▌ STRUCTURED EXPERIENCES, ROLE PLAYS, CASE STUDIES, SIMULATIONS AND GAMES AT PFEIFFER & COMPANY

Experiential learning (learning by doing) is utilized more and more in the HRD community. There is greater understanding that adult learning processes are different from those of younger learners and that vehicles for learning other than the traditional lecture need to be utilized in order to promote adult learning. The purpose of experiential training is to let participants feel the learning as well as think it, to let them "try on" new behaviors and new emotional as well as cognitive responses.

There are a number of different ways of changing people's attitudes and of developing individuals' behavioral skills. We will discuss five of them in this volume: structured experiences, role plays, case studies, simulations, and games. These technologies have been used and refined for decades, and they are still the mainstays of much group work.

Structured experiences stress high participation and "processing" of data generated during interactive activities. Discussion also is a time-honored teaching intervention that has been extended and refined in participation training. The case-study and gaming methods, in which situations are acted out to some degree, are closely related to role playing.

In creating, adapting, and conducting experiential learning activities, the facilitator needs both a unifying theory and a practical translation of that thinking. This section will explore a variety of aspects of the technology, including a model for experiential learning and design features that can be incorporated into a range of experiential learning activities. The facilitator can use these ideas both in developing them and in making sure that preexisting ones fit the learning needs and readiness of a particular group at a particular time.

We urge the reader to consult the "References and Bibliography" listings at the end of this volume and to become acquainted with the sources listed there for further information and ideas.

❚ THE EXPERIENTIAL LEARNING CYCLE: A MODEL

Experiential learning occurs when a person engages in some activity, looks back at the activity critically, abstracts some useful insight from the analysis, and puts the result to work through a change in behavior. Of course, this process is experienced spontaneously in everyone's ordinary life. We call it an *inductive* process: proceeding from observation rather than from *a priori* "truth" (as in the *deductive* process). Learning can be defined as a change in behavior as a result of experience or input, and that is the usual purpose of training. A structured experience provides a framework in which the inductive process can be facilitated. The participants discover meaning for themselves and validate their own learning. The steps follow those of a theoretical cycle.
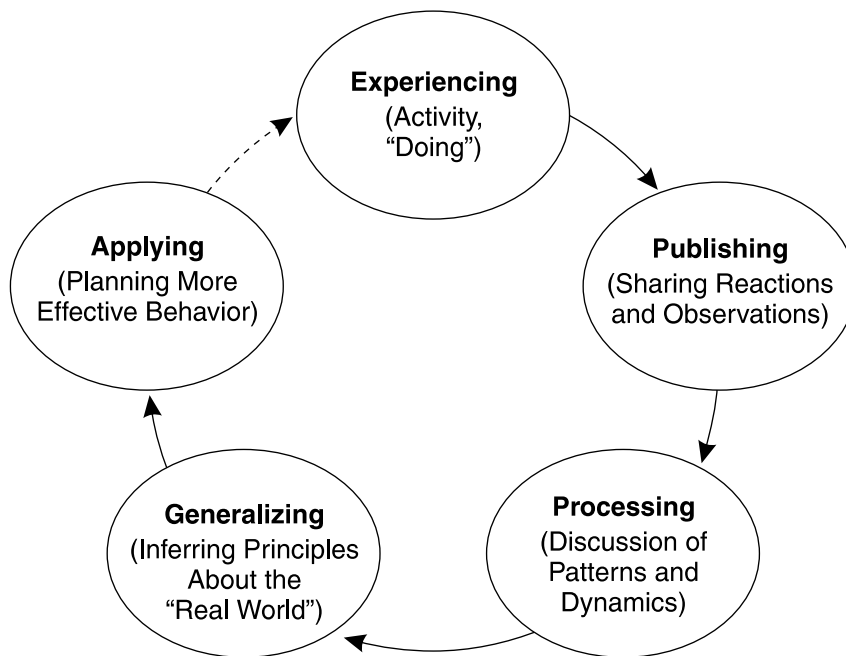
The Experiential Learning Cycle

EXPERIENCING

The initial stage is the data-generating part of the structured experience. It is the step that so often is associated with "games" or fun. Obviously, if the process stops after this stage, all learning is left to chance, and the facilitator has not completed the task. Almost any activity that involves either self-assessment or interpersonal interaction can be used as the "doing" part of experiential learning. The following are common individual and group activities:

- making products or models
- creating art objects
- writing
- role playing
- transactions
- solving problems or sharing information
- giving and receiving feedback
- self-disclosure
- fantasy
- choosing
- communicating verbally or nonverbally
- analyzing case material
- negotiating or bargaining
- planning
- competing or collaborating
- confronting

These activities can be carried out by individuals or in dyads (pairs), triads (trios), small groups, group-on-group arrangements, or large groups. Of course, the learning objectives would dictate both the activity and the appropriate groupings.

It is important to note that the objectives of structured experiences are necessarily general and are stated in terms such as "to explore . . . ," "to examine . . . ," "to study . . . ," "to identify . . . ," etc. Inductive learning means learning through discovery, and the exact things to be learned cannot be specified beforehand. All that is wanted in this stage of the learning cycle is to develop a common data base for the discussion that follows. This means that whatever happens in the activity, whether expected or not, becomes the basis for critical analysis; participants may learn serendipitously.

Sometimes facilitators spend an inordinate amount of energy planning the activity but leave the examination of it unplanned. As a consequence, learning may not be facilitated. It is axiomatic that the next four steps of the experiential learning cycle are even more important than the experiencing phase. Accordingly, the facilitator needs to be careful that the activity does not generate excess data or create an atmosphere that makes discussion of the results difficult. There can be a lot of excitement and "fun" as well as conflict in human interaction, but these are not synonymous with learning; they provide the common references for group inquiry.

PUBLISHING

The second stage of the cycle is roughly analogous to that of inputting data, in data-processing terms. People have experienced an activity and now they presumably are ready to share what they saw and/or how they felt during the event. The intent here is to make available to the group the experience of each individual. This step involves finding out what happened within and to individuals at cognitive, affective, and behavioral levels while the activity was progressing. A number of methods help to facilitate the publishing, or declaring, of the reactions and observations of individual participants.

- Recording data during the experiencing stage (for later discussion): rating such things as productivity, satisfaction, confidence, communication, leadership, etc.; listing adjectives that capture feelings at various points.

- Whips: quick free-association go-arounds on various topics concerning the activity.

- Subgroup sharing: generating lists such as the double-entry one "What I saw/How I felt."

- Posting: total-group input recorded on a newsprint flip chart.

- Ratings: developing ratings of relevant dimensions of the activity, tallying and averaging these measures.

- Reporting: systematic "interviewing" of individuals about their experiences during the activity.

- Nominations: a variation of the "Guess Who?" technique—asking participants to nominate one another for roles they played during the experiencing stage.

- Interviewing pairs: asking one another "what" and "how" questions about the activity.

Publishing can be carried out through unstructured discussion, but this requires that the facilitator be absolutely clear about the differences in the steps of the learning cycle and distinguish sharply among interventions in the discussion. For example, during the publishing phase it is important to stick to sharing reactions and observations and not to allow some participants to skip ahead to generalizing, inferring principles from what happened. Conversely, some group members' energies may be focused on staying inside the activity, and they need to be nudged into separating themselves from it in order to learn. Structured techniques such as those listed above make the transition from stage one to stage two cleaner and easier. That, after all, is the job of the facilitator: to create clarity and transition with ease.

PROCESSING

This stage can be thought of as the fulcrum or the pivotal step in experiential learning. It is the systematic examination of commonly shared experience by those persons involved. This is the "group dynamics" phase of the cycle, in which participants essentially reconstruct the patterns and interactions of the activity from the published individual reports. This "talking through" part of the cycle is critical, and it cannot be either ignored or designed spontaneously if useful learning is to be developed. The facilitator needs to plan carefully how the processing will be carried out and focused toward the next stage, generalizing. Unprocessed data can be experienced as "unfinished business" by participants and can distract them from further learning. Selected techniques that can be used in the processing stage are listed below.

- Process observers: reports, panel discussions (observers are often unduly negative and often need training in performing their functions).

- Thematic discussion: looking for recurring topics from the reports of individuals.

- Sentence completion: writing or saying individual responses to phrases such as "The leadership was . . .," "Participation in this activity led to . . . ."

- Questionnaires: writing individual responses to items developed for the particular structured-experience activity.

- Data analysis: studying trends and correlations in ratings and/or adjectives elicited during the publishing stage.

- Key terms: posting a list of dimensions to guide the discussion.

- Interpersonal feedback: focusing attention on the effect of the role behaviors of participants in the activity.

This step should be thoroughly worked through before going on to the next. Participants should be led to look at what happened in terms of group dynamics but not in terms of "meaning." What occurred was real, of course, but it was also somewhat artificially contrived by the structure of the activity. It is important to keep in mind that a consciousness of the dynamics of the activity is critical for learning about human relations outside the training setting. Participants often anticipate the next step of the learning cycle and make premature generalizations. The facilitator needs to make certain that the processing has been adequate before moving on.

GENERALIZING

If learning is to transfer to the "real world," it is important for the participants to be able to extrapolate the experience from the training setting to the outside world. An inferential leap has to be made at this point in the structured experience from the reality inside the activity to the reality of everyday life. The key question here is "So what?" Participants are led to focus their awareness on situations in their personal or work lives

that are similar to those in the activity that they experienced. Their task is to abstract from the processing phase some principles that could be applied "outside." This step is what makes structured experiences practical, and if it is omitted or glossed over, the learning is likely to be superficial. The following are some strategies for developing generalizations from the processing stage:

- Guided imagery: guiding participants to imagine realistic situations "back home" and determining what they have learned in the discussion that might be applicable there.

- Truth with a little "t": writing or making statements from the processing discussion about what is "true" about the "real world."

- Individual analysis: writing or saying "What I learned," "What I'm beginning to learn," "What I relearned."

- Key terms: posting topics such as "leadership," "communication," "feelings," etc., to focus generalizations.

- Sentence completion: writing completions to phrases such as "The effectiveness of shared leadership depends on . . . ."

It is useful in this stage for the group interaction to result in a series of products—generalizations that are presented not only orally but also visually. This strategy helps to facilitate vicarious learning among participants. The facilitator needs to remain nonevaluative about what is learned, drawing out the reactions of others to generalizations that appear incomplete or controversial. Participants sometimes anticipate the final stage of the learning cycle also, and they need to be kept on the track of clarifying what was learned before discussing what changes are needed.

In the generalizing stage, it is possible for the facilitator to bring in theoretical and research findings to augment the learning. This technique provides a framework for the learning that has been produced inductively and checks the reality orientation of the process. But the practice may encourage dependence on the facilitator as the source of knowledge and may lessen commitment to the final stage of the cycle if the outside information is not "owned" by the participants—a common phenomenon of deductive processes.

APPLYING

The final stage of the experiential learning cycle is the purpose for which the whole structured experience is designed. The central question here is "Now what?" The facilitator helps participants to apply generalizations to actual situations in which they are involved. Ignoring such discussion jeopardizes the probability that the learning will be utilized. It is critical that attention be given to designing ways for individuals and/or groups to use the learning generated during the structured experience to plan more effective behavior. Several practices can be incorporated into this stage.

- Consulting dyads or triads: taking turns helping one another with back-home problem situations and applying generalizations.

- Goal setting: developing applications according to such goal criteria as specificity, performance, involvement, realism, and observability.

- Contracting: making explicit agreements with one another about applications.

- Subgrouping: in interest groups, discussing specific generalizations in terms of what can be done more effectively.

- Practice session: role playing back-home situations to practice "new" behavior.

Individuals are more likely to implement their planned applications if they share them with others. Participants can be asked to report what they intend to do with what they have learned, and this can encourage others to experiment with their own behavior.

It is important to note that on the diagram of the experiential learning cycle there is a dotted arrow from "applying" to "experiencing." This is meant to indicate that the actual application of the learning is a new experience for the participant, to be examined inductively in turn. What structured experiences "teach," then, is a way of using one's everyday experiences as data for *conscious* learning about human interactions. This sometimes is referred to as "relearning how to learn."

Although the stages of the model have been presented in discrete terms, it is clear that the interaction between them (and within them) is complex. No learner goes through these phases exactly step by step, and it probably would not be desirable to do so. The danger also exists that the participants might become fixed at one level because changing one's behavior is frightening or emotionally demanding. Some participants may engage in what seems to be whimsical behavior because they fail to see how the training is related to issues in their own lives.

As Palmer (1981) notes, if there is a major shortcoming in the area of change agentry, it lies in the completion of the latter phases of the cycle. The economics of time and money have discouraged the development of programs that might result in more integrated and long-term behavioral change. All too often one is seduced by the exhilaration of discovery (the early stages of the model) and finds generalizing, processing, and publishing relegated to the last half hour—or even minutes—of the program. We all know that there are people who have left training programs full of good intentions but have soon returned to their old ways of behaving. When long-term change in individuals and/or organizations eludes us, we may begin to blame it on the participants rather than to examine the training design. Trainers must question their own professionalism or ethics if they attempt to present "exciting" training events that emphasize experiencing and discovering and are clearly lacking in generalization and application. Many clients will assert that they cannot afford a longer, more substantial design. The credibility of the HRD profession may be dependent on our answer to that assertion.

What experiential learning does best is to instill a sense of ownership over what is learned. This is most easily achieved by making certain that each stage of the learning cycle is developed adequately. The implications of the model stress the necessity for adequate planning and sufficient time for each step. An appropriate structure is especially important for processing, generalizing, and applying. When handled with care, concern, and skill, the experiential approach is invaluable for group facilitators in the broad field of human resource development.

A BACKGROUND FOR USING STRUCTURED EXPERIENCES IN HUMAN RESOURCE DEVELOPMENT

THE HISTORY OF STRUCTURED EXPERIENCES

When structured experiences first emerged as a training technology, controversy over their usefulness and use also emerged. Bach (1954), one of the first to deal with the subject, noted that what he called "programmed activities" tend to reinforce the authoritative role of the group leader and that they frequently lack spontaneity. However he also pointed out several advantages of them:

1. They enable the individual to understand different aspects of his or her personality and social roles.
2. They equalize the participation of dominant and less expressive members, balancing the sources of stimulation in a group.
3. They help to differentiate the norms of the growth group (which foster exploration) from the norms of everyday culture (which tend not to).
4. They provide an opportunity for the individual in the group to act out, and therefore engage in, a wide repertoire of behaviors.
5. By providing a structured format, they help to reduce the anxiety aroused by free expression and ambiguity.

Argyris (1967) voiced concern about some of the possible negative effects of structured interventions. He said that:

1. Many of them lack a theoretical rationale supporting their use.
2. They stress the emotional aspects of the participant's experience at the expense of the cognitive labeling that enables one experience to be related to another.
3. They do not foster generalization, therefore diminishing back-home applications.
4. They give the facilitator such a dominant role in the participants' learning that the participants become dependent on him or her.
5. They focus group members' attention on the instructions of the facilitator, rather than on his or her behavior, which has greater didactic and facilitative potential.
6. They encourage less member interdependence because of the leader's central role.

7. They cause group members to lose the sense of competence and accomplishment that comes from identifying their own goals and discovering their own solutions.

8. They move the group members out of the "here-and-now."

In support of the technology, Fagan (1971) argued that structured interventions are an effective means of producing changes in participants. She stated that they minimize the number of sessions in which group members search aimlessly and uncertainly for some understanding of their behavior. Otto (1970), another advocate, offered a handbook with anecdotes from his workshops to illustrate how structured techniques helped participants to actualize their potentials.

We (Pfeiffer & Jones, 1972) objected to the practice of calling this type of intervention an "exercise," on the grounds that an exercise is merely the repetition of something to develop a particular competence, or a "game," as explained previously. Therefore, we invented the term "structured experience" to emphasize the two aspects of the intervention: the existence of some boundaries and the process of learning through doing.

As the controversy raged, several things occurred that contributed to the historical acceptance of structured experiences as a training technology. First, practitioners in the field began less to use the therapy group as the basic model for the increasingly popular training group, and, secondly, we and several others (Argyris, 1976; Jones & Pfeiffer, 1975; Kolb, Rubin, & McIntyre, 1971; Miller, Galanter, & Pibram, 1960; Newell, Shaw, & Simon, 1960; Pounds, 1969) developed models for behavioral change to guide the use of such interventions (see our experiential learning model in the previous discussion; see Palmer, 1981, for a succinct description of all these models). These models incorporated theoretical rationale, cognitive labeling, generalization, application, and participant input into the design of structured experiences, taking them out of the realm of "games" or experiments. At the same time, we stressed that the facilitator should always have a plan for what might happen, but should always be prepared to change it to accommodate the reality of what actually *does* happen.

Lieberman, Yalom, and Miles (1973) investigated the effect of structured interventions on participants in encounter groups. Participants with more of such interventions saw their groups as more cohesive and constructive, felt that they had learned more as a result of their group experience, and perceived their leaders as more competent than did participants who experienced less structured intervention. Levin (1973) and Levin and Kurtz (1974) studied the effects of structured and nonstructured T-groups. Their results indicated that members of the structured groups perceived their groups as more cohesive, more ego involving, and having more significant positive effects on their personalities than did members of the nonstructured groups. Pinkney's (1973) research indicated that the structured format produced more client satisfaction in both individual and group vocational counseling. Erskine (1974) found greater reported ego involvement and greater group satisfaction in the structured versus nonstructured consciousness-raising groups that he studied. All this research began to lead to the conclusion (Kurtz, 1975) that structured experiences can lead to:

- more cohesive groups;
- participants who are more involved in the group's activities;
- participants who perceive their leaders in a more favorable light; and
- participants who report that they learned more from the group experiences.

The research also supported the conclusion that factors other than the use of specific techniques make the difference in the outcomes of growth groups, suggesting that the variables that do make a difference are linked to the facilitator (e.g., Lieberman, Yalom, & Miles,1973; Traux, 1961). These included his or her: ability to convey caring responses to the participants; ability to help participants make their experiences meaningful to themselves; empathic ability; genuineness and warmth; and other factors that had not been studied. In sum, the use of a structured experience would not produce a facilitative leader, nor would it hinder an effective one.

Further research tended to diverge in terms of the types of groups that were studied, as the distinction between counseling/psychotherapy groups and growth/ training groups became more clear. As group facilitators began to understand and implement the experiential learning model, the structured experience began to be viewed as a useful and effective vehicle for initiating awareness and change in attitudes and behavior. However, the fact remains that the skill and professionalism of the group facilitator is still the key ingredient in the success of a structured experience or, for that matter, of any training technology.

Structured Experiences: What They Are and What They Are Not

A structured experience is a group learning design that is based on the five stages of the experiential learning cycle. In the first stage, experiencing, the participants are told the goals of the activity (or, if the goals are best not revealed at the beginning, are told what they need to know in order to engage in the activity). Depending on the nature of the activity and the number of participants, they may or may not be divided into subgroups to facilitate the accomplishment of the task. They are provided with any materials or handouts that are appropriate. Then, directed by the facilitator, they engage in an activity (or, frequently, a sequence of activities) designed to produce certain results in the form of reactions/feelings/ insights/experiences/learnings.

A problem that has arisen from the popular use of the structured experience as a learning technology is that people who are not trained professionals may cut short the experiential learning cycle at this point, assuming that the experience is enough to assure learning. Worse, they may then proceed to tell the participants what they "should have" experienced and learned! Although they must be selected carefully, the activities that constitute the initial phases of the learning cycle—sometimes erroneously called "games"—are merely *the means by which the rest of the learning cycle is put into motion.*

A number of structures can be used to facilitate the publishing, processing, generalizing, and applying stages. Participants can share their observations with the total group, or subgroups can be used to facilitate discussion, with a member of each subgroup later reporting the highlights of the subgroup's discussion to the total group. The subgroups can develop posters of their primary points, or the facilitator can create a poster as members or subgroups contribute items. Generally, a combination of small-group sharing and total group discussion is utilized. As has been stated, further activities, such as completing a feedback instrument or contracting with other participants to report new behavior in the future, may be utilized in the later portions of the structured experience to clarify or reinforce what is being drawn out and transferred to real-life behavior.

The important thing to remember is that a structured experience is not a game. Although it may be "fun," it has a definite purpose. Each step, everything that the participants are to do, should facilitate the accomplishment of the stated goals of the experience. The activities should support the goals, and the discussions should support and continue the learnings from the activities. A structured experience, then, is a carefully thought-out design, a sequence of events that attempts to lead to a specific range of results. Although it is not possible to predict how any individual will respond to—or what he or she will "make of"—a particular stimulus or experience, it is possible to plan carefully so that certain results are most likely to occur and to be prepared to deal constructively with whatever does occur. The remainder of this section will tell you how to do this, how to select, present, and design structured experiences to be of optimal benefit to the learning group and the individuals in it.

◧ EVALUATING AND SELECTING A STRUCTURED EXPERIENCE

All human-interaction training experiences need to include adequate processing so that the participants are able to integrate their learnings without the stress generated by unresolved feelings or a lack of understanding. It is here that the expertise of the facilitator becomes crucial. If the structured experience is to be responsive to the needs of the participants, the facilitator must be able to assist the participants in successfully processing the data that emerge from that experience. Thus, an activity should be selected on the basis of two criteria: the facilitator's competence ("Will I be able to manage the activity and process the data that emerges?") and the participants' needs.

PRIMARY CONSIDERATIONS

Certain questions need to be asked by the facilitator who is thinking about using a structured experience as an intervention in a training event. This set of considerations constitutes a self-examination that is intended to help the facilitator to select and develop designs that are both relevant and effective.

1. *What are the goals of this group and why was it formed?* Structured experiences are designed for a variety of purposes, but their most effective use is within programs that are aimed at specific learning goals. The facilitator needs to keep these goals in mind at all times.

2. *At what stage is the group in its development or what stage is it likely to reach?* Different issues surface at various stages of group development, and some activities are particularly useful at some points in group life. A feedback design may be inappropriate in the earliest stages but highly beneficial after the group has a brief history.

3. *What is my contract with the group?* Some groups expect the facilitator to "run" everything. It is important to minimize the gap in expectations between the facilitator and the participants. Using too many structured experiences can reinforce dependency on the part of the participants, and they may turn to the facilitator to introduce an activity rather than confronting their own behavior. The facilitator needs to make it clear that each member of the group is responsible for his or her own learning.

4. *Why is it important that I intervene?* Because it is possible for facilitators to meet their own needs at the expense of the participants, it is important that they assess their own motives for intervening into the interaction among members. Useful distinctions can be made between making things happen, letting things happen, and being a part of what is happening. One useful axiom is "When in doubt, wait."

5. *Why does this particular intervention appeal to me?* It may be that the structured experience seems appropriate because it would be "fun" to do, but the overriding consideration should be the learning needs of the participants at any given point in the group's development. One should be careful not to overuse any one activity; this might indicate that the facilitator has "a solution in search of a problem."

6. *How ready are these participants to take risks, to experiment?* Some structured experiences, such as guided imagery and nonverbal activities, are threatening to many participants and may evoke anxiety and defensiveness rather than openness to learning. It is useful, however, to establish a norm of experimentation in experiential education, and participants should be expected to "stretch" somewhat.

In addition to being manageable within time and resource limitations, a structured experience must be manageable by the participants in terms of their level of readiness and their ability to profit from it.

7. *What content modifications can I make for an effective, appealing design?* Implementing an activity according to the original format is especially helpful for facilitators who are only beginning to use structured experiences. However, by varying parts of a structured experience, the facilitator can add significantly to its overall usefulness. It is suggested that the facilitator carefully study the structured experience as it relates to the learning situation and note the basic area(s) in which a change or variation will need to be made in order to meet the specific objectives of the learning design. Thus, the process of modifying a structured experience begins with a comparison of the goals of the structured experience with those of the training event. Once the goals are clear, procedures, work sheets, and so on can be modified to facilitate the attainment of these goals. Local issues and concerns can be incorporated into structuredexperience materials and processes in order to heighten the possibility of the transfer of training. Such advance preparation can have a high payoff in developing work-group norms and avoiding perception of the experience as "game playing." Roles, goals, company policies, issues, etc., can be gathered with the help of participants.

A learning design should have enough interest to create excitement but not be so loaded that it also creates confusion or chaos. If too much happens, it becomes difficult for the participants to track what is happening.

8. *What advance preparations need to be made?* Appropriate rooms, with the right kinds of furniture and equipment, should be scheduled. Staff members may need to be prepared in some particular way. Materials must be duplicated and assembled. Sometimes it is helpful to prearrange the furniture so that participants are seated in preparation for the first phase of the process.

9. *How rigid are the time restraints for the session?* It is necessary not to generate more data than can be processed adequately within the session. It is better not to use an activity than to leave too much data "hanging" at the end. One consideration is to anticipate which elements of the design can be speeded up or expanded, if necessary.

Time also should be used *efficiently.* Using an hour-long activity to make a ten minute point is not just overkill; much could have been accomplished in the fifty minutes that was wasted. On the other hand, just "making a point" may take only ten minutes, but if the learners' behaviors or attitudes are not changed, the ten minutes may have been wasted. The facilitator must decide what is the most effective use of the learners' time (Custer, 1986).

10. *How am I going to set up the processing?* Because the processing of the data generated by the structured experience is more important than the experience itself, this planning phase should be considered carefully. A number of strategies can be used, such as process observers who have been briefed and who are using comprehensive observation guides; lecturettes; instrumented processing with brief questionnaires; subgrouping; the empty-chair or group-on-group techniques; and interviewing. Some of the data may be saved for use in later training designs.

11. *How am I going to evaluate the effectiveness of the design?* Because structured experiences are best employed in an atmosphere directed toward specific goals, some assessment of the extent to which the goals of a given activity were met is necessary. Such a study may be impressionistic and/or "objective," but it needs to be planned beforehand. The facilitator needs to decide the basis for judging whether or not or to what degree the aims of a particular intervention were accomplished.

The overall consideration in selecting a structured experience, then, is to effect a "match" between the needs and goals of the participant group, the reason for using a structured experience in the first place, and the goals and likely results of a particular structured experience.

A CLASSIFICATION OF STRUCTURED EXPERIENCES

The following listing reflects the classification of structured experiences in the Pfeiffer & Company *Handbook* series and the *Annual* series. Each of the major categories has been divided into subcategories. Of course, many structured experiences can be adapted for a variety of training purposes.

The learnings from a structured experience in any category will depend, in part, on the participants: on their learning needs, their past experiences, their reactions to the activity, and their (and the facilitator's) ability to process their observations and reactions in such a way that significant learning occurs. If the experiential learning cycle is completed thoroughly, there will be the optimum potential for participants to transfer their learning.

Individual Development

These activities focus on the expansion of personal insight and awareness.

Sensory Awareness: activities that focus on personal awareness and skills through the exploration of the senses.

Self-Disclosure: activities that teach the ability to reveal oneself to others.

Sex Roles: activities that help a person to see assumptions he or she may have about sex roles and the effects of these assumptions.

Diversity: activities that expand awareness of personal stereotypes and prejudices and their effects.

Life/Career Planning: activities that allow a person to evaluate the present and the future of his or her career or life.

Communication

These activities emphasize verbal, nonverbal, and metaverbal communication patterns and enhance skills in these areas in both interpersonal and group situations.

Awareness: activities that illustrate what happens when people communicate, either verbally or nonverbally.

Building Trust: activities to create trust and a climate of openness and learning.

Conflict: activities that develop skills to recognize and deal with interpersonal conflict situations.

Feedback: activities that promote awareness of how others can help a person to understand the impact of his or her behavior and that encourage acceptance of the opinions or feelings of others.

Listening: skill-building activities that help people to listen actively.

Styles: activities that identify communication styles and deal with issues of style in interpersonal interactions.

Problem Solving

These activities focus on the skills that constitute effective problem solving.

Generating Alternatives: activities that offer practice in this early step in problem solving.

Information Sharing: activities that demonstrate the importance of sharing information effectively in problem solving.

Consensus/Synergy: activities to develop the group's skills at reaching general agreement and commitment to its decisions and goals.

Action Planning: activities that teach the skill of action planning.

Groups

These activities focus on how individuals affect group functioning and how groups organize and function to accomplish objectives.

How Groups Work: activities that help to develop skills in observing what is taking place within a group.

Competition/Collaboration: activities that deal with both the competitive tendencies that emerge within groups and the appropriateness of collaborative behavior.

Conflict: activities that develop skills to surface and handle conflicts in a group.

Negotiating/Bargaining: activities that deal with the effects of win-win and win-lose approaches to resolving differences.

Teams

These activities focus on how work teams organize and function to accomplish objectives.

How Groups Work: activities that help team members to develop skills in observing what is taking place within their work team.

Roles: activities that identify and explore various roles played by members of a work team.

Problem Solving/Decision Making: activities that teach these necessary skills within a work team.

Feedback: activities that encourage the exchange of effective feedback within a work team.

Conflict and Intergroup Issues: activities that develop skills to surface and handle conflicts within a work team and between work groups.

Consulting and Facilitating

These activities help to develop the skills of internal and external consultants and facilitators, in both organizational and group settings.

Consulting: Awareness: activities that help people to be aware of the forces that affect the functioning of their organizations.

Consulting: Diagnosing/Skills: activities that focus on diagnosing organizational problems that develop the skills of the internal or external consultant.

Facilitating: Opening: activities designed to "warm up" members of a learning group that is meeting for the first time; to recharge the group when energy is low; or to create a climate of trust, openness, and learning within the group.

Facilitating: Blocks to Learning: activities developed to deal with situations in which learning is blocked through the interference of other dynamics—conscious or unconscious—in the group.

Facilitating: Skills: activities designed to develop the facilitative abilities of trainers, group leaders, and group facilitators.

Facilitating: Closing: activities to use at the end of a training event.

Leadership

These activities emphasize the skills needed for effective leadership behavior.

Ethics: activities that allow individuals to examine the ethical implications of their assumptions and behaviors.

Interviewing/Appraisal: activities to develop skills needed in interviewing and appraisal situations.

Motivation: activities that deal with issues of motivation in interactions between leaders and members of a group.

Diversity/Stereotyping: activities that look at values and prejudices within personal and organizational contexts and how these factors affect the functioning of a group or organization.

Styles: activities that identify leadership styles and deal with issues of style in interactions between leaders and members of a group.

▊ PRESENTING STRUCTURED EXPERIENCES

Facilitation—helping to guide the learning process—is a skill that can be developed only through experience; however, it is possible to list some useful suggestions.

THINGS TO DO

Prepare

- Have a design flow chart, at least in outline form.
- Check the timing of the various steps in the process, the handling of materials, lecturettes, group discussions, etc.
- Time the activities for the time available. Allow sufficient time and have backup materials ready.
- Prearrange the room(s) and materials.
- Rehearse the instructions.
- If *you* have questions, get the answers *before* the session.

Plan for Contingencies

- Have alternative activities ready in case the group is more (or less) advanced than you expect.
- Have any lecturettes, handouts, and instruments that you might use "ready to go."
- Examine your design plan to determine those points at which changes are most likely to be required.

Set up the Situation

- First, give a broad overview of what will happen.
- Provide further instructions in small segments (step-by-step if appropriate).
- Brief observers on *what* and *how* to observe.
- Obtain and focus the group's attention by waiting for silence, using charts, or writing out instructions when necessary.
- Remain in charge of starting, stopping, or interrupting the structured experience.
- Always keep the learning objectives in mind.

Facilitate the Process

- Maintain a supportive atmosphere.
- Give everyone something to do at all times.
- Keep the experience well paced and focused.
- Participate whenever possible.
- Let the group help you.
- Provide time cues.
- Reinforce the concept of options.
- Use subgroups to encourage sharing and to make some tasks more manageable.

Facilitate Learning

- Turn whatever happens into a learning experience.
- Manage the impact of the experience in accordance with the participants' readiness.
- In the learning cycle, make the stages clear and complete and prepare the way for the next step.
- *Experiencing:* keep the generation of data within bounds.
- Store data: if the experience is lengthy, interrupt the activity periodically and ask the participants to take notes about what is going on.
- *Publishing:* help the participants to separate themselves from the experience by talking about it.
- Encourage contributions from all participants and accept all input as data.
- *Processing*: work the discussion of dynamics thoroughly, focusing on interaction versus meaning.
- *Generalizing:* remain nonevaluative about generalizations and draw out all perspectives.
- Layer the process: discuss the learning in several layers (e.g., self, this group, back-home groups).
- Phrase questions to begin with "how," "what," or "why," and try to include the words "think" or "feel" to draw out responses. Avoid questions that can be answered "yes" or "no."
- *Applying:* encourage and help the participants to share their plans for application of their learnings (action and change).

A good facilitator remembers that the learners are more important than the subject matter. He or she is attentive both to the signals that the participants are sending about their readiness, feelings, understanding, and involvement, and to his or her own feelings and assumptions about what is happening and the signals that he or she is sending to the participants. Being honest about one's own thoughts and feelings and taking responsibility for them allows one to be experienced as a congruent person. The facilitator should appear to be relaxed, both to free his or her own body and perceptions and also to set an example for the participants. It may be helpful to engage in a relaxation activity, such as deep breathing, before beginning a group activity.

Facilitators should be skilled in active listening—stating in one's own words what another person has said. This helps to check for accuracy of perception and reassures the speaker that his or her meaning has been understood. In addition, a facilitator should be skilled in interpreting nonverbal and metaverbal communication. For example, if a participant is sitting well back in his chair with his arms folded, it may be an indication that he is not ready to engage in an interpersonal activity or is not interested in the content being discussed.

THINGS TO AVOID DOING

Overinstructing

- Providing too much detail.
- Excessive telling (versus listening or sharing).
- Pressuring people to participate.
- Loading questions so that people must respond as you wish (leading the witness) or "fishing" for specific answers (playing guessing games).

Negotiating the Design

- Arguing over interpretations of what did happen.
- Defending your own views of what should happen.
- Changing what will happen to meet the needs of one or a few group members.

Engaging in Inappropriate Behavior

- Using off-color language or humor, slurs, sarcasm, or humor about sensitive or controversial issues, beliefs, or groups of people.
- Misusing your platform to expound personal opinions or demonstrate expertise.

