incident, getting facts, stating and deciding the immediate issue, and learning from the case as a whole. The method helps participants to plan group activity; gather and sift facts; weigh evidence and formulate issues; summarize and speak clearly; and think independently, decisively, and flexibly.                    (235)


SPEROFF, B. J. and A. K. HEYDRICK. The "incident" method: its use with buzz groups and filmstrips. **Personnel** journal 33:5, October 1954. pp. 170-172.

In the "incident method," the conference leader, although having all the facts about a case, reads or hands out only a simple statement describing a situation. Trainees then ask questions to get the critical facts that precipitated it. These key facts are outlined, and each trainee decides on his solution. All solutions are evaluated by the group. In conclusion the group tries to stipulate a way to eliminate the cause of the incident. In administering the incident method the group is first given a sample incident to experiment on. A filmstrip of an incident is shown. Questioning ensues, and the entire story is finally given so trainees can compare their ideas with the facts. This step impresses upon them the need and value of fact-finding, provides a standard for fact-finding, and results in a more complete and integrated learning experience. The trainees then break into buzz groups to resolve the case. Results are announced to the entire group.                    (236)

STOLUROW, LAWRENCE M., SUTHITA SANTHAI and RAY KOOPMAN. Critical incidents with hetero-cultural interactions (Technical report no. 42). Urbana, Ill.: University of Illinois Training Research Laboratories, October 1966. 77 pp.

These incidents were collected as raw material for the development of self-instructional materials. The objective of this material is to develop sensitivity to cultural differences: the materials must teach individuals to discriminate interpersonal interaction differences between their own culture and that of others. The specific discriminations are less important than the ability to recognize that a cultural difference exists. These incidents are examples of situations which led to a change in attitude in the person reporting the incident. Use of code numbers categorizes incidents into areas such as family, religion, sex, customs, education, and makes it easy to find incidents related to specific topics.    (237)


ZOLL, ALLEN A., III. The action maze. IN HIS **Dynamic** management education. Seattle, Wash.: Management Education Association, 1966. pp. 7-1—7-13.

The action maze technique is similar in some respects to programmed instruction. An incident is described and alternative possibilities of action given. The trainee analyzes the incident, chooses an alternative, and is directed to a page giving the result of his choice and the alternative possibilities that are associated with it. He analyzes again, makes a new choice, and so on. In almost all actual situations, analysis does not stop when action is begun; in this respect the action maze is realistic, and its occasional use is well received. The method has limitations, however. Simulations may have little or no effect on behavior in an actual (parallel) situation; and when a trainee must choose between alternatives, neither of which he would choose in an actual situation, the method loses realism. Five suggestions for construction of action mazes and nine examples of approaches in developing them are discussed. The maze can be administered to a class group or to an individual. Because trainees may interpret analyses of their responses as personally critical, a good approach is exploration of all assumptions behind each route. (238)

CORSINI, RAYMOND J., MALCOLM E. SHAW and ROBERT R. BLAKE. **Roleplaying in business and industry**. New York: The Free Press of Glencoe, 1961. 246 pp.

The use of role-playing in commercial enterprises which have had good results is emphasized in this introduction to, and manual for, role-playing. Three sections give the background, techniques, and applications of the techniques. Chapter titles are: The Human Equation in Business and Industry; Rationale of Role-playing; Problems of the Human Side of Industry; Preparations; Directing Roleplaying; Techniques; Training; Giving Information; Testing and Spontaneity Training. Appendices are: Case Material; Observation Guides, Definitions, Annotated Bibliography, and Professional and Training Organizations. An index is included. **(239)**

DePHILLIPS, FRANK A., WILLIAM M. BERLINER and JAMES J. CRIBBIN. Roleplaying methods. IN THEIR **Management of training programs**. Homewood, Ill.: Richard D. Irwin, 1960. pp. 177-180.

Role-playing, an effective human relations training technique, is the acting of a part in a contrived situation. Because it involves both actor and spectator, this method is among the best of the attention-getting and interest-holding devices. Its controlled conditions facilitate communication by stimulating trainee activity and involvement. All participants must, of course, be briefed on its techniques and on their roles, and observers must be told what to look for. Trainees then come to understand their own behavior through identifying with the actors. An impromptu presentation can, however, vitiate the advantages of the technique, as can a self-conscious trainee, one who is intentionally difficult, or one who tries to attract attention. Some situations that involve psychological or business problems that trainees cannot handle are not suitable for this technique, and over-emphasis of the problem-solving efforts can interfere with comprehension of the interpersonal relationships and job behavior being shown. Role-reversal, sequential, interrupted, open-ended, small unit role-playing, and other variations are described and linked to situations for which they are suitable. **(240)**

KELTNER, JOHN W. The task-model as a training instrument; using physical models in simulation tasks to focus on organization problems. **Training directors journal** 19:9, September 1965. pp. 18-21.

The Task-Model Procedure is a method which is a cross between role-playing and management gaming. It involves the use of construction toys, card packs, Lincoln Logs, or other construction-type media. The trainer constructs a model which he hides behind a screen in the training area. Trainees are assigned roles as the manager, two subleaders or foremen, and four workers for each of two groups. Only the manager may see the model. He must instruct his two foremen on how to assemble it, and they instruct their work groups. The problem of communication becomes apparent almost immediately when the project begins. Various suggestions for improving communication are discussed by the group and experimented with. The trainer then leads the group in discussion of implications of the model problem for actual work settings. Three variations of the basic model are described, and seven cautions in using the procedures are listed. The method's applications for training in communication, leadership, group processes and problem-solving, and for behavioral research are noted. **(241)**

KLEIN, ALAN F. **Role-playing in leadership training and group problem-solving**. New York: Association Press, 1956. 176 pp.

Practical suggestions are given on how to conduct role-playing. Chapters of the book follow steps in conducting role-playing: (1) Using Role-Playing in Your Meeting; (2) Helping the Group to Role-Play; (3) Preparing for Role-Playing; (4) The Setting and Action of the Role-Play; (5) Involving the Audience; (6) The Leader of Role-Playing; (7) How Role-Playing May Be Used; and (8) The Values and Dangers of Role-Playing. The suggested main uses of role-playing are: (1) training in leadership and human relations skills; (2) training in sensitivity to people and situations; (3) the stimulation of discussion; and (4) training in more effective group problem-solving. **(242)**

MAIER, NORMAN R. F., ALLEN R. SALEM and AYESHA A. MAIER. Supervisory and executive development; a manual for role playing. New York: John Wiley & Sons, 1957. 330 pp.

Twenty cases which cover a broad range of management problems have been tested for use in training by a combination of case method and role-playing. Each case is divided into four sections: (1) focusing the problem, (2) role-playing process, (3) materials, and (4) comments and implications. Multiple role-playing procedure and single group role-playing procedure are prescribed, and use of the book as a training manual for small groups without trainers or for executive self-development is described. Seven important contributions of the case method to training and seven unique values of role-playing are listed in the introduction. Other points covered in the introduction include: how to role-play, role-playing supplies, recommended sequence, previous experience, size of group, rank differences, mixing departments, the classroom, furnishings, and class assignments. There is an index. (243)

PAREEK, UDAI. Simulating reality: role-playing. IN Lynton, Rolf P. and Udai Pareek. Training for development. Homewood, Illinois: Richard D. Irwin and The Dorsey Press, 1967. pp. 148-153.

A definition of role-playing ("a method of adopting roles from real life other than those being played by the person concerned and understanding the dynamics of these roles") and a brief discussion of role-playing technique precede the discussion of five types of role-playing. Simple role-playing involves the observance by a group of the role-playing of another group. Multiple role-playing involves all the persons present in the group. Audience role-playing sensitizes the audience through the use of a specially prepared situation which they are then required to react to a change in. The skit completion method and the dramatized case method are also discussed. (244)

REISSMAN, FRANK. Role playing and the lower socioeconomic group. Group psychotherapy 17:1, March 1964. pp. 36-48.

Indigenous nonprofessional aides from the lower socioeconomic groups were taught the full program of the Mobilization for Youth—Parent Education by means of role-playing. They acted out situations in which they would tell community families about the program. A group discussion followed in which the leader could add to the information of the group. The role-playing method provided interest for more intensive lecture-discussion programs. Teachers in the Mobilization for

Youth program also met and role-played some of the situations they encountered. Discussions followed, and reading was related to enacted situations. (245)

SHAW, MALCOLM E. Role playing— a procedural approach. Journal of the American Society of Training Directors 10:2, March-April 1956. pp. 23-24.

Role-playing involves three stages of development—the warmup, the enactment, and the postenactment analysis. In the warmup the participants are guided toward a group-centered feeling; a low pressure, non-argumentative atmosphere is created; an action atmosphere is established; and a feeling of group responsibility is encouraged. During the enactment, involvement of the individual players and audience is maximized; the group's desire to learn more about the dynamics of the situation is increased; and spontaneity is nurtured. The analysis encourages the group to share their reactions and feelings toward the enactment; generates group cohesiveness; and is used to reinforce and integrate the experience of individual participants. (246)

STATON, THOMAS F. The role-playing method. IN HIS How to instruct successfully: modern teaching methods in adult education. New York: McGraw-Hill, 1960. pp. 124-156.

Role-playing is an effective method of instruction where learning outcomes such as skill in human relations, insights into behavior, and sensitivity to interpersonal contacts are desired. To realize its maximum effectiveness as an instructional method, a role-playing episode has to be carefully planned and conducted. Basic steps in securing most learning from a role-playing episode are: (1) determine the objective of the episodes; (2) structure a situation to achieve that objective; (3) establish roles and select participants; (4) prepare the audience and participants for the episode; (5) play the situation; (6) analyze the episode; (7) evaluate, summarize, and discuss the episode. A guide to producing a role-playing episode, along with a sample role-playing episode, is presented. Suggested readings are cited. (247)

WOHLKING, WALLACE. Guide to writing role playing cases. IN Training and development journal 20:10, November 1966. pp. 2-5.

The training specialist can translate his own experiences into role-playing situations: use a trainee's own problems to lend validity; choose cases that apply to the trainee's current or future job; use realistic elements and conflicting motivations and goals to sustain participant involvement. Cases should be easily under-

stood, stimulating, and motivating; they should foster trainee identification with the situation, permit unstereotyped, creative approaches, and avoid diversion from the training objectives. The number of conflicts caused by different emotions, motives, allegiance, perceptions, and goals; competition; and structured interaction should be restricted to simplify achievement of the case objective. (248)

DALY, ANDREW A. In-basket business game. **Journal of the American Society of Training Directors** 14:8, August 1960. pp. 8-15.