Playing Psychological Games

- Ridiculing people, engaging in "put-downs."
- Deceiving people.
- "Interpreting" the behavior of individuals.

Overloading

- Generating more data than can be discussed thoroughly.
- Repeating an activity "until it works right."
- Overanalyzing data.

Ending Without Closure

- Leaving people to resolve their own exposed problems.
- Leaving applications to chance.

AVOIDING PITFALLS

It is easier to replace specific behaviors with alternative actions than simply to stop engaging in the undesired behaviors. One can avoid *overinstructing* by outlining key points in advance and pacing one's way through them as the structured experience progresses. A broad overview usually should be followed by no more detail than is immediately needed. It is fairly easy for most people to keep three items in mind at once, so it is useful to limit instructions for any one part of the structured experience to three points. Excessive selling and telling are avoidable through increased listening, which has the added advantage of giving the facilitator an opportunity to model active listening skills.

Although most facilitators would not actively pressure people to participate, nonparticipants can be a real irritation and can seem rather threatening ("Will I lose the group?"). Even a skilled facilitator may unwittingly encourage subtle peer pressure to participate. It is, then, especially important that people are told overtly and clearly that they have the *option* of participating.

The most common source of *negotiation over design* elements is defensive fear on the part of participants. This includes fear about admitting or interpreting what did happen as well as fear of what might happen next. It is important that the facilitator avoid being pulled into this type of design negotiation, because the defensive fears of the participants play into any defensiveness the facilitator might feel, and a fear-defense cycle (Gibb, 1978) is started. Arguing and defending can be avoided if the facilitator refuses to be baited. Other views can be recognized as legitimate for the persons expressing them, and the facilitator still can say, "This is what I saw and what it means

to me . . ." and proceed with the design. Requesting or suggesting design changes should be legitimized, but unless there is a clear consensus from the group (i.e., a strong majority of the group members shares the concern), the facilitator probably should avoid lengthy discussions of "better" designs.

Inappropriate behavior is any behavior that does not support the contract with the client and the learning goals of the group. This can include making remarks that may be offensive to any group members. Humor or sarcasm in relation to particular beliefs or groups of people are inappropriate unless they are part of an experience that is intended to surface stereotypes, assumptions, values, etc., and their effects. Taking oneself or the activity too seriously can be inappropriate if it is interpreted as an attempt to "brainwash" the group members or if it renders the facilitator inflexible. Conversely, learning is the work of the day, and attempting to be too funny can detract from the learning experience (Custer, 1986).

No competent and ethical facilitator purposely engages in *psychological games*. All of us are, however, tempted to let an annoying participant "have it" on occasion. The worst way for this to happen is for the facilitator to make implicitly damaging psychological interpretations of a person's behaviors or feelings. This is equivalent to the less subtle comment "When did you stop beating your spouse?" Avoiding psychological games, put-downs, and trips of various sorts is made easier if the facilitator recognizes and confronts his or her own angry feelings, e.g., "Tom, I feel very resentful of your actions right now. Your questions seem to be holding us back from getting into what I think are the real issues, and I'm feeling angry about that lack of progress." Tom probably will not feel great about this, but he certainly will feel better than if the facilitator were to cut him off with sarcasm ("Gee, I thought we were beyond such simplistic questions") or with an interpretation designed to shut him off ("You know, Tom, your continual questioning may reflect your basic interpersonal insecurities").

Overloading, in various ways, probably is one of the most common traps in which facilitators are caught. Even a short structured experience usually generates more data for processing than there is time for. Allowing an activity to become overly extended, in order to reach some closure, usually is a poor decision. Closure still may not be reached, and, in any case, the significant aspect of closure comes after processing the outcomes of the experience, not because of the conclusion of the experience itself. Too lengthy an experience generates too much data to be processed effectively and also results in the loss of critical data from the early part of the activity (people forget). The facilitator should set time limits, give participants three-minute "time's up" warnings, and stick to the limits. Repetition of activities sometimes is important, especially for skill-practice experiences, but simple repetition to "get it right," without processing or feedback to the participants, is a sure way to produce frustration. If some part of a structured experience does not work, it should not be repeated; what happened can be processed, and some learning can be derived from that.

A facilitator must be more concerned with the participants needs than with his or her own. *Overanalyzing data* is a behavior that may meet the facilitator's needs (e.g.,

fascination with data or with behavioral detail) and not the participants'. One can avoid this pitfall by keeping in contact with participants while processing the structured experience. Are people withdrawing from the discussion? What nonverbal cues do they give?

The facilitator's appropriate *concern for closure* should be with concluding the entire session. One way to avoid open-ended individual problems (e.g., one's awareness of dissatisfaction with present behavior patterns) is not to open up such issues. In other words, the focus should be on individual problem areas only to the degree that it is possible to work such issues through to closure. One good, general way of providing some closure is to end with a focus on "back-home" applications. This takes care of the second common failure of closure, leaving applications to chance. When people cannot think of any specific applications of their learning, it is a clue that something went seriously wrong, and the facilitator should explore this issue with the group as part of the closure process.

LEARNING IMPACT

Experiential learning is particularly effective because of its immediacy and its personal impact. This impact can vary considerably, from intellectual awareness, through personal relevance, to complete reshaping of one's self-image. The degree of impact depends, for the most part, on the facilitator. Structured experiences are, in and of themselves, most likely to have low to moderate impact (although it is possible for a particular experience to have an unusually strong impact on a particular individual, due, perhaps, to that person's psychological readiness). A facilitator can increase or decrease the intensity of impact in various ways. Obviously, the best of all possible situations would be one in which an experience could be tailored to have just the right degree of impact for each individual in the group. However, the widely varying levels of readiness for different kinds of learning among individuals in any group make this ideal quite unrealistic. Thus, the facilitator must decide how strongly to impact the group as a whole. Although some individuals probably will experience a lesser and others a greater level of impact than intended, the facilitator can aim for an approximate, overall level of impact.

It is not unrealistic to suggest that a facilitator can diagnose the learning readiness of group members and, on that basis, decide at least roughly how strong an impact is desirable. The facilitator generally is wise to design the experience so that a moderate degree of impact is likely. Just as a moderate level of stress seems to be more beneficial for human growth, development, and existence than high or low stress (Selye, 1974), groups and their members typically gain the most from learning experiences that are neither too high nor too low in impact. Just what is "high" or "low" will, however, vary with the group. Thus, two important aspects of the facilitator's task are the assessment of learning readiness—the degree of impact with which the group is prepared to cope— and the management of the impact of structured experiences.

■ PREVENTING AND DEALING WITH PROBLEMS IN USING STRUCTURED EXPERIENCES

Structured experiences can produce unforeseen results; that is, they may not produce the predicted results or they may produce unexpected results. The learning objectives may not be reached, participants may become angry or puzzled, and distance and alienation may result. A structured experience is likely to "fail" only if the experiential learning cycle is not completed or if the facilitator does not accept or adjust to what the participants have experienced and attempts to "teach" them a different learning. Occasionally, a structured experience "blows up," and feelings inappropriate to the training design are generated. The following are examples of structured experiences that produced unforeseen results.

- An intact work team was asked to participate in a competition-collaboration activity. The team members were playful in the first few rounds, but as the experience continued, the conversations became whispers, and a hostile, secretive tone emerged. The processing discussion was bitter; past history was dredged up and replayed. The training design was shelved for the rest of the day, to allow the team to reach closure on all the old data that had been surfaced. At the end of the session, participants still were uncomfortable.

- A ten-minute, blind, trust walk was used to introduce a session: Participants led their blindfolded partners around a crowded university campus. The activity was met by stares and catcalls from students not participating in the training event. When participants returned to the training room, the facilitator attempted to lead a discussion on the dynamics of trust, but the participants responded grudgingly and halfheartedly. During the break, several participants decided to leave the workshop.

- An activity designed to illustrate the differential effects of organizational structures involved several sets of playing cards in preset arrangements. For one group, the cards were not set up properly, leading to some confusion and the members' feeling that they had "lost" the competition. Charges of manipulation and favoritism were made against the facilitator, and a lengthy total-group session was required to resolve the issue.

Clearly, learning occurred in all these instances—but not the learning that the facilitator intended. In some of the instances, the learning was lost amid feelings of hostility or disgust; in others, extraordinary measures were required to redirect the event and to incorporate the learning.

THINGS TO WATCH FOR

Attention to the following considerations will reduce the number of unanticipated results from structured experiences.

Sequencing

Structured experiences are only one component of experiential learning; they are most effective when balanced with theory inputs, instruments, and small-group interaction. A series of structured experiences may overload participants with undigested data. Beginning a session with a detailed structure or ending it with a "blockbuster" may hasten failure. A careful look at the overall design of the training event should include checks on the logical flow of events.

Preparation

Some structured experiences require considerable prework—chairs to be arranged; instructions or charts to be detailed on newsprint sheets; work sheets, handouts, and lecturettes to be prepared; and special equipment to be obtained and set up. If the facilitator's lack of preparation results in a confused, sloppy presentation, the experience itself will be confused and sloppy. Adequate preparation includes familiarity with the structured experience and the materials required and a trial run, if necessary.

Introduction

Although some structured experiences are enhanced by keeping the objectives obscure, most are not. Many participants need to know the learning objectives before they can fully participate in the activity. Introductions need not be elaborate, and the facilitator must be careful not to prescribe what must be learned. If the facilitator thinks that preannounced objectives would diminish the experience for participants, he or she simply can announce, "l want to keep the objectives obscure for this experience because it depends partially on surprise and novelty. I'll ask you to trust me during this event."

Over/Under Processing

A common cause of failure of structured experiences is truncating or abbreviating the experiential learning cycle or implementing it inadequately. Each step in the model is an essential part of the entire sequence; each needs sufficient attention to effect its full impact. Inadequate processing is the most common cause of failure of the model.

One axiom in experiential training is "You can get a mile of process from an inch of data." Another is "Never generate more data than can be processed." Some simple structured experiences make an obvious point and do not require lengthy processing. Others are risk experiences and require processing on several different levels. Knowing the potential power of the structured experiences he or she uses, the sensitive facilitator is alert to various nonverbal cues from participants and uses these signals to determine whether more or less of each processing step is required.

Overuse

A structured experience sometimes is ineffective because the facilitator is running it for the three-hundred-and-ninety-second time. Most facilitators have a collection of "sure favorites" that have become part of their routines. The facilitator's lack of enthusiasm often is unwittingly transmitted to the participants, who then are prepared to be bored by or uninterested in the event.

Mind-Set

Many participants, especially those in an intact work group, may have a negative attitude or "mind-set" about structured experiences because of previous contact with a bad design or an inept facilitator. These people may be prepared to attack structured experiences as superficial "games" designed to suppress feeling rather than deal with it. The facilitator may find it useful to check on the participants' history with experiential learning and to allow a discussion of structured experiences as a learning strategy before proceeding with his or her overall design.

Alternative Methods

Participants develop awareness of human dynamics during a training program and become adept in various communication skills. If they are ready to deal with issues through clear, confrontive, verbal interaction, a poorly placed structured experience can impede rather than facilitate learning.

Obvious Threat

An important dimension of any design is its risk or level of potential threat, which usually is a function of perceived self-exposure. The facilitator can put himself or herself in the participants' shoes by actually participating in the planned activity prior to the training event. He or she also can urge the participants to view the experience not in terms of how much they can lose but in terms of how much they can learn.

With a little reflection and common sense, the facilitator can approximately determine the threat level of a given activity for participants. Activities that focus on personal competence, emotions, power, and feedback tend to be more risky than those that relate to group-level data and for which individual responses are not identified or sharing is optional. As a general rule, it is better to begin with a low-risk activity and lead up to more complicated processes after norms of experimentation and support have been established within the group. Opening an event with a lengthy guided imagery or asking a group of Marines to cradle one another will almost guarantee a problem. If the facilitator is intent on presenting a risky structured experience, he or she can announce that the participants may find the upcoming activity strange or childish and that participation is by choice. Usually, however, when the facilitator has the sense that a particular experience will be too risky for the group, it is a cue to change the design.

Conversely, it is possible to underestimate the strength of the participants. If no risk is taken, much of the power of experiential learning is lost. For example, giving and receiving personal feedback always involves discomfort as well as excitement. If one wishes to avoid risk altogether, one might as well avoid experiential learning and choose an alternative learning model.

The "Rorschach Effect"

The structured experience, because of its novelty and initial ambiguity, occasionally makes it possible for participants to project all sorts of unrelated feelings into the situation. Some participants, burdened by uncomfortable affect, may need only minimal cues to give expression to their internal pressures. Although such situations are rare, they do happen occasionally, and they require a sensitive, caring response from the facilitator. In such situations, it is important to keep in mind that the structured experience did not "cause" the outburst of feeling and that the participant's reaction is legitimate for him or her. Such a reaction is not a symptom of craziness; it is only that the participant is preoccupied with personal concerns that interfere with his or her full participation.

Nonprofessional "Trainers"

If the trainer lacks the important background in attitudes and knowledge about human growth and development, group dynamics, etc., undesirable consequences can occur (Kirschenbaum, 1977). At the minimum, participants may think of the experience as a cute but superficial game or gimmick, with no real learning to show for it. Worse, the trainer may have used the opportunity to "teach" his or her point of view, with little opportunity for the participants to explore or integrate their own experiences.

Unfortunately, ineffective or inappropriate use of a structured experience by any facilitator only increases the chances that other facilitators may encounter difficulty in their attempts to present a structured experience. If participants in a learning activity previously have had negative or ineffective training experiences, it is likely that they will be more resistant to, and less inclined to involve themselves in, such experiences in the future. Thus, the question of how structured experiences are used and processed becomes significant. It is imperative that facilitators confront the demands and requirements of the experiential model so that they—and their colleagues who follow them—can gather the rewards and benefits that the model offers.

RECOURSES FOR THE FACILITATOR

When problems occur, the facilitator has several recourses. The following methods will help:

- The facilitator can *acknowledge the problem*. He or she need not feel compelled to defend the structured experience ("Gee, it always worked before") or to blame

the participants ("You didn't do it right"). The occurrence is an opportunity that can result in learning.

- The facilitator *can allow appropriate processing time*. If the problem impacts the entire group, it may be appropriate to call an all-group session and work through the feelings generated. People often learn more from their failures than from their successes, although less comfortably. Most people can deal with problem situations if what is exposed is an error in assumptions (or some other factor) rather than their lack of intelligence or worth. The facilitator can be aware of this distinction and use his or her skills to help participants process the incomplete or unanticipated experience. If necessary, the design can be shelved temporarily. If the disrupted event involves only one participant or a few group members, the facilitator may want to meet with them privately or make an appointment later in the day to discuss the event thoroughly.

- The facilitator can, with the group, *diagnose how the unanticipated outcome or problem occurred*. Rich data can result from unplanned learning opportunities. In fact, such difficulties sometimes can stimulate more learning than what was planned.

- The facilitator may decide to *return to the design*. Few events are so shattering as to justify a total junking of the training design. Rearrangements and deletions may be necessary, and flexibility may be required on the part of the facilitator. However, it is important to understand that life and learning go on in spite of our mistakes.

Mistakes are made, and problems do occur. They are instances of unsolicited feedback for the facilitator! He or she should consider them as part of the tuition in the school of experience and learn to deal with them appropriately.

◼ DEVELOPING STRUCTURED EXPERIENCES

Structured experiences—designed to focus on individual behavior, constructive feedback, processing, and psychological integration—are infinitely varied and variable. They can be adapted easily to the particular needs of the group, the aim of a training design, or the special competencies of the training facilitator. "Good" structured experiences actually are "semistructured": not rigid but intended to make learning more likely by defining goals, specifying behavioral processes, and predicting outcomes. When Pfeiffer & Company publishes a structured experience, it assumes that facilitators will be innovative in adapting it to their specific needs.

Before creating a new structured experience, the facilitator first should determine whether it is necessary to do so or whether some design already exists that could be used or easily adapted. If an existing design does not fit the needs of the group, does not make the intended learning point, or simply has been used too often by the facilitator, it probably is desirable to create a new one.

PRIMARY CONSIDERATIONS

The first question that must be answered is: What is the purpose of this structured experience? It is important to remember that the goals of the event direct the activity that will be used to produce the learnings. It is not the activity, *per se*, that is important but the impressions, feelings, and learnings that arise as a result of it. A list of activities and group tasks that can be used to effect a variety of learnings is provided later in this section, and any given activity may be appropriate to achieve a number of different objectives. The aspects of the activity on which the participants are focused and the way in which the data are processed can make the experiences decidedly different. For example, in a personal awareness or feedback design, the behavioral and feeling data that emerge from the activity probably would be processed in a general discussion in which participants express their feelings and reactions to the behavior of others and their own growing awareness. In a leadership development session, the same activity might be processed in terms of the way in which leadership evolved in the group, the leadership styles that emerged, and the dynamics of influence and decision making. A particular theory of leadership even may be presented in the context of the experience. Facilitators should remember that the group task or activity merely is a vehicle—a means to an end—and should address the considerations in this section before deciding on the particular activity or task to be used to generate discussion.

The second consideration is the time available. If the structured experience is to be part of a larger training design, are there lecturettes or handouts to be delivered to the participants? Can the structured experience fit between prescheduled breaks? Before

deciding on a particular activity, the facilitator should determine how much time is available and take into consideration the time that will be needed to give instructions and conduct the activity as well as the time required to complete the publishing, processing, generalizing, and applying stages of the experiential learning cycle.

Third, will the physical facilities support the activity that is being considered? Will participants be sitting or lying on the floor? Are chairs and tables required? Is the furniture in the room movable? Are separate rooms needed for subgroups to meet?

Another question is: How familiar are the participants with one another? An activity that would work with an intact (preexisting, ongoing group) might not work with a group of people who have no or little previous acquaintance with one another.

Related to this, and pertinent to the goals of the experience, is the question: What are the needs and expectations of this group? Is there an emotional load in the group, issues that may surface, or particular needs to be met? And: How familiar are the members with the concept of experiential learning? How "ready" are they to engage in this activity?

Also, how many participants are there? Some activities work better if conducted with the total group. Other activities lend themselves to subgrouping for tasks, information gathering, discussions, contracting, and so on. The size of the total group may have an impact on the activity selected.

Another important consideration relates to the facilitator's readiness to conduct this particular type of activity. It is much more difficult to direct and process a group-feedback activity than it is to run a warmup activity. Even within a particular category, some designs are more complex than others. The facilitator needs to be sure that he or she is ready to deal with the emotions and reactions that may be generated, as well as with the questions that may arise and the depth of the learnings or their implications.

As is mentioned earlier, it may be advisable to include a lecturette or handouts to further the learning goals of the training. In addition, the activity selected may require role sheets; instruction or information sheets; or task materials such as paper and pens, scissors, puzzle parts, baffles, blindfolds, and so on. The facilitator needs to determine whether he or she will have access to a photocopying machine and must prepare all other materials ahead of time. Thus, the selection of an activity depends, in some part, on the availability of the materials required.

Finally, some activities require follow-through. In some, participants contract with one another to report their progress. Obviously, this is accomplished more easily if the facilitator has ongoing access to the participants or if they are members of an intact group.

ELEMENTS OF THE DESIGN

All structured experiences have a set of required elements. First, there must be a specific learning objective. This could be a concept or hypothesis if the structured experience is in the cognitive domain; for a structured experience in the affective domain, it could be

a feeling state, awareness, or insight about such a state. If the experience aims at skill building, it could be a specific behavior or set of behaviors. In general, these include the following objectives:

- *Cognitive*: awareness of content; incorporation and use of the content; generalization; conceptual integration.

- *Affective*: self-awareness; ownership of feelings; insight; empathy; awareness of inner life; awareness of personal and interpersonal processes.

- *Skill Building*: development, practice, and implementation of interpersonal skills and techniques such as listening, problem solving, and intervening.

Second, the facilitator must create a set of stimulus materials that will evoke the specific learning objective that has been identified. It is here that the greatest creative latitude exists. There is a truly immense range of activities that can be employed. Whatever materials are developed (e.g., a role play, a case study or simulation, a task activity) should be tested and modified. Research experiments often can be modified for use in experiential learning, particularly when a specific concept is the learning objective.

Content Issues

Using content that is relevant to the participants (e.g., related to their occupations, life styles, locale, history, group issues, or personal/group concerns) can be effective. In leadership and management-development designs in particular, the content of the activities should parallel closely the kinds of concerns and problems that the participants ordinarily face in their work.

There are several techniques for generating data that will help to make the content relevant to the participants. Participants can be asked to make notes to themselves about particular feelings they are experiencing, persons to whom they are reacting, and so on. The members of dyads can interview each other about their reactions to a particular issue, event, or behavior. A list of concerns, issues, or controversial topics can be generated by having participants call them out and then posting them on a flip chart or chalkboard. Participants then can rank order the list. Questionnaires also can be used to generate data, as can videotapes of previous sessions.

At times, and for various reasons, the facilitator may want to *avoid* creating materials that are too close to the everyday world of the participants. Although such content can lend greater credibility to the task, participants could become overly involved in the content of the experience or become tangled up in affective issues based on back-home "history." In either case, process learnings can be diminished severely. It also is possible that the participants may criticize the structured experience as a gross oversimplification of the "real" situation, leading them to miss or reject potential learnings. Activities that do not include back-home content can free the participants

from prior knowledge and roles; a variety of non-content-specific activities can be used to elicit fresher views of things such as behavioral styles and other critical issues.

In some cases, content-specific activities are more functional during the latter part of a workshop to aid the participants in applying their learnings to their back-home situations.

Clarity and Simplicity

A good design is basically simple; it becomes ineffectual when it is so complicated that there is a lack of clarity or ability to retrieve and process what happened. It is important to remember that experiential learning involves *feelings* as well as ideas, and even the most intelligent participant will be slightly clouded at times. The need for clarity applies to instructions, whether for the activity or for work sheets or instruments. Participants who are "stirred up" or fatigued can become confused by even relatively simple instructions. The use of newsprint or handouts to supplement verbal instructions generally is desirable.

Involvement

During the structured experience, every participant should have something to do at all times, some role that contributes to his or her learning within the context of the structured experience. If a role play or some other activity is conducted that requires only a portion of the group members, the others can be designated as observers, provided with observation guides, and requested to provide feedback at the end of the activity.

Sequence

Each activity within the structured experience (and the larger training design, as well) should build from the previous sequence of activities toward the next one. Each component of the design should be part of a structure that results in the attainment of the goals of the event. Balance also should be considered in sequencing. For example, participants should not be overly stimulated just before they are asked to assume a reflective or passive role. Nor should they be overloaded with cognitive material. Even breaks and meals can be planned strategically, and the effect of the interactions within breaks and meals needs to be anticipated.

Sometimes the sequence can include thematic material that runs throughout all the components of the training design, allowing for the processing of a variety of events against the same theoretical model.

Data Collection

There should be a structured or semistructured data-collection method built into the structured experience. This could, for example, be a videotape of a group activity, a questionnaire, or observers' notes. Whatever the method, the data about what happened

should be "published" in the broad sense of the word—shared with the full group. This procedure allows the facilitator to lead a discussion of generalizations from the experience. The concept can be defined and supported, the feeling defined and shared, or the skill identified and specified behaviorally. In the last instance, a fourth necessary design element is an opportunity to practice and repractice the skill.

Components of Structured Experiences

All structured experiences have certain, basic components, although the names for these components may vary from one facilitator or publisher to another. For example, the "goals" of the activity also may be called "objectives" or "purposes"; the step-by-step "process" may be called "procedure." To simplify this discussion, we will use the terms that we first used in publishing structured experiences in our *Handbook* and *Annual* series.

Goals

Goals (objectives, purposes, expected outcomes) are established to focus the facilitator on the general objectives of the experience—what it is expected that the participants will learn. They should be limited in number to those that can be realistically attained in the time and structure provided. They also should be stated in language that the participants can understand.

A good goal is *specific* in that it states exactly what will occur; it is less specific in terms of the results of that occurrence, in order to permit *inductive* learning—learning through discovery. For example, a goal may be "to examine" or "to explore" the effects of collaboration and competition. The activity will involve those two dynamics, i.e., an activity will be designed in which the groups will be called on to compete and collaborate with one another so that they will have a chance to learn something about the issues related to the goal. What is learned, however, may differ from participant to participant, depending on their backgrounds and their unique experiences during the activity.

A goal is *performance oriented*, to guide the person toward what he or she is going to do; it *involves* the individual in the goal objective; it is *observable*, so that other people can see the result; and, most important, it is *realistic*. For maximum effectiveness, a goal must be attainable.

Group Size

The minimum and maximum number of participants, the optimum size of the group, and the number and size of subgroups should be noted where relevant. If there are extra participants, they can, for example, be designated as observers or added to subgroups.

Time Required

This should be a realistic expectation, based on actual trials of the experience. The activity must be manageable within the time bounds of the workshop setting, with adequate time allowed for sharing and processing the learnings. If the experience requires a long period of time, it might be divided into more than one session.

Materials

There are several types of materials that may be needed in a structured experience. The first type is printed materials such as background or information sheets, printed lecturettes, instrument forms, work sheets, etc. If appropriate, an observer sheet should be devised for the activity. The specific printed forms that will be needed and the quantities of each should be listed. Another type of materials includes things such as blank paper and pencils, crayons, scissors, 3" x 5" index cards, masking tape, lapboards, and so on. Props may be needed to conduct the activity. Audiovisual aids (e.g., felt-tipped pens and newsprint charts on easels; sound, film, or video equipment) should be indicated if they are to be used. The primary criteria for materials are easy availability, utility, and uncomplicated preparation.

Physical Setting

It is important to identify the participants' needs in terms of the activity to be conducted. Some groups need to be private, quiet, and isolated. Some need or prefer to sit around tables; others will sit on the floor. Some need writing surfaces. The experience may be conducted in one room, or additional rooms may be required. The activity may require that rooms be specially designated or arranged for certain subgroups to meet away from the main group (these often are called "breakout rooms"). Specific furniture may be required. Easily movable furniture usually is desirable to aid in the flexibility of moving from one experience to another. Some activities can be conducted outdoors.

Process

This is a step-by-step description of the *procedure* to be followed in conducting the task or activity and in discussing and solidifying the learnings from the experience. The term is somewhat confusing because the discussions following the task activity (the publishing, processing, generalizing, and applying phases of the experiential learning cycle) often are referred to collectively as the "processing" part of the structured experience. "Procedure" is an alternative term for this element; it describes what the facilitator *does* and *says* and what the participants do in the appropriate sequence. In developing a structured experience, the beginning and end of each step should be specified. A time estimate for each step or phase is helpful.

Variations

Variations are optional, but also can be very helpful. They are adaptations that can be made to vary the activity's content, sequence, use of observers, timing for each step, materials, size of group(s), complexity of process, and use with intact groups. One basic group activity can be used in a variety of training settings and to accomplish a variety of learning objectives by varying the focus, elements of the design, and the processing.

Work Sheets and Instrument Forms

Work sheets or instrument forms should be written and designed so that they contain sufficient room for the participants to write in their responses; are simple and easy to reproduce; have clear instructions; and are necessary and meaningful to the activity. Whenever possible, each work sheet should be on one page, with type large enough to read easily. It is practical to have the work sheet contain its own instructions. If it does not, it should tell the participants that the facilitator will give oral instructions. Sources for work sheets should be acknowledged.

Handouts

In a training setting, conceptual learning is obtained in several ways: through the presentation of theory by the training staff, through the abstractions of theory from ongoing experiences (a joint effort of both participants and staff), through handouts of previously prepared materials, and through a combination of any of the preceding methods. The most effective learning results from a combination of all three, i.e., the facilitator presents a background lecturette; the participants engage in an activity in which they actually experience the dynamics or effects that have been discussed; and, finally, the participants are provided with a theory handout that they can read and reflect on as they integrate their learnings. Thus, the use of handouts is especially helpful to generate discussion of the theory underlying the new behavior suggested by the structured experience. Handouts also provide a record of some of the learnings from the training event, which can promote continued learning after the participants have returned home.

Background and information sheets should be germane to the activity to be completed by the participants. Printed forms of lecturettes should be related directly to the goals and expected learnings of the structured experience. All handouts should give credit to any previous sources.

Unless necessary, participants should not be reading handout material while the process is running. However, if handouts are to be provided, the participants should be told at the beginning of the experience so that they will not prepare to take notes; this allows them to concentrate more fully on what is being said and done.

Credits

Generally, the names of the authors of the structured experience should appear in the order of the significance of their contributions. If the ideas and designs of others are incorporated into the structured experience, these also should be acknowledged.

EXAMPLES OF DESIGNS

We have selected two structured experiences to illustrate the type of activities and processing steps that make this technology so useful. The *complete texts* of these structured experiences are printed in Appendix 1 at the end of this volume.

1. "Shades of Difference"

This design introduces the participants to the various aspects of communication known as "metaverbal"—e.g., tone of voice, pitch, and use of pauses as well as nonverbal components such as gestures, posture, and facial expressions. It draws their attention to how they, and others, use these aspects, either consciously or unconsciously. Furthermore, it allows the participants to experience how *they use* metaverbal communication and how they *respond* to it in perceiving and interpreting meaning.

   The design employs a lecturette to promote cognitive understanding of the components of, uses of, and effects of metaverbal communication, including the confusion that results when verbal and metaverbal messages are incongruous or conflicting. In small groups, participants then take turns reading "opinion" sheets as if they (a) agreed or (b) seriously disagreed with the contents. Group members note and discuss the metaverbal cues that indicate agreement, disagreement, etc., and how these aided or detracted from the presentations.

   A total-group discussion synthesizes these subgroup reports, solicits further examples, and so on. Subgroups then are directed to discuss principles and applications of metaverbal communication.

   This structured experience demonstrates the difference between reading or hearing about a topic and actually experiencing it. It draws on both cognitive and experiential input to generate learnings.

2. "Parole Board"

In the second example, the learning objectives are increased awareness of (1) one's own value system and (2) the impact of personal values on individual and group decisions. Stimulus materials call for small subgroup discussions to elicit decisions concerning which of a set of prisoners will be released on parole. Information is provided about the various prisoners. There is no "correct" answer. Each individual, then each group, makes decisions. The groups are weighted in terms of "liberal," "conservative," and "mixed or undecided." When all groups have finished, their decisions are shared, along with rationales. The facilitator then leads the full group in a discussion to draw out the

learnings. Group members come to recognize explicitly the implicit values they used to arrive at their decisions, and they become aware that members of other subgroups hold different values.

CONCLUSION

It is not possible to design structured experiences that "guarantee" certain, specific learnings. Rarely will a facilitator use the same structured experience in *exactly* the same way twice; it is, in fact, desirable to modify structured experiences to meet the needs of different groups. However, if a facilitator follows the guidelines suggested here and clearly specifies the learning goals, outcomes can be made more predictable and participants' learnings can become more clearly focused.

◢ STRUCTURES AND ACTIVITIES FOR STRUCTURED EXPERIENCES

There are numerous ways in which a group activity can be structured to best result in certain types of learning. In almost all structured experiences, the activity is introduced to the group; the procedure that will be followed is explained or task directions are given; the participants engage in some activity or task (frequently in subgroups); and the participants' reactions, learnings, generalizations, and plans for application of the learnings then are discussed in a group setting.

Some structured experiences consist of practicing skills such as listening, interviewing, giving and receiving feedback, or diagnosing group process. Some consist of completing a self-evaluation through an instrument or other procedure and comparing results with others. Some consist of building a product, competing for resources, sharing information, solving a problem, or doing some other task that is intended to simulate the work setting. Several types of activities and techniques are available for facilitating learning within structured experiences.

Typical activities include:

- *Constructions:* making or building something, assembling or taking apart puzzles.

- *Data Collection*: counting, measuring, interviewing, checking resources, instrument scoring, assessing skill levels.

- *Discussions*: conversations, summarizations, question-and-answer sessions, dialogues.

- *Experiments:* Replication of research paradigms, Gestalt work, playing with hypotheses.

- *Games*: adaptations of standard games, cards, board games.

- *Graphics*: collages, body painting, drawings, finger painting, clay sculpture, charts and graphs, advertisements, posters.

- *Guided Imagery*: Tapping into internal feedback systems, stories, body trips.

- *Instruments:* inventories, checklists, standardized test batteries, rating scales, questionnaires.

- *Media*: monies, charts, audiovisual aids, projective techniques, audiotapes, videotapes.

- *Models*: conceptual schemes, diagrams.

- *Movement and Nonverbal Communication*: milling around, dancing, interpersonal sculpting, facial expressions, symbolic communication, facial and body reading.

- *Role Plays*: play reading, acting, impromptu theater, alter ego, role reversals.

- *Simulations*: structured role plays, microcosms, simplification of complex phenomena, community or back-home focus.

- *Subgroups*: experienced/inexperienced; homogeneous/heterogeneous in terms of gender, age, ethnic background, political outlook, job, rank, etc.

- *Tasks*: ranking, problem solving, writing, decision making, action planning.

All these activities can be used in the "experiencing" stage in more than one type of structured experience design or to achieve more than one type of learning goal. For example, constructions, games, tasks, simulations, and role plays all could be used to study group dynamics, group processes, leadership development, leadership styles, motivation, and so on. Similarly, discussions, graphics, guided imagery, role plays, subgroups, and instruments all could be used in exploring personal or group values. Obviously, some of these activities are more complex than others. For example, milling around and dividing people into subgroups are fairly simple activities that often are used in "warmup" or "icebreaker" designs. The following is a discussion of some of the more complex activities and structures that are used fairly often in HRD.

CASE STUDIES

Case studies can be effective in helping people to transfer learnings to real-life situations. Typically, a case study presents participants with a problem situation and asks "What would you do?" The participants, usually in small groups, then develop approaches or solutions, and these are compared and discussed. The groups solutions are compared to the actual results (if the situation was a real one) or to a "preferred" outcome.

Case studies may be descriptions of real or fabricated problem situations. Some learners seem to respond with more enthusiasm when the facilitator can say that the situation actually existed and can provide information about the course of action that actually was taken and the results. Of course, the facts should be camouflaged so that participants do not become involved in identifying where the case originated and who was involved (Custer, 1986).

The background material for the case study must describe a specific group. The facilitator must clarify the group's size, primary purpose, and how it came to exist. It is helpful to develop a summarizing statement about the dynamics of the group, describing the situation; those who are affected by it; possible causes of problems; and group

strengths and weaknesses; as well as to specify what role, if any, the facilitator will play (i.e., as president of the organization, as process consultant, etc.). The summary statement also should describe the resources available to the group to use in completing its task (Guthrie, Miller, & Grimberg, 1981).

To prevent the activity from being frustrating for the participants, the case background should not be too lengthy, and all relevant data should be included. However, some irrelevant information can be included, as occurs in real-life situations. It is important not to provide the kind of specific detail that could sidetrack participants ("This is about banking, and I'm in retailing"). Participants should be able to generalize the case material, to obtain a generic learning from the experience, so the underlying concept should be applicable to as many participants as possible. Multiple cases can employ the same concepts in different settings.

If all groups will work on the same case problem, it is helpful to read the case and the instructions aloud. This ensures that all participants receive the same information and prevents the fast readers from beginning before the slow readers are ready. Immediately after the reading of instructions and case background, stress any key points, then ask for questions. When all questions have been answered, subgroups can be formed to begin the task.

If the case material is worked on in small groups, each should present its solution to the total group before a general discussion is conducted. Reporters can be asked to not to repeat in detail what has been said previously by other groups, but to focus on what is different or important in their subgroup's deliberations and solution.

It is important that the facilitator not attempt to guide the discussion toward the "preferred" solution, although it is important to guide the process ("What are the key issues here?"; "What created the problem?"; "Of what larger problem might these issues be a symptom?"). It often is not necessary that everyone agrees on one particular solution; what matters is that the participants have had an opportunity to wrestle with the diagnostic or problem-solving process and have had their thinking stimulated without any threat to their on-the-job performance.

A more comprehensive discussion of this subject is found in the third section, "Using Case Studies, Simulations, and Games," of this volume.

COMMUNICATION ACTIVITIES

A typical communication activity is active listening, in which the listener or interviewer repeats, in his or her own words, what the speaker has said. This "mirroring" of another's speech serves to clarify whether the speaker has been understood. It also improves the listening skills of the person who practices it. This activity is useful in teaching listening skills, particularly to managers, counselors, personnel interviewers, and others whose jobs require them to listen well.

Other communication experiences include demonstrations of one-way versus two-way communication; explorations of the effects of factors such as status, power, hidden agendas, trust, and values on the effectiveness of communication; and activities that include verbal, metaverbal, and nonverbal communication.

Giving and Receiving Individual and Group Feedback

This allows participants to develop more effective ways to monitor and assess the impact of their behavior and whether it is congruent with their intentions. Feedback also helps participants to learn to respond to others in terms of actual behavior rather than perceived intentions and to accept the opinions or feelings of others without becoming defensive.

Before engaging the group in a feedback activity, the facilitator must establish the norms of caring, trust, openness, and acceptance (i.e., acknowledging how other people are, not how one would like them to be). These norms must be nurtured throughout the experience. Guidelines for both giving and receiving feedback also must be stated explicitly. Such guidelines can be found in Appendix 3, as well as other sources.

Individual and group feedback can be enhanced through the use of appropriate instruments. Members can fill out instrument forms describing their reactions to the group in terms of numerous factors such as structure, atmosphere, cohesion, decision making, meeting effectiveness, and so on. They can rate themselves and others in terms of communication, participation, openness, and a host of other traits and compare their ratings with the verbal feedback that they have given and received.

GROUP AWARENESS

Working with an intact group (that is, an ongoing group in which the participants have some knowledge of and history with one another) is quite different from working with a group of people who virtually are strangers to one another. Obviously, intragroup communication, group process, and other group issues and behavior will be different in an intact group. With a "stranger" group, these issues can be examined clinically, in a theoretical way, but with an intact group the data and reactions that are generated are deeper and are *important* to the group members in a more personal way. Thus, the facilitator may be faced with greater difficulty in serving as helper, coordinator, and learning resource for such group members.

If a norm is established of respect for the privacy of information generated within the group, it is more likely that members will "open up" in their interactions within the group. A group may choose to share information with the larger community, but usually this information will be about group process (how the group is working) rather than about group content (who and what the group is talking about). It also is important that a group report its own data rather than having it reported on by others.

GROUP TASK ACTIVITIES

Competition tasks such as model building can be used to explore the functional and dysfunctional aspects of interpersonal or intergroup competition. A competitive atmosphere may be established deliberately or it may arise from the groups (even when it is not necessary). Activities can be designed to compare and contrast the effects of competition and collaboration. Many activities are designed so that if groups compete initially, they can learn that collaboration yields a higher payoff. Pure collaboration tasks such as problem solving and information sharing can be used to teach the value of cooperation.

Consensus-seeking activities involve a group or groups of people who attempt to arrive at collective judgments (which are compared to and generally found to be superior to individual judgments). Consensus activities are used to illustrate the concept of synergy.

Other group tasks such as constructions, model building, problem solving, and so on can be used to explore how a group organizes itself for work, how it shares resources, how leadership develops, what styles of leadership emerge, how problems are solved and decisions are made, what the communication patterns are in the group, what roles the individual members play in the group, and many other aspects of group functioning.

GUIDED IMAGERY

Guided imagery (sometimes called "guided fantasy") is useful when the trainer wants the participants to focus on a specific issue or identify with a certain situation (Guthrie, Miller & Grimberg, 1981). Guided imagery helps people to generate pictures, sounds, and situations. To create a guided image, the trainer should encourage the participants to make themselves comfortable by taking off their shoes, sitting or lying on the floor, etc. Sometimes it is helpful to dim the lights in order to encourage a relaxed, meditative atmosphere.

Before leading the participants through a specific sequence of suggestions or instructions to stimulate their imaginations, the facilitator should help them to relax by suggesting in a low, rhythmic voice that they relax one part of their bodies at a time while breathing evenly and regularly. After several minutes of systematic relaxation suggestions, the guided image can be initiated. After it has been completed, time should be allowed for the participants to leave the image and reorient themselves before the discussion begins.

Some participants may need considerable assistance in integrating the learning derived from guided imagery and nonverbal activities into their own views of themselves. The use of such methods should be based on a wellthoughtout theory of learning, and the facilitator should be careful to introduce such activities in a timely way.

In-Basket Activities

A type of simulation, the in-basket activity is used primarily in management training to provide practice in setting priorities, making decisions, managing time, delegating, etc. Each participant individually plays the role of a manager who has a certain period of time in which to deal with a specific set of items in his or her in-basket, in accordance with a specific set of constraints and conditions (e.g., "You will be out of town for the next two days"; "Your secretary has next Monday off"; "The board meeting is next Tuesday"). The in-basket typically contains letters, memos, requests for information, requests for time (speeches, meetings, etc.), notice of changes in deadlines, "emergency" problems, and so on. Participants must respond to or delegate all items. Feedback is provided, and the processing includes a discussion of general principles of time management, delegation, communication, decision making, problem solving, administration of policies, and the like.

In developing an in-basket activity, it is best to begin with the specific learning objectives and then to develop the materials and procedures that are needed to achieve these objectives. In such activities, the materials should resemble the learners' on-the-job situations, to promote transfer of learning.

Two examples of such activities are "Hampshire In-basket: A Management Activity," in Volume 18 of the *Pfeiffer & Company Library* and "Vice President's In-basket: A Management Activity," in Volume 18.

ROLE PLAYS

Role playing allows the participants an opportunity to try and practice new behaviors in a relatively safe environment. Participants can see, practice, and receive coaching on interpersonal skills such as active listening, interviewing, problem solving, communicating, information sharing, and risk taking. Group members can exchange roles in order to experience multiple sides of a situation. They can assess the effectiveness of various approaches and can provide feedback to one another on their styles of interacting. Furthermore, role playing can be used to work through issues or problems that arise in real life but which are difficult to examine objectively (Maier, Solem, & Maier, 1975; Shaw, Corsini, Blake, & Mouton, 1980). More detail about using role plays can be found in the second section, "Using Role Plays," of this volume.

There are several variations of the single-group role play. These include:

- *Demonstrations or modeling*: two volunteers or selected participants enact the situation while the other participants take notes and prepare to critique the interaction. The interaction then may be repeated with other role players.

- *Multiple role plays*: pairs or subgroups enact the scenario(s), with or without observers, and report back to the total group. If the total group is too large for all members to participate in one role play, this is probably the best choice for experiential learning.

- *Spontaneous role plays*: role-play opportunities arise when someone is attempting to explain how a situation should be handled or when there is disagreement about whether a certain approach will work. The facilitator can say, "Let's experiment: you play the boss/employee/customer and Pat will play the employee/supervisor/salesperson and will respond in the manner described."

As mentioned above, large groups can be divided into subgroups, and multiple role plays can be conducted simultaneously. This results in comparisons of processes and outcomes that provide rich data. It generally is *not* a good idea to have one group conduct the role play while the others watch. In role plays, the learning tends to be in *doing* rather than in observing. With the exception of those participants designated as observers and briefed on their function, all group members should have an opportunity to participate. Observers are very useful in commenting on what happens during role plays.

Roles (including that of observer) can be assigned by having group members count off, then announcing "Member number one in each group will play the employee, member two will play the supervisor, member three will serve as observer, etc."

If participants do not have experience in role playing, they may feel uncomfortable about "making fools of themselves in front of other people." It is important to allow them to become acquainted with one another and to establish a climate of support and experimentation before initiating a role play.

In some role-play designs, an element of deception may be built in in order to heighten learnings about listening, leadership, cooperation, information sharing, etc. In such situations, some participants may be unaware of the roles, hidden agendas, or information assigned to other role players. The facilitator must be prepared to process this type of "manipulation" and must weigh the use of such activities in terms of benefits versus backlash (Hanson, 1981).

Before beginning the role play, the facilitator should allow time for the participants to "get into" their roles. It also is a good idea to describe the procedure and to read all instructions before people begin to role play. The role instructions should clarify whether each role player is to (a) act as he or she personally would in such a situation, (b) act just as the character is described in the role instructions, or (c) remain true to the character as generally described but take it from there and improvise as the situation develops.

Time should be allowed to help the participants to unwind after the role play has ended. A role play may become very intense or participants may identify aspects of themselves that they wish to explore further. They may need to talk together or to seek personal time with the staff members (Guthrie, Miller, & Grimberg, 1981).

Numerous role plays have been published in the *Pfeiffer & Company Library*, and these can be used as guides in developing others. Examples include: "Sunglow: An Appraisal Role Play," in Volume 18; "Datatrak: Dealing with Organizational Conflict," in Volume 10; "Elm Street Community Church: Third-Party Consultation," in Volume

14; and "Ajax Appliance Corporation: Exploring Conflict-Management Styles," in Volume 11.

SIMULATIONS AND GAMES

Simulations and games can be fun and can provide a change of pace. Although there are many differences among the many games and simulations available, all represent abstractions on certain elements of human, individual, and social behavior. These abstractions are reconstructed in miniaturized fashion to create a dynamic and involving learning environment. Thus, factors such as competition and peergroup pressure—all forms of social interaction that play an important part in our daily lives—are brought into the training setting, becoming a relevant source of, or at least motivation toward, learning (Ruben, 1972). They provide learners with nonthreatening experiences that resemble real-life situations and can help people to reexamine some of their basic instincts and feelings, to observe the difference between how they *think* they would behave under certain conditions and how they *actually* behave.

Games can be particularly useful when participants need to be presented with new perspectives or experiences that are not easily obtained in real life. For example, if the focus is on the use of power, a game could be used in which players are first powerless, then "all powerful."

One difficulty in using games and simulations is that both are difficult to design and require considerable imagination, so many facilitators tend to use packaged ones. Packaged games and simulations cover a variety of topics and content areas, at prices ranging from less than one dollar to hundreds of dollars. Some are designed for use with as few as one or two participants; others are meant to be used by 200-300 participants. Many of the packaged instruction games and simulations have little or no apparent applicability to the typical goals of the small group. The risk is that one might use a game for its novelty when it is not geared specifically to the learning needs of the participants. If such packaged materials are to be useful, significant adaptation generally is required. Other problems are that time and energy are consumed in learning the rules of the game and playing it, and winning sometimes becomes more of an objective than learning.

More about these techniques is found in the third section, "Using Case Studies, Simulations, and Games," of this volume.

THE USE OF OBSERVERS

During a structured experience, all participants must have something to do at all times. It often is valuable to have certain participants designated as observers to note and later report on the interactions that occur during specific portions of the structured activity. During communication experiments or exercises, role plays, decision making activities,

and other interpersonal or group tasks, observers can provide feedback on behaviors and processes that may be missed by the participants who are involved in the content or emotional aspects of the activity. The reports of observers serve as fertile soil for the growth of discussions and further learning.

Observers should have written instructions telling them (a) what the situation is that they will be observing; (b) how they are to observe; and (c) what they are to observe (i.e., what types of behaviors, interactions, or processes they will be expected to report on). Adequate materials for note taking should be provided, and it is helpful if these are in the form of work sheets, with major categories or headings already listed. Such sheets should not lead the observer to any conclusions but should merely help to direct and/or facilitate the observer's task.

◨ USING SUBGROUPS IN STRUCTURED EXPERIENCES

Large participant groups can be divided into smaller subgroups to achieve several objectives. Subgroups can be used to simulate work teams. The subgroups can be assigned task activities, and then the subgroups' processes and/or results can be compared. Subgroups are particularly useful for the sharing of reactions, feelings, observations, insights, and new learnings. The size of a total training group often is too large to permit "air time" for everyone. Subgrouping allows all participants to have a chance to make a contribution, and each subgroup then can report its major insights, findings, or discussion points to the total group.

FORMING SUBGROUPS

Facilitators frequently need to establish subgroups to operate as teams in structured experiences. To do this, the facilitator has five major options:

1. *Numbering.* The number of participants is divided by the desired subgroup size, rounded *down* to the nearest whole number, and the members are instructed to "number off" in increments up to that number. The participants should be reminded to remember their numbers, and the facilitator should be careful not to get this process backwards. For example, if there are twenty-eight participants and the facilitator wants to form seven-person groups, he or she has the participants count off by *four* not by seven. All "ones" then form a group, all "twos" form a group, and so on.

2. *Choosing.* Participants are instructed to choose one another, either freely or by using criteria such as taking risks, lack of acquaintance, or infrequency of contact.

3. *Adjusting.* Temporary subgroups are formed by any convenient method, and then the membership in each is adjusted by applying criteria such as male-female balance, no boss-subordinate pairings, or no members who attended the training together. Members trade places across subgroups as each criterion is applied sequentially. It is important for the facilitator to stress that the original subgroups are temporary and for the process to move quickly to prevent premature cohesion from developing.

4. *Building.* Pairs are formed, they choose other pairs, and these quartets choose others to form groups of eight. The choices can be made according to criteria

such as those discussed above. (This design is spelled out in "Two-Four-Eight: Building Teams," in Volume 14 of the *Pfeiffer & Company Library*.)

5. *Randomizing.* When subgroups are to be formed repeatedly within a training event, it is helpful to have various, random combinations available beforehand.

The chart of randomized numbers on the pages that follow can be used in forming subgroups.[1] To use the chart, find the number of total participants in the left column labeled "Group Size" (it indicates from ten to twenty total participants) and then look to the right horizontally to the column representing the desired "Subgroup Size" (three, four, five, or six members each). There you will find all the possibilities for different groupings. Assuming that each participant has a number, the chart shows how many ways the participants (indicated by numbers) can be combined without repeating. For example: assume that there are ten participants, and the facilitator wants to form triads. The first time this is done (indicated by "A" on the chart), the members of group I will be persons 9, 7, and 10; Group II will contain persons 6, 4, and 8; and Group III will consist of persons 2, 3, and 5. Person 1 will be "left over." The second time (B) that triads are formed, Group I will include persons 2, 7, and 3; Group II will have persons 9, 10, and 6; and Group III will consist of persons 4, 8, and 5. Person 1 again will be "left over." This chart enables the facilitator to make systematic, random groupings five times.

"Leftover" participants (in any of the previous options) can be accommodated in several ways:

1. Odd-sized subgroups can be formed.

2. The design can be adapted for different groupings.

3. They can be used as process observers (to report later).

4. They can be used as process consultants (to intervene).

As is stated previously, the composition of subgroups should be changed periodically (and, in fact, participants in the total group should be encouraged to vary their seating arrangements). This avoids the development of cliques and the usurpation of air time by more vocal members; it encourages participants to share ideas with new people, thus supporting the norms of risk taking, experimentation, and support.

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[1] The chart is based on the work of Gordon Drew, who developed these groupings with the aid of a computerized random-number program.

Group Size 10

Column 3:

	A	B	C	D	E
I	9	2	3	2	9
	7	7	8	8	6
	10	3	5	5	7
II	6	9	10	3	2
	4	10	6	9	4
	8	6	2	4	5
III	2	4	7	1	3
	3	8	1	7	10
	5	5	9	6	8

Column 4:

	A	B	C	D	E
I	3	1	9	5	9
	8	7	1	3	10
	10	3	8	6	1
	2	4	4	4	2
II	1	6	2	10	4
	6	9	6	2	8
	4	8	7	7	6
	9	5	10	1	5

Column 5:

	A	B	C	D	E
I	3	10	10	4	2
	1	1	8	5	8
	7	7	9	3	1
	6	4	2	8	3
	8	9	6	9	5
II	9	8	4	6	9
	5	5	5	1	6
	2	3	3	10	4
	4	2	1	2	7
	10	6	7	7	10

Column 6: (empty)

Group Size 11

Column 3:

	A	B	C	D	E
I	8	2	8	6	6
	7	1	7	11	8
	4	7	9	7	1
II	11	9	4	4	10
	6	6	5	1	4
	3	10	10	9	2
III	9	4	6	3	3
	10	5	3	8	7
	2	8	2	2	9

Column 4:

	A	B	C	D	E
I	10	5	9	9	7
	3	4	4	7	8
	6	8	8	11	5
	5	1	10	1	4
II	4	9	1	3	1
	8	3	5	10	9
	2	10	7	6	2
	9	11	3	4	10

Column 5:

	A	B	C	D	E
I	8	7	4	7	1
	4	3	3	11	3
	6	1	10	9	4
	10	5	1	5	8
	9	2	11	4	6
II	11	9	5	6	9
	3	11	7	2	2
	1	4	9	8	11
	5	10	2	1	5
	7	6	8	3	7

Column 6: (empty)

Group Size 12

Column 3:

	A	B	C	D	E
I	9	12	10	12	5
	4	7	2	3	8
	7	5	12	8	3
II	2	2	4	7	4
	10	10	8	9	11
	8	8	9	10	9
III	1	4	11	2	12
	3	3	5	5	10
	5	1	1	6	6
IV	6	6	6	4	2
	11	11	3	1	1
	12	9	7	11	7

Column 4:

	A	B	C	D	E
I	4	8	7	4	9
	7	6	1	3	6
	1	3	8	6	4
	8	9	6	7	3
II	10	5	10	2	2
	9	4	3	8	7
	2	11	11	11	1
	5	1	2	9	11
III	11	7	12	10	10
	12	12	4	12	8
	3	10	5	5	12
	6	2	9	1	5

Column 5:

	A	B	C	D	E
I	2	2	2	9	11
	7	5	9	7	9
	12	7	1	2	7
	8	10	6	1	10
	5	12	12	10	1
II	1	11	10	12	3
	6	9	8	4	12
	9	6	3	11	8
	11	4	5	3	5
	4	8	4	6	2

Column 6:

	A	B	C	D	E
I	9	4	3	2	1
	12	11	12	9	4
	11	5	8	11	8
	6	8	10	4	11
	3	10	2	6	10
	10	2	11	3	2
II	4	3	4	5	6
	1	1	1	7	3
	7	7	5	8	7
	5	12	7	10	5
	8	9	9	12	9
	2	6	6	1	12

Group Size 13

Column 3:

	A	B	C	D	E
I	4	7	1	10	13
	8	8	12	6	2
	10	9	5	4	12
II	1	10	2	12	10
	6	12	6	8	9
	11	13	7	11	5
III	2	5	11	7	7
	12	6	9	2	11
	7	4	10	13	1
IV	9	3	4	3	4
	3	1	13	1	3
	13	11	8	9	6

Column 4:

	A	B	C	D	E
I	12	9	8	2	2
	9	8	1	8	13
	8	13	4	12	1
	13	12	2	9	12
II	10	5	9	6	7
	5	3	10	1	9
	11	6	6	7	11
	3	4	7	10	4
III	6	11	5	5	6
	4	10	11	13	3
	1	1	13	4	10
	7	7	12	3	5

Column 5:

	A	B	C	D	E
I	3	7	8	12	5
	1	12	13	9	9
	4	2	10	6	11
	6	13	6	1	13
	11	6	7	2	12
II	10	1	5	5	10
	12	9	3	11	1
	2	3	11	4	4
	9	5	2	13	7
	5	10	4	10	2

Column 6:

	A	B	C	D	E
I	10	6	12	13	3
	9	13	9	1	5
	5	1	3	6	11
	4	5	10	11	12
	13	4	8	9	8
	8	2	2	5	10
II	2	3	7	7	6
	1	7	13	3	4
	7	9	5	10	13
	3	11	6	8	2
	6	8	1	2	9
	12	12	11	12	1

Group Size 14

Column 3:

	A	B	C	D	E
I	1	6	8	9	7
	3	11	1	8	11
	9	12	14	5	10
II	5	5	11	13	12
	10	8	7	4	9
	6	7	9	10	1
III	14	4	3	1	14
	11	10	10	11	5
	4	2	6	7	6
IV	12	14	4	14	13
	13	9	2	6	3
	8	3	5	12	8

Column 4:

	A	B	C	D	E
I	12	9	9	13	12
	2	7	10	8	1
	4	4	7	6	11
	1	14	14	11	8
II	7	6	12	9	9
	11	10	11	7	13
	14	8	5	3	3
	5	11	1	14	10
III	6	5	3	4	4
	13	13	2	1	14
	9	12	6	2	7
	8	1	4	12	2

Column 5:

	A	B	C	D	E
I	4	10	14	7	3
	14	8	6	13	13
	7	12	11	10	1
	6	1	3	1	12
	12	3	13	8	14
II	1	9	1	14	2
	11	14	8	5	6
	8	13	12	4	9
	2	7	4	6	8
	9	6	2	12	4

Column 6:

	A	B	C	D	E
I	8	2	1	6	12
	5	10	10	8	2
	7	3	13	3	14
	9	7	5	2	6
	3	12	14	13	1
	1	11	12	4	3
II	14	4	8	10	10
	2	6	7	9	7
	10	8	11	7	11
	6	13	6	11	5
	11	14	4	14	13
	4	5	3	5	9

Subgroup Size

Group Size 15

Subgroup Size 3

	A	B	C	D	E
I	1	1	1	7	8
	8	10	10	11	14
	15	13	11	1	13
II	9	12	9	4	4
	12	8	8	5	11
	6	9	13	13	7
III	2	7	15	3	9
	10	6	7	12	6
	7	15	14	8	1
IV	3	14	5	15	3
	4	11	3	6	15
	5	3	2	14	10
V	14	4	6	2	5
	13	5	4	9	2

Subgroup Size 4

	A	B	C	D	E
I	11	3	9	3	3
	3	1	10	2	2
	4	8	4	10	14
	13	14	1	5	12
II	12	15	5	11	13
	2	13	7	14	1
	14	10	11	1	7
	15	12	15	13	9
III	7	6	6	4	15
	1	9	14	7	5
	6	2	3	8	6
	10	4	2	9	11

Subgroup Size 5

	A	B	C	D	E
I	7	1	5	3	4
	4	3	1	9	5
	14	13	4	14	9
	10	11	12	1	14
	1	14	2	5	8
II	5	9	14	10	2
	9	8	7	4	1
	12	10	8	11	6
	13	4	6	6	10
	8	12	15	12	12
III	2	5	3	8	11
	11	6	11	7	3
	3	2	9	15	15
	15	7	13	2	7
	6	15	10	13	13

Subgroup Size 6

	A	B	C	D	E
I	3	4	3	8	4
	6	5	2	12	9
	5	15	15	10	13
	12	13	9	2	5
	1	14	14	1	6
	10	3	1	7	10
II	11	1	13	14	11
	2	11	5	13	12
	13	10	10	9	2
	15	9	8	6	3
	9	7	12	15	1
	14	8	7	11	14

Group Size 16

Subgroup Size 3

	A	B	C	D	E
I	10	4	14	1	5
	12	2	12	13	11
	13	10	1	9	7
II	4	5	11	15	8
	5	15	16	7	2
	6	11	13	4	10
III	8	12	4	12	13
	15	3	7	8	4
	7	6	9	10	3
IV	1	7	3	14	9
	9	14	8	16	6
	2	9	10	2	1
V	14	16	6	11	15
	11	8	2	5	12
	16	1	15	3	16

Subgroup Size 4

	A	B	C	D	E
I	6	13	13	13	1
	16	9	15	10	8
	15	3	5	14	14
	2	4	4	2	3
II	12	1	11	3	6
	5	12	2	6	12
	8	11	9	16	2
	7	15	3	9	11
III	11	5	6	8	13
	1	8	7	7	16
	14	2	14	12	5
	4	7	8	15	7
IV	10	14	1	1	9
	9	6	10	4	10
	13	10	12	11	15
	3	16	16	5	4

Subgroup Size 5

	A	B	C	D	E
I	2	8	12	3	2
	13	16	7	5	6
	6	4	2	10	5
	1	14	9	11	7
	4	15	3	8	15
II	10	10	10	12	13
	3	6	5	13	9
	12	13	6	2	11
	8	1	4	14	10
	16	12	1	7	3
III	11	5	16	16	16
	5	7	13	1	1
	9	9	15	6	8
	14	3	11	4	14
	7	2	8	15	4

Subgroup Size 6

	A	B	C	D	E
I	8	8	15	13	11
	16	6	4	8	12
	3	9	6	1	1
	12	1	8	4	15
	6	7	13	16	7
	7	4	7	6	4
II	14	12	11	11	9
	10	13	1	2	8
	13	3	10	10	6
	15	5	14	5	16
	11	11	2	3	14
	1	16	12	9	3

Group Size 17

Subgroup Size 3

	A	B	C	D	E
I	15	6	7	1	1
	1	3	16	12	11
	8	9	5	10	9
II	14	2	10	8	12
	7	7	1	14	3
	9	10	6	13	10
III	12	11	11	11	17
	17	14	17	7	16
	5	13	14	4	7
IV	11	15	4	17	6
	2	4	2	9	13
	10	5	15	5	15
V	16	17	8	2	14
	4	16	13	16	4
	13	8	3	3	2

Subgroup Size 4

	A	B	C	D	E
I	14	13	10	5	5
	2	10	5	4	6
	9	4	4	10	4
	16	10	14	12	9
II	7	7	6	9	12
	3	5	3	11	10
	6	15	1	15	3
	8	18	9	14	13
III	5	12	7	2	11
	15	1	16	8	14
	2	11	8	7	16
	13	9	15	1	1
IV	12	17	13	6	15
	17	14	17	3	2
	11	16	2	17	17
	1	3	11	16	7

Subgroup Size 5

	A	B	C	D	E
I	5	15	7	15	8
	11	17	5	8	7
	15	10	4	7	6
	9	2	9	16	2
	13	16	15	11	13
II	1	9	11	12	10
	16	5	6	6	4
	17	3	10	4	14
	14	2	1	10	16
	2	13	8	9	15
III	8	14	3	14	5
	6	8	16	17	9
	3	11	13	2	3
	10	7	12	5	11
	7	1	14	3	12

Subgroup Size 6

	A	B	C	D	E
I	2	8	10	8	11
	5	16	11	5	15
	14	11	14	12	10
	13	6	2	14	17
	7	4	12	11	3
	9	7	7	9	1
II	12	10	4	16	14
	6	14	1	10	9
	4	2	5	4	7
	17	3	3	6	16
	1	9	13	1	8
	3	15	6	2	4

Subgroup Size

Group Size 18

Subgroup Size 3

	A	B	C	D	E
I	11	17	15	2	17
	18	16	4	15	1
	8	10	13	6	4
II	2	18	17	4	9
	14	8	9	18	10
	12	5	16	11	14
III	7	1	2	3	18
	1	14	12	5	13
	15	12	8	12	16
IV	13	9	18	17	15
	10	7	10	1	3
	6	15	7	13	5
V	9	2	3	10	6
	5	6	6	8	2
	4	13	5	7	11
VI	3	11	1	9	12
	16	3	11	14	8
	17	4	14	16	7

Subgroup Size 4

	A	B	C	D	E
I	10	8	8	4	8
	15	16	5	18	13
	7	2	15	10	18
	9	5	10	7	14
II	13	1	6	3	1
	14	7	14	6	11
	4	6	4	17	5
	1	14	17	14	12
III	5	12	2	12	9
	8	15	11	13	16
	12	3	16	9	3
	6	11	7	16	4
IV	18	9	3	11	6
	16	13	1	5	2
	11	4	9	15	7
	2	10	13	8	15

Subgroup Size 5

	A	B	C	D	E
I	2	4	6	3	12
	1	12	15	13	5
	17	14	3	10	10
	14	5	9	15	11
	10	1	18	16	6
II	6	18	13	1	8
	8	3	16	9	14
	5	7	2	12	2
	16	2	17	18	13
	7	9	1	5	4
III	12	13	7	6	1
	15	10	8	17	7
	13	11	5	7	18
	11	16	10	11	15
	4	17	4	8	9

Subgroup Size 6

	A	B	C	D	E
I	18	14	14	8	8
	4	18	15	4	4
	16	11	16	7	5
	14	3	8	3	9
	13	8	5	1	3
	8	10	4	6	14
II	15	13	10	12	12
	5	4	2	15	15
	6	7	1	16	10
	1	5	13	10	7
	10	9	17	9	18
	12	17	7	14	17
III	11	12	12	2	16
	3	1	3	17	11
	17	15	11	18	1
	2	6	9	5	2
	9	2	6	11	13
	7	16	18	13	6

Group Size 19

Subgroup Size 3

	A	B	C	D	E
I	3	1	3	7	11
	4	10	16	1	1
	5	7	7	8	15
II	6	3	6	12	18
	13	5	9	17	2
	7	12	1	18	14
III	9	4	8	2	16
	18	13	2	13	4
	12	11	17	9	17
IV	15	14	5	19	12
	8	17	14	4	5
	10	18	15	14	10
V	17	2	11	3	9
	11	19	19	6	19
	1	9	10	11	13
VI	14	15	13	15	8
	16	6	4	5	6
	2	16	18	10	3

Subgroup Size 4

	A	B	C	D	E
I	8	7	7	4	16
	18	12	17	14	13
	3	2	18	18	18
	2	18	12	3	11
II	5	9	2	12	9
	19	10	6	16	3
	4	8	19	10	2
	9	13	1	5	10
III	7	14	8	19	7
	16	4	9	15	12
	15	6	4	7	19
	13	11	15	1	6
IV	10	15	14	2	4
	12	19	16	6	15
	17	5	13	9	5
	14	16	5	11	8

Subgroup Size 5

	A	B	C	D	E
I	17	19	1	17	9
	4	8	9	9	2
	10	17	12	8	5
	6	9	3	4	18
	7	6	16	11	1
II	16	10	4	3	7
	12	18	10	10	14
	8	1	19	7	4
	13	2	11	5	11
	19	16	17	16	10
III	2	13	13	18	19
	9	12	6	6	17
	18	11	15	13	6
	15	14	8	2	16
	5	5	18	15	8

Subgroup Size 6

	A	B	C	D	E
I	2	2	18	6	11
	10	1	11	8	1
	19	12	3	15	12
	17	15	8	12	4
	16	14	14	10	2
	4	10	12	13	5
II	12	4	5	17	17
	9	3	4	3	10
	7	16	6	2	14
	13	6	13	16	17
	3	17	9	7	13
	18	11	7	14	3
III	8	18	15	5	18
	1	5	17	1	6
	6	19	1	18	9
	14	8	10	19	15
	15	13	2	9	16
	11	7	16	4	8

Group Size 20

Subgroup Size 3

	A	B	C	D	E
I	8	16	1	6	11
	20	9	17	4	13
	18	3	2	2	18
II	11	18	15	15	8
	1	14	16	14	7
	9	8	6	19	17
III	3	1	7	10	5
	19	6	14	9	3
	2	19	19	18	20
IV	13	15	9	11	4
	5	12	20	1	2
	17	10	5	3	15
V	12	13	13	17	12
	14	7	8	13	6
	10	4	3	5	1
VI	16	5	12	8	16
	15	2	18	7	14
	6	20	4	20	10

Subgroup Size 4

	A	B	C	D	E
I	16	2	13	13	4
	17	14	10	18	8
	13	17	16	5	17
	10	6	7	17	16
II	15	7	19	7	9
	9	8	3	2	1
	11	16	20	4	7
	7	19	15	6	2
III	1	18	2	20	10
	6	1	14	11	13
	12	3	1	1	19
	4	13	18	19	11
IV	14	16	9	14	15
	18	4	17	16	6
	2	9	4	12	12
	20	10	8	3	14
V	19	11	5	10	5
	3	5	11	9	18
	5	20	6	15	3
	8	12	12	8	20

Subgroup Size 5

	A	B	C	D	E
I	20	11	19	7	3
	16	1	3	18	5
	3	3	15	6	8
	18	10	20	8	17
	15	16	17	9	15
II	14	5	13	16	1
	1	14	9	4	18
	9	6	10	17	13
	6	7	12	19	11
	2	17	16	1	7
III	19	19	4	2	19
	8	2	2	12	2
	7	8	18	20	10
	11	20	11	3	6
	10	18	5	14	20
IV	17	13	7	13	12
	13	4	14	10	14
	12	15	8	11	4
	4	9	1	15	16
	5	12	6	5	9

Subgroup Size 6

	A	B	C	D	E
I	13	2	17	10	18
	7	8	5	6	1
	4	17	20	5	20
	1	1	13	7	7
	18	4	14	3	2
	19	15	8	8	9
II	15	7	1	4	15
	12	6	7	14	10
	5	9	18	15	16
	2	16	11	19	6
	20	20	3	17	8
	8	3	4	18	4
III	6	14	19	11	12
	9	5	6	13	5
	17	10	2	12	3
	14	12	9	2	13
	11	18	15	9	11
	16	13	12	20	17

WORKING WITH SUBGROUPS

It usually is best to divide the participants into subgroups before giving task instructions, because instructions may be "lost" during the shuffling of chairs and people.