A brief discussion of the rationale and operation of the in-basket game for management training is presented. It is seen as providing an opportunity for observing and discussing such managerial behavior as effective use of routines, flexibility, delegation, foresight, effective use of data in problem solving, originality, planning and control, consideration for human relations, judgment of ability or motives of others, orderliness of work habits, cooperativeness, and writing ability. Procedures for evaluating and discussing the trainees' performance in the in-basket game are also discussed. A sample of a complete in-basket game is included. **(249)**

FRANK, H. E. and S. J. PRINGLE. "In-tray" training exercises. **Journal of the American Society of Training Directors** 16:7, July 1962. pp. 27-30.

In this article several military and industrial applications of the English version of "In-Basket" simulations are presented and discussed. It is further stated that the adaptability of the exercise to a wide variety of interests and levels, and the fact that it uses the method of "learning by doing," can make it an effective training device. Emphasis is placed upon making the exercise pertinent to the needs of the training group. *(ASTD)* **(250)**

FREDERIKSEN, NORMAN, D. R. SAUNDERS and BARBARA WARD. The in-basket test. **Psychological monographs: general and applied** 71:9, whole no. 438, 1957. 28 pp.

The in-basket test resulted from an attempt to devise a sensitive measure that at the same time might be objectively and reliably scored. It proceeds from the assumption that progress toward both goals of sensitivity and objectivity may be made in one operation. This instrument is a situational test presented in written form and group administered. The briefing on the nature of the problems and the presentation of the problems are carried out in such a way that the information available is the same for all candidates. The test allows a great freedom of response. The problems are presented in such

a way that it is up to the candidate first to discover the problem and only then to organize an attack. Although the in-basket test was designed to represent the situation faced by the Field Officer in the Air Force, material suitable to other areas of experience may be readily adapted to this form. Presented is a description of the steps taken in developing this instrument and of the problems encountered along the way, as well as recommendations for further improvement of the test. **(251)**

In-basket method materials for managerial decision making. Ann Arbor, Mich.: University of Michigan, Bureau of Industrial Relations, n.d.

Single copies and bulk quantities are available on twenty-one separate in-basket cases. Instructor's Discussion Guides and Participant's Guides are also available. **(252)**

JAFFEE, CABOT L. **Problems in supervision: an in-basket training exercise.** Reading, Mass.: Addison-Wesley Publishing Company, 1968. 235 pp.

This workbook was designed for undergraduate or graduate courses in supervision, personnel management, or organizational behavior, as well as for additional exercises in management development courses for supervisory personnel up to the middle management level. It can be used with most texts in management since it is designed to provide general experiences with many of the topics in courses dealing with supervision. The text has two sections, each requiring approximately one hour to complete. Each section contains an in-basket exercise, a self-scoring test, and a test to be submitted for scoring by an instructor. The first in-basket exercise involves the duties of a first-line supervisor, the second of a plant superintendent, in a manufacturing company. The items presented in the in-basket deal with different types of organizational problems. Consequently, participants can discuss their performance relative to crucial supervisory skills such as organizing and planning ability, sensitivity to others, and forcefulness. The items are designed to relate to each other and to present a unified picture of a work organization with problems. The discussion questions afford an opportunity to relate the particular problems of the company to broader, more general organizational problems. **(253)**

LOPEZ, FELIX M., JR. Evaluating executive decision making: the in-basket technique (AMA research study 75). New York: American Management Association, 1966. 159 pp.

Information on in-basket exercises which simulate the job being trained for is presented in detail. This exercise uses a representation of an administrator's workload on a typical day. The participant's handling of the posed problems provides a basis for judging his potential for coping with the administrative and planning aspects of a managerial position and for helping him sharpen his skills in this area. Chapters are: Simulating Management Work, How In-Basket Exercises Are Designed, The In-Basket Applied to Training, In-Basket Applied to Assessment, and Exploring the Nature of In-Basket Performance. Exhibits from cited in-basket exercises and tables and a discussion of research on the in-basket technique are appended. Samples of in-baskets, reports, questionnaires, charts, forms, and problems accompany the text.                                   (254)

ROBERTS, THOMAS S. Training managers to make decisions: the in-basket method (reprint from Personnel, September-October 1965). New York: American Management Association. 9 pp.

Recognizing the need for a supply of in-baskets that trainers could obtain in volume, the University of Michigan's Bureau of Industrial Relations undertook to prepare such a collection. This article highlights some of the conclusions drawn from their use in over 400 organizations. The in-basket is compared to the case method, and the role of the leader is duscussed. The value of the in-basket for teaching methods of managerial problem-solving is emphasized. The provision of feedback, with the opportunity for each participant to evaluate his own performance, is a particular advantage of the method.                                   (255)

SMITH, CHARLES D. What's in the box, doc?—an in-basket test for young executives and girls Friday. Journal of the American Society of Training Directors 15:1, January 1961. pp. 27-31.

The development of the in-basket test (originated by Frederiksen, Saunders, and Ward in the Selected Service School of the Air University, USAF) for use in measuring the proficiency of platoon leaders in the performance of their duties in a NIKE AJAX missile battalion (specifically in platoon administration) is discussed. The development entailed three phases of trial and revision. The final version is seen as applicable to the management field for use as a periodic test for young executives in the area of paper-based decision-making, preferably as a self-check. It is also recommended for use by personnel administrators in screening prospective employees in management positions.        (256)

ZOLL, ALLEN A., III. In-basket exercises. IN HIS Dynamic management education; an introduction to the selection, creation and use of cases, in-basket exercises, the action maze, business games and other dynamic management techniques. Seattle, Wash.: Management Education Associates, 1966. pp. 6-1—6-18, A-1—A-24, B-1—B-22, C-1—C-15.

In this section there are presented 6 advantages and 4 limitations of in-baskets as instructional exercises; questions to be considered before creating an in-basket; an outline of factors for consideration in creating an in-basket; an example of how to start; discussions of writing the instructions and providing supplemental material; considerations in administering the exercise (including a sample in-basket self-critique); and discussion of 5 sources of in-basket exercises. Three complete in-baskets follow the general discussion: (A) The General Management In-Basket; (B) In-Basket on Management Development; and (C) In-Basket Exercises on the Control Function. Notes on implications of each item in the exercise are presented at the end of each in-basket. (257)

# SIMULATION AND GAMING IN EDUCATION

ABT, CLARK C. **Games for learning** (Occasional paper no. 7, The Social Studies Curriculum Program). Cambridge, Mass.: Educational Services Incorporated, 1966. 24 pp.

The theory of educational games is discussed, particularly in connection with the teaching of social studies in elementary and secondary schools. Eight examples of educational games developed by the author are discussed. **(258)**

ALLEN, LAYMAN E. Games and programmed instruction. **The arithmetic teacher** 12:3, March 1965. pp. 216-220.

There are at least two examples in which programmed instruction and games have been usefully joined: the Wff 'n Proof games and the Equations games developed at Yale with the help of a grant from the Carnegie Corporation. Wff 'n Proof is designed to help teach propositional calculus; Equations to help teach the six elementary operations of arithmetic. The two points of intersection between programmed instruction and game-playing found in both games are considered in this article: (1) that appropriate kinds of games can themselves be a rather sophisticated and complex mode of programmed instruction, and (2) that learning programs can be constructed so that they incorporate important features of games. **(259)**

BOND, JACK H. **Using simulation techniques to change attitudes of education majors toward professional course objectives** (Teaching research general report, Title VII, project no. 1247). Monmouth, Ore.: Oregon State System of Higher Education, July 30, 1965. 36 pp.

The effects of classroom simulation on the attitudes of education majors toward topics in educational psychology were classified, and the magnitude and rate of appearance of these effects were measured. (Bert Kersh's simulation—"Mr. Land's Sixth Grade"—was the instrument used.) The first experiment determined the magnitude and speed of attitude changes. The second repeated the first, but with refined attitude instrumentation. Results of attitude change on students who scored low on a pretest of attitude are listed. Hypotheses, procedures, and results are given; each experiment is

followed by a discussion. The results suggest positive change when certain simulated experiences become a part of the instruction in educational psychology. Eleven references are cited. Appendices contain a summary of raw data, sample pages of the Semantic Differential Attitude Scale, and sample pages of the Attitude Towards Educational Psychology Scale used in the research. **(260)**

BOOCOCK, SARANE S. and JAMES S. COLEMAN. Games with simulated environments in learning. **Sociology of education** 39:3, Summer 1966. pp. 215-236.

The structural defects of secondary education include: (1) a mismatching of time, (2) a rigid reward system, (3) an overemphasis on the "judging" aspect of the teacher's role. These defects can be relieved by the use of games with simulated environments. Three such games are described and a design for testing them is suggested. Analysis of experimental data reveals that players are highly motivated, that they acquire specific learning from the game, and that they gain a broader perspective on the social situation simulated. **(261)**

CRUICKSHANK, DONALD R. Simulation: new direction in teacher preparation. **Phi Delta Kappan** 47:1, September 1966. pp. 23-24.

The use of simulation in teacher preparation is advocated in order to meet the criterion of realism for classroom teachers in addition to providing for the wider range of teacher behavior that might be practiced. This study reports the current usage and cites results from other simulation studies. *(ASTD)* **(262)**

*HOLMES, CLEO CHERRY. Developments in simulation of international relations in high school teaching. **Phi Delta Kappan** 46:5, January 1965. pp. 227-231.

This article reported on a simulation game used at the Lawrence, Kansas, High School for teaching international relations to high-school students. Approximately 500 students were involved in 8 simulation runs of a period of two years. The Lawrence simulation has developed into a game that can be played by 15 to 40

students without special facilities or teacher assistants. The simulation game produced realistic attitudes on the part of the players toward international relations. (ASTD) (263)

*Name is incorrectly spelled. It should be Cherryholmes, Cleo.

KERSH, BERT Y. **Classroom simulation: a new dimension in teacher education** (Teaching research final report, Title VII, project no. 886). Monmouth, Ore.: Oregon State System of Higher Education, June 30, 1963. 101 pp.

The objectives of the research reported were (1) to develop the principles and skills required in the production of classroom simulation materials and the techniques for using the procedure in the pre-service education of elementary teachers (immediate concern was with the student teacher's ability to detect, diagnose, and resolve such teaching problems as confusion, inattention, distraction, and fatigue on the part of the learner); (2) to conduct an experiment aimed at determining the need for realism (fidelity) in the simulation procedures used in teaching (of those variables possibly contributing to fidelity in simulation, the size of and motion in the projected image were explored). To conduct this research a simulated sixth-grade classroom was developed—"Mr. Land's Sixth Grade"—using motion picture films and printed materials. Described in the report are the theoretical framework, development of materials, procedures for using the materials, conduct of the experiment, results, and conclusions. Sixteen references are cited. An appendix describes simulation facility equipment and controls and contains reproductions of orientation materials and script used in the simulation. (264)

Learning can be child's play. **The Johns Hopkins magazine** 17:6, March 1966. pp. 4-7.

The article provides an overview of the use of games to stimulate interest in students. Particular attention is given to the work done at Johns Hopkins. Games discussed include: Arithmetic Baseball Game, The Legislature Game, The Life Career Game, The Community Disaster Game, The Consumer Game, and The High School Game. The use of games can alleviate the dual role of the teacher who must function as both teacher and authority figure. The simulated environment lets a student play many roles; the games instill intellectual skills that will be needed and lead to a consideration of wider moral questions. (265)

VLECK, CHARLES. Classroom simulation in teacher education. **Audiovisual instruction** 11:2, February 1966. pp. 86-90.

Educators find it difficult to provide adequate classroom experiences for future teachers and, as a result, they make mistakes, misinterpret, and lose rapport with their students. The reasons for this are that student teachers (1) do not receive adequate guidance from classroom supervisors; (2) must try to please both supervisory teachers and university coordinating teachers; (3) have no opportunity to experiment with teaching techniques and problem-solving. Simulated classrooms, such as that developed by Bert Y. Kersh, allow prospective teachers to discover and develop classroom behavior. "Mr. Land's Sixth Grade," a simulated classroom, is described and discussed in detail. The effectiveness of the simulated classroom was evaluated by a classroom observational record form. This form collected data on the following: (1) does the student-teacher understand the concepts of inattention, baiting and testing, disorderly conduct, distracting behavior, and fatigue; (2) is the student-teacher able to identify these five behaviors; (3) does the student-teacher apply discovered principles correctly and appropriately in solving the problems? Implications for future research are suggested. (266)

ABT, CLARK C. Twentieth century teaching techniques (Reprint from *The faculty* 30:1, August 1966). 13 pp.

Of four modern teaching techniques—programmed instruction, case method, T-group, and games—all possessing the virtues of direct relevance, individual participation, and social interaction, games are seen to be the most useful in business education. (The four techniques are compared in a chart illustrating their major applications and limitations.) Educational games are first defined in the article, after which the following related topics are briefly discussed: how a game is conducted, how people learn from games, physical requirements for training games, and the history of games in training and education. The article concludes by outlining the procedures of the following five business games: Adman, Bankplan, Automation, Buddies, and Market. (267)

ANDLINGER, G. R. Business games—play one! **Harvard business review** 36:2, March-April 1958. pp. 115-125.

The experimental "Business Management Game," developed by McKinsey & Company, Inc., is discussed in detail. The game has the elements of business—marketing, production, research and development—and deals with capital goods companies. The game introduces the realistic element of time lags between decision-making and results and lends itself to playing under informal "do-it-yourself" conditions. The following aspects are discussed: basic objectives, setting up the game, tools and materials, time period, pregame preparation, winning and losing, rules for competition, and umpire routine. Charts and tables illustrate the discussion. (268)

CANGELOSI, VINCENT E. SIMUFOR: an exercise in planning and forecasting: how to add an important element to business games. **Training and development journal** 20:5, May 1966. pp. 46-52.

Business games do not provide for planning based on forecasts of future industrial and economic environments. Although these games purport to stimulate and train the student in the planning function, this planning is limited to current decision-making with little concern for other industries or the general economy. To provide

experience in planning, SIMUFOR, a simulation model of an industrial and general economic environment, was designed. The design of the model is described and a generic flow diagram shows how it operates. The exercise is described. The advantages of this game are that: (1) it collapses the time dimension; (2) it allows for error under simulated conditions; (3) it stimulates interest; (4) it provides reinforcement; and (5) it provides a convenient vehicle allowing experimentation with forecasting techniques. (269)

CARLSON, ELLIOT. The versatile business game: its growing use in industry. **Management review**, 55:9, September 1966. pp. 45-47.

The current popularity of the business game in management training and development in American businesses is reported. Examples of its use by several companies and testimonies of its effectiveness by various training directors in large concerns are presented. (270)

CARTER, LAUNOR F. Exercising the executive decision-making function in large systems. IN Glaser, Robert (ed.). **Training research and education.** Pittsburgh: University of Pittsburgh Press, 1962. pp. 409-427.

It is difficult to train individuals for decision making because of the idiosyncratic nature of so many decision situations. Most decisions are made within the context of many competing processes whose influence is understood and whose interactional components are not well understood. Simulation and business games are helpful in training for decision making and system improvement because they offer realistic practice, improving the performance of individuals and developing team skills. Some general points can be made about decision making: (1) technical training and ability to evaluate factual material are necessary for sound decision making; (2) problems of human interaction, acceptance, and motivation enter into good decision making; and (3) as systems become larger and more complex, the outcome of decisions becomes unclear. Simulation of possible decision situations is the best practice for improved decision making. (271)

DILL, WILLIAM R., JAMES R. JACKSON and JAMES W. SWEENEY (eds.). Proceedings of the conference on business games as teaching devices (Sponsored by the Ford Foundation and School of Business Administration, Tulane University, April 26-29, 1961). New Orleans: Tulane University, 1961. 138 pp.

The book is divided into two parts. Part I, Review of the Conference, contains the following chapters: (1) A Brief Report on the Conference on Business Games as Teaching Devices; (2) The Future of Games in Business Education; (3) Some Basic Sources of Information about Management Games and Related Topics. Part II, Individual Discussion Papers, includes 22 papers submitted by members of the conference who were drawn from various departments of a number of major universities throughout the United States. The papers are concerned with methods of teaching with and designing management and business games and their place in the business curriculum. (272)

FELDT, ALLEN G. Operational gaming in planning education. Journal of the American Institute of Planners 32:1, January 1966. pp. 17-22.

Operational gaming, a recent innovation in education for planning, has shown good promise as a means of communicating knowledge and experience not easily adapted to systematic teaching and not easily acquired by a person occupying a single position in urban affairs. The technique has shown its ability to create high motivation and retention. A general description of the Cornell Land Use Game is provided, together with an interpretation of its use by students, faculty, and professional groups. Some suggestions for further improvement of games of this nature are offered. Unlike many teaching games in which the emphasis is upon role-playing behavior, this game may be more closely compared to a combination of chess and Monopoly where the strategies and roles of the players are determined only in response to the rules of the game and the behavior of the players. (273)

FERGUSON, LAWRENCE L. Better management of managers' careers. Harvard business review 44:2, March-April 1966. pp. 139-152.

Evidence is presented of the practicality of a comprehensive simulation model of business careers that can give coherence and relevance to the various parts of the selection, training, motivating, and promotion processes for management personnel. Such a model or system would also provide a matrix of different research and operating possibilities, and a perspective for planning and testing the means to improve important elements in the costly and relatively primitive process of

manager development that is common today. A "Simplified Managerial Manpower Selection and Career Planning Model" (in diagram form) is included. (274)

FOSTER, G. A. Problems on an international scale. The manager 33:8, August 1965. pp. 37-38.

The business game INTOP is the first management exercise to simulate the activities of a group operating internationally in a competitive market. Within the article the game is described and the roles of the administrator are outlined. The game is thought to offer value as a research tool. (ASTD) (275)

GREENE, JAY R. and ROGER L. SISSON. Dynamic management decision games. New York: John Wiley & Sons, 1959. 84 pp.

Seven non-computer management decision games are included. Chapters on how to construct, organize, and handle business games precede the games. Additional player and referee instructions, as well as background data, are available. (276)

GREENLAW, PAUL S., LOWELL W. HERRON and RICHARD H. RAWDON. Business simulation in industrial and university education. Englewood Cliffs, N.J.: Prentice-Hall, 1962. 356 pp.

This book provides guidance and a comprehensive source of information on the design, administration and educational uses of business simulations both in university curricula and in management training programs in industry. There are eight chapters. Chapter 1 focuses attention on a definition and description of business gaming, its historical roots, and a survey of the more important varieties of games now (1962) in existence. Chapter 2 deals with the kinds of learning that may be fostered by various applications of gaming. Chapters 3 and 4 deal with game construction, providing a general treatment of game design and a case study of the construction of a specific management game. Chapter 5 illustrates the use of simulation in presenting a new concept to the student. Chapters 6 and 7 deal with game administration and present a number of approaches for operating gaming sessions. Chapter 8 provides a statement of the difficulties and problems involved in the use of gaming and expresses some views concerning the future of business games in management education. Summaries of 89 representative games now in existence are

included in an appendix. A bibliography, an index of business simulations, and a general index are included. (277)

GREENLAW, PAUL S. and STANFORD S. KIGHT. The human factor in business games. **Business horizons**, Fall 1960. pp. 55-61.

Decision making is affected by needs, attitudes, and feelings. This article explores the dynamics of the decision-making group at work and investigates the skills needed to effect decisions in management games. Because social groups condition the attitudes of their members, participation in a decision-making group can induce changes in certain characteristics if a participant feels free to disclose his attitudes, if he receives information that will enhance his perception or overcome inadequacies in his beliefs and behavior, and if he has an opportunity to test his new behavior. Group interaction can develop empathy through simulated experience with unfamiliar ideas. If a gaming group is to be successful as a change-inducing medium, continuous feedback is necessary. Ego-involvement is characteristic of management games. Too much involvement is dangerous if the individual cannot accept feedback. Several approaches to reduce chances of over-involvement are listed. Human relations aspects of organizational behavior have been said to be over-emphasized. The human factor cannot be considered by itself. Business games are an excellent way to experience interaction between human forces and nonhuman, quantitative, economic data. (278)

HENSHAW, RICHARD C., JR. and JAMES R. JACKSON. The executive game. Homewood, Ill.: Richard D. Irwin, 1966. 163 pp.

Two models of The Executive Game are presented. Model I, the simpler version, is for lower level courses. Model II, the more complex version, is used in upper levels and graduate courses and in executive development programs. In addition to instruction for players, a brief introduction to computer programming and detailed descriptions of the mathematical models and FORTRAN computer programs which were employed to develop the models are included. The Investment Game, an elaborate business game for use in sophisticated investment analysis, corporation finance, new business planning, and operations courses is described in an appendix. (279)

HERDER, JOHN H. Do-it-yourself business games. **Journal of the American Society of Training Directors** 14:9, September 1960. pp. 3-8.

The article offers a brief guide to the design and preparation of non-computer-type business games to suit the special requirements of individual companies. The various categories of games that can be constructed by using the guide are games on materials inventory management, production scheduling, industrial sales management and general management operations. The guide is divided into six steps: select level of decision making; analyze the decision making; collect data; select game elements; design and prepare materials; play the game. References are included. (280)

KIBBEE, JOEL M., CLIFFORD J. CRAFT and BURT NANUS. **Management games: a new technique for executive development.** New York: Reinhold Publishing Corporation, 1961. 347 pp.