It often is useful to have each subgroup identify, at the beginning of the process, a spokesperson or reporter who will take notes on the data that are generated by the group. These notes can be made on newsprint to help the group to focus and remember, or they can be made on paper, checked with the subgroup members at the end of the discussion, and then copied onto newsprint for reporting to the total group. The amount of time allowed for subgroup reports should be specified beforehand, and general discussion should be postponed until all subgroup reports have been made.

While subgroups are working, the facilitator should be available to clarify instructions, answer questions, supply materials, help groups to focus on the task or stay on track, etc. If the group's task is lengthy, asking for a preliminary report can help the group members to stay on track and to remember what has happened or what data has been generated so far.

USING SUBGROUPS FOR PROCESSING

In most structured experiences, individuals are encouraged to look carefully at themselves, their perceptions, their values, their behaviors, and their effects on others. However, it may be difficult for some people to talk about their insights in front of a large group of people. Also, the size of the total group may preclude all phases of processing being done in the large group. Several subgroup arrangements can be helpful in aiding the participants to process their learnings. These include the following.

Dyadic Sharing

Participants form pairs to (a) discuss their insights, (b) interview each other about their learnings, or (c) provide feedback to each other on their behaviors during the activity.

Small-Group Assessment

Subgroup members point out and discuss individual reactions, perceptions, principles, etc. Subgroups can be given reaction forms, instruments, feedback guidelines, discussion guidelines, and the like to aid them in their task.

SEATING ARRANGEMENTS

The choice of group seating arrangement should be based on several considerations: the size of the group; the type of presentations, interactions, and activities in which the participants will be engaged; whether the activity will involve subgroup work or the

total group only; and the requirements of any audiovisual or learning aids that will be used. Some designs will not require tables and/or chairs.

If the participants are seated in movable chairs, it will be easy for them to move into small circles. If they are seated at tables, groups can be formed with people seating across from one another, or groups of three can be formed using participants on the same side of the table by having the person in the middle move his or her chair back slightly to form a small triangle. The following arrangements are suggested by Margolis and Bell (1986) and Goad (1982).

- For small groups (up to twenty participants), a *"U" shaped arrangement* helps to involve participants and stimulates interaction. A *circle* offers the same benefits and lessens the focus on the trainer. The circle does not lend itself so well to the use of visual aids, but it is very effective for discussion groups in which the trainer takes a role that is equal to that of the other group members.
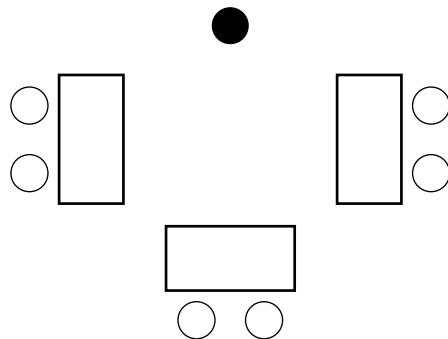
U-Shaped Arrangement
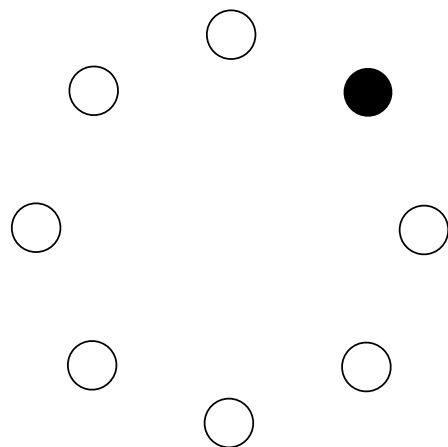
Circle

- For medium-sized groups (twenty to forty participants), *rows* are practical, although the *classroom-seating arrangement* may be preferable. Such an arrangement is used when the learning design calls for trainer presentation of material, independent completion of work, and/or audiovisual materials. Each table then accommodates two or three learners, all facing in the same direction.
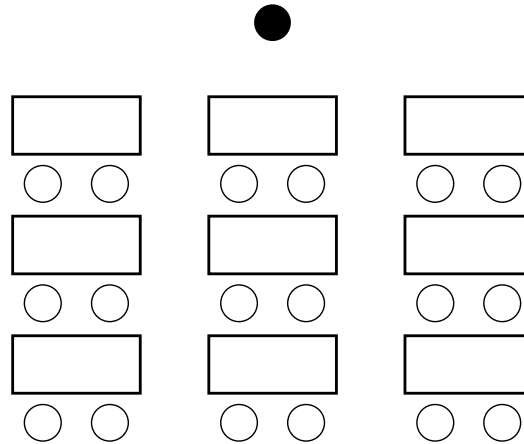
Row Arrangement
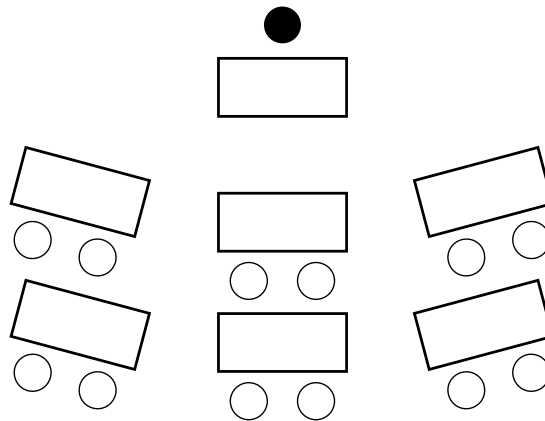
Classroom-Seating Arrangement

- The *fan arrangement* is useful when material is to be delivered by the trainer. All participants have a clear view of the trainer and of any audiovisual aids. They also can switch easily from listening to making a presentation to working within their subgroups to taking part in a total-group discussion.
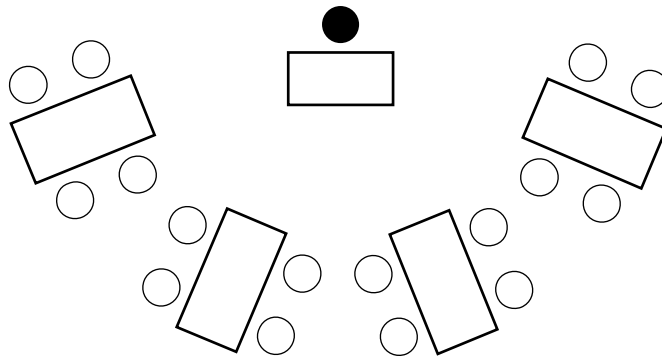
Fan Arrangement

- For a large group (more than forty participants), *theater-style seating* may be required. This is most effective when most of the information is imparted by the trainer and when there is little interaction among participants. However, if the group is very large, and interaction is required, the theater-style arrangement still can be used. Participants can be divided into dyads (sitting next to each other) or into groups of four, with two of the members sitting directly in front of/behind the other two.
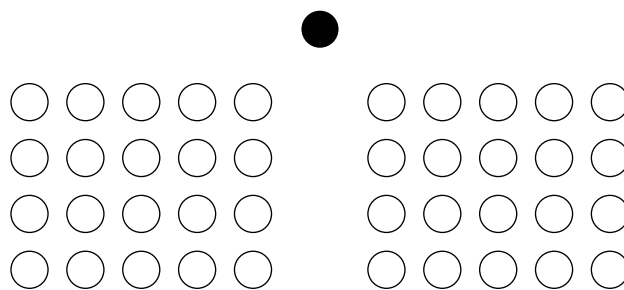
Theater-Style Seating

- If total-group discussion is called for, with little independent presentation and/or subgroup activity, a *conference-table arrangement* can be effective. If the design requires both presentations and total-group discussion, the *horse-shoeseating arrangement* may work well.
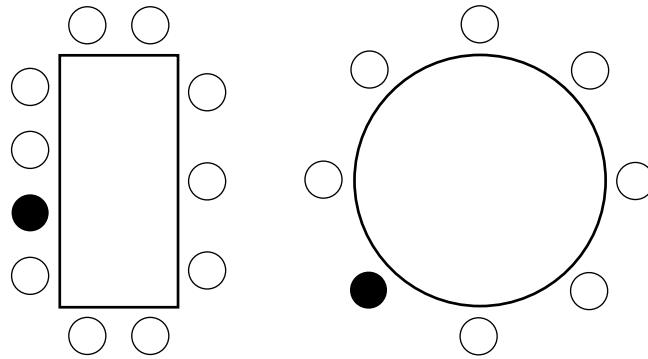
Confrence-Table Arrangement
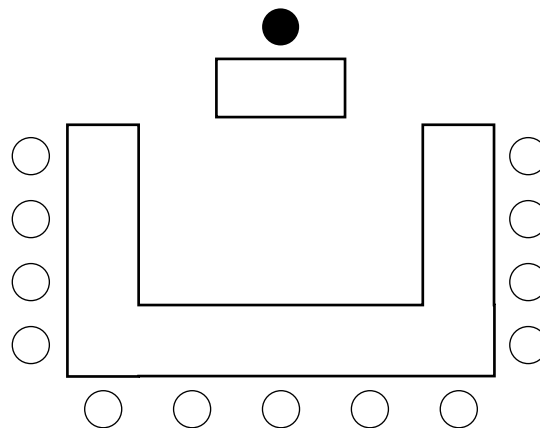
Horeshoe-Seating Arrangement

The room should be large enough to accommodate the tables, chairs, and other furniture or equipment needed and still allow adequate space for people to move around. If participants will be working on written tasks, they will need space to work and space in which to spread out their materials. If the room is too large, the training area can be set up in one end of the room, and a room divider, beverage table, or equipment table can be used to create a boundary for the area.

CONCLUSION: EXAMINING THE USE OF EXPERIENCE-BASED ACTIVITIES

The primary problem for the individual who wants to make use of prepackaged, experiential-learning activities is deciding what the people who designed the

activities were up to. One way to focus on the central issue is to consider the structure and function of experiencedbased activities in general. Five elements are common to all: (1) participants in roles, (2) interactions between participants/roles, (3) rules governing interactions, (4) goals with respect to which the interactions occur, and (5) criteria for determining the attainment of the goals and the end of the activity (Ruben, 1972).

As Ruben explains, although each of these elements is present in all experience-based activities, their importance, composition, and origin differs greatly from one design to another. Sometimes the roles, interactions, rules, goals, and criteria are clearly specified by the design of the activity or by the facilitator, and participants have little latitude in their determination. In other instances, most of these decisions are made by the participants as part of the activity. This distinction can be important, as each type of activity is appropriate for a particular kind of learning objective. In the simplest sense, the distinction has to do with whether it is desirable for participants to learn particular and specific knowledge, behaviors, skills, or facts, or to acquire general competence—to question, inquire, make decisions, or create knowledge.

Where the things to be learned can be specified and enumerated and when the objective is to teach particular knowledge, a tightly structured and controlled activity is necessary and desirable. Through participation in such an activity, all participants are exposed to and gain at least a passing familiarity with a particular set of known knowledge.

In contrast is the activity in which the goal is the creating of individual knowledge, the inventing of personal coping strategies, and the increasing of self-awareness. It is neither necessary nor usually desirable for all participants to be exposed to the same experiences to learn the same things. Such experiences can be characterized more by the *striving for* than the *attainment* of.

A logical consequence of the facilitator-directed activities is the encouragement of homogeneity among participants in the way in which they understand and experience the activities to which they are exposed, as well as the applications they come to make of their learning in "back home" situations. Because participant-directed experiences are less likely to be experienced similarly by all participants, they can foster heterogeneity and can permit the reaching of diverse and nonoverlapping goals by those involved. The results of a highly effective participant directed activity may be judged ineffective if viewed in terms of the goals associated with a facilitator-directed experience. Likewise, if the learning goal is to have each participant come to his or her own understanding and judgment of the relevance of "sharing" or "honesty" for his or her own life pursuits, facilitator-directed activities, which foster similarity, probably would be dysfunctional.

Most experiential learning designs are neither totally facilitator directed nor totally participant directed. The design and selection of experiential learning activities must be preceded by the design and selection of a framework within which the activities will operate toward the learning and growth goals of the particular group.

◼ A GLOSSARY OF TERMS IN EXPERIENTIAL TRAINING

HRD professionals are notorious for their use of jargon. Those who use an "applied-behavioral-science" approach often use technical terms interchangeably, adding to the confusion of participants. The following list is intended to help clarify this situation. Although these terms are not technically precise, we have found it useful to make sharp distinctions between them for the sake of clarity and ease of comprehension. Many persons might argue for even more specific and exclusive definitions.

Activity	A design for participation to create a common experience to be studied and discussed by participants.
Affective	Pertaining to feelings or emotions.
Case Study	Group discussion and problem solving from material about an actual or fabricated situation.
Cognitive	Pertaining to thoughts and ideas.
Critique	Group evaluation of the effective and ineffective aspects of a learning design.
Deductive	A learning method that begins with "truth" and proceeds to its logical conclusions.
Design Task	An assignment to create a plan for participants to learn through interaction.
Deroling	Helping participants in a role play to extricate themselves from their assigned roles and to resume their normal interactions.
Didactic	A teaching approach in which information is imparted from an expert.
Energizer	An activity designed to develop readiness for participation in learning events; usually involves physical movement.
Exercise	Repetitive activity, usually designed as part of training to develop skills.

Experienced-Based   Synonymous with "experiential."

Experiencing   Phase 1 of the "Experiential Learning Cycle"; a learning activity that is discussed and integrated by participants afterward.

Experiential   An approach to learning in which participants in an activity learn through reflection on the activity itself.

Experiential
Learning Cycle   A model of an inductive learning process consisting of five phases experiencing, publishing, processing, generalizing, and applying.

Experiment   A (semistructured) activity with unpredictable outcomes.

Facilitation   Helping participants to learn from an activity; conducting experiential training.

Facilitator   A person who uses experiential methods to promote learning; literally, "one who makes things easy."

Feedback   Information about the effects of one's behavior.

Game   An activity that is engaged in for its own sake; usually connotes fun and competition or chance.

Icebreaker   An activity to help participants to release anxiety at the beginning of a training event; usually fun, involving becoming acquainted with one another.

Inductive   A learning method that is based on the discovery of "truth" from the examination of experience.

Input   An exposition of information or theory; contribution to a discussion.

Instrument   Paper-and-pencil device used to inventory or rate oneself or a system.

Instrumentation   The use of instruments in training or research.

Intensive Growth
Group   Unstructured experience focused on the "hear-and-now"; may be an encounter, therapy, counseling, marathon, or T-group.

Item	A component of an instrument (e.g., a question or statement to be ranked or rated).
Likert Scale	A type of attitude-measurement scale developed by Rensis Likert; usually "strongly agree, agree, undecided, disagree, strongly disagree."
Mind-Set	Psychological condition prior to an activity; attitudinal predisposition; expectations.
Model	(1) Theoretical explanation of a complex set of phenomena; (2) ideal behavior type.
Modeling	(1) Demonstrating effective behavior; (2) developing a theoretical explanation of a process.
Norms	(1) Expected behaviors, (2) statistical summary of responses to an instrument.
Package	A self-contained training design that is completely developed, with little or no flexibility.
Parameter	Characteristic factor, goal, or limitation; what the facilitator has to work with in creating a learning design (not to be confused with "perimeter" or "boundary").
Participation Training	Group discussion that includes learning how to be a more effective group member.
Processing	(1) Phase 3 of the Experiential Learning Cycle, in which participants discuss the patterns and dynamics that occurred in their commonly shared experience; (2) a generalized term used to indicate phases 2, 3, 4, and 5 of the Experiential Learning Cycle—the "talking through" rather than "doing" phases.
Publishing	Phase 2 of the Experiential Learning Cycle, in which participants share reactions and observations about what they saw and how they felt during the experiencing phase.
Questionnaire	An instrument that does not have correct answers; a survey device.
Reinforcement	Anything that raises the probability that a response or behavior will be repeated.

Response Format	The scale or method used by participants in reacting to the items of an instrument.
Role Playing	A design for learning in which participants act out a situation through assigned parts that they play spontaneously.
Self-Assessment	Looking inward at oneself, usually by means of a learning activity or instrument.
Self-Disclosure	Communicating about oneself to others: usually connotes letting others know about one's private self.
Simulation	An interactive learning package designed to recreate or mirror a larger, more complex situation in order to sponsor learning.
Skill Building	Developing effective behavior through practice toward an ideal type, with both knowledge of results (feedback) and reinforcement.
Structured Experience	A design for inductive learning through the implementation of the Experiential Learning Cycle; focuses on particular learning goals.
Test	An instrument with "correct" answers.
Win-Lose	A competitive situation in which there must be a loser in order for there to be a winner.
Win-Win	A situation or outcome in which one person does not have to lose in order for another to win, i.e., both win.
Zero Sum	An activity in which there is a fixed, limited amount of whatever is at stake, so that whatever someone wins, someone else loses.

■ A BACKGROUND FOR USING ROLE PLAYS IN HUMAN RESOURCE DEVELOPMENT

THE HISTORY OF ROLE PLAYING

The technique of role playing is an outgrowth of the age-old idea of practice or rehearsal and was reinforced by the development in this century of the case-study method for teaching. Role playing in its modern form was first used by J.L. Moreno, a Viennese psychiatrist, in working with mentally disturbed patients (Moreno, 1923, 1953). He called it "psychodrama," and his purpose was to give the patient insight into some of his or her relationships with others by having the patient play the role of these other persons. (Psychodrama, or therapeutic role playing, is still used in counseling and therapy today.) Moreno saw role playing as an opportunity for an individual to shed the inhibitions and restrictions imposed by society and by the fear of criticism, punishment, or ridicule. He maintained that this reduction of inhibition is necessary before the individual can employ the creativity and spontaneity that are necessary for learning and change to occur. Then the opportunity to experience new feelings and practice new behaviors helps to stabilize the new, desired behavior.

In 1933, a German military psychologist named Simoneit devised a number of action procedures very similar to current role-playing techniques by which officers in the German army could estimate the qualities of army recruits. In the 1940s and 1950s, the U.S. Office of Strategic Services Assessment Staff used role playing in the selection of people for secret wartime work, and the British army employed similar procedures in its officerselection program. Role playing began to be used in the United States for training purposes during World War II, and its use in industrial training was reported by Lippitt (1943) and French (1945), followed by Argyris (1951), Maier (1952, 1953, 1973), Corsini (1957, 1966), Starr (1977), and many others. Today it is an accepted part of the trainer's repertoire.

WHAT A ROLE PLAY IS AND WHAT IT IS NOT

Role playing is a technique in which people are presented with roles in the form of a case or scenario, then act out the roles in order to experience them for educational purposes. The ways in which these roles were approached by the role players then is discussed, and the action may or may not be tried again. Role playing is, then, a spontaneous human interaction that involves realistic behavior under artificial or "imagined" conditions.

Role playing generally is used for one of several reasons:

1. To *practice behavior in preparation* for a new role or an anticipated problem situation;
2. To *examine a problem situation or past incident* in order to learn how it could be/have been handled better;
3. To *create insight* into the motivations and roles of others or oneself.

In role playing, the emphasis is on developing new skills and insights and on solving and preventing problems. This differs from the lecture and the textbook approaches to learning, in which the emphasis may be on principles and determining the "right" answer.

With a real-life situation, one may never be sure that it was handled in the best way. The role play is a type of simulation in which a person or group can be introduced repeatedly to the same situation and can measure the effects of various behaviors. Because the situation can be repeated with various approaches, the impact of those various approaches can be assessed and discussed.

Role playing is distinguished from another major educational approach, the case study, primarily in terms of focus and impact. The case study is more likely to be centered primarily on cognitive learning, whereas a role play typically emphasizes both cognitive and affective development on the part of learners. For example, in a case study the group might decide that person A should apologize to person B. That would be the result of the group's work on the subject. In a role play, however, A would actually go to B and apologize. Both A and B would say how that felt and whether it worked for them; they might retry it with A modifying his or her apology and/or B modifying his or her response. Thus, role playing demonstrates the difference between *thinking* and *doing*. Because the case study has a there-and-then content emphasis, it creates considerably less learner involvement than the role play and less potential for promoting transferable learning that is "owned" by the participants.

A RATIONALE FOR USING ROLE PLAYS

A human being thinks, acts, and feels at the same time, but the three processes may not be congruent. The most effective way to communicate with or teach a person is to reach the totality—the thinking, feeling, and behaving parts of the individual. Experience in the training and development field has made it clear that learning the principles of human behavior has little value unless it is supplemented by affective understanding and skill practice. The best kind of practice is performing under competent supervision in an atmosphere that is free of serious risk to oneself or others. Role playing offers an opportunity to practice one's human relations skills in a lifelike setting, to experiment and try out new behaviors without running the risks that such experimentation entails in real life. The repetition that is part of many role-play designs sharpens and reinforces the

new insights, feelings, and behavioral skills. In addition, a properly planned role-play activity involves discussion and analysis of crucial issues.

The participants in a role play engage in actual behavior, confronting problems and other people. They receive immediate information about the effects of their behavior and about how they could act differently. Thus, they can relate the feedback to their actual ways of behaving in specific situations. This creates the motivation to inquire and to experiment with new behaviors.

Because role playing is an active technique, the participant in a role play gains many insights while in a role that would not occur in clinical reading or discussion of a situation. There is no separation between thoughts, words, and action. Role playing provides a chance to fully experience a situation, including "the other side," whether that be, for example, a boss/subordinate, husband/wife, parent/child, or union/management situation or an intercultural experience. This allows the learnings to become internalized, which does not occur from merely reading about something. In fact, during a role play, participants often make the mistakes for which they have been criticizing others, especially their managers, spouses, or coworkers.

The discussion that follows the role play is the core of the learning experience. It typically reveals various attitudes and habits that can be clarified, evaluated, and modified through group interaction. Observers can note not only what occurs in the role play but also their own reactions. The comments of all role players and observers about more effective ways to deal with the situation can be explored, and the situation can be reenacted to test the new ideas. For these reasons, role playing has a wide utility in leadership and management development, training in communication skills, improvement of interpersonal relationships, and team development.

Role playing is widely used by the military in war games, by assessment centers to determine the optimum career path of participants, and in assertion training to develop the skills and concepts needed for individuals to stand up for their rights in the face of potential conflict. Role playing lends itself particularly well to the exploration of ideas and theories in interpersonal communication and leadership roles. Perhaps the most widespread use of role playing in training and development has been in courses and workshops in communication skills and leadership development. It also has been used frequently to teach interviewing skills, to both interviewers and potential interviewees.

The unique values of role playing include the following:

- It requires the person to *carry out* a thought or decision. As stated above, it demonstrates the difference between thinking and doing.

- It permits *practice* in carrying out action and allows people "another shot" at it.

- It makes clear the fact that good human relations require *skill* in the same sense that playing golf requires skill. Although many of us feel that we are expected to know how to solve interpersonal problems and deal with people merely because we are adults, the fact that problems, misunderstandings, counselors, and training exist is evidence that most of us do not have these skills inherently.

- It accomplishes *attitude changes* effectively by placing people in specified roles. This demonstrates that a person's behavior is not only a function of his or her personality but also of the situation in which he or she happens to be.

- It trains a person to be aware of and sensitive to the feelings of others. This awareness functions as feedback on the *effect* of one's behavior.

- It develops a fuller appreciation of the important part played by *feelings* in determining behavior in social situations.

- It enables people to *discover* their personal faults. For example, the person who enjoys making wisecracks may discover that they annoy or hurt others.

- It permits training in the *control of feelings and emotions*. For example, by repeatedly playing the role of a supervisor, a person can practice not becoming irritated by complaints.

In role playing, a person can learn not only how to act in different ways but also why other people may act as they do. This creates enormous potential for the improvement of interpersonal interactions.

ROLE-PLAY OBJECTIVES

Although role playing has been used effectively in counseling and therapy, we have chosen not to discuss that application. ln the field of human resource development, a number of objectives can be realized through role playing; these include training, communication, behavior rehearsal, behavior modeling, demonstration, and assessment and evaluation.

Training and Communication

One of the primary reasons for role playing is to provide training for skills in dealing with information or insights into the nature of human behavior. Role playing has the potential to generate affective content for the purposes of exploring relationships between feelings and behavior in human interactions. Role plays can be selected or devised to study the probable effects of different behaviors on the participants in a problem situation, thereby providing a potential learning opportunity for individuals to develop an increased sensitivity both to their own and to others' feelings. It also can be used to create a data base for interpersonal feedback within a workshop. Thus, role playing is suitable in training for any situation or job that involves human interaction.

Inasmuch as many experiential learning concepts are often difficult for participants to apply to their everyday work, role playing also offers a vehicle for delivering theory input in an engrossing and stimulating way that is relevant to real-world problem situations. Theoretical concepts can be incorporated into role descriptions and into the role-play problem.

The technology also can be used to help people to improve their communication skills through practice, feedback, and attempting to vary the presentation in order to make it more effective. This can be particularly useful in training not only managers but also medical practitioners, police and other public servants, parents, salespeople, educators, lawyers, and scientists. Thus, role playing is not limited to applications in which one is attempting to change attitudes and behaviors; it also is useful in creating insights and "polishing" interpersonal skills.

Behavior Rehearsal and Behavior Modeling

The operant conditioning or "stimulus-response" theory of behavior modification led to the introduction of programmed instruction. Then it became clear that although programmed instruction could increase an individual's knowledge, it could not provide the insight that comes from trying out new behavior in ongoing human situations. Role playing has become an integral part of the behaviorist's approach to learning because it provides opportunities for introducing new stimuli and evoking new responses; it provides opportunities for reinforcing desired behavior and diminishing undesired behavior; and it provides opportunities for learning by doing. The two most common applications of role playing in behavior modification are behavior rehearsal and behavior modeling.

In *behavior rehearsal* the individual is asked to deal with a specific problem that has been identified through small-group discussion, a problem census, a presentation, or the individual's own analysis of areas in which he or she wishes to practice and improve. The facilitator introduces ground rules or procedures as guidelines to use in coping with the situation under consideration (e.g., guidelines for dealing with angry customers, procedures for making a sales call). These also serve as criteria for determining whether the role player's behavior is appropriate and effective. The participants then identify a specific situation in this area that they want to deal with more effectively. The group is split into small "rehearsal" groups (three to eight members each), and a specific and repeatable rehearsal procedure is defined so that all participants have the opportunity to practice dealing with the problem situation. Multiple tries and a format for feedback are built into the process. If the training group is small, the format can be less formalized although still structured; that is, the facilitator can ask one or more group members to begin the role play as a demonstration, with other members offering suggestions.

Behavior modeling is based on the premise that people may handle a situation ineffectively because they do not know how to handle it, i.e., they do not have a model for dealing with it. In organizational settings, behavior modeling often is used to teach procedures for dealing with clients, customers, and subordinates. First the participants are presented with a procedural model; then they observe a *behavioral display* in the form of an enactment, film, or videotape. Group members then try out their own skills in dealing with the situation or issue, through either structured or unstructured role playing.

Demonstration

The role-play approach can be used to inform and instruct in almost every situation in which films, lectures, and demonstrations are suitable. A role play can demonstrate various skills and concepts in interpersonal relations and communications. It can be used to teach specific methods. It can be used to give the observers information about how a certain role should be filled. In such a case, the role play serves to "model" the behaviors desired; it is one type of audiovisual aid.

Assessment and Evaluation

Role playing is one of the best ways to provide evaluation of and feedback to people relative to increasing their effectiveness in various interpersonal situations. It can provide an impactful means of experiencing different behaviors in order to evaluate their effects.

Problems being focused on by a participant group can be "staged" to achieve a different perspective. Role playing also can be used for group diagnosis, to provide better understanding of the role players by seeing and hearing them in action. This would be particularly helpful in group problem solving or team building.

In addition, role playing has been applied to personnel selection and other types of job evaluation, as in assessment centers. The assessment center is an extension of the testing processes of both psychometrics and "situation testing," an outgrowth of Moreno's work that was developed by the military in the 1940s. Specific factors related to performance are identified and standardized, and the role-player's performance is evaluated by experts. It is important in this instance that the role-play situation and problem bear resemblance to real life and that they elicit behavior that is typical of the individual. In assessment centers, role playing is used for both assessment and demonstration. It usually is combined with instruments, simulations, interaction activities, and a variety of small-group tasks. This is most frequently applied to the selection and development of managers.

Role playing has an advantage over interviews, instruments, and diagnostic tests in that it is spontaneous, natural, and in the hear-and-now. It provides the evaluators with direct experience that is not distorted by errors in communication; thus, it is more accurate for the prediction of human behavior (Borgatta, 1956).

THE ADVANTAGES AND POTENTIAL DISADVANTAGES OF USING ROLE PLAYS

Role playing has a number of obviously desirable applications; however, there also are some potential disadvantages. The facilitator needs to be aware of both in order to be able to optimize the benefits and to minimize the potentially negative aspects.

Advantages

Participants typically experience role playing as an *engaging* activity. Because almost everyone knows how to play someone else's role, participants tend to enjoy role plays, and it is unnecessary for them to learn new skills in order to benefit from the process. Also, role playing often is fun, although overplaying a part can detract from the learning. When role playing is conducted skillfully, the situations have a high credibility for participants, thereby reducing resistance to learning relevant skills and theory.

The technique is highly *flexible*. The facilitator can change the role play as it is being conducted, and the materials can be edited to fit particular situations. Role playing can be engaged in for brief or long periods. The technique often *reduces the threat* of interpersonal interaction: it sometimes is easier to explore oneself by projecting oneself into a role than to expose oneself directly. Participants are allowed to carry out decisions without the danger of embarrassing or incriminating themselves in "real" situations. Role playing can increase participants' awareness about the effects of feelings on social behavior.

Perhaps the most decided advantage of role playing in a training context is that it uses the experiences of participants in ways that *increase their ownership of learning*. As it provides a vehicle for focused feedback to individual participants, it can assist in developing the expression of feelings. Human problems in systems can be studied through the medium of role playing in a way that brings the "human factor" of organizational situations into sharper focus. Because it has the potential to *develop skills* in self-expression, listening, communicating points of view, and interpersonal interaction, role playing can raise participants' consciousness about the need for skills in human interaction. It also can permit the simulation of problem issues that arise infrequently in personal or work situations but are very important when they do arise. Thus, role playing offers participants the opportunity to gain hard-to-obtain experience in dealing with such situations. Because role playing frequently affects a participant's perception of a problem or situation, the new attitudes and behaviors tend to carry over to back-home situations.

Potential Disadvantages

Several potential disadvantages are inherent in the role-play technique. One obvious one is that the artificiality or superficiality of situations depicted in role-play scenarios can allow participants to discount the value of their learning because of the apparent oversimplification of the situation. Similarly, role playing can deteriorate into play, and the serious learning potential that is inherent in the process thereby can be jeopardized.

Participants often lose themselves in a role and engage in inadvertent self-disclosure, exposure, and ventilation. It is important that the facilitator point out this possibility to participants. The facilitator should be particularly aware of this disadvantage in order to avoid the ethical breach of allowing people unknowingly to make themselves vulnerable. Role playing can be a threatening experience for a

significant minority of participants, and the facilitator needs to be sensitive to the pressures faced by participants.

Another disadvantage is that roles sometimes reinforce stereotypes and caricature people's behavior. This unfortunate side effect can be avoided if the facilitator ensures that role descriptions are credible and nonstereotypical and that role players are instructed not to caricature their roles.

A fifth problem arises when role plays are staged in front of an audience: the passivity of the audience can lessen the impact of the learning. In such a case, it is important that members of the audience have active roles as observers or coaches.

Sixth, role-playing situations can overpersonalize problem situations; for example, in team building, problems facing organizational work units sometimes are aggravated by a tendency to perceive feedback personally and to see issues in terms of individuals. Role playing can, through such overinvolvement, generate excess affect. The facilitator should be aware of the need to keep the learning focus sharply delineated.

❚ EVALUATING AND SELECTING ROLE PLAYS

Before considering role playing as a training technology, the facilitator must be clear about the goals of the session and must consider whether role playing is the best way to achieve them. Much of the training value of a role-play case depends on the scope of the generalizations that can be drawn from the results. For this reason, two important factors in screening a role play are the extent to which it typifies a broad range of problems in the area to be considered (management, personnel, intergroup, etc.) and the extent to which it illustrates and highlights the methods and principles for dealing with these problems. Another factor is the interest value of the role play and the challenge that it offers. A role play that lacks conflict and variety may be too boring to stimulate the interest of the participants. Of course, the overriding factor is the relationship of the role play to the overall training objectives, i.e., whether the activity will contribute to the goals of the session.

It is best if the facilitator has some knowledge of the group of participants (work team, department, organization, family, club, etc.) that will be attending the role-play session, as well as of the norms, standards, and problems that are present in the environment in which these people interact. A role play then can be selected to fit the needs, goals, interests, and expectations of the participants. If the participants are not members of an intact group, it will be up to the facilitator to select the best role play possible, given the backgrounds of the individual participants. Studying actual role plays will provide an overview of the types of problems, situations, and structural interventions that can be found in good role plays.

TYPICAL PROBLEM SITUATIONS

In general, role playing in HRD is used to examine five typical kinds of problems:

1. Power and authority;
2. Morale and cohesion;
3. Goals and objectives;
4. Norms and standards;
5. Change and development.

These areas of difficulty appear in both private and organizational life, but most HRD applications deal with on-the-job situations, so those will be the ones discussed here. The important thing for the facilitator is to discern what the problem issue is and to select a role play that deals specifically with that issue.

Power and Authority

The problems of power and authority are of particular difficulty in modern society. More and more people who possess power and authority do not know how to exercise them effectively, and those in our society who are *subject* to power and authority have trouble accepting that fact. If a person's attitude about power or authority in general is one of antagonism or threat, that person is less competent to deal objectively with those issues. Self-defeating cycles of behavior may result. Role playing can be an effective way to examine and deal with attitudes and behaviors that stem from these issues.