This book provides a general introduction to management games and attempts to answer such questions as why and how to use them and how to design them. The treatment is non-technical and model building is discussed more from the standpoint of the educator than of the mathematician. Management games are presented primarily as an educational technique; their use in research, problem solving, and executive testing as well as the general subject of business simulation, are covered only briefly. Contents are: Part I, Background: Theory and Practice—(1) An Introduction to Management Games; (2) A Management Game in Action, by V. Donald Schoeller; (3) Games and Executive Development; (4) How to Integrate Games into a Training Program; Part II, Administration—(5) Planning, Briefing, and Play; (6) Observing and Critiqueing; Part III, Game Design—(7) General Aspects of Game Design; (8) Mathematical Aspects of Game Design; (9) Manual Games and Computer Games; (10) The Future of Management Games; Part IV, Case Studies—(11) Management Games Today, by Lois Stewart; (12) Business Games at General Electric Company by Robert R. Smith; (13) Top Management Training in the Pillsbury Company, by J. W. Zimmerman and Seymour Levy; (14) A Simulation Exercise for Plant Scheduling and Warehouse Distribution, by J. C. Emery; (15) The Use of Analogue Computers in Operational Games, by P. J. Robinson; (16) Development of a Spare Parts Supply Simulation at Trans-Canada Airlines, by A. A. Lackman and Howard Whitton; (17) A Japanese Business Management Game, by Y. Osawa and T. Miyashita; Part V, Reference—A directory of Management Games, Bibliography, and Index. (281)

LOPEZ, FELIX M., JR. Simulating management work. IN HIS **Evaluating executive decision making: the in-basket technique** (AMA research study 75). New York: American Management Association, 1966. pp. 11-26.

The introduction of the game to management science was in response to the need for accurate, realistic

techniques to identify, select, and develop people with the ability to hold key positions. Early efforts in this area and the obstacles in developing management skills are discussed. The management game, in the context of training and testing methods, is defined. The development and acceptance of the management game is traced and games are categorized (according to the number of players). The development and first application of the in-basket technique are discussed as well as current applications. The validity, realism, and effectiveness of management games for selection and development are considered, and the holistic and systems approaches inherent in the game are analyzed. (282)

Management games in selection and development (Proceedings of the Executive Study Conference held May 5 and 6, 1964). Princeton, N.J.: Educational Testing Service, 1964. 139 pp.

Papers by members of the conference are presented in three sections: (1) Management Development—The In-Basket in the AMA Management Course, by Felix M. Lopez, Jr.; A Problem Analysis and Decision Making Program—Evaluation of Results and Application, by Robert Oliver; Studying Performance Under Various Simulated Organizational Structures, by Bernard M. Bass; (2) Management Games in University Programs—The International Operations Simulation (INTOP)—Use, Experience, and Research Potential, by Hans B. Thorelli; The HARBETS Simulation Exercise in the Advanced Management Program, by Lewis B. Ward; (3) Selection and Assessment of Management Personnel—A Case Study in Group Appraisal, by J. Myron Johnson; Situation Tests for Management Selection, by Richard F. Thornton; Situational Tests in Assessment of Managers: Part I, The Assessment Program, by Douglas W. Bray; Part II, Contributions to the Assessment Process, by Donald L. Grant. (283)

McGEHEE, WILLIAM and PAUL W. THAYER. Business games. IN THEIR Training in business and industry. New York: John Wiley & Sons, 1961. pp. 221-223.

A business game is a set of rules realistically corresponding to the economics of a business with the limitations of a game structure. Twelve advantages of business games in management training are: (1) the player learns which key factors to observe in an actual on-the-job situation in order to understand the business position; (2) the game illustrates important facts and gives an idea of the approximate quantities in volume; (3) a dynamic game gives insight into the particular area of executive action; (4) the player's attention is focused on establishing policies or strategies and on long-range planning; (5) the player gains practice in using decision-assisting tools; (6) the game illustrates the value of analytic techniques; (7) games can be used in training for operations research; (8) players become involved; (9) a game is dynamic; (10) in games a large number of interacting variables must be simultaneously accounted for; (11) time is compressed; and (12) the game offers the functional specialist a vehicle for broadening his management horizons. Games may be time-consuming and costly. Another disadvantage is that rules for games are usually designed so that novel approaches do not give the best results. (284)

MOORE, LARRY F. Business games vs. cases as tools of learning; results of research at University of Colorado. Training and development journal 21:10, October 1967. pp. 13-23.

Research was conducted to determine whether business games are better tools of learning than case studies, since they allow direct feedback of decision results and sequential decision making. The hypothesis was that, compared to case study, production gaming enables students: (1) to master a greater degree of factual material; (2) to express more explicitly the fundamental concepts; (3) to utilize a more logical approach in relating and solving substantive issues in decision-making situations; (4) to comprehend more fully aspects of general learning; and (5) to give evidence of greater overall learning. Two separate classes of Introduction to Production Management were used, and they were treated as two separate samples. Students within each sample formed matched pairs based on mental profile similarities and overall intelligence quotients. Five case studies were constructed using data from five functional games. Two-thirds of weekly class time was spent in a joint lecture; the other one-third of class time was split—one-half of the class used business games and the other half used the case method. A four-part test was administered to evaluate the results of the two methods. Results were: the games were not significantly more effective than the case method in this study; and certain aspects of learning seemed better achieved through use of the case method. Statistical significance in favor of the case method was not present, but the high incidence of directional tendency toward that method suggested it provided a greater degree of overall learning. Two questionnaires, administered before and after the course, indicated that students were more motivated by the games than they were by the case study method. References are cited. (285)

PROCTOR, JOHN H. and WILLIAM M. THORNTON. Decision simulation. IN THEIR Training: a handbook for line managers. New York: American Management Association, 1961. pp. 88-90.

Decision simulation (business gaming) is based on a mathematical model of actual business conditions.

Teams of four to six managers operate as individual firms. To play: (1) each firm is provided with statistics on production costs, resource and development expenditures, company debts, and other pertinent items; (2) each firm makes a series of operating decisions for a specified period of time; (3) the computer translates the decisions and issues reports; (4) during the game the firm receives bulletins concerning stock market quotations, scientific breakthroughs, and other news that must be evaluated; (5) at the conclusion, critiques presented by staff personnel as well as by members of competing firms show how decision making can be improved, point out correct and incorrect assumptions, and encourage discussion of strategy. The technique is costly and limited to small groups. Another disadvantage is that the players must be away from homes and their jobs for a minimum of three days.                                    (286)

RAWDON, RICHARD. **Learning management skills from stimulation gaming**. Ann Arbor, Mich.: University of Michigan, Bureau of Industrial Relations, 1960. 15 pp.

The training problems of a large company are discussed and an overview of training techniques is presented with emphasis on management games. A management game is a controlled situation in which a team competes against intelligent adversaries or its environment to attain its objectives. The complexity of a model should be consistent with the training purposes for which it is intended. The more difficult and complex a game, the more lengthy and demanding it is. Gaming has been shown to enhance decision-making ability and provide insights into developmental needs. Specific industry games to aid the overspecialized manager, games to instill company cohesiveness, games to make management personnel aware of their shortcomings, and total enterprise games are discussed in detail. Examples illustrate the use of several games. A simple game model, Simuload, with only one decision variable, is described (with accompanying graphs and figures).          (287)

SAWYER, JACK and MORRIS F. FRIEDELL. The Interaction Screen: an operational model for experimentation on interpersonal behavior. **Behavioral science** 10:4, October 1965. pp. 446-460.

Based on the belief that game experimentation provides a highly promising technique for investigation of interpersonal behavior, the Interaction Screen was developed to provide for a standard situation in which experiments could be performed. The Screen is an electronic system consisting of five major components: two consoles (one for each subject, through which, by operating dials and switches, they interact with one another); an experimenter's console for monitoring

subjects' interaction; a control unit for altering the response possibilities open to the subjects; and a card punch that records all interaction by both subjects. Thus the apparatus defines a complex, flexible, and objective situation and provides for meeting the following criteria: standardization, generality, control, and motivation.
                                                       (288)

VANCE, STANLEY. **Management decision simulation**. New York: McGraw-Hill, 1960. 50 pp.

A non-computerized, management decision simulation game is presented. Organizing, planning, and administering the game are described in detail. Worksheets and other material are included.          (289)

WAGNER, ALAN B. The use of process analysis in business decision games. **Journal of applied behavioral science** 1:4, October-November-December 1965. pp. 387-408.

"This paper describes an executive development conference wherein a four-day sensitivity training laboratory was followed by the UCLA Executive Decision Game No. 2. After each quarter-year decision period for the game there was a session devoted to analysis of the process by which the group made decisions. Emphasis of this 'process analysis' was upon interpersonal relations and group behavior as it affected the business game tasks. The results of the case presented here clearly define three stages of group behavior existing during the decision-making process. The first is entitled Regression, which is characterized by a return to competitive interpersonal patterns of behavior similar to the early phase of sensitivity development; the second has been called Overcompensation, where there is a heavy investment of individual energy aimed at maintaining group harmony at all cost; and the third stage is Realist Problem Solving, in which a 'team effort' is developed. This study has particular significance to the fields of sensitivity training and business gaming, and to their effective integration." *(ASTD)*          (290)

ZOLL, ALLEN A., III. General management business games. IN HIS **Dynamic management education**. Seattle, Wash.: Management Education Association, 1966. pp. 8-1—8-53.

The definition and history of games are discussed; seven advantages and six disadvantages are listed; detailed suggestions for planning and building a model are given; aspects of the initial tryout are discussed; and details of administration are presented. Nine references for further reading are cited, with brief annotations.
                                                       (291)

ZOLL, ALLEN A., III. Other business games. IN HIS **Dynamic management education**. Seattle, Wash.: Management Education Association, 1966. pp. 9-1–9-27.

Business games can be constructed to depict specific business functions in depth, such as production scheduling. The steps in building a functional game are the same as those for a general management game. Realism is conferred by a broad picture of the activities of the function, its relations with other functions, conditions that require key decisions, and believable objectives. Detailed examples of three functional games are presented: Material Management Simulation, A Federal Reserve System Game, and Operation Suburbia. The creation of game material, the planning of feedback, and evaluation and administration of the games are discussed. **(292)**

# SIMULATION IN PUBLIC HEALTH

ALLEN, RICHARD G. Training for diversity; extensive development for hospital administrators. **Training and development journal** 21:5, May 1967. pp. 29-36.

A continuing education program in hospital administration at the University of Alabama Medical Center is described. A list of objectives and an outline of content for in-residence sessions are included. A key element of the course is the development of a complete simulation model of a typical hospital—including budget, financial statements, personnel, history, and problems. Role-playing; in-basket exercises; lectures; group discussion and seminars; films; filmstrips; slides; and a home study course involving readings, case studies, and essay questions are also part of the program which is described as a dynamic experiment undergoing continual evaluation. **(293)**

BOGDANOFF, EARL. **An epidemiological game: simulation in public health.** Santa Monica, Calif.: System Development Corporation, 1963. 11 pp.

A public health organization trying to detect a hypothetical epidemic and ameliorate its effects on a community was simulated by role playing. The public health organization, laboratory, and environmental situation are described, and the epidemiological game is discussed. Role playing is used in this gaming situation to a degree seldom found in games. This procedure provides a setting for evaluating the process and effectiveness of the role playing technique. **(294)**

**Dixon, Tiller County, U.S.A., a teaching reference community.** 5th revision. Atlanta, Ga.: U.S. Department of Health, Education, and Welfare, Public Health Service, Communicable Disease Center, January 1967.

Dixon, Tiller County, is a simulated community with a 1966 population of 181,000. It was developed by the Training Branch of the Communicable Disease Center to be used as a teaching reference for unidiscipline or multidiscipline courses in many subject areas of public health. Materials include a 16mm color film, "Dixon, Tiller County, U.S.A."; 2" x 2" color slides; *Dixon, Tiller County, U.S.A., A Teaching Reference Community* (basic descriptive data); three census books;

materials entitled Morbidity, Mortality, and Vital Statistics; Health Index Survey; Medical Profile; Rules and Regulations Governing Nursing Homes and Related Facilities; Lake Orlie Environmental Sanitation Survey; and assorted maps. **(295)**

SIEGEL, GILBERT B. and DONALD M. SULLIVAN. Building an environmental training model: MAPCORE—a training exercise for air pollution control. **Training and development journal** 21:5, May 1967. pp. 41-50.

The Model Air Pollution Control Region (MAPCORE) is used in training future air pollution control administrators. This model provides a semi-structured environment in which the job of an air pollution control official is simulated. It is practical and realistic in its approach, is relatively inexpensive, and utilizes many validated training methods; it provides an opportunity for the trainer and educator to use their skills; it permits trainees with highly diversified backgrounds to strengthen the total learning outcome of the group by using these differences; it can be used by training programs in any field; and it works. This model is based on "Dixon, Tiller County," a hypothetical community resource book developed by the U.S. Public Health Service, Communicable Disease Center, Training Program, Atlanta, Georgia. "Dixon, Tiller County" provided the basic scheme of a community that could be selectively modified to include air pollution data and expanded to develop a more political, social, and economic character. The working model is made up of three basic elements: (1) the hypothetical community, (2) a simulation framework which includes the rationale for linear development of activities to occur in sequences which might actually occur; (3) "igniters" which spark trainees and start them on their simulation activities: in-basket letters, memos, reports and incoming phone calls, and office visitors. The model provides for continual development. The earlier exercises are fairly simple, while the later ones become more complex. This establishes progressive continuity, progressive degree of difficulty, and a direct relationship between classroom learning and the MAPCORE exercises. This type of model is readily adaptable for government training and for occupations and environments which are unrelated, such as construction superintendents and data processing customer representatives. **(296)**

ADULT EDUCATION ASSOCIATION. **Training group leaders** (Leadership pamphlet no. 8). Washington, D.C.: Adult Education Association, 1956. 48 pp.

Aspects of the use of training groups for developing group leaders are discussed. Articles included are: Introduction: A Democratic Requirement; Can Training Be Education?, *Adult Leadership* editorial; The Functions of Leadership, by Wilbur C. Hallenbeck; The Conditions for Good Training; The Role of the Trainer; The Training Process; Designing the Training Group; Selecting Leaders for Training, by Seymour Lieberman; Measuring Leadership Performance, by Alvin Zander and Ronald Lippitt. (Articles with author not indicated were prepared collaboratively by Ralph Canter, Hubert S. Coffey, Gordon Hearn, Theodore C. Kroeber, Irene Fagin, William P. Golden, Jr., Joseph M. Mjolsness, and Hedley S. Dimock.) **(297)**

ARGYRIS, CHRIS. A brief description of laboratory education; In defense of laboratory education; and A comment upon George Odiorne's paper. **Journal of the American Society of Training Directors** 17:10, October 1963. pp. 4-8, 21-30, 31-32.

These articles are in defense of sensitivity training. Research findings and personal experience are cited as proof of the validity of the method. (The articles should be read in conjunction with George Odiorne's article in the same issue of the *Journal,* questioning the validity of the method.) **(298)**

ARGYRIS, CHRIS. **Interpersonal competence and organizational effectiveness**. Homewood, Ill.: Richard D. Irwin, 1962. 292 pp.

Objectives of the study reported were: (1) to explore the diagnostic validity of a model of a system with inputs, outputs, and feedback, as well as its capacity to provide the foundations upon which a change program could be developed and evaluated; (2) to help top executives develop the insights and understandings needed to enhance administrative competence and the competence of other parts of the organization. Sections and chapters are: I, Theory and Models—(1) The Nature of Interpersonal Relations and Formal Organizations; (2) Interpersonal Competence and Organizational Effectiveness; II, Diagnosis and Feedback—(3) The Diagnosis of the Top Executive System: Interviews; (4) The Diagnosis of the Executive System: Observation; (5) The Feedback of the Results; III, The Laboratory Program—(6) The Nature of Laboratory Education; (7) Interpersonal Authenticity and the T-Group; (8) The T-Group: Examples of Major Themes; (9) Organizational Diagnostic Sessions; IV, Evaluation and Conclusions—(10) The Impact of the Laboratory on the Organization; (11) Impact of the Laboratory on Perceptions of Others by the Experimental Group; and (12) Conclusions. Author and subject indexes are included. **(299)**

ARGYRIS, CHRIS. T-groups for organizational effectiveness. **Harvard business review** 42:2, March-April 1964. pp. 60-74.

The value systems which executives have created and the need for changing them are examined. The problem is to create an environment in which the ineffectiveness of the old values will become apparent and in which the new values can be learned, practiced, and protected until the executives feel confident in using them. Laboratory training tries to help the executives teach themselves, mainly through the T-group. T-groups are described, with particular attention being given to the role of the educator. Various components of laboratory training, such as lectures, role-playing, consultation groups, diagnosing problems, developing and testing recommendations, and solving intergroup problems are described. Objections to and misunderstandings about laboratory training are discussed, as is the impact of such training on organizations. **(300)**

BASS, BERNARD M. The management training laboratory. **Advanced management** 25:7, July 1960. pp. 11-16.

Interaction is an important function in groups. Factors influencing interaction are listed. Problems occurring in the group interaction of formal organizations are discussed and suggestions are made for solving

these problems in the management training laboratory. This method is analyzed and its advantages are commented upon. (301)

BENNIS, WARREN G. Goals and meta-goals of laboratory training. **Human relations training news** 6:3, Fall 1962. pp. 1-4.

Beyond the explicit goals of training rests another set of learnings, the meta-goals. Four pivotal meta-goals are discussed: (1) expanded consciousness and recognition of choice, (2) a spirit of inquiry, (3) authenticity in interpersonal relations, and (4) a collaborative conception of the authority relationship. Meta-goals represent what the participant internalizes and transfers to his organization. They deeply affect and modify values and motivational commitments which determine the individual's orientation to his role. (302)

BLANSFIELD, MICHAEL G. Instrumented versus sensitivity centered laboratories: a comparison. **Human relations training news** 7:1, Spring 1963. pp. 6-7.

There are two types of laboratory learning experiences, instrument-centered and trainer-centered sensitivity. The latter follows a pattern of extensive, small group activity with feedback on a personal rather than impersonal level. In the former, the use of trainer staff is limited, and understanding and insights are achieved through compilation and reporting of data. A table is presented to classify the differences between the two. The design approach and positive and negative values of the two are contrasted on learning rationale, the nature of dilemmas, invention, feedback, generalization, insight, goals, theoretical presentations, program format, and staff role. (303)

BRADFORD, LELAND P., JACK R. GIBB and KENNETH D. BENNE (eds.). **T-Group theory and the laboratory method: innovation in re-education.** New York: John Wiley & Sons, 1964. 498 pp.

This book describes the general development of laboratory training, with emphasis on the T-group. It consists of 18 essays by the editors and nine other contributors. The first section describes and explains the laboratory environment in which the T-group has developed and gives historical and philosophical perspectives from which the T-group as an educational method can be understood. Chapter titles are: (1) Two Educational Innovations; (2) The Laboratory Method; (3) Designing the Laboratory; (4) History of the T-Group in the Laboratory Setting; (5) Trainer-Intervention: Case Episodes; and (6) The Present Status of T-Group Theory. This is followed by the efforts of nine experienced

T-group trainers to conceptualize the development of the T-group and its learning processes and goals. Chapter titles are: (7) Membership and the Learning Process; (8) From Polarization to Paradox; (9) Patterns and Vicissitudes in T-Group Development; (10) Climate for Trust Formation; (11) Psychodynamic Principles Underlying T-Group Processes; (12) Studying Group Action; (13) Training in Conflict Resolution; (14) Explorations in Observant Participation; and (15) A Survey of Research on T-Groups. The last section compares and contrasts the laboratory method with other educational methods utilizing group processes. Chapter titles are: (16) Training and Therapy, and (17) The T-Group and the Classroom. Chapter 18 is entitled "A Look to the Future." There is an index of names and subjects. (304)

BUCHANAN, PAUL C. Evaluating the effectiveness of laboratory training in industry. **Explorations in human relations training and research,** no. 1, 1965. 130 pp.

Concepts from the behavioral sciences are used in designing and conducting group training situations referred to as laboratory training. The training situations may involve unstructured groups; planned group activities; analysis of information (feedback) on current situations; situations for which existent behavior does not offer satisfactory responses; and generalization or reformulation of concepts and values. The objectives of this training are to sensitize the trainee to self and to others; to induce comprehension of factors that inhibit or facilitate group functioning; to instill motivation for self-improvement; to develop understanding of human behavior, especially communication; and to impart diagnostic skills applicable to individual, group, and organizational behavior. The results of some studies on laboratory training are reviewed. They support the contention that laboratory training does have an impact on the individual. More attention should be given to strategies of organization development, to adapting training theory and methodology to fulfill the strategies, and to devising ways of assessing the results of such programs. (305)

BUNKER, DOUGLAS R. Individual applications of laboratory training. **The journal of applied behavioral science** 1:2, April-May-June 1965. pp. 131-148.