Rejection and Suppression

Rejection by a significant person who possesses power or authority can cause great difficulty for an individual. The authority figure or powerful person's objective may be to eliminate disagreement, reestablish control, or facilitate "progress," but the person affected feels suppressed and discounted. This often results in antagonism toward the authority figure or withdrawal of the subordinate individual. Worse, the subordinate may conclude that he or she has been found lacking or unworthy. All these feelings can lead to unhealthy, unproductive, and even self-destructive behavior.

Role plays that focus on power and authority relationships (boss/subordinate, parent/child, doctor/patient, instructor/student, minister/parishioner, etc.) are ideal for helping people to explore their own relationships and to examine their attitudes about exercising authority and their reactions to authority.

Morale and Cohesion

Morale and cohesion typify a "team" feeling or *esprit de corps*, in which individuals feel a sense of union and shared responsibility. When these feelings are high, the members of the group commit effort. When these feelings are low, people lack commitment and may be emotionally absent.

Role playing can help people who are experiencing low morale to identify what is causing their discouragement or depression. They can identify alternatives and practice strategies to overcome their negative feelings and the self-defeating behaviors that often accompany them, replacing them with a more positive orientation.

Another reason for low morale may be difficulties in relationships. Role playing can be used to identify aspects of a relationship that are causing difficulties and what each individual does to contribute to the problem.

Goals and Objectives

Goals and objectives give form and purpose to human endeavors. If, however, goals and objectives are not clear, individuals may be working at cross-purposes with themselves or with other members of their group. Role plays can be used in various ways to aid

people in (a) clarifying their goals, (b) redefining their goals, (c) establishing goals when none are specified, and (d) restructuring their activities to make goal-oriented actions possible.

Norms and Standards

Norms and standards reflect the shared expectations of a group of people. When these expectations are accurate, each person can anticipate what the other people will do and can correlate his or her own efforts in order to bring about a productive outcome. If the norms and standards of a group are so informal or at so low a level as to block productive or creative efforts, role playing can be used to identify them and to demonstrate how they block group and individual accomplishment.

Another way in which norms and standards affect people is that, over time, people begin to expect things to be done in certain ways. When an attempt is made to institute change, resistance often is encountered. Some role plays are designed to explore attitudes about preexisting norms and standards and their purposes, thus helping people to let go of outmoded norms and standards and replace them with shared expectations that are more appropriate to the circumstances. This type of role playing is particularly helpful to the consultant who is attempting to effect organizational change, and it can be used in change efforts other than those concerning norms and standards, as the following discussion explains.

Change and Development

Planned change provides the option to learn the dynamics of change, strategies for causing it, and the skills necessary for creating positive change. This approach differs from older patterns that rely on evolution, one-step-at-a-time processes, or the use of force and pressure to bring about change.

Role playing can be used to allow individuals to practice different behaviors. Thus, it is one of the best approaches for dealing with resistance to change. A sense of being *able* to do things differently or better often changes resistance and resentment to enthusiasm for change and development.

USING ORGANIZATION-BASED SCENARIOS

There is some question about whether role plays should be based on conditions within the organization or system in which the training is conducted. In general, this should be done only after a considerable amount of training has been done with general cases. When cases are based on company experiences and/or details are "close to home," there may be unfavorable results. These include:

1. People who know about the situation may disagree on the basic issues in the problem, leading to polarization within the participant group.

2. Irrelevant or historical facts often are introduced into the role play; these disrupt both the role play itself and the subsequent discussion.

3. Persons who were involved in the original situation often exhibit defensive behaviors.

4. Participants tend to concentrate on solutions rather than focusing on aspects of the problem or the process.

5. Organizational situations often have many causes, and the humanrelations dimensions within them can be obscured by other factors. Role playing may oversimplify such situations and lead to misleading generalizations.

In setting up role-play situations, it is, therefore, best to use simulated problems before attempting to use real organizational problems. Once the group has become accustomed to role playing, has become familiar with the basic skill principles, and appreciates the constructive interaction that occurs in group discussion, organizational situations may be role played effectively. It is best, however, to use problems that have not been resolved, to avoid the betrayal of confidences and the perceived necessity of "saving face," and because the insights gained in role playing can be utilized in solving the problem. When a group is ready to role play organizational problems, different members of the group should present their own case data for the group's consideration.

OTHER SELECTION CONSIDERATIONS

Aside from the suitability of the role-play content, the selection of a role play will be affected by several other limitations imposed by the particular case. These include the following:

- *The number of people* required to play the roles;

- *The complexity of background and role instructions,* measured against the participants' familiarity with role playing and ability to deal with complex data;

- *The time required* for providing instructions, role playing, rerunning the role play, feedback, observer reports, and discussion;

- *The amount of space needed and/or the number and complexity of props* required;

- *The amount of threat and emotional affect* likely to be generated by the role play, measured against the participants ability to handle and process it;

- *The amount and type of data* likely to be generated during the role play and the processing discussions, measured against both the participants' and facilitator's experience in giving and receiving feedback and in working through such data;

- *The possible reactions of nonparticipants within the system* to the fact that others are engaging in this type of training and their ability to deal with the responses and *changes* incurred among the role-play participants.

A good role play reproduces the most significant conditions of a real-life situation with a minimum of detail. People are understandably nervous about engaging in a role play. It is ineffective to add to their concerns by giving them a lot of information about the case background to absorb. If the role players need to know "information" about the role-play "organization" or situation, this material should be printed so that they can refer to it as they go along. Similarly, instructions about how to role play should be separate from the actual role instructions and should be dealt with *before the role instructions are handed out*. A role-play design that is too complicated or that requires too many props or too much preparation may create unnecessary problems.

If more than one role play is to be used in the training design, the sequence of cases should follow a developmental sequence of principles and skills. Each case can involve the use of partially new and increasingly complex abilities.

◼ DESIGNING ROLE PLAYS

In designing role plays, the potential disadvantages of the technique can be avoided through certain design considerations, choice of development of materials, and detailed preparation.

DESIGN CONSIDERATIONS

In creating role-play situations, there are a number of useful design considerations. Within the situation itself and the descriptions of the roles of individual players, it often is important that there be a broad range of human problems. Unless the role play is intended to demonstrate ineffective behavior, participants should be given an opportunity to behave effectively. This is particularly true if the major objective of the role play is to develop skills, in which case the emphasis should be on acknowledging and reinforcing the desired results.

In the role-play situation it is ideal to have conflict and variety. As is stated previously, it generally is desirable to avoid getting too close to actual, current organizational situations. Referring to the texts of prepared role plays can provide examples of the design considerations discussed here.

CHOICE OF ROLE-PLAY PROBLEMS

There are many types of problems that can be suggested for creating role-play situations. It is possible to focus on personal problem behaviors such as being unable to say no or being shy. Problems indigenous to leadership situations can be set up easily for role playing; boss-subordinate interactions lend themselves to exploration, and performance appraisal—a special type of boss-subordinate behavior—can be studied effectively. It is easy to establish role-play situations that simulate various aspects of staff meetings, such as the influence of hidden agendas on the conduct of the meeting. Integration problems, such as a "we-they" attitude, also can be studied effectively. Peer relationships between colleagues can be role played, too. Other types of organizational problems include increasing costs, budget meetings, organizational change and resistance, interdepartmental competition, and so on. A basic type of role play establishes a situation between two people in which one has a problem or message to deliver to the other, and the second person's role is to respond and deal with the first person. It is perhaps more ambitious but entirely possible to design role plays that explore any aspect of a functioning organization and/or several participants. If feasible, role plays can be developed to meet specific organizational needs and goals. Through interviews or written surveys, managers and potential participants can be asked to

suggest program objectives and to supply pertinent data. Analyses of current data and statements of training needs also will help to pinpoint critical issues. As has been suggested earlier, it probably is wise *not* to use an issue that currently is "hot," unless there is a good chance of resolving it through the role play. An option is to select a similar problem that exemplifies the attitudes and skills needed to solve it.

DIMENSIONS OF ROLE-PLAY STRUCTURE

We can identify at least four common dimensions of role-play structure: the extent of active involvement, the degree of situational structure, the amount of role multiplicity, and the degree of nonverbal emphasis. Each of these is discussed below.

Extent of Active Involvement

A role play can be acted out by several groups at once or by only one group. The total number of participants will affect the facilitator's decision about which design to use; it is obvious that one could not have four role-play groups of five persons each if the total number of participants were ten.

However, the role-play design typically does allow the facilitator a choice regarding the extent of active involvement.

Multiple-Group Role Playing

In the *multiple role play*, several groups or pairs are established. These groups then act out the same role play simultaneously—often in the same room. These groups may or may not include observers. If they do, they usually receive reports from their observers while still in the small groups. Then these reports, or the most cogent aspects of them, are reported back to the total group in a large, general session. This type of role play is probably the most common and, in general, is easier to handle and discuss. In addition, it has certain advantages.

- If the total group is too large for all members to participate in one role play, it gives maximum opportunity for everyone to participate, to try out new attitudes and behaviors.

- It involves all members of the participant group in the problem. This helps shy or reticent group members (or those who are concerned because they have not role played before) to overcome these feelings and become involved. Because all group members are interacting, all are taking similar risks, eliminating the embarrassment of being singled out and the need to "save face."

- If observer feedback is given in the small groups, it is not as embarrassing to individual role players. If all members of the group have a chance to participate, no individual feels singled out for evaluation and criticism.

- It enables comparisons to be made of the data from each group. Discussing each group's experiences and relating them to various actions of the role players is especially helpful. Because the roles are the same for all groups, participants realize that differences in outcome result from variations in group interactions.

Single-Group Role Playing

The *single-group role play,* however, in which one pair or group carries out the role play "on stage," in front of an audience, is especially appropriate for small groups (fewer than ten people). It also has several advantages, no matter what the size of the group.

- Because there are multiple observers, role players profit from the analytical discussion of their behaviors. People are often unaware of the effect of their actions on others and are more apt to believe several members with similar reactions than they would just one.

- Because all participants observe the same performance, it is possible to discuss the details that led to a particular effect. For example, the group can discuss the first appearance of defensive behavior on the part of one role player and then attempt to determine what behavior on someone else's part might have stimulated it.

- It aids in diagnosing the feelings of others through observation of their behavior. For example, if a person in the role play indicates that he will improve his work, the observers may be asked to comment on whether or not they believe that he means it. The role player then can be asked to report his true feelings, allowing the observers to check on the keenness of their observation skills.

- It is possible to stop the action at critical points and start again. Because only one set of behaviors occurs, the details that have been observed by everyone can be discussed, and individual role players can be given highly focused, immediate feedback on their behavior.

- It permits audience members to develop observational skills and to serve as external consultants to the role players. When a role play is stopped, some type of consultation can be used to start the role players on a different track.

- It is particularly useful for advanced or intensive training as well as for demonstrations of particular behaviors.

Single-group role playing gives the facilitator much more control over the role-play process and allows him or her to capitalize on what happens in the role play without losing sight of the learning goals.

Several variations of the single-group role play can be employed. These include:

- *Demonstrations or modeling.* Two volunteers or selected participants enact the situation while the other participants take notes and prepare to critique the interaction. The interaction then may be repeated with other role players.

- *Spontaneous role plays*. Role-play opportunities arise when someone is attempting to explain how a situation should be handled or when there is disagreement about whether a certain approach will work. The facilitator can say, "Let's experiment: you play the boss/employee/customer, and Pat will play the employee/supervisor/salesperson and will respond in the manner described."

As mentioned above, large groups can be divided into subgroups, and multiple role plays can be conducted simultaneously. This results in comparisons of processes and outcomes that provide rich data. However, it generally is *not* a good idea to have one group conduct the role play while the others merely watch. With the exception of those participants designated as observers and briefed on their function, all group members should have an opportunity to participate. Observers, especially those who have been coached on their role, are very useful in commenting on what happens during role plays.

Neither the single-group or the multiple-group role play is inherently preferable. They simply meet different training needs. The decision to use one procedure or another should be determined by the specific training objectives and the size of the group.

Degree of Situational Structure

A second dimension centers on the degree to which the role-play situation is structured. At one extreme a *scripted skit* calls for role players to act out their roles from a line-by-line script. This has the advantage of producing a highly focused demonstration, but the impact of the participants' spontaneous involvement in their roles is minimal.

Skit completion begins with a highly structured reading of lines but, at some point (often a conflict point), the script ends and the participants continue spontaneously. Perhaps the most common degree of structure is represented by the *dramatized case*, which is read silently and individually by each role player. The case may be in the form of a script, but more often simply is a page or so of background material. Role players pick up on the action in a spontaneous way, at the point at which the case leaves off. Both these approaches determine events up to a certain point, thereby controlling to some degree the type of problem or conflict that is experienced and dealt with. The higher the degree of structure, the more certain it is that specifically defined learning points will be made; however, it is possible that the participants' personal experiential involvement will be lower.

In unstructured or developmental role playing, there are no pre-prepared role instructions or background materials. The focus and structure of the role play is developed by the group as it discusses the issues and problems it wants to explore. This type of role playing calls for more sophistication and familiarity with the technology on the part of both the facilitator and the participant group, but it can be highly rewarding.

Later parts of this section present more of the differences between structured and unstructured role playing and provide guidelines for conducting both.

It is desirable in many settings to use structured role plays to obtain predictability, to aid group members in developing skill and knowledge, and to enable participants to feel comfortable in role play situations. Within this context, an unstructured session occasionally may be interjected or—if the facilitator feels comfortable and confident working with a given group over a relatively long period of time—the sessions may gradually become increasingly unstructured as the participants become more experimental, more open, and more spontaneous in relating to interpersonal or organizational problems.

Amount of Role Multiplicity

The third dimension of role-play structure is the degree of role multiplicity. For example, it often is desirable to have one or more persons act as backups or "alter egos" to a particular role player. This often is called "doubling." A kind of minimum condition would be assigning observers to be limited alter egos for a multiple role play. At the other extreme, an audience can be divided so that each segment identifies with one of the actors in a single-group, on-stage role play. The alter ego or "double" can coach the role player to help him or her to analyze a situation more objectively, can help keep the actor "in role," can provide support for the role player in difficult situations, and can step in and change places with the role player, if desirable. Using one or more alter egos actively involves more participants in the role play and is advantageous from that viewpoint. This technique and others are discussed in more detail in "Role-play Techniques," later in this section.

Degree of Nonverbal Emphasis

Finally, an often-neglected dimension concerns the degree of nonverbal emphasis in the role-play situation. Role plays can be used to focus exclusively on nonverbal behavior, through the use of pantomime for all communication, for example. Although this would generate awareness of nonverbal factors in interpersonal behavior, a more realistic approach might involve explicit role instructions that include directions about nonverbal behavior. Observers' instructions, too, can be designed to focus on this dimension.

Combinations

The four dimensions described here are independent and they can be combined in almost any imaginable way. A multiple role play could be designed with an incomplete (open-ended) script, using two alter egos and concerning scripted nonverbal behaviors. Equally possible is a single-group, on-stage design using a dramatized case with everyone but the role players being observers and with nonverbal behavior left unexamined. In

addition, there are several "techniques" or ways of structuring the roles and content of the role-play design to produce certain dynamics during the role-play enactment. These are discussed in "Role-Play Techniques," later in this section. The specific nature of any role-play design will depend on the learning goals, the specific content issues, the nature of the population, and the facilitator's preferences, along with other factors. Awareness of these dimensions and the range of choices they imply should help the facilitator in the design process.

Extent of Active Involvement
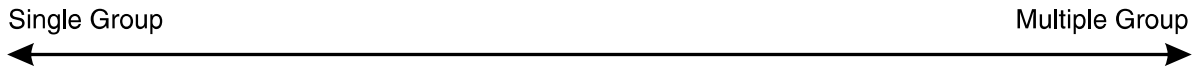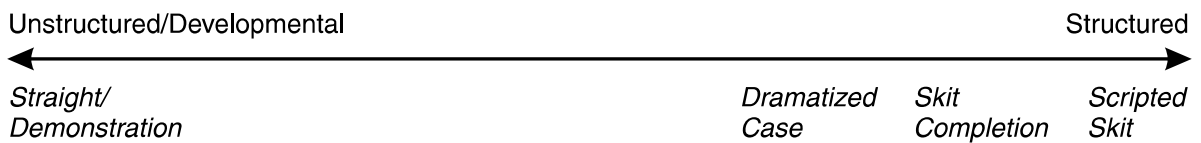
Single Group   Multiple Group

<--->

Degree of Situational Structure

Unstructured/Developmental   Structured

<--->

Straight/		*Dramatized*	*Skit*	*Scripted*
Demonstration		*Case*	*Completion*	*Skit*

Amount of Role Multiplicity

Individual Role   Shared Role

<--->

Monodrama,	*Mirroring*	*Role Rotation,*	*Multiple*	*Teams*
Empty Chair,		*Role Reversal,*	*Alter Ego/*	*Play*
Soliloquy		*Single Alter*	*Group*	*Roles*
		Ego/Doubling,	*Doubling*	
		Tag Team		

Degree of Nonverbal Emphasis

Nonverbal   Verbal

<--->

Pantomime	*Verbal with Emphasis*	*No Emphasis*
	on Nonverbal	*on Nonverbal*
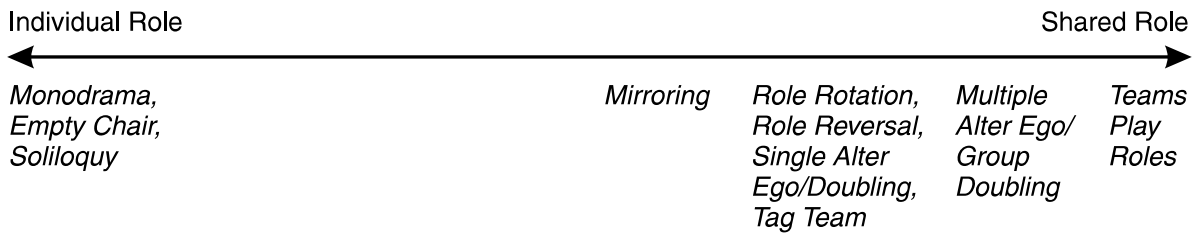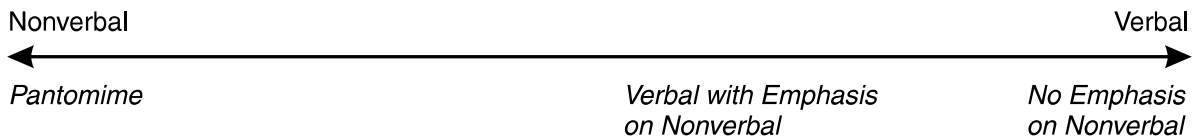
Dimensions of Role-Play Structure

DEVELOPMENT OF ROLE-PLAY MATERIALS

It is important to develop clear, concise, and highly focused materials for use in a role play. These materials will be of two kinds: information and directions for the facilitator and information and directions for the participants.

Materials for the Facilitator

A special section of notes for the facilitator should state the purpose or possible goals of the role play, including training outcomes and behavioral objectives, that is, when the

role play would be used and what the facilitator can expect to achieve by using it. The design of the role play and all accompanying materials should relate directly to and reinforce the critical problems and objectives that have been identified.

The facilitator's notes should include statements about the length of time required to conduct and process the role play (including any time needed for replaying), the degree of skill needed by the participants to engage in and process the role play, and the minimum and maximum numbers of participants. A step-by-step description should be provided for setting up the role-playing scene, and instructions should be provided for conducting the role play itself.

If there are any unusual aspects of the role-play design (e.g., for some reason, observers are not to receive background materials prior to observing the role play), the facilitator should be informed of this in the step-by-step directions for conducting the role play. In some role-play designs, information in addition to the original background materials and role instructions is to be provided to the participants at intervals during the actual role play. Such materials, in the form of "bulletins," "telegrams," "letters," notes, etc., are used to affect the role play as it progresses. If the facilitator is to introduce such materials into the role play, he or she should be told which materials are to be used and to whom and when each is to be presented. The notes also may suggest when the facilitator might want to introduce discussions of key issues.

The notes for the facilitator also may contain suggestions for facilitating the processing discussion after the role play has been acted out. This section may contain comments about the events and results that are most likely to occur in the role play and hints about how these might be discussed. It also can present the principles involved in the case and the kinds of skills required for dealing with the problems. (See "Role Playing and the Experiential Learning Cycle" in the discussion of "Conducting Role Plays" later in this section.)

The facilitator also should have a copy of all materials to be handed out to the participants and observers. The following is an example of typical materials for the facilitator.

SAMPLE INSTRUCTIONS FOR THE FACILITATOR[1]

"Handling Disagreement Through Effective Listening"

Goal (stated to the group)

To increase the ability of supervisors and managers to listen effectively when confronted with disagreement or resistance.

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[1] These instructions have been condensed to illustrate key elements. For more examples of structured role plays, see the Appendix in Shaw, Corsini, Blake and Mouton (1980) and the cases in Maier, Solem, and Maier (1975).

Behavioral Objectives

1. Participants will increase their skill in using questions, general statements, paraphrasing, and other nondirective or active-listening responses, specifically when confronted with feelings or ideas with which they may disagree.

2. Supervisors will increase their capacity to give and receive feedback without judgment or defensiveness.

Instructions (for the facilitator)

1. After a brief discussion of the purpose of the session, each participant is given either printed or verbal role-play instructions (see the sample that follows), then a brief, printed, background information sheet, if appropriate to the role play. The group then is divided into subgroups of three members each.

Sample Role-Play Instructions

During the role play, you will be asked to act out a situation, but you are not being asked to become a professional actor. It is better if you simply act as you would if you were in the position of the person described in your role instructions, as if it were "for real." For example, if you are in the role of a production manager, consider yourself to be the production manager rather than acting the way you think a production manager would. You may be asked to accept facts about your length of service, sex, family, affiliations, and previous experiences. Adopt these as your own and let your feelings and attitudes change as these imagined events or factors require.

During the course of the role play, issues or questions may arise that are not covered by you role instructions. If this occurs, feel free to make up facts that are appropriate to the circumstances. For example, if someone in the role play asks you how your wife or husband is, you may answer normally without altering the spirit of the role-play case. Do not make up facts that are inconsistent with your role.

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2. One member of each subgroup is designated as member A, another as member B, and the third as the observer. Each member is given a sheet of appropriate role instructions, and the observer is provided with a pencil and lapboard or other writing surface. Questions about role instructions are answered before the role play begins.

3. Members A and B in each group conduct the role play while member C observes. (If appropriate to the design, members A and B may switch roles and replay the scene, or may receive feedback from the observer and retry it using different approaches.)

4. A discussion of the role play is conducted, drawing out observer and participant comments in order to clarify the nature of the listening process and ways in which diverse viewpoints can be pursued. Discussion items include:

   a. Which responses by Member A seemed to encourage Member B to talk more and to be more open?

   b. What comments seemed to discourage Member B or put him or her on the defensive?

   c. Were the observer and member B quickly able to discern Member A's opinions, or did he or she maintain an open listening posture?

   d. Construct a list of the kinds of comments, approaches, and attitudes that seem to improve the quality of listening.

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Observer Guide

During the course of the role play, observe Member A. Does he or she (check statements that apply):

_____   Quickly reveal his or her own point of view and push for it?

_____   Ask leading or loaded questions that suggest a desired answer?

_____   Seem interested in drawing out and understanding Member B's point of view?

_____   Occasionally paraphrase what Member B said or use other nondirective techniques to draw out additional information?

Comment on ways in which Member A kept the discussion going.

- -

Role Instructions for Participants

Role instructions for Members A and B and the observer are as follows:

Role Instructions for Member A

Your partner (role player B) will initiate a discussion with you. Your task during the role-playing phase of this activity is to listen and ask questions without pursuing your own opinion or attempting to force the other person into a conclusion that agrees with your own. You may, from time to time, state ideas; however, you are not to attempt to change the other person's point of view. Your goal is to listen and understand. The following information may guide you in this effort.

Appropriate Listening Responses

1. General questions (e.g., "What do you think?" "What happened?") are useful finding out more about what another person thinks. Loaded questions or questions that lead to a predetermined answer (e.g., "Don't you think that...?") are inappropriate.

2. Statements that encourage the person to talk (e.g., "Tell me more about it") tend to increase communication.

3. Paraphrasing or "mirroring" the other person's statements or giving nondirective responses that pick up what the other person has said can be useful. For example, if a person says, "I think women are becoming too aggressive in trying to get ahead," you might respond, "I see, you think that women are abrasive in the way in which they are pursuing their goals." This kind of reply encourages the other person to talk and to expand or clarify the statement.

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Role Instructions for Member B

During the role-play situation, you are to express your opinions freely. If you encounter resistance or disagreement, you may deal with it in any way you see fit. You are asked not to play apart but to express your genuine feelings about the issue and to pursue your point of view in order to clarify the issue, influence the other person's opinion, or simply get your own position stated. You are to initiate the discussion by introducing your point of view about this statement: *Women are treated unfairly in most organizations. Males dominate and often are unaware of their chauvinistic behavior.*

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Materials for the Participants

Each participant, whether role player or observer, should receive an introduction to the role play, containing a *description of the general problem or situation.* In many cases, this introduction also contains a statement of the goals and issues that will be confronted during the role play. This usually is handed out to role players and observers and may be read aloud by the facilitator. This lets everyone know, at the same time, the same degree of background information. This information is separate from the individual role instructions. Ordinarily this consists of some background data—a scenario—to set the scene for the participants and any observers. In a business role play, for example, this data could include the name of the company, the names and positions of the role players, and any general historical or background information that is to be known to all role players and observers (whatever would be known to all members of the company in the situation to be role played). All participant materials, including background information, should be readable and not too lengthy or too complicated for a participant to remember.

Information about how the role play will be conducted and what the participants can expect to happen can be written and distributed to participants or it can be announced verbally by the facilitator. Whether written instructions are needed will depend on how complicated or detailed the role-play design is.

The *role descriptions* (a separate one for each role player) should be written in uncomplicated language and should include some hints about how to play the role. A role description may be limited to the name and description of the actual role that the participant will play, along with information about who the other participants are, or it may include attitudes, values, preferences, agenda items, and/or other characteristics to be depicted by the role player.

Most often, an individual role player will not know what information is contained in the role descriptions given to other role players. The role player should be told whether particular information pertaining to his or her character (such as hidden agendas, special information, etc.) is to be kept secret or revealed in the course of the role play. The role description also should state explicitly whether the role player is to (a) act as he or she would in real life, (b) adhere strictly to the role instructions/description, or (c) act as the role description indicates but change his/her position if appropriate as the role play progresses. The first and last choices are the ones most often preferred.

In writing the role descriptions and background information, it is important to include everything that the role players need to know in order to "get into" their roles. It also is important *not* to include much more. Role players easily can be overwhelmed by historical and numerical data and can put unnecessary energy into remembering such details. It usually is best if details are generalized as much as possible. In a business role play, company data such as a hierarchical chart and other necessary figures can be provided in written form for the role players to refer to during the enactment. In an actual business situation, people would be likely to have such information in written form. If the role is of a "recently appointed" manager, so much the better. In this way, detailed knowledge is not required of role player.

In most role-play designs, background data sheets need to be provided for all observers—those persons in the "audience" who will not act in the role play. It also is highly desirable for observers to have *observation forms*, paper-and-pencil instruments to focus their reactions. Without such forms, there may be a tendency for observers to overpersonalize their observations and to fail to focus on the specific learnings intended. These forms may simply leave room for specific observations to be noted or they may contain tables for the collection of data, especially if results from several groups will be compared. If this is the case, sample tables should be included to illustrate how the data is to be recorded.

In unstructured/developmental role playing, a more free-form of role playing, participants create their own roles instead of using prepared, written role materials. In this case, the participants should receive an instruction sheet telling them how to proceed in defining the critical elements of the situation and in developing interactions that will explore and expand on the situation. Although this approach minimizes the

need for printed materials, it often is more difficult for the facilitator to handle, in that the outcome is less predictable and may not be consistent with the expressed learning goals. This type of role playing will be discussed later in this section.

In summary, the following are things to consider when developing a role play:

Problem Situation

- Does role-play problem situation relate to group's learning needs/further group's training goals?
- Do role players have an opportunity to behave effectively?

Structure

- Extent of active involvement (multiple group vs. single group)
- Degree of situational structure (structured vs. unstructured/developmental role play)
- Amount of role multiplicity (individual vs. shared roles)
- Degree of nonverbal emphasis

Materials for Facilitator

- Notes for facilitator (goals, training outcomes and behavioral objectives, timing, minimum and maximum group size, physical setting, preparation, step-by-step instruction for role play, facilitating and processing guidelines)
- Introduction to role play (background information for participants)
- Role instructions/descriptions for all role players
- Any background data sheets for role players and/or observers
- Observers' instructions/guide
- Handouts/lecturette materials

Materials for Participants

- Introduction to role play (description of problem situation, scenario, background information)
- Role instructions/descriptions (a separate sheet for each role player)
- Any background data sheets for role players and/or observers

- Observers' instructions/guide
- Topical handouts (printed lecturettes, theoretical input, models)

THE CLASSIC ROLE PLAY: MAIER'S "THE NEW TRUCK DILEMMA"

A well-known, excellent role-play design is Norman R.F. Maier's "The New Truck Dilemma," in *The Role-Play Technique* (Maier, Solem, & Maier, 1975). The learning point—conceptual, with a secondary, skill-building focus—can be stated as follows: Problem situations can be categorized in terms of (1) the requirements regarding the quality of the solution and (2) the importance of acceptance of the solution by those who must carry it out. Situations in which the latter issue is predominant typically are questions of fairness. In such cases the group leader obtains the best results by acting as a facilitator rather than as an active participant and by allowing group members to arrive at a mutually acceptable (and fair) solution. In summary, the learning objectives of this role play are:

1. To provide the experiential groundwork for understanding the quality/acceptance dimensions of problem solving.

2. To demonstrate the positive effects of nondirective, facilitative leadership in a problem situation in which acceptance is the primary issue.

The stimulus materials are brief roles and a description of the situation to induce appropriate role sets. Participants become telephone-company service persons who are meeting with their boss. The roles give each person a reason for wanting a new truck that has become available; the supervisor is told to let the workers make the decision. In most groups, the desired behaviors occur as a result of the role-instruction materials. When such behaviors do not occur, the common reason is the supervisor's insistence on making the decision. In this case, however, the results also illustrate the learning point, though in a negative way.

When all groups have finished role playing, the "supervisors" report results, which are tabulated on a simple chart prepared by the facilitator during the last few minutes of the role play. These results are then discussed by the entire group, with the facilitator drawing out the learnings.

The complete text of "The New Truck Dilemma" is presented in Appendix 2 at the end of this volume. Anyone who is interested in writing role plays might benefit from studying this classic case.

❚ CONDUCTING ROLE PLAYS

THE CYCLE OF CHANGE

Unfreezing

Most people's behavioral patterns are habitual or "frozen." Little thought is given to the approach or procedure. As a result, individuals may not realize that their behavior in a given case is inappropriate or ineffective.

In role playing, awareness of untested assumptions is heightened, and people have a chance to test the effects on others of their assumptions and behaviors. As awareness grows, members of the role-playing group become self-conscious, and old behavioral patterns are "unfrozen." This examination of old patterns and the anxiety that accompanies it is a crucial step in opening up to change.

Changing

The next steps in the change cycle are: developing an understanding of the problem or ineffective behavior; developing several alternative actions or behaviors that might resolve the problem; and actually trying out one or more of these alternatives. Role playing is an excellent means of accomplishing these steps. Once the individual understands the need for change, he or she must explore the situation in order to develop alternative solutions that have a reasonable chance of being successful. Acting out the problem situation is an excellent way to examine and explore it.

In a role play, people can *try* out new behaviors in a safe setting and determine which alternatives work best. They can receive constructive feedback from others and can *practice* behaviors and try variations. Thus, long periods of real-life time can be simulated in a few role-playing sessions.

Refreezing

When people practice new behavior in a role-play setting, they are more apt to try it later in real-life situations. Employing the new behavior in actual life situations is the only way to accomplish the third part of the change process, refreezing. When the parties involved in the role play are the same ones as those in the real-life situation, there is even greater likelihood that the changed behavioral pattern will be successful and will continue over time, because all parties have changed expectations and because they support the change effort. Support or reinforcement for new behavior is very important in sustaining it.

As participants become used to engaging in role plays, they will take less time to unfreeze. As they become comfortable with the technique, they will become more flexible and experimental, better able to test assumptions and to explore and experiment with new procedures and behaviors. They also will learn to give constructive, accurate, feedback to others and will provide more effective support for change.

PREPARING FOR ROLE PLAYING

In order to realize the maximum learning potential of the role-play technique, the facilitator should be aware of some special considerations in utilizing this technology. Perhaps the most important is to keep the objectives of the role play and the facilitator's role clear throughout the entire process. The facilitator needs to be confident that the objectives are being met and that the activities can be focused adequately within a narrow range of learning goals. Toward this end, it is helpful if the participants as well as the organization are involved in setting goals for the session.

Participant involvement in planning the role-play session helps to create a sense of ownership in the outcomes and also helps to clarify the methodology. Participants often can suggest key problem situations, issues, and areas for practice and guidance. This information can be gathered before the training session by means of interviews, questionnaires, or small-group discussions.

From the beginning, it is important for the facilitator to prepare for the role play by establishing the proper mood and expectations, keeping the objectives continuously clear, and making certain that the entire experience has an obvious logic to it. The importance of establishing a proper mind-set early cannot be overemphasized. Because the term "role playing" can connote "fun and games" for some people, it is up to the facilitator to establish that the activity is intended to promote learning. The nature of the role play and the objectives should be specified beforehand, except in a situation intended to explore covert interpersonal processes, such as the use and impact of hidden agendas. Even in such a case, however, the facilitator needs to keep the training objectives in mind at all times.

Size of Groups

The size of the group usually will range from ten to fifty participants. The ideal size for single-group role playing is around twelve to fifteen; for multiple-group role playing it is between twenty-five and fifty. The skill and experience of the facilitator and the size of the room also must be taken into consideration. If these are optimal, a larger group can be handled for each type of role playing.