"Laboratory training has roots in the blending of research and action. Application interest took precedence in its early development, and the present need is to advance scientific knowledge of training processes and outcomes. Recent studies toward an empirical foundation for training theory are reviewed. Data are presented from a study of perceived behavior changes one year after participation in training. Participants are seen by

co-workers as increasing significantly more than controls in cognitive openness, behavioral skill, and understanding of social processes. Long-range changes are correlated with learning measures at time of training. The clear evidence for the impact of laboratory methods for some subjects must be followed by further inquiry which will explicate processes and conditions" (journal abstract). References are included. **(306)**

BURKE, RICHARD L. and WARREN G. BENNIS. Changes in perception of self and others during human relations training. **Human relations** 14:2, May 1961. pp. 165-181.

Studies of individual adjustment reveal similarity between perceived actual self and perceived ideal self during successful therapy; small group theory and research show increased conformity and similarity of perceptions among group members. These changes are reported to occur in members of training groups. Testing resulted in the conclusion that perceptions of themselves and others by members could be grouped according to three factors: friendliness-evaluation, dominance-potency, and participation-activity. Furthermore, significant changes were found in group members: (1) profile similarity between perceived actual self and perceived ideal self increased, (2) changes in perceived actual self were greater, (3) profile similarity between the perceived actual self and mean perception of him by others increased and changes in perception of individuals by others were greater than changes in self-perception, and (4) variance between members in their perception of individuals on the participation-activity dimension decreased. **(307)**

BURKE, W. WARNER and HARVEY A. HORNSTEIN. Conceptual vs. experimental management training: an attempt to integrate instrumented and T-group training. **Training and development journal** 21:12, December 1967. pp. 12-17.

In the fall of 1965 and again in 1966, the authors designed and conducted a five-day laboratory in which they attempted to develop a rationale enabling them to integrate more completely instrumented and T-group training. Of the participants, men and women undergoing a year's training in administrative management for a large federal agency, 70 percent were "quite" or "completely" satisfied with the lab and felt that it was too short; 90 percent felt that the laboratory had practical advantages. When asked to give suggestions for improving the laboratory, most participants said that it should be longer. The conclusion was that in the design

of laboratories the choice between instrumented and T-group training is not an either/or decision. Two references are cited. **(308)**

CLARK, JAMES V. Authentic interaction and personal growth in sensitivity training groups. **Journal of humanistic psychology** 3:1, Spring 1963. pp. 1-13.

The recurring order of events in sensitivity training groups that have to do with the improvement of significant self-learning are outlined. A review of research in this field is presented, and cases and examples to illustrate each point are included. **(309)**

DAUW, DEAN C. New educational methods for increasing religious effectiveness. **Insight** 4:2, Fall 1965. pp. 11-22.

Sensitivity training and its applicability to training in religious orders are discussed. The rationale, objectives, and methods of the T-group in laboratory training are reviewed in detail. **(310)**

DURHAM, LEWIS E. and JACK R. GIBB. An annotated biliography of research—1947-1960. **Explorations: human relations training and research,** no. 2, 1967. 12 pp.

The 49 books, articles, and unpublished manuscripts on human relations training research in this list are arranged alphabetically by author. Annotations are between 50 and 150 words. (This is reprinted from an earlier publication of the same title, National Training Laboratories, Washington, D.C., 1960.) **(311)**

HACON, R. J. **Conflict and human relations training.** Oxford: Pergamon Press, 1965. 118 pp.

Managers in industry and commerce often disagree with trainers about aims, methods, objectives, and potentialities of sensitivity training. The need for training results from problems which are the effects of an organization and its practices facilitating or hindering individual performance. Managers may or may not want to understand why and how conflicts arise between individuals and groups of individuals in an organization. When they do, the problem is to decide what they can do about it. Effective training depends on (a) the training staff's having the ability to analyze difficulties (personality differences, role incompatibility, lack of technical know-how, or questions of organization structure) and to produce relevant training programs, and (b) top management's supporting these efforts. Six

diagrams, 3 tables, and 3 case histories are included. (ERIC 1, edited)     (312)

HANSON, PHILIP G. and PAUL ROTHAUS. Training for interpersonal competence. **Personnel information bulletin** (Veterans Administration), September-October 1967. pp. 5-9.

A one-week training program at the Human Relations Training Laboratory at the VA Hospital in Houston, Texas, is designed to "help people develop some awareness and skills in the areas of interpersonal relationships, particularly as they apply to work situations." Authors describe the training schedule in detail. (USCSC 1)     (313)

HORWITZ, LEONARD. Transference in training groups and therapy groups. **International journal of group psychotherapy** 14:2, April 1964. pp. 202-213.

Differences between functions of the group therapist and the sensitivity trainer are explored. The group therapist encourages transference by confining his behavior to that of observer. He thus facilitates regressive reactions which are fundamental in uncovering unconscious conflict. But the trainer moves toward a "member" role. Member-like behaviors contribute (1) to an attenuation of transference reactions and to diminished preoccupation with the central figure, (2) to a decrease in regressive reactions, and (3) to increased interaction and interdependence among the members.
     (314)

KNOWLES, ERIC S. Research since 1960. **Explorations: human relations training and research,** no. 2, 1967. 21 pp.

The first section lists 76 published and unpublished items on research in human relations training, alphabetically by author. A second part contains abstracts of 52 of these.     (315)

LAKIN, MARTIN and ROBERT C. CARSON. A therapeutic vehicle in search of a theory of therapy. **Journal of applied behavioral science** 2:1, January-February-March 1966. pp. 27-40.

"The authors examine processes involved in group sensitivity training and cite various studies and points of view that attempt to explain the emotional impact such training has in encouraging behavior and attitude modification. They suggest that the changes that may be induced through sensitivity training appear to be similar to those that may be induced through

psychotherapy. If it is possible through further investigation to specify what it is that seems to induce change in the public situation of the sensitivity training group, then it may be possible to learn more about what is effective in the therapeutic situation." (ASTD)     (316)

Landmarks issue (entire issue). **The journal of applied behavioral science** 3:2, April-May-June 1967. 154 pp.

This issue celebrates National Training Laboratories' past development and tries to identify some of the major issues ahead. Individuals closely associated with NTL's early years, including Leland Bradford and Alfred Marrow, are contributors. Other articles are: On the Future of Laboratory Education, by Chris Argyris, with eight comments; The Anarchist Movement and the T-Group: Some Possible Lessons for Organizational Development, by Bernard M. Bass, with four comments. (USCSC 1, edited)     (317)

LIPPITT, GORDON L. and LESLIE E. THIS. Leaders for laboratory training: selected guidelines for group trainers utilizing the laboratory method. **Training and development journal** 21:3, March 1967. pp. 2-13.

Some of the significant roles, problems and qualifications of the effective group trainer are suggested. Factors effecting the trainer's roles include (1) purposes and design of training; (2) length of training program; (3) group composition; (4) practicing philosophy of the trainer; (5) expectations of participants; (6) expectations of the training planners; (7) organizational or personal needs which initiated the program; (8) influence of the trainer's peers and his profession; (9) current state of research and experience; and (10) needs of the trainer. The group trainer has multiple roles; he is (1) initiator of diagnostic training concepts; (2) diagnostic observer at appropriate time and level; (3) innovator of learning experience; (4) standards protector; (5) initiator of selected group standards for learning; and (6) a group member. Special problems and pitfalls result: (1) if the trainer becomes too directive; (2) if the trainer and group become too clinical; (3) if the trainer becomes too personally involved in the group; (4) if the training group is used in an inappropriate way; (5) when frustration and floundering are mistaken for learning. Several guidelines to assist the trainer in making decisions about training interventions are ennumerated. Qualifications of laboratory trainers are (1) self-understanding; (2) personal security; (3) previous group experience; (4) professional

training; (5) ability in verbal communication; and (6) training skills. (318)

MIRAGLIA, JOSEPH F. Human relations training, a critical evaluation of on-the-job effects. **Training and development journal** 20:8, September 1966. pp. 18-27.

A number of experimental studies to determine whether human relations training has actually changed supervisory performance on the job are reviewed. All but two of these studies noted significant improvement in attitudes and human relations skill. However, existing studies were generally found inadequate. Inadequacies were attributed to (1) lack of valid and reliable means of measurement, (2) unwillingness of organizations to experiment in sensitive human relations areas, (3) inherent difficulties of investigating and experimentally controlling dynamic interaction within organizations, and (4) the difficulty of evaluating training outcomes in everchanging organizational settings. Document includes 32 references. *(ERIC 1, edited)* (319)

NATIONAL TRAINING LABORATORIES. **Reading book, 20th annual summer laboratories in human relations training.** National Training Laboratories, 1966.

These papers represent notes for theory sessions presented at various training laboratories and are intended as helpful tools in supplementing theory sessions and understanding various laboratory experiences. The ideas and concepts have proved useful in National Training Laboratories over the years. Conditions for laboratory learning are set forth. The T-group, which employs inquiry, exploration, and experimentation into its own activities to improve understanding of individual and group behavior, is analyzed in terms of basic psychological needs and interpersonal processes. Emotional problems in organizations and groups are examined, together with leadership and the management of conflict, interpersonal communication, defense mechanisms and personal growth, useful criteria for evaluating group growth, relationships and interaction between client and consultant, processes of social interaction and change, and stages in planning organizational change. Skills are indicated for stimulating change in performance, attitudes, and understandings of an individual, group, organization, or community. Document notes purposes and personnel of the "Journal of Applied Behavioral Science," lists National Training Board members (May 1966), and provides reading lists. *(ERIC 1)* (320)

ODIORNE, GEORGE S. The trouble with sensitivity training. **Training director's journal** 17:10, October 1963. pp. 9-20.

This criticism of the methods and objectives of T-group training lists criteria for sound training: the desired terminal behavior must be determined before training starts; the training must be in small, logical steps; learning must be under control; there must be selection standards for admission; and the training must be susceptible to evaluation. Sensitivity training does not meet these criteria. (This article to be read in conjunction with Argyris' article in the same issue of the journal.) (321)

OSHRY, BARRY I. and ROGER HARRISON. Transfer from here-and-now to there-and-then: change in organization problem diagnosis stemming from T-group training. **The journal of applied behavioral science** 2:2, April-May-June 1966. pp. 185-198.

Problem analysis questionnaires designed to measure diagnostic style in individual patterns of analyzing interpersonal work problems were administered to ascertain whether T-group experience has significance for the participant's work world. Data reveal that diagnostic orientations learned about self in relation to T-group do generalize to learnings about self at work. As a result of T-group training, the trainee: (1) sees his work world as more human and less impersonal; (2) sees clearer connections between how well interpersonal needs are met and how well the work gets done; (3) sees himself as the most significant part of his work problems; (4) sees no clear connection between his new perceptions and how he translates these into action. (322)

SCHEIN, EDGAR H. and WARREN G. BENNIS. **Personal and organizational change through group methods: the laboratory approach.** New York: John Wiley & Sons, 1965. 376 pp.

The book was written "so that a wide audience could come to understand and evaluate a new and powerful educational medium which we call laboratory training." Part and chapter headings indicate contents: Part I, What Is Laboratory Training?—(1) Introduction; (2) What Is Laboratory Training: Description of a Typical Residential Laboratory; (3) Overview of Laboratory Training; Part II, The Uses of Laboratory Training—(4) Variations in Laboratory Training; (5) The Design of One-Week Laboratories, by Roger Harrison and Barry Oshry; (6) Sensitivity Training and Being Motivated, by J. F. T. Bugental and Robert Tannenbaum; (7) The Uses of the Laboratory Method in a Psychiatric Hospital, Section A: The Patient Training Laboratory, An Adap-

tion of the Instrumented Training Laboratory, by Robert Morton; Section B: Follow-up Evaluation of Human Relations Training for Psychiatric Patients, by D. L. Johnson, P. G. Hanson, P. Rothaus, Robert B. Morton, F. A. Lyle, and R. Moyer; (8) A 9,9 Approach for Increasing Organizational Productivity, by Robert R. Blake and Jane Srygley Mouton; (9) Sensitivity Training and Community Development, by Donald C. Klein; (10) Principles and Strategies in the Use of Laboratory Training for Improving Social Systems; Part III, Research on Laboratory Training Outcomes—(11) Research on Laboratory Training Outcomes; (12) Learning Processes and Outcomes in Human Relations Training: A Clinical Experimental Study, by Matthew B. Miles; (13) The Effect of Laboratory Education upon Individual Behavior, by Douglas R. Bunker; Part IV, A Theory of Learning through Laboratory Training—(14) A General Overview of Our Learning Theory; (15) Organizational Forces That Aid and Hinder Attitude Change; (16) The Laboratory as a Force Toward Learning; (17) Some Hypotheses about the Relative Learning Impact of Different Kinds of Laboratories; (18) Our Questions about Laboratory Training. Appendix A, If You Want to Run a Laboratory, contains a set of guidelines for anyone faced with the decision of whether or not to engage in laboratory training. (It contains a list of NTL Fellows and Associates as of May 1964.) Appendix B is a selected bibliography organized into the following categories: general books and articles, popular articles, the uses of laboratory training, evaluation studies, related group theory, and criticisms of laboratory training. An alphabetical list of references and name and subject indexes are included. (323)

Sensitivity training in the classroom. Human relations training news 11:3, 1967. pp. 1-5.

Instructors report experiences with T-group courses held as part of regular college undergraduate or graduate curricula. Most reaction is favorable, leading to the conclusion that laboratory training can be beneficially conducted in non-resident settings. (USCSC 1) (324)

SMITH, EWART E. and STANFORD S. KIGHT. Effects of feedback on insight and problem solving efficiency in training groups. Journal of applied psychology 43:3, June 1959. pp. 209-211.

The method and results of two experiments testing postulated learning principles used in constructing courses in human relations in management development are presented. Hypotheses tested were: (1) feedback will increase group productivity and increase self-insight; and (2) subgroup structure will result in increased group productivity and increased self-insight. The data indicated that personalized feedback markedly and consistently improved group problem-solving effic-

iency and improved self-insight under some conditions. The hypotheses regarding subgroup structure were not supported. References are included. (325)

SMITH, HENRY CLAY. Sensitivity to people. New York: McGraw-Hill, 1966. 226 pp.

Sensitivity is defined as "the ability to predict what an individual will feel, say, and do about you, himself, and others," or "the ability to sense accurately what others think and feel." The purpose of this book is to examine present sensitivity training programs so that better ones can be developed. Part One, Education for Sensitivity, is concerned with definition of the concept and presentation of the author's theory which differentiates sensitivity into six components: level and spread, empathy and observation, and stereotype and perception of individual uniqueness. Other areas considered in Part One are: objectives for training, measurement of sensitivity, how impressions of persons are formed, training principles (the unified person, the facilitation of change, knowledge of results) and guides to better training (including formulating realistic goals, developing better measures of goal achievement, sequencing goals, reducing defensiveness, fitting method to goal, and evaluating). Parts Two through Four sketch the nature and origins of the six components of sensitivity and contain specific suggestions for training to improve abilities in each area. Part Five, Implications and Applications, attempts to reintegrate the components by discussing several questions (What is sensitivity? Who is sensitive? What are the causes of insensitivity? How can selection be improved? and How can training improve sensitivity?) and examining their significance for education in the areas of clinical training, sensitivity training in T-groups, and the teaching of psychology. The small unit of instruction, rather than a general course, is suggested as the starting point for improving sensitivity training through empirical testing of methods and content. There is a bibliography. (326)

TANNENBAUM, ROBERT and J. F. T. BUGENTAL. Dyads, clans, and tribes: a new design for sensitivity training. Human relations training news, Spring 1963. pp. 1-3.

This design for sensitivity training is based on the division of a group of ten participants into three groups—dyads, clans, and tribes. Each participant is involved with each group. The subgrouping encourages interaction among participants. Dyads consist of pairs, clans of five participants and one leader, and tribes of ten participants and two leaders. Membership in the clans required that persons who had been together in T-groups previously be separated, no one working with a trainee with whom he had previously worked. There had to be at least one woman in each clan. Discussion of the

system includes these ideas: the three groups comprise a social system in which events, skills, and insights gained into any one segment have an impact on the others; the built-in relationships affect the events that occur in each element; the three units have varied meanings and are used by participants in diverse ways. Participants identified more than 40 design elements and important learnings. Specific reference is made to dyads. The design opens up new research possibilities, and the archaic roots of the design are stimulating.          (327)

WESCHLER, IRVING R. and EDGAR H. SCHEIN (eds.). Issues in training (Selected reading series no. 5). Washington, D.C.: National Training Laboratories and National Education Association, 1962. 121 pp.

The rapid development of laboratory training has raised a number of issues such as the role of the trainer in the training group, the current status of the training versus therapy controversy, training the trainer, the evaluation. These issues are discussed in the articles: (1) Human Relations Training: Current Status; (2) Theory and Method in Laboratory Training; (3) The Self in Process: A Sensitivity Training Emphasis; (4) Management Development, Human Relations Training, and the Process of Influence; (5) The Instrumental Training Laboratory; (6) The Logic of Team Training; (7) Training Laboratories in Organization Development; (8) Observations on the Trainer Role: A Case Study; (9) Ethics and Responsibility in Human Relations Training; and (10) Is Training a Profession?          (328)

WHITAKER, GALVIN (ed.). T-group training; group dynamics in management education (ATM occasional papers no. 2). Oxford, England: Basil Blackwell, 1965. 82 pp.

A training methods symposium takes up T-group training—its characteristics, its evaluation, and its application in and outside industry. A case study illustrating the nature of the technique, as well as a glossary, are included. The symposium was sponsored by the Association of Teachers of Management (Great Britain). Papers relate to experiences in Europe, the United Kingdom, and the United States. (USCSC 1)          (329)

WINN, A. Laboratory training in industry. Personnel administration 27:3, May-June 1964. pp. 6-10, 17.

This article explains the laboratory-sensitivity method of using T-groups. The main objective of laboratory training, as given in this article, is to provide the participants with an opportunity to examine and evaluate their customary normative orientation. The article goes into the use of laboratory training by the Aluminum Company of Canada, Ltd. The selection of trainees and their handling of these trainees during the program is covered. Also covered is a "family" laboratory used by Alcan. This "family" laboratory uses several hierarchical levels of a division or department at each meeting. In reality, the "family" laboratory is more like a work conference than a true laboratory.          (330)

BECKHARD, RICHARD. The confrontation meeting. **Harvard business review** 45:2, March-April 1967. pp. 149-155.

In periods of stress following major organizational changes there tends to be much confusion and energy expended that negatively affects productivity and organization health. The top management team needs quick, efficient ways of sensing the state of the organization's attitude and feelings in order to plan appropriate actions and to devote its energy to the most important problems. The usual methods, such as attitude surveys and extended staff meetings, demand extensive time and require a delay between getting the information and acting on it. A short micromechanism called a confrontation meeting can provide the total management group with: (1) an accurate reading of the organization's health; (2) the opportunity for work units to set priorities for improvements; (3) the opportunity for top management to make appropriate action decisions based on appropriate information from the organization; (4) an increased involvement in the organization's goals; (5) a real commitment to action on the part of subgroups; and (6) a basis for determining other mechanisms for communication between units and groups, appropriate location of decisions, problem solving within subunits, as well as the machinery for upward influence. A guide to the setting up and operation of the confrontation conference is offered and illustrated by three specific case instances. (331)

**Bibliography of publications on the managerial grid and grid organization development.** Austin, Texas: Scientific Methods, Inc., 1967. Mimeo. 46 pp.

Included are entries for books and monographs, articles, and chapters of books by various authorities in the field, published through 1967. (332)

BIDWELL, ALVIN C., JOHN J. FARREL and ROBERT R. BLAKE. Team job training—a new strategy for industry. **Journal of the American Society of Training Directors** 15:10, October 1961. pp. 3-23.

The team approach to job training, as presented here, is based upon the assumptions that the trainee candidates—particularly the workers in the jobs around which the training program is to be built and their immediate supervisors—are the ones best suited to identify the many and complex needs which the training program should satisfy. This team approach can solve the problems of developing really effective training in higher skills and of accomplishing sound results on the job even for the poorly motivated. The development and execution of such a program presently being carried out in an existing company is described, giving the method of initial contact, type of classroom and instructor, and the establishment of training review meetings. From interviews it was learned that all concerned with the program found it superior to the old method of "individual in isolation." *(ASTD)* (333)

BLAKE, ROBERT R. and JANE S. MOUTON. Improving organizational problem solving through increasing the flow and utilization of new ideas. **Training directors journal** 17:9, September 1963, pp. 48-57; and 17:10, October 1963, pp. 38-54.