Managing Differences in Rank

It generally is not a good idea to mix people of different rank who work together. Differences in status create attitudes and affect that can be brought into the training situation and can affect the interaction. This may not be true in a relatively small

organization in which all personnel are well acquainted with one another and respond to one another's personalities rather than to their positions. The problem of rank also is affected by the attitudes of the people involved. If the training group is composed of people from different organizations who do not know one another, or if the facilitator is sure enough of his or her skills and of the nonthreatening nature of the role play to be used, differences in rank may not matter. If the facilitator thinks that they would matter, it would be wise to choose a training technology other than role playing.

On the other hand, it usually is a good idea to have a mixture of people from similar-level jobs but from different departments or divisions within an organization. This helps the participants to learn that other people have situations and problems similar to their own. It allows the exchange of opinions and experiences that can enrich the training. It also contributes to a better understanding of the other parts of the organization and a networking function across levels. These effects can improve communication, help in the development of a broader view of the organization, and ease the process of lateral transfers.

Accommodating Both Sexes

The presence of both men and women in a role play is probably more of a benefit than a problem. A person can take the role of a member of the opposite sex if necessary, but more often the role description merely can be changed to fit the sex of the role player. If the role play is to focus on sexual issues or stereotypes, it can be conducted first with all participants playing members of their own sex and then repeated with men and women exchanging roles and playing members of the opposite sex.

Physical Accommodations

The room need only be large enough to comfortably accommodate the action and the observers, if there are any. Even when multiple role playing is going on, the noise from adjacent groups tends to stimulate the action rather than detract from it. In general, "large enough" means twenty-five to fifty square feet per participant. A room that is only slightly too small is preferable to one that is clearly too large.

The room should be located to minimize distractions such as telephones and voices. Care should be taken so that "outsiders"— people who are not participating in the role play—do not enter the room, look in, or overhear the role play.

The most important criterion for furniture is flexibility. Many role plays call for basic "props" such as a table and chairs to represent desks, conference tables, desk chairs, sofas, etc. The physical props need not be elaborate; the role players can use their imaginations.

Movable chairs also allow participants to form groups of varying size for role playing, observation, and discussion. This permits maximum visual and verbal communication among members of the group. If a room with movable chairs is not available, another option is to use an actual office in which the furniture lends itself to the requirements of the role play. If the group is large, auditorium seating is all right if

there is a stage area with movable furniture available for role playing. This at least will ensure that all observers can see all aspects of the role play.

The facilitator will want to have newsprint flip charts and easels on which to place them, felt-tipped markers, and masking tape for posting sheets of newsprint containing lists, posters, etc. that result from the group's discussions.

Each observer should be furnished with a portable writing surface such as a lapboard or notebook on which to take notes and with paper (or observation forms) and pens or pencils.

INTRODUCING THE ROLE PLAY

Climate Setting

The first step in beginning the training session is introducing oneself appropriately, telling the participants that they will be participating in a role play and why, and briefly describing what will happen during the event.

The next, critical, step is establishing an open, experimental climate. If participants do not have experience in role playing, they may feel uncomfortable about "making fools of themselves in front of other people." It is important to allow them to become acquainted with one another and to establish a climate of support and experimentation before initiating a role play. If the participants do not know one another, getting-acquainted activities may be conducted to "warm up" the group.

It is extremely important that the feedback to be given to role players by other role players and observers be constructive and useful. Guidelines for giving and receiving feedback (Hanson, 1975, 1981) can be distributed and discussed before the role play, as part of the introduction of norms and standards for the training session. For your convenience, these guidelines are reprinted in Appendix 3 at the end of this volume.

People are likely to be unwilling to participate in a role play if past experience has shown them that the role play is used as a basis for free-for-all criticism and evaluation. When people feel incompetent, defensive, or angry, they are not apt to be open to learning. The preparation for the role play should include a statement by the facilitator about the purpose of feedback and the ways in which it is to be used during the session.

Group members also must understand the topics, problems, and principles with which they will be dealing and the norms and standards under which they will be operating. In most cases, the goals or objectives of the session should be specified. The participants then can be asked to identify their own personal objectives for the session, whether they be the acquisition of knowledge or skill or the development of more effective attitudes and feelings. Participants should be encouraged to "buy into" the role-play experience. The group members' feelings as well as their thoughts must be involved if the role play is to be realistic and effective.

If appropriate, a lecturette, videotape, or other technique can be used to define key issues and focus the group's attention on problems that will be addressed during the role

play. For example, a videotape on performance review, meeting management, or sales techniques could be shown, and the group members then could be asked to discuss the principles presented and to examine the quality of interaction portrayed. The facilitator can ask questions such as "How do you feel when . . . ?," "What has happened in your past experience with this topic that made it easy for you to respond/participate . . . ?," and "What do you think are the most important considerations/things to do when you are engaged in a discussion of . . . ?" Key points can be listed on a newsprint poster. This type of discussion can help group members to become more aware of the principles, techniques, and problems encountered in the topic of the role play. Such awareness can help to increase their readiness to reexamine past experiences and practice new skills. In some cases, the discussion can serve as the basis for the role-play format, and the observers' guidelines can include tallies and descriptions of the key behaviors that have been identified by the group.

In structured role playing, the format for the role play is preplanned and assigned by the facilitator. For example, the facilitator may outline a procedure for handling customer complaints, such as (a) listen to the customer, (b) get details about the complaint, (c) indicate policy while remaining polite and helpful, (d) suggest a course of action. Some group members then would be asked to play the role of the complaining customer while others play the organizational representative.

Assigning Roles

In setting up the situation, it is important to give an overview to establish who is going to be involved and how. Participants can be selected by one of four basic models: using volunteers, typecasting participants on the basis of their personalities, making assignments on the basis of some other knowledge of participants, and utilizing role reversals. The latter might, for example, involve having someone with high status play a low-status position and vice versa. Roles (including that of observer) can be assigned by having group members count off, then announcing "Member number one in each group will play the employee, member two will play the supervisor, member three will serve as observer," etc.

If multiple-group role playing is to be employed, small groups are formed, as appropriate to the number of participants present and the number needed for each role-play group. Roles are assigned within each group. The participants are informed that each group will enact the same role play and that all groups will conduct the enactment simultaneously. Additional facilitators may be needed if there are several groups.

After participants understand whether they are to be role players or observers, and how they will be grouped, the facilitator can hand out the written background sheets and role instructions and allow adequate time for the participants to read them. The facilitator should be thoroughly familiar with all role-play materials before attempting to use them with a group. The facilitator then can answer questions and consult with any participants who have special role instructions. The facilitator should make it clear that the role players will not be allowed to reexamine their roles once the interaction has

begun. In briefing role players, the facilitator should not make the mistake of assuming that people know how to get into their roles; a bit of coaching on role taking may be necessary.

A very effective way of briefing role players is to designate support individuals or groups that can function as coaches during caucusing sessions. These groups can be established either randomly or through volunteering, and they can provide each role player with a support base for getting into and staying in role.

A variation on the support group is the reference group, consisting of participants with similar jobs. For example, secretaries in a workshop could be the reference group for an individual who is going to role play a secretary.

In instructing participants on how to role play, Maier, Solem, and Maier's (1975) seven directions, as outlined below, are useful.

1. Accept and adopt the facts of the role.
2. *Be* the role.
3. You may change your attitude(s) during the action.
4. Let yourself become emotionally aroused.
5. Make up data, if necessary, but do not alter the spirit of the case.
6. Avoid consulting your role notes during the role play.
7. Do not overact; it may detract from the learning goals.

These instructions also can be reproduced on the roledescription sheets that are handed out to role players prior to the activity. The role instructions should clarify whether role players are to (a) act as they personally would in such a situation, (b) act as their character is described in the role instructions, or (c) remain true to the character as generally described but take it from there as the situation develops.

Before actually beginning the role play, the facilitator should allow time for the participants to think privately in order to assume the characters of their roles. It also is a good idea to describe the procedure and read all instructions before people begin to role play. If they are interrupted after they are "into the swing of things," they may not be able to reestablish their mood.

Briefing Observers

In briefing observers, it is important to clarify their tasks. Are they simply observers or are they permitted to talk with one another? Are they expected to make a report after the role play? Are they going to meet with individuals? It is preferable to provide observers with printed observation sheets, generally in instrument format. Any such forms for recording observations should be explained. If the observers are to be permitted to intervene in the role play with process observations, this procedure should be made explicit. If the observers are to function as alter egos, this role probably should be demonstrated by the facilitator. In the example given previously of a customer complaint scenario, half the observers in a group might be asked to observe the complaining

customer's behavior and report on what they perceive to be his or her feelings, attitudes, and concerns, while the other half of the observers watch the member who is handling the complaint and report on that person's feelings, attitudes, concerns, and behaviors.

DIRECTING THE ACTION

Staging

Once the role players and observers are familiar with their roles, the actual interchange can begin. In staging a role play, several arrangements suggest themselves. The "group-on-group" role play, conducted in the center of the room with observers circled around it, increases the sense of involvement. Alternatively, the role play can be staged with the observers in a semicircular arrangement so that the role players can be seen from the front. In multiple-group role plays, each group should be arranged in such a way that it can interact with minimal interruption from the other groups. If there are several groups, or if the role play is likely to be fairly noisy, the role plays can be conducted in separate rooms.

Timing

Most role plays are conducted for specific periods of time. In some designs, the actors play their roles until resolution is achieved or time is called. In other designs, the action is either stopped after a specified amount of time or completed, then the players *exchange* roles, and the role players begin again from the start. This provides an opportunity to explore the situation from another person's point of view. Other variations call for the action to be stopped so the role players can describe their thoughts and feelings and so the observers or role players can comment on how the role play is going and make suggestions about what the role players might do or might have done to improve the communication or situation. Then the role play begins again with the participants in the same roles but trying new skills/strategies, alternative ways for dealing with the situation. In any case, the facilitator should give adequate time warnings.

Facilitating

A structured role play is directed by the design itself, by the role instructions, background information, and so on that are provided. The facilitator rarely intervenes except for procedural matters or interventions that are part of the role-play structure. (See the discussion that follows on the use of such interventions.) However, the facilitator must be aware of what is likely to happen in the role play and must have a sense of the relative importance of situations and events. He or she must use tact and sensitivity in dealing with the role players as they work through problem situations. The ability to simplify or straighten out complexities, persuasiveness, and the ability to help people to see and understand what is going on are key facilitator attributes. The

facilitator must keep participants interested and involved as well as help them to assess the situation and make good decisions. By *modeling openness, sincerity, and concern for the feelings of others*, the facilitator will help the participants to function together effectively.

While the role play is being conducted, the facilitator must be able to modulate the intensity of the event. This can be effected in a number of ways. Humor can be used to lighten a heavy interaction; the role play can be put "on hold"; participants can be assigned different roles during the role play; the interaction can be stimulated through intervention on the part of the facilitator; or role players can be instructed to remain in their roles. The facilitator can tell participants to reread their role descriptions and coach one another on roles, and then there can be interim caucuses between observers and support or reference groups and/or the role players. What the facilitator should *not* do is act as "expert" and tell the participants what to do. Role playing is effective for participants because it is highly experiential. For this reason also, the role play should be ended before it either becomes boring or loses its focus on the learning goals.

In some role-play designs, an element of deception may be built in in order to heighten learnings about listening, leadership, cooperation, information sharing, etc. In such situations, some participants may be unaware of the roles, hidden agendas, or information assigned to other role players. The facilitator must be prepared to process this type of "manipulation" and must weigh the use of such activities in terms of benefits versus backlash.

It is important for the facilitator to be thorough in working all the way through the experiential learning cycle explained later in this section. Forms and guided procedures can be extremely helpful for publishing experiential data, but the facilitator must assist the participants in using the forms and by explaining and tracking the procedures.

Using Interventions

Interventions are built into many structured role plays. These interventions have numerous purposes: they may be designed to add interest to the role play, to stimulate or challenge the role players, to allow participants to experience different points of view, or to allow for the sharing of feedback and information. Typical interventions are as follows.

1. *Observers.* One or more people are assigned various observation functions during the role play. In multiplegroup role playing, it is typical to have two people enact a role play dialogue (e.g., manager-subordinate, salesperson-customer, etc.) while other members of the group observe the interaction, taking notes as they watch. Observers usually have prepared formats for note taking and reporting; these guidelines reflect the issues and goals of the session. In some designs, each observer is instructed to observe a specific role player; in others, each observer is instructed to observe a specific type of behavior. The possibilities for using observers are great, and should be suited to the objectives of the session and the nature of the role play itself.

2. *Role Rotation*. In order to expose various dimensions of the problem and to contrast various techniques, approaches, and styles, role players may be asked to rotate or exchange roles. In a demonstration role play, the key player (the one with the presenting problem or message) may be asked to take on the role of the responding player to demonstrate his or her understanding of that role as it was portrayed in the previous enactment. In multiple role playing, it often is useful to have members of each role-playing group rotate positions (for example, the manager becomes the subordinate, the subordinate becomes the observer, and the observer becomes the manager). There is some flexibility in how the exchanging or switching of roles can be accomplished; as with other interventions, it should be designed to further the understanding of the role players and the goals of the role-play session.

3. *Feedback from Role Players Themselves*. Participants in the role play may be asked to fill out reaction sheets after the role play has ended. For example, the person who played the role of a counselor can be given a response sheet designed to identify major areas of resistance and the degree to which he or she felt that empathy was established. Simultaneously, the person who played the role of counselee could be asked to answer questions from that point of view. By exchanging feedback after the enactment, the participants can become more aware of differences in perception, gaps in understanding, and opportunities for using new skills in interpersonal situations.

4. *Information Sharing*. After the role-play has ended, participants can be provided with descriptions of situations that are comparable to the one with which they have been dealing. For example, in a multiple role-play situation in which triads have been playing the roles of shop foreman, shop steward, and employee, the role players can be asked to develop a course of action based on their role-played discussion. Comparative courses of action or solutions then can be distributed to members of the triads so that they can compare their results with the results of other groups, with "ideal" solutions, or with solutions that are compatible with union contracts. It is important to note that when "ideal" or comparative solutions are distributed, role players who have invested energy and thought into developing solutions to which they are committed may become defensive. This can be avoided by introducing contrasting (or what may look like "recommended") solutions early in the process so that group members have a chance to integrate these solutions into their own plans and to try out new approaches rather than simply to receive information after the fact.

Second Enactments

It often is desirable to provide opportunities for role-play participants to try out new techniques and new approaches, based on their experiences during the first enactment and on the feedback they have received from one another and from observers. In some

cases, the second enactment is designed to allow players to switch or rotate roles. In other situations, new input is provided by means of lecturettes, videotapes, or other sources of information. During the second role play, then, participants can utilize the additional information that they have received.

In many designs, the participants begin to work on problems, stop and receive feedback, and then restart the role play. Each new attempt provides an opportunity to apply new insights, new techniques or approaches, and new information.

DEROLING

It is important to remember that the initial attitudes adopted by role players may change, and change can produce several different emotions. Events in the process of role playing may alter attitudes and create pleasant or unpleasant feelings. As a result, the people involved may have some of the same emotional experiences that occur in real-life situations. This is one of the most important values in role playing and serves as a rehearsal for practical problems. As participants become experienced in role-playing situations, they learn to feel the part, and role-playing behavior becomes more and more authentic.

The facilitator needs to help the participants to unwind after the role play has ended. A role play may become very intense, or participants may identify aspects of themselves that they wish to explore further, so ample time must be allowed for them to talk together or to seek personal time with the staff members. Getting participants out of the content of the roles is crucial for effective processing.

While deroling the role players after the role play, the facilitator may invite them to "ventilate" or to explore in an expressive way the feelings that they experienced during the activity. They also can be invited to finish unfinished business by making statements such as "If I had been the boss . . . ." Role players often can separate themselves from the role through a written analysis of the role-play situation afterwards. Sometimes this process can be stimulated by having individual consultants work with role players in order to "finish" the experience.

FEEDBACK

In structured role-play designs, which have predetermined goals and outcomes, giving and receiving feedback generally is designed into the overall process. The instructions for the facilitator often specify where, when, and how feedback will occur.

Managing the Feedback Process

Participants need to be reminded that sometimes people do learn from experience. A golfer who slices the ball receives negative feedback on his stroke because the ball does not go where he wanted it to go. Likewise, some role-play feedback comes from the situation itself. Role players may be well aware of the fact that they have not solved a

problem or that one of them has found resistance or hostility in another role player. Much learning can occur as the result of an individual's experiences during and reactions to the role play, without the added advantage of feedback from other sources. Although feedback from others often can help to organize, relate, validate, and further refine it, personal, intuitive learning should be encouraged and drawn out for discussion. Starting the post-role play discussion with personal reactions parallels the "publishing" phase of the experiential learning cycle and helps to warm up the participants for the process of giving and receiving feedback from one another.

On the other hand, some individuals may not be aware of the nature of their impact; they may be so wrapped up in their own actions that they fail to notice how these actions affect or appear to others. Furthermore, many skills are enhanced primarily through obtaining instruction and feedback while practicing and applying what has been learned.

Usually feedback is provided by the role players (to one another) and the observers. Role players often can give one another interpersonal feedback in role as a means of ending the activity and getting themselves beyond it in order to explore its generalizable learning. This helps them to derole and prepares them to receive feedback from the observers. Observers may have been assigned to specific role players ("observer A will watch and take notes on the performance of role player A") or they may have been instructed to watch for specific behaviors or outcomes. In some designs, the observers' reports are generalized. Feedback also can be solicited by polling the group; e.g., the facilitator can ask, "How many of you in the group would be willing to change your mind regarding the problem issue, based on the discussion that has just occurred?"

The impact of feedback can be either positive or negative. Positive feedback is supportive and affirming. Although negative feedback does have a purpose, i.e., it is information to be dealt with and usually is intended to aid in correction, it can leave an individual feeling ineffective or diminished. It is important that the facilitator create an atmosphere in which feedback can be used by explaining that feedback and other forms of postenactment analysis are aimed at providing new insights, new opportunities, and support, rather than evaluation. *The best precaution against overly critical or unconstructive feedback is to design the feedback process so that it creates awareness and sensitivity rather than serving as a vehicle for criticism and evaluation.* Appendix 3 at the end of this volume contains guidelines for giving and receiving feedback. These can be used to prepare the participants for this important interaction.

A basic approach in managing feedback is to ask for affirmative feedback, e.g., "What are some of the things the manager did that were particularly effective?" or "In what ways did the counselor indicate his or her concern regarding the other person's feelings?" To encourage participants—both role players and observers—to focus their learning, the facilitator can instruct them to concentrate on comparing feelings with observable behavior and to develop generalizations about the worlds that they ordinarily work in, while avoiding any discussion about personalities within the role-play situation.

Another approach is to focus on the procedure rather than the role player. The facilitator might say, "We spoke earlier of a four-step procedure in handling customer

complaints. Which of the steps did you see demonstrated during the last role play?" Or, "Which steps do you think might have been used to greater advantage during the role play?"

The facilitator also should reiterate the objectives of the activity. Often it is useful if the objectives are posted on newsprint in the training room.

The problem or situation around which the role play was designed can be examined from a theoretical point of view, the instance under examination serving as an example for further generalization. This type of discussion tends to be productive because the language is precise and can be related to actual behavior and shared experience. The facilitator needs to be particularly careful to encourage the generalizing and applying aspects of the experiential learning cycle, as these often are omitted, leaving practical, transferable learning to chance.

Types of Feedback

Feedback Against Standards or Criteria

It is not always possible to obtain feedback based on results. For example, instructors have difficulty in judging their own effectiveness because the competencies, motivations, and backgrounds of their students vary so greatly. It frequently may be necessary to establish criteria other than, or in addition to, bottomline results.

It also is often true that inability to obtain bottom-line results may be because of performance problems or other factors that need to be identified clearly and then improved before they can contribute to basic objectives. For example, performance regarding patient care in one section of a hospital may be lower than in another section. It may be measured by patient reactions, mistakes made in dispensing medication, and other specific criteria. However, the hospital personnel in the first section may not know how to improve the quality of patient care even though they are aware that it needs to be done. It may be necessary to isolate a variety of measurable performance criteria in order to achieve a broader objective in examining patient care. The nurses may need feedback on practices in dispensing medication; aides may need training in interpersonal skills and other dimensions of their relationships with patients. In another example, to tell a salesperson "You are not making enough sales" may be inadequate feedback to aid that person in improving his or her performance. It may be necessary to identify specific performance factors such as sales prospecting, the ability to handle objections, the ability to close the sale, and so on. In applying this approach to role playing, the facilitator must establish—or engage the group in establishing—criteria for the procedure or skill being practiced.

Impressionistic Feedback

In many situations it is almost impossible to develop "hard" criteria for measuring performance and providing feedback. For example, a fund raiser may follow all the

prescribed rules in dealing with potential donors but still admit that something is lacking. A casual observer might say, "I get the impression that you really don't enjoy your job," or "It seems to me that you just aren't enthusiastic," or "I don't think that you are a very good listener." In many cases it is possible to convert these impressions into more tangible and specific performance criteria. However, in many other situations, impressions, perceptions, and reactions are just as important as hard data. If, for example, a subordinate gives a manager the impression that the subordinate is hostile or resentful, it really does not matter very much whether it is a hard fact. The subordinate may think of himself as "shy" or "self-possessed," but if his manager sees him as "aloof" or "hostile," it is likely to cause problems for him on the job.

Role playing provides many opportunities for giving and receiving impressionistic feedback. Because many impressions can stand in the way of effective interpersonal relations or other types of effectiveness and success, the information received from this type of feedback can be very valuable.

Data-Based Feedback

There are numerous ways by which to make feedback more accurate. All involve some structured methods for recording what the role players do. These methods can range from merely having the observers write down what they see, to giving the observers written observation guides, to administering a written questionnaire to all participants during or after the role play.

The most complete record can be created by recording the role play on audio- or videotape (closedcircuit television). Although effective use of tape media requires skill and practice on the part of the facilitator, it is a powerful way to provide feedback. It is difficult for role players to deny or distort their behaviors when those behaviors are displayed audibly or visually. With videotape, both verbal and nonverbal behaviors can be reviewed. Furthermore, comparisons can be made among several role players or role-playing groups, allowing the participants to see their own behaviors in the context of a range of behaviors.

However, because these media are over-rich in information, the facilitator must be skilled in using them as feedback tools. The facilitator must know how to operate the recording and playback equipment. The participants must be prepared for the taping so that they do not act differently because their behavior is being recorded. It is a good idea to assure the group members that the tape will be erased following the feedback session.

The timing also must be planned; it typically takes one or one and one-half hours to review thirty minutes of videotape. Thus, it is necessary that the facilitator carefully select the material to be reviewed. This means allotting time before the feedback session to select specific "bits" of behavior. These must be selected carefully so that they further the learning goals without appearing to present people's behavior unfavorably out of context. Even so, participants' responses to seeing or hearing themselves on tape may range from surprised to disturbed; it is important that these initial reactions are worked through so that more significant levels of learning can be explored.

Finally, the facilitator must have the skill to lead the role players and the rest of the group to valid insights. It is important to avoid ridicule and nitpicking and to create a supportive and positive climate. The facilitator will need to judge the appropriate depth of feedback.

Feedback from Performance or Results

In role playing, as in many other endeavors, feedback can come from actual performance or results. This is particularly true in the case of feedback to the facilitator. If a facilitator conducts a training session, and the participants report high levels of satisfaction and seem to perform better as a result of the training, the facilitator has received positive feedback from the situation itself and from the results achieved. A facilitator who does not achieve positive results in a training session also is receiving feedback. In this case, he or she needs to reexamine his or her performance as well as the training design in order to determine what steps must be taken in order to achieve positive results. It may be necessary for the facilitator to solicit more systematic feedback or to observe other facilitators in similar sessions so that his or her performance can be improved.

Likewise, if participants in a role-play session do not achieve the results that they expect in their back-home situations, it is likely that they are not doing what they think in terms of applying the lessons from the role play. In this case, it would be wise for the participants to contact the facilitator or other participants to check assumptions and reevaluate their "modified" behavior. It is a good idea to build into the role-play training design an opportunity for participants to report back on their progress and to ask for clarification and further help.

ANALYSIS AND CLOSURE

In both structured and unstructured role-play sessions, closure is necessary. Participants have been through a series of experiences that suggest the possibility of changes in behavior, applications of new learnings and new skills, and the development of new ways of relating to others. It is the facilitator's job to do all that can be done within the training setting to make it possible for the participants to act on these newly surfaced concerns and objectives. Post-enactment analysis is concerned for the most part with providing feedback to individuals and giving them some indication of new directions that might be possible in handling future problems. It often is possible to organize this feedback and discussion experience into a more generalized form so that participants feel that they have a basis for future action. The discussion that follows, "Role Playing in the Experiential Learning Cycle," tells how to structure the role-play session so that participants have an opportunity to organize, codify, and apply their experiences and learnings.

ROLE PLAYING IN THE EXPERIENTIAL LEARNING CYCLE

The actual role-playing activity is the beginning of a five-step experiential model that is based on a cyclical learning process of five separate but interlocking procedures. (A complete description of the model is found in Section One of this volume.) As implied by the name of the model, the emphasis is on the *direct* experiences of the participant or learner, as opposed to the *vicarious* experiences garnered through didactic approaches.

The experiential model also is an inductive, rather than a deductive process: the participants *discover* for themselves the learnings offered by the experiential process. This discovery may be facilitated by a leader, but in the end the participants find and validate their own experience.

This is the "laboratory" approach to learning. It is based on the premise that experience precedes learning and that the learning, or meaning, to be derived from any experience comes from the learner. Any individual's experience is unique to that individual; no one can tell the person what he or she is to learn or gain from any activity. Probable learnings can, of course, be devised, but it is up to the participants to validate these for themselves.

Each step of the experiential learning cycle can be related to role playing. Five revolving steps are included in the experiential model:
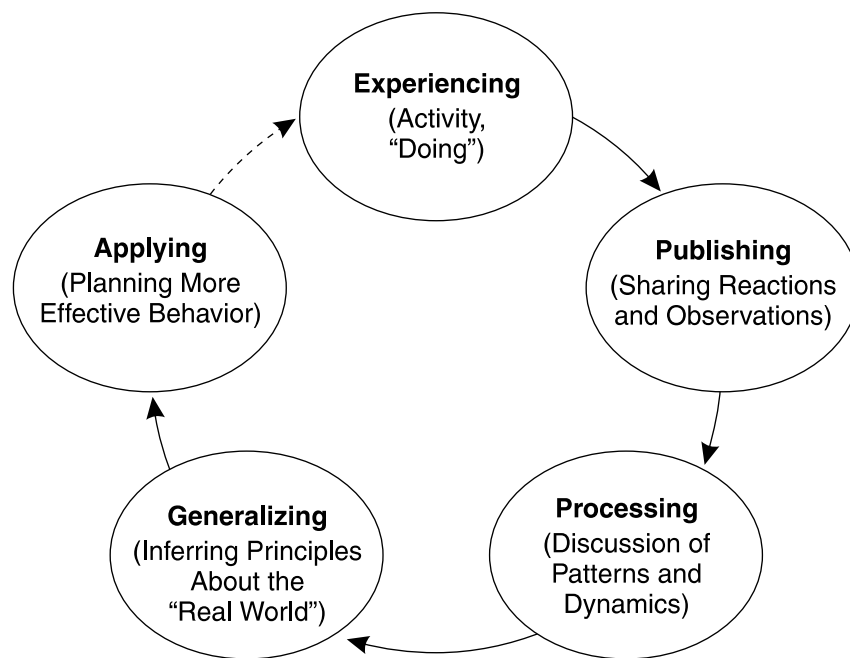
Experiencing

The process usually starts with experiencing. The participant becomes involved in an activity; he or she acts or behaves in some way or does, performs, observes, sees, or says something. This initial experience is the basis for the entire process.

In role playing, during the *experiencing* phase the focus is on the role play itself. It is important to recognize that this phase creates the data base of human interaction for later discussion. Thus, much of the emphasis in preparing a role play has to be on later phases, i.e., what happens after the role play itself is completed.

Publishing

Following the experience itself, it becomes important for each participant to share or "publish" his or her reactions and observations with others who have either experienced or observed the same activity.

In the *publishing* phase, the role players' expressions of feelings, attitudes, and experiences and the observers' reports are the significant aspects. Here the emphasis is on sharing reactions experienced in the role play. In the typical design, the person who received the problem or message gives his or her impression of how it felt and how it went. The observers are asked to comment on their reactions to that person's role. Then the person who presented the problem or message shares his or her reactions and impressions, and the observers comment on their reactions to his or her role. All group members may discuss the overall tone of the action. If there are more than two role players, the reactions of the role shared first, then those of the observers.

During this phase, it is important that the participants not skip to making suggestions or drawing conclusions or principles, but stick to "feeling" reactions to the experience. The facilitator can summarize these reactions to make certain that they have been understood and then move the group into the next step.

Processing

Sharing one's reactions is only the first step. An essential—and often neglected—part of the cycle is the necessary integration of this sharing. The dynamics that emerged in the activity are explored, discussed, and evaluated (processed) with other participants.

Observers of a role play can report the patterns of behavior that they observed and make *suggestions* during this step. The facilitator can ask questions as well; for example, the person who presented the problem or message can be asked "Do you think that role player B understood your point of view?," then "Do you think that she will do anything about it?" A typical processing question is "How could communication have been enhanced or objectives achieved better?" In guiding this discussion, the facilitator will need to take into consideration the sophistication of the participants and their previous experiences in role playing.

At this point, role players often are still in their roles emotionally, and it is important to make an intervention that will help to "derole" them and make them more receptive to cognitive integration of the experience. Often a simple announcement—"All role players may now resume being and acting themselves"—is adequate. Sometimes, however, a meeting may be required with support or reference groups for the purpose of finishing the unfinished business of the role play. The use of videotaped replay in the processing phase can be highly advantageous for focusing the study of the dynamics of

the role-play situation—the patterns of behavior that spontaneously emerge in the interaction of the role players.

Generalizing

Flowing logically from the processing step is the need to develop principles or extract generalizations from the experience. Stating implications and discussing learnings and new skills in this way can help participants to further define, clarify, and elaborate them. For example, during the role play and the subsequent discussion, it may have become clear that too much conversation from an interviewer tends to block effectiveness. The resulting generalization may be "It usually is inappropriate for the interviewer (or person receiving information) to dominate the conversation." Now the group can begin to develop specific principles that support the generalization. The group may even develop suggestions for action, such as the following:

- Rather than repeating your own opinion, ask questions to clarify the opinions of others.

- After you have asked a question, remain silent for ten or fifteen seconds rather than reframing your question or trying to push the other person to talk.

- Summarize the other person's point of view frequently to show that you are listening and to aid the other person in expressing or clarifying his or her ideas.

In some cases, the generalizations that have emerged can be converted into procedural form. An example of this might be a list of steps to be followed (progressive discipline) in dealing with problem employees. The principles involved in the role-play issue have been experienced in such a way that it has become possible for the facilitator or the group members to be much more specific about the meaning of the principle and the action steps that are suggested.

There are a variety of techniques for helping participants to generalize from the role-play experience to "real-world" situations. Individuals and/or groups can be instructed to write declarative statements based on their experiences outside the training situation, and participants can be encouraged to develop cause-and-effect hypotheses about the dynamics that emerged in the role-play.

Applying

The final step in the cycle is to plan applications of the principles derived from the experience. The experiential process is not complete until a new learning or discovery is used and tested behaviorally. This is the "experimental" part of the experiential model. Applying, of course, becomes an experience in itself, and, with new experience, the cycle begins again.

This final phase of the role-play process is the most important one. In this part of the design, participants are led to explore two crucial questions: "So what?" and "Now what?" These discussions can take place between goal-setting partners, within natural subgroups of the training group, between participant-observer pairs, and by repeating the

role play and applying the generalizations that came out of the first round. It is important that the facilitator, in devising a role play, think very carefully about how participants are to be led from playing a role to integrating their learning into practical, everyday, significant changes in behavior.

In some instances, such as when a series of training sessions are being conducted and "follow-up" is scheduled later, the applying stage may be relatively open ended. Participants may not yet have experienced situations that are supportive of the theories of the methodology. If the role-play experience has been highly individualized or emotional, people may need to think about their experiences in the role-playing session before deciding how they will act differently in their back-home situations. At this point, there may be no basis for prescribing behavior; if the individual is acutely aware of a need to follow a given procedure or behave in a new way, the intensity of commitment may be quite clear and to impose prescriptions may well be presumptuous or may preclude further learning or insight. Even in such situations, an action commitment can be made: people can agree that they will think about the issues or read more about them or discuss them with friends or colleagues. Contracts can be made for follow-up reports at a *specified* time in the future.

UNSTRUCTURED/DEVELOPMENTAL ROLE PLAYING

The Warmup Phase

As described by Shaw, Corsini, Blake, and Mouton (1980), in preparing for an unstructured role play, the emphasis of the process is on the group itself. The facilitator describes the objectives of the overall session (but not of the role play) and introduces the concept of role playing and the norms of the training group. The facilitator may suggest a general, overall topic for the session, such as "handling employee complaints" or "improving interdepartmental communication." During the warmup part of the session, the topic is discussed, and a verbal survey of pertinent problems and examples usually is conducted. Examples of survey questions are: "What are some of the major issues you have confronted in dealing with employee complaints?" and "What are some of the major obstacles you have encountered in dealing with department B?" As the discussion progresses, the facilitator checks to determine whether *an identified issue is considered to be important or significant by the majority of group members*. The discussion continues until the facilitator and group members agree that one or more key issues have been isolated and that they are worth working on. These become the issues to be addressed and/or problems to be confronted by the role play.

Just as in structured role playing, the warmup and orientation phase of the session can include the use of films, videotapes, printed materials, simulations, and so on, to stimulate group interest, understanding, and concern about a certain issue or problem. The distinguishing thing about an unstructured role play is that the facilitator does not predetermine the relationships or processes that will take place when the role-play

enactment begins. Written role descriptions, background sheets, and predetermined problems are not used. In unstructured role plays, participants often deal with their own concerns and relationships while working on the issues of general concern.

Facilitating

The facilitator is the major source of interventions in a developmental role play. He or she may intervene by guiding the way in which issues or situations are structured, by encouraging group discussion or feedback, or by employing any of the wide range of techniques that are described in the next part of this section. Developmental role plays are highly dependent on the creativity and skill of the facilitator and on the way in which the process is managed. The facilitator must help the group members to identify problems; to move in and out of problem areas in useful and constructive ways; to create role flexibility, spontaneity, and creative interaction; and to use the role play to generate deeper understanding and to improve self-awareness and interpersonal skill. The facilitator uses the process and the techniques that he or she has learned to involve the participants and to encourage them to move toward experimentation with new behavior and the development of new awareness. The following are some of the interventions that can be used in developmental role playing.

Develop Consensus

The facilitator may prescribe a general theme or objective for the session but, in a developmental or unstructured process, cannot prescribe the content of the interactions. Nor can the specific situation to be dealt with be imposed on the group. Therefore, it is critical that the facilitator direct the group members to spend whatever amount of time is needed in exploring one another's concerns and problems and in identifying a group focus. The facilitator's task is to help the group to draw out a problem issue that is shared by all members. Common links must be established so that all members feel some degree of ownership of the problem.

Ask for Volunteers

One of the most common concerns of the facilitator of unstructured role plays is the problem of obtaining responsive participants. There are numerous ways in which people can be encouraged to join the enactment comfortably and spontaneously. The first of these is asking for volunteers.

Often there are group members who are eager to try out new behaviors. Others may want to test their different methods of handling difficult situations. Still others may enjoy the opportunity to do a little acting. The facilitator can encourage these motivations by saying something such as the following: "We have talked about some of the problems in . . . . It would be useful to all of us if someone in the group would show us some of the ways in which he or she deals with . . . ." Or "First let us define . . . , and that will move us closer to selecting a problem situation." Group members often begin to

describe issues relevant to the topic, thereby nominating themselves for involvement. One member might say, "There is one person with whom I have tried everything. I have tried listening, I have been nondirective, I even have gotten angry a times, but nothing seems to work." After some additional exploration, the facilitator may ask the member to demonstrate some of the ways in which he or she has responded to the person so that other group members can begin to identify the variety of techniques that are available.

Make the Situation Nonevaluative

The way in which the facilitator leads the discussion will indicate whether or not the focus of the process is on evaluation. A statement such as "Let's see how well people handle this kind of problem" is likely to discourage the participants. A better statement would be "There are probably dozens of ways to respond to this type of issue. It would be helpful to all of us to take a look at three or four different ways of handling the problem and then to begin experimenting with new approaches in order to broaden our range of alternatives." The facilitator can make a wide-ranging statement to establish the idea that role playing is an experimental process rather than an evaluative one. For example: "One of our purposes today is to try handling problems in new ways. We are not concerned with what is the 'right' way but, rather, with experiencing new behaviors and new reactions. Later on, each of you can judge what best fits your own style and situation."

Assign Participants the Roles of Others

Often, the best way of getting started after the warmup is to ask a group member to play the role of someone with whom he or she interacts. For example, in the case of a teacher who has described a difficult student, the facilitator might ask the teacher to play the role of the student by saying, "You have worked with this student quite a bit; you seem aware of some of his difficulties and sources of resistance. If you could portray the student, it would give other people in the group a chance to work on a similar problem that they may have encountered or may encounter in the future."

Have the Group Define Approaches

Whenever an individual is asked to handle a problem to the best of his or her ability, an element of evaluation and judgment is implied. Other members of the group tend to say, "Here are some things you could have done better" or "I would have handled it differently"—implying that the person did not handle the situation correctly. To avoid this trap, the facilitator can ask the group members to define patterns of behavior and techniques or skills that can be experimented with in a role play. Rather than asking "How would you handle the situation?," the facilitator can summarize or list the various ways of dealing with the problem that have been developed by the group and then ask people to try out those alternatives. In this way, the role player is not necessarily exhibiting what he or she would do but, rather, is trying out an approach or pattern

identified by the group to be tested. This changes the emphasis from evaluation to experimentation and selection.

Use Role Rotation

Rather than choosing one person to play the key role and therefore focusing on that individual's skill or lack of it, it often is appropriate to have three or four people handle parts of the role and then discuss the total situation. This avoids direct criticism of one individual and provides linkages between various people who can supplement and complement one another as they experiment with the role-play situation. The facilitator can prepare people for this activity by saying, "Now we are going to try to deal with this troublesome individual. I would like two or three people to try to talk to her and find out what is going on in terms of her resistance. Each person will have two or three minutes. Maybe in the next ten minutes or so, we can find out more about the person and what she is feeling and *then* develop some new strategies for working with her."

Continue the Warmup During the Role Play

During the role-play enactment, the connections between the actors and the observers should be maintained. The facilitator can continue the warmup process by involving group members. For example, one role player might be asked, "Why don't you try to find out a little about how the other person sees things?" The interaction then might proceed for a short period of time, then the facilitator might intervene again to involve the audience: "Most of you have worked with people who are resistant (or whatever the problem is). Does this person sound typical up to now?" Through this intervention, the facilitator takes the focus away from evaluation of the role players and puts it on the type of interaction being presented and the nature of the problem.

The facilitator may then use a wide range of techniques (which are covered in more detail in the discussion that follows) to maintain connections between the role players and the rest of the group members. Role playing is effective when the observers feel that they, too, are represented in front of the room (rather than merely sitting in judgment on someone else's performance).

Similarly, the participants who are involved in the enactment are more apt to learn and become more open and spontaneous when they feel that they are part of the group (rather than actors who are about to hear critical reviews from a psychologically distant audience).

Use Action Methods

Role playing facilitates learning through interaction. Once the participants have been assigned roles, it is important to move quickly into enactment. Background information should be minimized at this point; "action" situations are called for.

Developmental role playing is relatively spontaneous and creative. At some point the facilitator may want to stop the action to interview the key role player in order to -

find out more about how that person is feeling and then to check with the members of the audience (the observers) to determine whether they have shared some of these feelings. At other times, if the audience is supportive and the role players are becoming free and spontaneous, the facilitator may let the role play run for a while and then move into postenactment discussion. The facilitator also can choose to have people reverse or rotate roles or can direct new people to act out the situation. As many as three or four people can be asked at various times to play the role of the manager/instructor/salesman/counselor while three or four others play role of the subordinate/student/customer/client. A large group can be divided into smaller role playing groups so that more members can try role playing in a less threatening situation.

As participants become more involved in the process, it may be desirable to summarize principles, techniques, or key ideas that will be useful to the group as it enters the discussion phases of the experiential learning cycle.

Feedback

Because developmental role plays are unstructured, feedback is not specifically built into the process. Just as is the case with the earlier phases of the process, the feedback and post-enactment phase emerges from the group's interests and concerns. Rather than telling the group members what to look for, the facilitator in a developmental session might ask, "At what point did you feel most involved in the process?," "What was most interesting or stimulating to you?," "In what ways were you able to identify with role player A as she responded to the other individual?" In this way, group members may best be stimulated to give feedback, but rather than analyzing and evaluating the performances of others, they concentrate on their own empathy and concerns and identify with other members of the group who have been involved in the problem situation.

SUMMARY

Role playing is one of the most exciting techniques available to the trainer in HRD work. It is particularly effective as a training intervention in attempting to solve problems in communication or human interactions because it allows the participants to: Identify the problem;

1. Explore the attitudes and behaviors that contribute to the problem;

2. Develop alternative strategies and behaviors for changing the situation or solving the problem;

3. Receive timely, constructive, descriptive feedback on their behavior;

4. Practice one or more alternative behaviors and refine and repractice until it feels right; and

5. Receive encouragement and/or reinforcement for engaging in an effort to change for the better.

Because role playing is active learning, it requires detailed planning for both content and logistics, and because it is not a "show," it necessitates care in processing, or talking through, the experience before crystallizing its learning. The role-play process allows participants to share their reactions, identify patterns, discuss general principles and generalize from those principles, and plan how they will apply their new learnings and practice new behaviors. Most importantly, role playing creates practical, transferable learning that participants "own" and are likely to apply in their everyday lives.

❚ ROLE-PLAY TECHNIQUES

Certain techniques can be used in many types of training sessions either to move the group toward predetermined or agreed-on goals or to contribute to the discovery and exploration of new objectives and new modes of behavior. These techniques can be written into structured role plays or can be introduced spontaneously into structured or developmental role plays.

UNSTRUCTURED OR DEVELOPMENTAL TECHNIQUES

The techniques discussed here usually are used in unstructured/developmental role plays. In each case, the specific technique to be used should be a response to the dynamics of the situation and the facilitator's objective in intervening.

Straight or Demonstration Role Playing

In the most common and frequent application of developmental role playing, two individuals are asked to enact a specific scene or situation that is relevant to the defined purposes of the session or to the emerging needs and interests of the participants. A variety of warmup techniques can be used: asking members to identify key problems in the area under examination; using a videotape or other presentation to elicit involvement; and so on.

The facilitator might state the general topic to be explored in the session and say that he or she would like several participants to demonstrate what a typical problem in that area looks and sounds like so that the group can begin to explore various ways of dealing with it. The facilitator then can ask for examples of the problem, check for commonality of concern, and choose the situation as a point of departure for further examination. "This example will give us a chance to look at the nature of . . . and some of the problems we encounter in that area." The person who provided the example can be asked to play himself or herself and to select another group member to play the part of the other person. The first member then takes the second person to a secluded part of room (or to another room) and briefs him or her on the situation, describing *in general* the behavior of the other person in the example. When they return, the facilitator asks specific questions of the first participant to structure the session: "Where were you when this happened?," "What time was it?," "What was the general atmosphere?," "What were you feeling?," and so on. The two role players then interact.

The facilitator may let the interaction run for a while, or may ask other people to demonstrate similar interactions, or may begin working with the group to develop criteria or strategies for dealing with the situation. The facilitator also may use a variety

of techniques to contribute to the spontaneity and insight of the role players. One such technique is called "soliloquizing" or the "on-the-spot interview."

Soliloquizing: The On-the-Spot Interview

The purpose of this technique is to expose more clearly to all participants and observers what is going on in the situation (Is it realistic? Do the people involved understand each other's feelings? Are there other ways in which they could become more clear and more direct?).

As the interaction begins to warm up and to take on a pattern, the facilitator may interrupt in order to validate the reality of the situation and/or to aid group members in developing more insight into what has occurred. The facilitator can ask the primary role player (the one who supplied the example around which the interaction is built), "Is this pretty much the way it happened?" Then, "Tell me how you are feeling now as you begin to try to . . . . Tell me more about that." As the role player's feelings and perceptions become clearer, the facilitator can explore those feelings and what actions are taken based on those feelings. This raises questions about how the individual deals with his or her own anger, confusion, hostility, etc., and whether the role player stays in touch with the second person or begins to alienate the other and create tensions. Alternatively, the facilitator might ask for support and reinforcement for the role player from the observers. "How many of you feel angry and upset when . . . ?"

This interruption of the role play is only temporary and is intended to ensure that the lead participant feels as though the situation is realistic, not simply a charade. It also provides an opportunity for all members of the group to identify with the lead role player and to obtain more insight into the feelings and reactions that occur in handling a situation of this type. Finally, the soliloquy or on-the-spot interview gives the facilitator a chance to introduce alternative approaches. For example, the facilitator might say, "What are some of the other ways in which you might draw this person out?," and then encourage the role players to experiment with them.

Often it is appropriate to let the role play run for a while until the role players become further involved. On the other hand, if involvement is slow in coming, it may be necessary to interrupt and interview one or both of the role players in order to bring the situation into a clear focus and to ensure that participants and observers understand the real issues. If there is lack of clarity, or if the participants do not seem to be "warming up" well, it often is useful to use a technique called "role reversal" or "switching."

Role Reversal

In some situations, the facilitator may ask one role player to change positions with and take on the role previously being played by the other. It is important to actually have the participants change positions; the physical change encourages their mental or psychological change and also keeps the roles clear to those who are observing.

Role reversal accomplishes one or more of the following objectives:

- *Clarifying the situation.* In demonstration role playing, this allows the observers to see how the second person behaved in the actual situation through the eyes of the person who supplied the example. It also gives each role player a chance to clarify the facts, to be specific in voicing complaints, and to mirror what he or she perceives to be the attitude of the other.

- *Increasing spontaneity*. Role reversal can help to keep people moving and loose. People who are "stuck" in their usual roles—behaving in stereotyped or mechanical fashion—are shaken out of their stereotypes through role reversal. They are forced to reexamine what is going on from a different perspective and to try out different behavior.

- *Increasing insight and awareness.* Often a simple role reversal makes one or both of the role players more aware of the position of the other person, and the subsequent enactment brings to light some of the feelings and behaviors that might not have been identified otherwise. The role-reversal technique can be used in combination with on-the-spot interviews to clarify the facts in the situation and to increase insight and spontaneity. For example, when asked whether the second person is representing the other role accurately, the person who described the situation (the lead role player) might say, "No, the real person was much more belligerent than that." The facilitator then could have the role players exchange seats and instruct the lead role player to take the other person's role and to demonstrate how the real person actually behaved. In the meantime, the second role player is instructed to play the lead person's role *as that person has been playing it.* This allows the first role player to see how he or she has been responding to the other and how he or she has been handling the situation. This also allows the role players to gain insight into each other's feelings and motives. When this happens, it usually is productive to have them resume their original roles, pick up a few lines before the spot at which they left off, and continue the role play. Often, the role players will try new approaches.

Role reversal or switching is one of the most powerful role-play techniques. By moving from role to role in various situations, group members increase their flexibility, their awareness of a wider range of attitudes, and their responses and concerns; in general, they enhance their ability to interact more freely and openly within changing situations.

Doubling

A supplemental technique similar to soliloquy is the use of the "alter ego," often called "doubling." In this case, a third individual is brought into the role-play situation and is asked to become the "inner voice" of one of the role players. The facilitator introduces the idea by saying that when a person is involved in interactions with others, there often are a lot of things in that person's mind that he or she does not care to express or does not have time to express. Our minds work much faster than our words can convey.

Therefore, another person will be added to the role play to express the unexpressed thoughts and feelings of one of the role players.

This technique requires quite a bit of direction and prodding from the facilitator because it is new to the participants and they frequently do not understand it at first. One option in this instance is for the facilitator to assume the doubling role the first time in order to demonstrate how it works. A second option is for the facilitator periodically to interrupt the interaction to *interview* the "inner voice" of one of the major role players. By asking pertinent questions and encouraging the double to soliloquize, the facilitator can call attention to some positive actions that possibly could be taken.

A variation of this technique is a representation of contemplation. The role player states his or her position and feelings about the situation, then the double thinks along with the role player, out loud. The role player is instructed to correct the double if that person goes off track. If the role player agrees with what the double is saying, he or she is to continue or extend the thought. In this way, the person is almost having a conversation with himself or herself. Thoughts are clarified and extended; ideas are explored; actions are considered, and so on. In some cases, the technique results in the two representatives of the person spurring each other on and becoming "stirred up" about new thoughts and new possibilities.

There are many possible applications of this technique. It can be used to warm up role players. It is quite useful in demonstrating how a salesperson gets ready to make a call or how a lawyer gets ready to present a case. It also can be used in a slightly different form called "group doubling."

Group Doubling

In this technique, the entire group or portions of the group are asked to express the inner, or unexpressed, thoughts or feelings of one or more role players. For example, if two instructors have just demonstrated a disciplinary interaction between a manager and an employee, the facilitator will divide the group in half so that half the participants serve as the "double" for the manager and the other half double for the employee. The facilitator would invite the "managers" to express some of their feelings and reactions to the employee as a result of the discussion they just held. It is all right if this turns into a little bit of a free-for-all; more than one "manager" may be talking at once, and there may be some interrupting and some "piggybacking." This session is intended to surface emotions, to get ideas and feelings out into the open. After the manager's doubles have expressed their opinions, the facilitator asks to hear how the employee's doubles feel.

On some occasions, this technique can be turned back into straight role playing by having one of the employee's doubles and one of the manager's doubles continue the discussion in front of the group. The emotion of the real-life situation can be validated and strengthened by the doubling process.

Tag Teams

In this variation of the alter ego/doubling technique, two people are assigned the same role. As the role play begins, one of the two members begins playing the role and continues to do so until he or she becomes "stuck." Then, using a prearranged, nonverbal signal such as a touch on the shoulder (tag), the first player asks the second to step in and take over the role. The second person then plays the role as long as progress is being made. Conversely, if the first player is having difficulty in dealing with a problem in the role play, and the second player thinks that he or she has a solution, the second person may use the signal, asking the first role player to let him or her have a chance. Tag-team pairs can agree prior to the role play on what signal they will use and when (in what circumstances) a transfer of role would be in order. The post-role play processing then would include a discussion between the members of the tag team. If managed properly, this discussion can lead to clarification of the situation and the behaviors of role players, clarification of the tagteam's role and the way it might be approached, identification of alternatives, and increased understanding and bonding between the tag-team pairs.

Mirroring

In the mirror technique, rather than speaking as the inner voice of the role player, the second person takes on the role of the other and portrays it *as the first person is playing it,* to "mirror back" to the role player how he or she appears.

The second application of the mirror technique is used to engage people in role playing who are hesitant about or resistant to becoming involved. For example, participant A may talk quite a bit about how she would handle a difficult colleague but, when asked to demonstrate her approach, she resists. The facilitator might say, "Since member A would rather not portray the role of the person who is dealing with the (disruptive, competitive, etc.) coworker, perhaps someone else will play the role as A has described it. Member A, is that all right with you?" Participants almost always agree to let someone else play their roles, at least early in the session. The facilitator then can call on someone to take the role of A, and A is encouraged to suggest ways in which the situation could be handled differently. Thus, role player A becomes involved and may interrupt the role play interaction to suggest different ways of behaving. It is not at all unusual for member A finally to volunteer to demonstrate some of her ideas within a role play.

There are other variations of mirroring. After small-group discussion or confrontation, members of the group can be asked to portray one another. Everyone changes roles: A becomes B, B becomes C, and so on. A simpler version of the technique is to ask two or three people to show another person how that person has acted in a given situation by mirroring the person's behavior. If only one person is singled out to be mirrored, it can be embarrassing and evoke tension. However, in the spontaneous role play, if from time to time different individuals are asked to mirror back to others, the technique can gain acceptance in the group and become a way of communicating

perceptions and feelings without attacks or negative feedback. In two techniques described previously—behavior rehearsal and behavior modeling—participants can learn how to portray a role more effectively by mirroring a more experienced person or a filmed presentation of an appropriate procedure or style.

Empty Chair

In Gestalt therapy, developed by Fritz Perls, there is an experiment called "dialogue" or "open chair," in which an individual engages in a dialogue between two different aspects of himself or herself or with another person who is not there. The individual moves from one chair to another to indicate movement from the one person or aspect to the other. This technique can be applied effectively to role playing.

At times, a group member may have difficulty interacting with another person because the member is so preoccupied with trying to relate to and impress that other person. The group member can be relieved of the pressure of having to deal with the specific person by having an empty chair be used to simulate the other person. The member does not have to be concerned about how the chair responds. At the same time, he or she can gain the experience of trying to deal with the other person.

Often the empty-chair technique leads to other interactions in which someone is asked to move into the chair and portray the symbolic role that has not yet been revealed. Or the group member who is experiencing the problem may choose to move into the chair. This leads to the technique that follows.

Self-Role Play or Monodrama

An individual often can gain insight into a given interaction by playing both roles, by literally switching between two chairs. Thus, for example, the individual plays the role of the supervisor, says what he or she has to say (or believes the supervisor would say) in that role, and then shifts to the role of the subordinate by moving to the other chair. As the subordinate, the person answers the supervisor and then returns to the supervisor's chair again to continue the exchange. It takes some experience and practice to make this technique effective, but it is widely used in developmental role playing and, with some experimentation, can be very useful.

Shifting Physical Position

Communication problems or relationships can be dramatized by changing physical positions. In one example, the person playing the part of a dissatisfied customer will gradually turn her back to the person playing the salesperson to indicate the opinion that the salesperson is not truly listening to her objection or complaint. Another variation is to have one individual stand while the other remains seated in order to dramatize a hierarchical or authoritarian relationship. The facilitator can interview the person who is seated, asking, "What is your reaction to having . . . standing and looking down at you?"

Other variations of this technique include moving chairs farther apart or closer together and having group members shake hands or make physical contact during an interaction.

Role Rotation

At times it is useful to move a series of people quickly through one role. For example, an individual may be asked to play the part of an angry citizen talking to a public official. Those being trained to be more effective in the role of public official can be asked in sequence to move into that role as the angry citizen continually makes the same complaint. In a very brief time, ten or fifteen people can experience the role and give a one or two sentence response to the angry citizen.

This technique has two purposes. One is to elicit a wide range of responses; people can compare approaches and develop new awareness of the range of possibilities available to them. Second, role rotation often is a useful warmup technique, allowing people to try new approaches and experiment with new behaviors.

On-the-Spot Inventions

In developmental role playing, where there is no predetermined structure and system, it often is possible and useful for the facilitator and group members to improvise new ways of gaining insight or improving skills. For example, if an individual in the group is having trouble being firm or assertive with a resistant person, the facilitator might ask the group to suggest experiments that the individual could try in order to come across more forcefully. Someone might say, "Why don't you try pointing your finger at the person? I'm not suggesting that you do this all the time, but it might give you a feeling of firmness or resolve." Someone else might suggest, "Why don't you try leaning forward a little bit? You seem to be rocking back on your heels." In an open, spontaneous session, people find ways of assisting one another to learn, to experiment, to explore their own potential, and to develop their own resources.

In summary, there is a wide range of unstructured techniques, some of which have been used in many situations over a long period of time: role reversal, doubling, and the mirror technique are three. Many other techniques emerge as the facilitator and group members search for new ways of relating to one another and new ways of solving problems and producing results.

STRUCTURED TECHNIQUES

Structured role playing has been defined as role playing in which there are predetermined objectives and in which roles, background information, and procedures have, for the most part, been planned and designed prior to the session. One of the characteristics of the structured approach to role playing is that it does not rely on spontaneous interventions. Many role plays can be conducted by relatively inexperienced trainers, and many designs are utilized by educational groups, voluntary agencies, industrial organizations, and various other groups without employing HRD

professionals. In addition, structured role plays often are part of larger programs that include other training technologies such as structured experiences, instruments, lecturettes, simulations, small-group discussions, and so on.

The techniques that facilitate and energize this type of role playing are quite different from those used in developmental sessions. Although it is possible to include a role reversal or the mirror technique, these would be unusual interventions in the structured role-play process.

Multiple-Group Role Playing

As has been discussed previously, in multiple-group role playing, several small groups are provided with the same role-play assignment and they act out the situation simultaneously. In most instances, the process is programmed: specific objectives are defined; time frames are indicated; and formats are used to elicit specific areas of concern and to provide a common focus for discussion.

Built-In Tension

Whether a role play is conducted as a demonstration or in a multiple format, the core of the structured approach is in the design itself and, therefore, often is difficult to identify. The energizing force in making structured role plays work is *built-in tension*. For example, if managers are being trained in performance-review techniques and are asked to role play an appraisal interview, the role-play design is not likely to be useful or successful if it does not include areas of disagreement or tension. There are several types of tension or conflict-building devices that can be used in designing a structured role play.

Conflict or Contradiction in Information

People can be given conflicting background or role information to create tension. However, this information must be realistic and resolvable when exposed and explored further. For example, in a performance-appraisal role play the subordinate might be instructed: "You have had quite a few complaints from customers lately. The basic cause of these complaints is a new system that was installed by the engineering staff. The system is experimental, and although your boss was told about this, she was never given the specifics of the new approach. You have done all you could to resolve the causes of the complaints. You did not want to put too much pressure on the engineers. You think that your boss would have said something if she had wanted you to take a stand."

Concurrently, the instructions for the supervisor's role might include the following: "You are aware that your subordinate has been receiving a lot of complaints. This is, in part, because of a new engineering approach. You think that your subordinate should have been more assertive in not letting this approach get out of hand and cause customer dissatisfaction."

Conflicts in Immediate Past Experience

Differences in experience can be built in to roles in order to provide a basis for examining various approaches to solving problems and resolving conflict. For example, role player A (an executive) could be told that he or she has always found a certain worker to be quiet and unassuming, while role player B (the worker's supervisor) could be told that this worker is belligerent and a troublemaker, but that the worker says very little when a member of top management is around. The issue then is not whether one role player is right or wrong about the worker, the issue is what these two role players are trying to achieve, how well they share information, how they solve the problem, and what the results of their discussion are. The content of the conflict is not terribly important; it is the process of resolving it that matters.

Differences in Roles or Responsibilities

Any number of management and organizational problems occur because individuals are loyal to a given group or department. For example, in a university it is not unusual for the members of any particular department to have difficulty resolving differences with components of the university outside that department. In a structured role play designed to involve people in interdisciplinary-development activities, the problem could be dramatized by having one role player be a professor of liberal arts and the other play a professor of mathematics. These two are members of a small committee that is trying to work out an interdisciplinary curriculum. The members of the committee generally agree that basic, liberal arts courses should precede any kind of professional or specialized education. The professor of liberal arts further believes that liberal arts should be the major focus in undergraduate years, with students moving on into professional or technical disciplines afterward. The professor of mathematics, on the other hand, does not think that specific liberal arts prerequisites should be built into the curriculum. As far as he or she is concerned, half a dozen or so liberal arts courses *of the student's own choice* are enough. The role play would then be a meeting between these two. To make it more complicated, a few additional committee members, with varying points of view on the subject, could be added to the role-play meeting. A variation of this technique would be to assign role players conflicting responsibilities or concerns.

Differences in Objectives

Conflict can be induced easily in a group situation by providing people with different objectives. For example, in business role plays, tension can be created simply by saying, "Your goal is to maximize the profitability of your unit." The intergroup competition that results provides the basis for much learning.

Built-In Resolution

It is not sufficient simply to build conflict or tension into a structured role play. Opportunities also must be provided for the resolution of that conflict. This is achieved by including explicit or implicit options for resolution.

In their book, *The Role-Play Technique*, Maier, Solem, and Maier (1975) provide many examples of structured role plays with builtin tensions. However if the role players examine the situational context, look for alternatives, and avoid yes-no positions, they can find many opportunities for appropriate solutions. In one case, the authors sum up the objective of the process in a way that is typical of structured role playing:

> It is apparent that problems stated in situational terms are the most likely to prevent defensive reactions and the most likely to contain a mutual interest. However, interest in problem solving might cause some employees to become critical of others. It is at such time that the leader must protect the individual who is attacked. She can point out that the aim is to solve the problem in a manner suitable to all, that there are bound to be differences in values and viewpoints, and that the purpose of the discussion is to understand and resolve the differences. At all times the leader's job is to keep the discussion situation-oriented and to respect differences in needs, values, and attitudes.
> (pp. 118-119)

SUMMARY

Two types of role-play techniques are available to the role-play facilitator. *Developmental or unstructured techniques* are used to facilitate the training group's involvement in an innovative, emerging process of learning. Materials and techniques are not predetermined. Role reversal, soliloquy, doubling, and other action methods can be injected into the role play as it unfolds. *Structured techniques* focus on predetermined goals, training materials, and formats. Multiple role playing often is used to engage group members in concurrent enactments so that principles and relationships can be clarified and skills can be practiced by all members. Structured and unstructured methods can be combined in a series of sessions, or within one session, to provide opportunities for learning through experimentation, discovery, and innovation, as well as through systematic, organized enactments and discussions.

◼ A BACKGROUND FOR USING CASE STUDIES IN HUMAN RESOURCE DEVELOPMENT

DEFINITION

A case is a description of an administrative decision or problem that people are trying to solve (or a record of an issue that actually has been faced by the people involved, e.g., managers, executives, doctors, engineers, accountants), together with the surrounding circumstances, facts, opinions, and prejudices on which executive decisions depended. It usually is written from the point of view of the decision maker. The case method is the use of cases as educational tools to provide participants an opportunity to put themselves in the decision maker's or problem solver's shoes. The written case is presented to participants or students for exploration, analysis, discussion, and decision about the action to be taken. Through repeated personal analysis, discussion with others, definition of the problem, identification of alternatives, statement of objectives and discussion criteria, choice of action, identification of possible consequences, and plan for implementation, the participants have the opportunity to develop analytical and planning skills (Leenders & Erskine, 1973). The case method includes the case materials and specific ways of using those materials. It also provides the participants with *feedback* on their answers, analyses, recommendations, and decisions.

THE HISTORY OF THE CASE-STUDY METHOD

The case-study method has been used since the early 1900s at the Harvard Business School, which also trained faculty members from other schools in the case method from 1955 to 1965 through a Visiting Professors Case Method Program sponsored by the Graduate School of Business Administration and the Ford Foundation. The Harvard Business School was a leader both in using and in developing case studies for teaching and training, aided by financial and other support from the Ford Foundation. Originally, most of the cases were used in planned organizational change. Action research served as the source of the cases. Cases also were used as examples and as alternatives to "war stories." According to Towl (1969), "The use of cases permitted the professor to convert a subject from static pigeon holes into which pieces of life are put, to an organic system of concepts which can be used to see life more clearly and as a whole."

During the period of time in which the Harvard program was in operation, two studies of academic management education (Pierson et al., 1959; Gordon & Howell, 1959) emphasized the need to teach managers how to make decisions and solve problems, rather than teaching them business "practices" or "techniques." Both studies

recommended that the case method be used more. As a result, the faculty members at many colleges and universities began to want to learn how to use the case method.

Initially, at Harvard and other universities, most case studies were used in management training. Although they still primarily are geared to managers and other professionals, case studies now are used in human resource development, management and leadership development, other social sciences, engineering, medicine (including nursing), economics, and many other fields. There are some differences in how case studies are written in various fields. For example, in the legal profession cases are based on precedent, on getting the judge's or jury's decision, not on what the lawyer does. Medical cases usually are based on clinical diagnosis and treatment. Cases in business administration tend to focus on analysis, objectives, and action needed now. This section will discuss the latter type of cases: those intended for use in human resource development, including management training.

WHAT A CASE STUDY IS

In a very general sense, there are four types of cases (Willings, 1968): (a) individual problem, (b) isolated incident, (c) organizational problems, and (d) a combination of some of these. The focus of a case study can be on a person, incident, or situation. Because it is to be used for diagnostic purposes, a written case contains all relevant data about the situation. It does not contain prescriptive data (solutions and the effects of solutions), because these are generated by the participants in the training. The case presents actual events that have occurred in an organization (business, hospital, etc.), covering a variety of human aspects of management (Tagiuri, Lawrence, Barnett, & Dunphy, 1968), to demonstrate the complexity of real-life situations. The case writer includes aspects of the case that are relevant to the training objectives, including economic, technical, social, and personal factors.

Malcolm P. McNair (Towl, 1969), says that the case study:

- has a specific time frame, is written in the past tense, and specifies a sequence of events;

- has a narrative structure—the flow of a story—along with expository structures to explain the context and details to the participants (company, industry, technical, etc.);

- has a plot structure—an issue (what should be/have been done?).

Willings (1969) says that the case-study *process* includes the following: a stated problem and existing information (the written case), needed information, the actual problem, objectives in solving the problem, possible solutions, possible effects of them, best action(s), and ways to deal with the effects and prevent problems in the future.

A good case reaches a balance between facts and people and their feelings. It tells how the situation developed and how it was handled up to the decision point. It bridges

the gap between the business or professional setting, with its unique circumstances, jargon, and so on, and the learning group. The facilitator supplies theoretical tools for the participants to use. The participants' task is to *apply* the theories they have learned to the circumstances in the case, decide what is pertinent, identify the real issues, decide what should be done, and develop a plan of action.

WHAT A CASE STUDY IS NOT

A case study is not an example, illustration, or demonstration. In actuality, it is more like a mystery story. The case writer does not include his or her own opinions, analysis, evaluation, or answers. This is the domain of the participants, in their private and group work and discussion. Thus, the case study is used not to prove a point but to develop critical analysis and decision-making skills.

How Case Studies Differ from Games

Case studies are different from learning games. In games, team members actually make decisions and must experience the consequences of them. Rather than analyzing and discussing the situation, as in a case study, the participants in a game become part of it, making a series of decisions and actions over the course of the game. There is more competition and team feeling (and usually, therefore, more pressure). There also may be less consultation, thus, fewer points of view in regard to decisions. Because games have rules, there is less flexibility in how they are presented. A different way of assimilating knowledge, cases are used to *communicate* concepts rather than to *illustrate* them.

A RATIONALE FOR USING CASE STUDIES

More and more managers and other professionals are called on to decide what to do in a problem situation rather than to follow a prescribed routine. In our "information society" we do not have the time or opportunity to gather or check all the information we need; thus, we rely increasingly on information provided by others. Although we do not have the luxury of checking all the information we receive (that would be inefficient), we must evaluate its implications and possible consequences. In many situations, we cannot even get all the information we would like. At some point, we must decide what is sufficient information on which to base a decision or on which to act. Unfortunately, because organizations and organizational issues today are so complex, we cannot devise a set of answers for "typical" management problems. There are too many complex factors, too many diverse responsibilities. Furthermore, the process of mentoring is no longer common in most organizations. Thus, there is no easy way for the new manager or professional to obtain the benefit of experience.

The case method makes use of past experience as a frame of reference. Written cases allow the process of learning from actual situations, actions, and consequences. A good case is a vehicle by which a piece of reality is brought into the training setting. The

case demonstrates the significant aspects of a situation and helps the participants to identify alternatives. The real nature of the case also helps to keep the discussion grounded on some of the facts that must be faced in real-life situations, avoiding the speculation that may arise in purely theoretical learning. In the case method, complex situations must be pulled apart and put together again before they can be understood. This brings out the participants assumptions, preferences, attitudes, theories, and ways of operating. Participants can look at what their reactions and responses are and compare them with those of others. In this way, and with the input of the group facilitator, they can see factors that they may not have thought of or that might be getting in the way of effectiveness. Thus, they gain new awareness, new insights, new concepts and increased understanding of old ones, in addition to new skills.

Dr. Nathaniel Cantor urged professors in the Harvard Business School program to shift from "teaching" to fostering the conditions for "learning." Associate Dean Lombard of the Harvard Business School said, "The proper role of theory is to direct inquiry" (Towl, 1969). The case-study method does just that; it allows the application of theory to practice. The learning that occurs is much more likely to be used than is rote memorization.