Procedures used to evaluate an experimental grid laboratory seminar (idea laboratory) included: (1) interviews conducted a month before the lab and six months after; and (2) meetings held a month before, during, and six months afterwards to analyze quantitative data which showed changes in how an individual saw himself. The purpose of the laboratory was to increase the flow and utilization of new ideas. The sequence of activities was: orientation; explanation and drill; personal application; identifying traditions, precedents, and past practices; and summary and implications. Changes were observed in self-reappraisal, in managerial effectiveness in dealing with conflict, and in interpersonal perceptions. Specific kinds of changes resulting from the idea laboratory are discussed in the second installment of the article. (334)

BLAKE, ROBERT R. and JANE S. MOUTON. Organization development and performance. IN THEIR **The managerial grid; key orientations for achieving production through people.** Houston, Texas: Gulf Publishing Company, 1964. pp. 290-311.

The results of a large-scale experiment in organization change conducted in an industrial plant of 2400 are discussed. The experiment involved the authors'

six-phased approach to organization development (managerial grid laboratory-seminar training, team development, horizontal and vertical intergroup linking, setting organizational improvement goals, implementing planned change by attaining established goals, and stabilization). Results are discussed in terms of changes in indices of performance of the organization (profit, manpower, organization structure); changes in intergroup relations (headquarters-plant, union-management, staff-line, and others); changes in the character and uses of team action; and changes in individuals. (335)

BLAKE, ROBERT R., JANE S. MOUTON, LOUIS B. BARNES and LARRY E. GREINER. Breakthrough in organizational development. **Harvard business review** 42:6, November-December 1964. pp. 133-155.

The link formed by behavioral science concepts of team learning between individual learning and total organizational development is described. The link suggests some answers to a long-standing problem in industry: how to test and demonstrate the large-scale usefulness of human relations research and teaching. In the process, the article describes a new approach to management development and organizational development called the "Managerial Grid." The grid helps to give businessmen a language system for describing their current managerial preferences; it also involves classroom materials and an educational program for designing more productive problem-solving relationships. The program is meant to be taught and applied by line managers over a time span involving six overlapping phases. The first two promote manager development: laboratory-seminar training and team development; the last four promote organization development: intergroup development, organizational goal setting, goal attainment, and stabilization. The first part of the article describes how the grid program should work theoretically; the second part describes an attempt to apply the theory to a real situation. Tables and graphs illustrate key points. (336)

BLAKE, ROBERT R., JANE S. MOUTON and MICHAEL G. BLANSFIELD. How executive team training can help you. **Journal of the American Society of Training Directors** 16:1, January 1962. pp. 3-11.

In this article it is stated that conventional training seeks to improve team action by training individuals separately rather than training the team as a unit. This process is likened to training an athletic team on an individual basis, and the more common training procedures are described. The alternative to these methods is the team approach whereby the members of the team train together to perfect the skills needed in their working relationships. Such a method enables the

members to become familiar with technical skills but also with the interpersonal relationships associated with their positions. To implement this, it is recommended that the training unit be composed of organizational subgroups, starting at the top of the hierarchy, and made up of individuals who have both boss-subordinate and peer working relationships. These functional subgroups meet with a behavioral scientist, the prime task of the participants being to engage in direct feedback in face-to-face interaction concerning reactions, attitudes and feelings in order to build constructively on the strengths of people. Further contrasts of this approach with the traditional are given, and in conclusion it is stated that in companies where team training has been carried out, more effective team action has been observed. *(ASTD)* (337)

BUCHANAN, PAUL C. and PHILIP H. BRUNSTETTER. A research approach to management improvement; Part 1—description of the program. **Journal of the American Society of Training Directors** 13:1, January 1959. pp. 9-18.

This report is about the first year of a program to improve the operation of a large department in an industrial organization. The improvement program's goals, rationale or underlying philosophy, and methodology are discussed. Six general goals for organizational change and three goals for individual change are outlined under "Dimensions of Improvement." Seven general assumptions are discussed under "Change Process in Organizations," and five assumptions about change in an action program are discussed under "The Program Approach." Assumption No. 4 of the program approach was that it should be conducted in four "waves": consultation, laboratory-type workshops or conferences, survey-feedback of how the organization is operating, and evaluation of improvement methodology. These concepts are elaborated upon. The remainder of the article describes the development program: the major project sequence, background of the program, statement of purpose for the conferences, agenda, details of the conferences (which include T-group training, lectures, and discussions), and the use of a survey questionnaire for feedback. (338)

GLANZER, MURRAY. Experimental study of team training and team functioning. IN Glaser, Robert (ed.). **Training research and education.** Pittsburgh: University of Pittsburgh Press, 1962. pp. 379-407.

The word "team" refers to a collection of interacting individuals who work together to perform a task. There are certain general principles of individual training that apply also to team training: (1) immediate feedback or reinforcement; (2) simulation; (3) represen-

tativeness; (4) statement and incorporation of require-
ments; and (5) principles of learning. The application of
these principles requires a considerable knowledge of
how a team functions. Research and observation indi-
cate that a team is a complex organization of interlock-
ing responses whose proficiency can theoretically be
reduced to the proficiency of the individuals composing
it. The most basic problems in team training are not in
the organization but rather in the errors by individual
team members and inefficiency in correcting these
errors. Solutions to these problems require better moti-
vating and supervision, and better techniques for feed-
back and reinforcement for individuals.               (339)

GOLEMBIEWSKI, ROBERT T. and ARTHUR BLUM-
    BERG. Confrontation as a training design in
    complex organizations: attitudinal changes in a
    diversified population of managers. The journal
    of applied behavioral science 3:4, October-
    November-December 1967. pp. 525-547.

Following is the major portion of the abstract at
the beginning of the article: "The 'confrontation tech-
nique' has been used successfully in training designs in
complex organizations, and this study at once reinforces
and extends existing experience. Specifically, . . . this is
a report on an application of the technique that induced
favorable attitudinal changes in the marketing area of a
large firm. . . . Basically, the design required the ex-
change of 'images' between individuals or organization
units. The public sharing of these data apparently
reduced the amount of 'unfinished business,' freed up
organization members, and led to favorable attitudinal
changes on a variety of before/after compari-
sons. . . . The design and results of this study are
distinguished from other reports in the literature, partic-
ularly in four senses. First, the present training experi-
ence deals with several functionally related departments.
Second, the design encompasses several hierarchical
levels down to the first level of field super-
vision. . . . Third, an unusually wide variety of data was
gathered in the present training design. Only gross
attitudinal changes in the total population are reported
here, i.e., the gross focus here is how everyone saw
everyone else at time 1 and time 2. But the cooperation
of the participants permits a range of analysis broader
than that of existing reports in the literature. Fourth,
the confrontation experience was part of a large and
long-range program of organization change. In contrast,
existing reports tend to deal with ad hoc efforts."
[Comments on this article by Stokes B. Carrigan and
Donald C. Klein follow the references.] Ten references
are cited. Explanatory figures and statistical tables are
included.                                              (340)

KLUNDT, CARL B. Task team development within and
    between agencies. Training directors journal
    19:12, December 1965. pp. 11-19.

A task team is a group of 8 to 15 supervisors
and professionals, often from divergent backgrounds,
who are assigned a common task. The task director of
the team should try to (1) keep up with the evolving
task definition; (2) select members for the team while
the task is still partially undefined; (3) orient the
newly arrived to a changing job description while
budget is still being allocated within the task; (4) pre-
serve the fact that there will be both supervisors and
subordinates; and (5) maintain the impression that the
director of the project really knows what is to be
done. There are two trainers to a team, the communi-
cation development trainer and the working relations
development trainer. The communications development
trainer, the outside trainer, works from outside the
group; he points out what is happening between team
members when they are working out their organiza-
tional relationships. The working relations development
trainer joins the group in their effort to define their
working relationships in the task team organizational
structure. Further duties of both trainers are described,
as well as the background required for trainers. The
group-centered approach accelerates the amount of
accomplishment during the period of time the group is
together, because they deal with specific major issues.
An actual task team development workshop is de-
scribed in detail. This discussion centers around mem-
ber reaction, atmosphere, and members "on the rack"
(term used when feedback flows freely to an individual
from the rest of the group).                          (341)

MALOUF, LeROY G. Managerial grid evaluated. Train-
    ing and development journal 20:3, March 1966.
    pp. 6-15.

"An experiment with the Managerial Grid Labor-
atory-Seminar managerial development program was
made in an effort to determine its effectiveness. The
objectives of the program were to help people develop
themselves by showing them their managerial style, how
to improve their style, and how to improve effectiveness
of the groups with whom they work. Eleven managers
and professional people took part in the one-week
session in March, 1963. The attempts to determine and
evaluate changes in managerial practices which resulted
from the session are described here along with the
conclusions reached." (ASTD)                          (342)

NAYLOR, JAMES C. and GEORGE E. BRIGGS. Team-training effectiveness under various conditions. **Journal of applied psychology** 49:4, August 1965. pp. 223-229.

In a simulated radar aerial intercept task, the transfer performance of 3-man teams was measured. The independent variables which affected team performance were task complexity and organization and skill level of replacements. The task complexity was consistent during all transfer sessions, with best performance on the simpler tasks. With task organization, performance was influenced only after the replacement, with superior performance by teams organized to permit each subject to work independently of his counterpart. Those teams that received more highly trained replacements improved in performance; those teams with less skilled replacements deteriorated but recovered in later work periods.
(343)

REDDIN, W. J. The tri-dimensional grid: an integration of managerial style theories. **Training directors journal** 18:7, July 1964. pp. 9-18.

A system of describing managerial behavior is discussed. It involves integration of two existing approaches: McGregor's "X and Y" theory and Blake's Grid. Both consider authoritarian and permissive dimensions, and both may relate to individual and organizational behavior. The integrated approach incorporates a third dimension of "effectiveness." The three style theories are explained and illustrated by graphic presentations, and the Tri-Dimensional Grid is applied to eight basic styles of managerial behavior: active deserter, missionary, autocrat, compromiser, passive deserter, developer, benevolent autocrat, and executive. Two additional managerial style theories—"The Tannenbaum and Schmidt Continuum of Leadership Behavior" and the "Task and Maintenance Functions"—are described and then adapted to the Tri-Dimensional Grid. A list of references is included.
(344)

WILSON, JOHN E., DONALD P. MULLEN and ROBERT B. MORTON. Sensitivity training for individual growth—team training for organization development? **Training and development journal** 22:1, January 1968. pp. 47-53.

The need to produce learning which would result in significant change for the better in both the manager and his organization has been the recognized goal of management developers and trainers for many years. A new approach, the "instrumental laboratory" originated by Blake and Mouton, is rapidly gaining acceptance. This organizational training emphasizes team decision making and problem solving, focusing on the methods of recognition and resolution of intra- and inter-group conflict. A report of a study (questionnaire survey) with the cooperation of the Training Division of the California State Personnel Board is included. Figures explain some of the findings.
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