In addition, the case method may be one of the few available training technologies that would be tolerated by people who have advanced knowledge or understanding. Teachers, lawyers, doctors, managers, and others who have had years of experience may be amenable to exploring ideas with a group about how to deal with complex problems, whereas they may not be inclined to sit and listen to a lecture or presentation that reminds them of a conventional classroom.

THE PURPOSE OF USING CASE STUDIES

In today's world, most professional and managerial jobs consist of a series of decisions involving the weighing of alternatives in the context of managing the inevitable change. Young professionals generally have knowledge in their specialized fields, but not in management processes. One purpose of the case-study method is to acquaint the participants with a range of actual professional or management situations that require decisions and action.

A second goal is to allow them to relate these situations to relevant theory, models, and knowledge. As old methods become obsolete, they need to learn how to absorb, interpret, and use new relationships and new knowledge. To achieve this, learning must be realistic and useful. In this regard, the participants are not actually trying to learn information or a specific body of knowledge from the case, but to *practice using* the information or knowledge in making critical distinctions in a variety of situations.

This leads us to the most important goal of the case-study method: to develop the participant's ability to think, decide, and choose appropriate courses of action. The use of case studies gives the participants experience (and allows them to develop skill) in working with data, relating facts to action, deciding what should be done, and

committing to a course of action. Skill takes more time to develop than does intellectual comprehension. Developing problem-solving and decision-making skills helps the participants to deal with the multitude of situations in their professional lives that require action and change. The method teaches them how to think on their feet, quickly and effectively, rather than how to enforce or carry out a static policy.

Lastly, a goal of the case-study method is to get the participants involved, so that they understand the need to engage in the process and take responsibility for both the outcome and their own learning (i.e., content and process). With involvement and experience, they also gain confidence in using their new skills.

❚ USING CASE STUDIES

SELECTING A CASE STUDY

In designing a training program, the facilitator first needs to identify both the objectives of the training program and the skill levels of the participants and then select theoretical materials and experiential technologies that will best meet these objectives and the needs of the training group. There are many experiential technologies available, including instruments, structured experiences, role plays, case studies, simulations, and games. All can be used to create an interaction between the theories, models, and concepts presented and the realities of everyday life. In considering the goals of the training and the conceptual input to be presented, the facilitator must decide what balance there will be between cognitive input and experiential learning. Then, with a complementary balance in mind, the facilitator can decide how this will be achieved. Will the cognitive input consist of lectures, readings, lecturettes, handouts, and/or audiovisual aids? Which experiential technologies will work best? There are various effects of each alternative, and these must be considered carefully. Above all, the facilitator should not choose to use a structured experience, role play, or case study simply because he or she likes to do it. The case study is an effective way to illustrate concepts and reinforce theory. It also presents and allows for various points of view. If the facilitator's objective is to help the participants to use concepts to analyze situations and make decisions, the case study may be the best alternative.

Relating the Case Study to Learning Goals

If the facilitator decides that the use of a case study is appropriate, the next task is to find one that raises the issues the facilitator wants to deal with. The facilitator must select a case that can be completed adequately within the time available. Many of the case studies written for human resource development take from three to six hours, and some cases take longer. A case study should be involving, but it is not intended to be "entertaining"; completing it is work. Thus, any case to be used with a learning group should be interesting, so that it will involve the participants, but the primary question in selecting a case is whether it will teach the things that need to be taught. The issue or problem in the case study must be relevant to the rest of the training program. The facilitator must ask: "What are the goals *of* and *for* the participants?" Later in this section there is a discussion of sources of written case studies; many are available from libraries or other standard HRD sources. It may take a lengthy search to find a case study that is exactly right; however, it is better not to use a case study than to use an inappropriate one.

Technological Considerations

Some case studies now are available on computer disk. Each participant (or each team of participants) obtains and processes data at a computer terminal. On some programs, the participants can alter numerical data (such as sales figures, inventory, salaries, etc.) to explore alternatives.

The computer and other forms of technology have altered the use of the case study in other ways. A new problem in using this technology is the changing role of the computer in finding and analyzing information in today's organizations. In addition, cases are more complex, in part because organizations and economics are more complex. Cases that are a few years old may not reflect these changes or the changes that result from the impact of the many other forms of rapidly changing technology in the "real world." It may be difficult to keep up-to-date on these changes in organizational case studies. This creates the question of obsolescence, the need to keep finding new, up-to-date cases. Some people choose merely to update good, existing cases. Others believe that this is not enough to create a sense of reality for the participants because the *issues* are outdated, and that it is very important that the issues be relevant.

Relating the Case Study to the Participant Group

The case to be used must relate to the type of jobs and level of experience and/or knowledge of the participants. Although case studies are used in college settings as training for future roles, the case-study method primarily is designed to be used with people who can make decisions or take actions in their own organizations or who have authority or responsibility. The participants must be at a level where they can identify with the person (administrator, boss, consultant, etc.) in the case and with that person's job responsibilities. They need to be able to understand the organizational background and situation and the interrelationships in the case as well as the "facts" before they can use the case study effectively. Therefore, they may need some prior knowledge of certain concepts and business practices and some experience to relate to what they are reading in the written case (even though further theoretical input will be given) and as a basis for later analysis and discussion. For this reason, the facilitator must be careful not to select a case that requires a decision that is above the participants' levels of responsibility and understanding.

The facilitator also should be familiar enough with the participants' backgrounds to know where they are likely to go in terms of their analyses and discussion. If participants do not "catch on" to a case, they will criticize it rather than acknowledge their lack of understanding. If this occurs, the fault lies with the facilitator for selecting a case that is inappropriate for the group or for using a case study at all.

It is a good idea for the facilitator to find out what type of organization the participants work for in terms of structure, hierarchy, norms, values, and processes (the ways in which things are done and how they feel). The more closely the case study can relate to them, the more likely it is that the participants will take it seriously and become

involved. It is even better if the facilitator can learn what the participants' primary job responsibilities are and what types of decisions they typically make. This may be possible when one is doing in-house training and in some consulting work. It usually is not as possible in public training or in a university or college setting. Of course, it is easier for the facilitator if all the participants are from the same organization or at least have the same educational or professional background. It also is helpful if the geographical location of the organization in the case study is similar to that of the participants.

PREPARATION

The facilitator must have a thorough knowledge and understanding of the subject of the case (e.g., management) before attempting to teach it. The facilitator must study the case itself before the training session, even if it is one that he or she has used before. Because a case study is different with each group, the facilitator must be thoroughly familiar with not only the case but also its ramifications, i.e., where the discussion is likely to go, and must prepare for alternatives in terms of the group analysis, discussion, questions, and suggested courses of action. The facilitator may find that he or she varies the case presentation depending on how it worked with the previous group. He or she also must be prepared to deal with the unexpected in presenting and discussing the case. This is a good time to review and add to the facilitator's notes at the end of the case.

Willings (1968) suggests that facilitators ask themselves specific questions when preparing to use a case study. These include:

1. What is likely to be generated by this case?
2. What is the presenting problem? The real problem(s)?
3. Does the facilitator have any biases?
4. What parts of the written case help in identifying and understanding the real problem?
5. How would the facilitator solve it?
6. What questions are the participants likely to ask?
7. Are there any "red herrings"?
8. How long will various steps in the process take?

The facilitator also must plan where and how to make conceptual inputs. A good source of information in this regard is "Using Lecturettes, Theory, and Models in Human Resource Development," Section One of Volume 23 of the *Pfeiffer & Company Library.*

The participants in the training group should have an opportunity to become acquainted with one another before the case study is introduced so that they will feel free to offer comments and share information. This can be accomplished by using "icebreaker" activities or by using other learning technologies to prepare the group

members for the content of the case study and the concepts involved as well as to give them some experience in working together. The prospect of using a case study may cause some concern among the participants; they may have questions about why they are there, why a case study is being used, or the process itself. It is best if these concerns and questions are dealt with directly, before the case study is presented.

PRESENTING A CASE STUDY

Orientation

The first item on the agenda is to introduce the goals of the session and to describe how the case study will be used. It is very important to stress the benefits of the case-study method but also to establish clear expectations at the beginning of the session. The participants need to understand that a case study is not a "game"; it is work—the work of the manager or professional in the case and the organization being studied. The participants should be encouraged to accept responsibility for working through the case. The process is not intended to be easy; in fact, if it is fun it probably is too simple for the group or is not being done correctly.

The facilitator can describe briefly how a case is researched and prepared. A case is a statement of relevant facts about a particular situation but, just as in real life, some facts about the situation are not known. This may be because the cost or effort involved in obtaining such information is too great for the organization or the individual. It may be that the situation is current and the outcome still is unknown. In most cases, information that does not impinge directly on the case has been omitted deliberately. It is the participants' job to define key issues, interrelationships, and problems; to consider alternative solutions and their possible consequences; and to decide on courses of action. This task is complicated. The participants must examine the interrelationships between facts. They must gather data and decide which data are most relevant and valid before attempting to engage in problem solving, decision making, or action planning.

The facilitator also needs to point out that few, if any, cases have one diagnosis, in terms of either the problem issues or the recommended solutions. A strong point of the case-study method is that it requires the group to consider several points of view within the case (e.g., the people actually involved in the case situation, people in other departments, the overall organization, customers, shareholders, etc.) as well as the input of all participants in the training group before proceeding. This is a good time to stress that the purpose of the activity is not to determine what is right, but to acknowledge and work with the existence of *multiple realities*. Because they exist in any business or human interaction or situation, there may be multiple solutions. The purpose of the participants in a case study, then, is not to "decide on" but to "find."

Facilitating

The written case then is distributed. The participants may have been given the case study to read (some time) before the session, or time can be allowed for them to read it as soon as it is distributed. Each participant should read the case individually; the facilitator can summarize what the participants have read; then time can be allotted for all to ask questions. This is one point at which it is critical that the facilitator be thoroughly familiar with the case. However, the facilitator should stick to answering questions about the process or the written case at this point. It is not the time to elaborate details or facts or to begin to solve the problem for the participants.

There may be some differences in the way participants interpret the written case, and this is a valid subject for further discussion and learning. The facilitator should not defend the case. If participants question the personality, attitudes, and ways of doing things of the manager or professional who is the subject of the case study, the facilitator can point out that, just as in real life, individual personalities are organizational variables (Towl, 1969; Willings, 1968).

How the facilitator chooses to start the case discussion may depend on the participants' existing knowledge and experience or their levels of readiness. One method of approaching the case analysis, suggested by Willings (1968) is to first conduct small-group discussions of the case. To increase involvement, start by asking the participants to discuss what is happening in the case organization or situation. Also ask them to identify what is negative and what is positive about the situation. Allow a specific amount of time for these small-group discussions.

The next step is a total-group discussion led by the facilitator. This would begin with a discussion of the small-group work, starting with what the participants think is relevant in the case. The facilitator would list points on newsprint and ask *why* participants think that particular facts are relevant. One of the skills to be developed might be stated as pinpointing the *real* problem or issues. The participants may need to be reminded to think about the purpose, goal, or objective of the person and/or organization in the case study. They should be encouraged to think of the case situation as though they were actually part of it—rather than looking on from the outside—and to try to feel the constraints and pressures that are on individuals in real situations.

During this and subsequent discussions, the facilitator's task is to monitor the direction of the discussion but not its content. In the case method, the facilitator is not an instructor in the conventional sense and does not insert "expert" advice or facts into the case discussion. It is important to allow the participants to express a variety of viewpoints and ideas. There will be varying degrees of participation, and some participants will contribute more than others. The participants will evaluate the case within their own frames of reference and relate it to their own knowledge and experiences. To encourage them to do this, the facilitator must establish norms of openness, inquiry, and experimentation. He or she needs to make sure that the participants understand that there are no right or wrong answers, that the learning comes from providing each participant an opportunity to discuss with other how they think and

feel about the problem and to compare his or her thoughts with those of others. Therefore, it is imperative that all points of view are covered, so the discussion is not shortchanged.

The facilitator also should not attempt to speed up the process. Participants need time to think about ideas and new concepts, make associations, and so on (especially if this is the first time they have engaged in a case study). Without this synthesis, and if they feel "pushed," they may jump to conclusions rather than analyze and evaluate.

The participants may need to be advised of several analytical "truths" at this point. The first is that *the stated or "presenting" problem is not always (maybe even rarely is) the actual problem.* The second is that *symptoms are not causes.* The third is that *the stated problem may be technical, whereas the real problem may be human.* Participants often focus on concrete facts (dates, schedules, memos, etc.) and fail to take personalities into consideration. They may need to be advised to think about the situation in terms of people as well as facts, to take another look at what individuals in the situation are doing.

One typical problem that often is overlooked is how people interact. Participants can be asked to consider who is really running things, what the pressures (from above and below) are on various individuals, what things people have in common, and what the motivating and demotivating factors are (Willings, 1968). Of course, it is possible that the participants will become "stuck" on human relations problems when other issues are more important.

The facilitator also needs to help the participants to distinguish between their own personal values and theories and the facts of the case, to separate the data from their ideas about the data. The facilitator may ask the participants to discuss the pros and cons of the actions taken in the case or when asking the participants to identify what they think is the real problem, the facilitator can ask for evidence to support each conclusion.

Cognitive Input

During the group discussion, the facilitator may provide cognitive input in the form of lecturettes, handouts, visual aids, and so on to describe various theories and show various models (e.g., decision-making and problem-solving models) in relation to the case study. For example, the facilitator may deliver a lecturette, with visual aids, on force-field analysis or may focus on a specific skill area that pertains to the case. This cognitive input is intended to guide the participants' thinking and to develop their skills in analyzing situations, asking pertinent and useful questions, and identifying and scrutinizing possible solutions. The facilitator may tell the participants that the purpose of presenting the concepts, theories, and/or models is to enable the participants to *use* them, not just to understand them. This ability to utilize and apply knowledge suitably is one of the primary aims of the case-study method. Therefore, it is the participants' job to decide which concept or theory fits the specific situation and how it best can be applied.

In some circumstances, the facilitator also may be able to show videotapes of actual interviews with people in the case study or of parts of the case organization at work

(e.g., meetings or processes). Such audiovisual components should be pertinent to the case material and edited so that they are not repetitious or boring. The opportunity to read about some important aspect of the case and then see it in action can serve to enhance the participants' feeling for the case organization and the reality of the case.

It is important that all participants understand what is going on in the case before the facilitator shifts the discussion to what should be done about it. As the group members talk, the facilitator should list points, people, characteristics, and so on, on newsprint flip charts. He or she also can make charts and diagrams to show procedures and relationships between people and facts, patterns of interaction, and the like. These newsprint posters help to focus the discussion and also serve as reminders of what has been discussed and of the content that they represent.

The participants should not be allowed to discuss solutions prematurely, but neither should they be allowed to "massage" the data excessively. If the participants get sidetracked in theoretical discussions, the facilitator can redirect them to what is going on, e.g., ask them to examine significant relationships or external stress inducing factors. One of the facilitator's tasks is to assess where the group is and to control the momentum of the discussion. A discussion group easily can become carried away in overanalyzing or, at the other extreme, in jumping to impulsive action before the analysis has been completed. It is necessary to maintain a balance between the two. Once the group has identified the primary problem(s), it probably is appropriate to focus on possible secondary and tertiary problems.

Action Planning

At some point, the facilitator may have to shift from listing issues or facts to discussing primary points and evaluating them. A clue that this is necessary is when the discussion becomes repetitious. The facilitator then should shift the focus from general to more specific, to move the group on to action planning. The facilitator can say, "Yes, but what do you *do* about this now?" The participants are encouraged to discuss possible ways of handling the problem while the facilitator lists them all on newsprint. The facilitator can ask questions such as, "What would happen if (a particular person in the case) were to do (a specific action)?" The facilitator may need to introduce new concepts, challenge old concepts, or question a particular line of thought as the group works. He or she can ask what the person in the case has done, what the person should have done, and what he or she can do now. The group members can be allowed a few minutes to think about what they would do to solve the problem(s). They then suggest ways to solve each problem previously identified as being important (ways to improve the situation). Some participants may even cite their own organization's policy in dealing with this type of situation. The various points of view should provide new insights to the group. It is unlikely that all members of the group will agree on a course of action, but each participant should be expected to make his or her own decision.

In the ensuing analysis, the possible consequences of each action are listed and those that are unacceptable for some reason are eliminated. This consideration of cause

and effect is very important. For each suggested action, the possible effects should be identified. The facilitator can help by asking questions such as "If you do (a specific action), will something else also need to be done (e.g., boost sales, expand a plant or distribution system)?" "What restrictions are there in terms of capacity, money, people, and other resources?" "What time restraints are present?" The participants may need to be reminded that people can *talk about* making things happen much faster than they can *actually be made* to happen. The group also should consider the costs (personal, financial, time, and other) of solutions considered as well as other impacts (e.g., would there be a legal basis to fire somebody?) (Towl, 1969). Finally, the group arrives at a final statement of diagnosis and solution, complete with likely results, effects, and implications.

Follow-up

Once the participants have identified the solution(s) to the problem, the facilitator can tell them how the problem was handled in the actual organization and what the outcome was, disguising any identities that might violate the confidentiality of the case study. It is possible that some participants may become defensive at this point because they have invested time and energy into developing a solution to which they have become committed. It may be necessary to reiterate the fact that there is rarely one "right" way to solve any problem, and that a training group's solution may be no better or no worse than the one that actually was tried.

In processing the experience, the facilitator can ask a series of questions to highlight the major conceptual points and to reinforce new learnings and new skills. These questions should draw out points related to the objectives or goals of the training session. The facilitator can summarize the points of the discussion and ask the participants to make generalizations and state principles about dealing with similar organizational problems. Then the participants can be asked to describe similar problems in their own jobs and to state how they would handle them in light of what they have learned from the case-study activity.

CASE STUDIES IN PROGRAM DEVELOPMENT

A case study needs to be supplemented with the use of lectures or lecturettes, flip charts, readings, handouts, films or videos, and other types of experiential learning such as structured experiences, role plays, simulations, practice sessions, and actual experience. The design of the training program should include a change of pace, a sequence that balances types of input and output. In planning this, it is important to keep in mind the amount of time available for the entire training program and the amount of time required to complete the case study.

The Harvard program mentioned in the "history" portion of this section asked professors to plan their courses with a carefully sequenced series of "decision points." Thus, the purpose is not only to teach specific knowledge but to teach the ability to *use*

knowledge and information, to make critical analyses and decisions. Specific information may become obsolete; the ability to assimilate, analyze, and use information does not (Towl, 1969).

Towl also states that after much experimentation and work over many years, the interaction between cases and concepts was summarized as follows by the professors involved in the Harvard program:

1. Building a ready reserve or "repertoire" of cases;
2. Converting a topic outline to a matrix for case analysis;
3. The case-concept-case sandwich;
4. Currently useful distinctions (e.g., between job satisfaction and productivity);
5. Course concepts as the magnetic field for case discussion;
6. Formulating concepts from case discussion.

It is important to note that this work also pointed up the fact that participants were not ready to see meaningful conceptual relationships until they had experienced enough shared case discussion.

SOURCES OF CASES

The Inter-Collegiate Case Clearing House (ICH), Soldier's Field, Boston, Massachusetts, publishes, lists, and distributes cases. For example, their *Inter-Collegiate Bibliography, Selected Cases, Business Administration,* lists books of cases from commercial publishers in the field of business administration. There are a multitude of published cases in many areas, including corporate strategy, strategic management, organizational behavior, decision making, administration (business, hospital, public, etc.), personnel, human resource management, communication, business ethics, nursing, occupational therapy, vocational education, psychology, and other related fields. Many case books are available from commercial publishers. These usually can be found in libraries and in other listings under "Cases in . . ." and may be cross-referenced by field (e.g., "Cases in Strategic Management" or "Strategic Management, Cases in . . ."). Further resources are listed in the "References and Bibliography" section of this volume.

◼ DEVELOPING CASE STUDIES

TO WRITE OR TO BUY

It is accepted practice in many colleges and universities for professors to develop case material. In these settings, research assistants (usually doctoral candidates) often write or help to write cases. The rationale for this is that it helps to train them in case work before they become professors and that it relieves the schedules of busy professors. However, close supervision is needed, and many professors prefer to do their own cases or to have their research assistants accumulate the data and do the drafts, at which point the professors take over. This allows the development of more cases, and the new knowledge in the field can be valuable. However, the lack of business experience on the part of the case writers is unfortunate.

Cases that are intended to be used for training purposes do not need to contain all the details that are required in research reports. In research, too, multiple cases often are required to prove the point. In training, only one case is used, the requirement being that it contain enough pertinent material to stimulate discussion among the participants and enable them to analyze the data and reach valid conclusions.

In the field of HRD, there is controversy over combining research and case writing with consulting. Many consultants have obtained permission to use cases they have worked on. However, because this combination can "backfire" in a number of ways, the consultant who plans to combine consulting with case research must be very careful to establish clear expectations with the client contact and the organization.

One of the reasons that case research is a touchy subject is that it costs the organization that is being studied in several ways. There can be negative fallout later from the content of the case, even if every attempt has been made to make it subjective. Personnel are distracted from their usual work to provide information to the case researcher. There are costs to the case researcher, too. These include the costs of being on site (mostly in terms of time, but also in salaries, miscellaneous expenses, travel, writing and revising, transcription and secretarial time, review, getting releases, reproducing and printing the case, and so on). In fact, the difficulty of conducting case research in a real organization and the expertise required to write cases precludes most users from doing it. In many circumstances, it is better to buy cases.

If, however, the decision is made to research and develop a case study, it is best to start by selecting a simple case situation, not one that includes complex or obscure issues. The beginning case writer can read good cases and analyze them for technique, content, and presentation. When the actual draft is ready, it should be shown to more experienced users, peers, and colleagues. Their comments, insights, and suggestions for revision then can be incorporated into further drafts. Finally, the writer can actually use the case with a group and learn from what happens.

The following describes the stages in developing a case study.

RESEARCH

The task of finding a suitable organization on which to base the case study; collecting the appropriate and necessary data from individuals, groups, and other sources in the organization; checking the facts; and obtaining a release may well take more time and effort than the actual writing of the case study.

It is easier to coordinate the process if the person who does the research is the one who will actually write the case but, for several reasons, this is not always possible. If the case study is being written as a team effort, the planning and coordination become even more critical.

Planning

Good planning is an essential part of the case-development effort. First, the researcher must consider the need for the case. What are the topics, concepts, theories, and models to be taught? What are the types of issues to be considered? What type of problem is to be illustrated? What field or area of organizational endeavor is most appropriate? What other special considerations are there?

Search for Organization and Issue

Once the need for the case has been identified, the next step is to search for an appropriate organization and issue around which a case can be written to fill that need. It is difficult to find organizations in which executives are willing to talk about problems and solutions. Finding appropriate leads is a research task in itself. One possible source of leads is people who have been involved in cases that you have written in the past. People who are also in the business (consultants, etc.) get leads through their work and contacts; they often will be glad to tell you about any possibilities. You can solicit leads from peers, colleagues, people in professional networks, other business contacts, former students, and people you meet at conferences and seminars. You also can read articles in professional journals and business newspapers, which frequently include articles about organizations that have or have solved interesting problems.

When soliciting leads, it is important to specify that you need to know *who to contact in the organization* and what the issue is. Even if a lead results in a good contact, the person's organization may not be appropriate for a case study or agreeable to your conducting one. However, the contact person may be able to help you to find another contact person in another organization.

Initial Contact

Before calling or writing to the contact person, check your information. Is the situation in the organization suitable for your case study? Has a case on it already been done? Do

some research on the company so that you are not going in uninformed. If you write a letter, emphasize that the case will be used for education and that it will make a contribution to the field (e.g., management, medicine, nursing, engineering). Thank the contact person in advance for any cooperation and help. You may want to send a sample case with your letter, stating that all cases are different and briefly outlining what you hope to achieve with your case (Leenders & Erskine, 1973).

Then make an appointment with the contact person. Have a specific proposal when you go in. Let the contact person know what you are looking for. Provide information about what the case study will be and do, what type of training program or course you expect to use it in, the goals of the session (what you want to teach the participants or students), and how you use cases. Emphasize the unique value of what the particular organization and situation can bring to the case that is worthy of study as well as the contribution that it will make to education. In some instances, a case study can provide good publicity for the organization, stressing how it has handled the problem.

It is a good idea to get an overview of the problem situation early, in order to check the feasibility of going ahead with the case-study research. Later, it is important to get a chronological overview.

Each time you meet with the contact person, describe how you see the case evolving and continue to do this throughout the process, to clarify what is happening and what might happen so that the contact person's and organization's expectations will not be different from yours. Outline your method of operation, the timing, and your needs from the organization. Stress that a case writer must remain neutral and will not participate in the actual solving or analysis of the problem, i.e., you will not be present to serve as a consultant. In some situations, the case writer may be the person who actually will be using the case and may be in a position to provide feedback later to the subject organization on how the participants viewed or solved the problem, but this is rare.

Discuss how much disguise will be involved in writing the case. It may or may not be necessary to disguise the organization, the product or service, the location, the people involved, certain actions, and company data such as turnover, production, or sales figures. The discussion that follows on "Writing" will help to clarify some of the issues around the subject of disguise.

Another expectation to be established is whether the other executives and managers in the organization are or will be agreeable to the case study—whether they can and will cooperate. You need to make a concerted effort at this point to determine whether you will be able to get the whole picture of the problem issue in the organization. It is best if the contact person is at the top of the organizational hierarchy or can obtain formal approval from the top, so that managers and others in the organization know that you and the case research have been "approved."

Finally, ask who will review the drafts of the case study and sign the release. The release is written permission from the appropriate executive(s) in the organization to use the case (the final, approved draft), *to publish and distribute it* for educational purposes.

The case study is useless without written approval and release of content. During the initial contacts, ask the contact person and other top executives, "Will you be willing to have this case published and distributed publicly?" You may not want to put in the time and effort required for a good case study if the contact person says that it "will have to be reviewed by our legal department."

Data Collection

A large part of case-study research is a personal interview with each manager, executive, and person who is involved in or has a unique perspective of the case problem or issue. This may include people in various positions or various parts of the organization that may have been affected by the situation, not just those in the section or division in which the problem occurred. Try to find a time that is good for the person being interviewed. Do not focus initially on the "problem"; this can result in embarrassment or defensiveness. Instead, ask about "issues." You can say something like, "I'd like to hear about your experience in dealing with this." Be honest and direct about the information you want, but use tact. This is a good time to practice interviewing skills, including listening skills, observation, and reporting skills. During this process, you often will need to be resourceful in getting the information you need, but you also must be careful not to get a reputation for going over (or under) the head of a particular executive or of looking only for skeletons in closets. Above all, do not give different stories to different people. If your presence is seen as disruptive or subversive, you may be asked to leave. It is better to present yourself as something of a mystery writer who is tracking down clues.

It is best if you can talk to people in the organization while the problem or situation to be studied is occurring or as soon afterward as possible. As in a mystery story, it is more difficult to trace the trail after it is cold. Once an incident is over with (especially if it was an unpleasant one), people minimize or forget their doubts, their problems in dealing with it, their confusions, and so on. While conducting the interview, you may choose to take notes or—if you have an exceptionally good memory—you may make your notes immediately after the interview. Some interviewers prefer to record the interview on audiotape. If you prefer this method, be sure that the person whom you are interviewing is comfortable with it; if not, it may inhibit what that person will discuss or reveal. You will need to assure each person whom you interview that case information will not be discussed with or revealed to anyone outside the organization except for the educational purposes for which the case study is being written. You may want to describe the degree of disguise that will be used and the amount of information (if any) that might be shared with your contact person. If the interviewee agrees to be tape recorded, *get a verbal release on the tape recording* before conducting the rest of the interview.

During the research phase, it is important to remain open enough so that you get all the information that is available and do not attempt to define the problem too soon or cut off avenues of exploration or information. In many cases, the actual problem or situation

may be different from what is initially described or from what it initially appears to be. Be prepared for things to arise that you have not previously anticipated. It is important to get *all pertinent data*. People tend, either deliberately or unconsciously, to withhold important information. If you think that you are being blocked for some reason, you can rephrase questions so that they appear to be less threatening or less direct. You also can follow up on leads that the person may reveal without realizing it.

One of the problems in doing case research is what to do with confidential information, i.e., information that is pertinent to the case but which the source does not want included in the report. One option is to keep the information in mind, although private, while searching for other leads. Another option is to refuse to accept confidential information. If you say something such as, "I cannot accept confidential information that I cannot use, but all information used in the case study will be disguised (describe how) and used only for educational purposes (describe)," it may overcome the subject's reluctance to release the information.

Another important part of the research task is obtaining a chronological history. This should be done early and updated throughout the interviewing and research process. The case writer's job is to report the relevant facts of the situation at the time the decision needed to be made or the problem existed. The participants who will use the case-study for educational purposes will be taking the parts of the people involved at the time the situation existed and making decisions as though they were the managers or professionals involved in the issue. Thus, you must be aware of any information that is given as though it were part of the situation but which actually was obtained later or is merely hindsight.

It also is important to obtain file data and other written data as soon as possible, to provide information to be used in interviewing and to check facts and chronological information. Interviews, documents, and personal observation all contribute to an understanding of the facts. People in the organization being studied should not be expected to take the time to provide this data; you may need their help in determining where to find it but you will need to do much of the leg work yourself. In looking for and organizing data, ask yourself, "What will the participants in the case-study training group need to know?" Of course, you may have to request an expert in the organization to help you to find background or technical data or to explain the data or specific terms or processes to you. Lastly, you may not want to limit your inquiry to data inside the organization. There also may be useful data *outside* the organization. You can ask, "Whom else should I talk to?"

Then, without attempting to draw any conclusions, compare stories. Work until a pattern emerges from the data. Remember that you are looking for patterns in the data, not interpretations. Stick to reporting, rather than critiquing, analyzing, judging, or commenting. Above all, *check the facts*.

Finally, remember your responsibility for protecting information obtained for the case study. Do not discuss the organization or the information that you have obtained

with other people. In fact, you may be obliged to promise to destroy all case notes and data after you obtain release of the final draft.

A Checklist for the Case Researcher

Planning

1. What are the topics, issues, problems, concepts, theories, and/or models to be taught/considered?

Search

1. What contacts can you ask for leads? To what articles or publications can you write to follow up on leads?
2. Have you asked for the name of a contact person?

Initial Contact

1. Does your information indicate that the organization is suitable for your study?
2. Have you sent a letter, with a sample case, to the contact person? Have you asked for an appointment?
3. For your first meeting, have you prepared a proposal for the research project, described the value of the case, etc.?
4. Have you obtained an overview of the problem situation from the contact person?
5. Have you exchanged and clarified expectations with the contact person?
6. Have you explained your method of operation and your needs to the contact person? Does he or she seem to understand?
7. Has the contact person told you who will approve the written case and who will sign the release?

Data Collection

1. Have you conducted a personal interview with each person involved in or affected by the issue?
2. Have you asked about "issues" rather than "problems"?
3. Have you established clear expectations about confidentiality and disguise?
4. Have you avoided being manipulative?
5. Have you followed up promptly on leads?
6. Have you remained open and not attempted to define the problem prematurely?
7. Have you included all pertinent details?
8. Have you indicated a chronological order of events?
9. Have you checked file data and other written data?
10. Have you reported, but not evaluated, the pattern that has emerged from the data?

WRITING

The next steps are organizing the data and writing the first draft of the case study. First, it is necessary to sort the information that you have obtained. Next, you need to organize those materials and notes. Plan the presentation. Prepare an outline of the case. Then you can begin to put the information back together in logical order.

In creating a case study, you will need both writing skills and editing skills. You will need to use good grammar, correct punctuation, etc. It is preferable to use the active voice. Some case writers think that you should use present tense as much as possible in order to foster participant involvement; others say that use of the past tense suggests that the situation may have changed in the case organization and keeps the case from being dated. Obviously, one must use one's own judgment about this, based on the nature of the particular case.

Begin the case study with an introduction that tells what the potential users (the participants in a training group) need to know: what the case is about what they are supposed to do with it. Clearly identify the issues in the case and state why case is presented and how it can be used. You may wish to state that the report is based on a real organization that has cooperated fully in the development of the case, although the organization will remain anonymous and certain facts, names, and so on, have been disguised. In order to protect yourself legally, you may choose to include the standard disclaimer ("any resemblance to actual . . .").

The written case can be short or long, simple or complex, with a narrow or broad focus, and can deal with a specific skill area or with general administrative skills in a particular field, based on its intended use and the level of knowledge and experience of the potential users. Leenders & Erskine (1973) suggest that the optimum size for a case is a maximum of ten to fifteen pages. A case that is longer may contain more information than the potential users can absorb and apply.

Any outstanding facts about the case should be presented in an overview at the beginning. This includes the most important information about the setting and the people involved. You may mention that only facts that are pertinent to the case and that relate to the issue have been reported and that these will include the historical background of the company; its current situation (profitability, growth, market share, and so on, as appropriate); the problem or issue to be dealt with; the current situation; its effect on people; the nature of their jobs or their positions in relation to the problem; and what people have done about the problem so far or how they are reacting to it.

A case study is an attempt to recreate the reality of an organization using only the important and pertinent information and descriptions. The written case must present a wide range of facts, emotions, interactions, physical realities, and other data (including, perhaps, technical data). It also must appeal to the people who will be using it. It must provide the users with clues that enable them to analyze the situation and to make informed recommendations.

One way to begin is to use the present problem and show how it developed, filling in the background needed to understand the organization, the people, and so on. This

may include the formal organizational structure or hierarchy, the actual (informal) hierarchy or relationships, physical layouts, and sequences of operations. As in a mystery book, there should be a time structure and a sequence of events. In fact, the case study probably will be easiest to read and understand if it is written somewhat like a story, although more concise and with more narrative and less dialogue. It is not necessary—in fact, it is counterproductive—to include unnecessary descriptions or details. Allow the readers to identify a basic theme and perhaps one or two secondary themes. Do not embellish; a case study is based on facts, and the reader almost always can sense when something does not "ring true" (Willings, 1968). There is a fine line between involving the readers in the case and overloading or boring them. Biographical data about the people in the case generally is not very important; what matters is what they have *done*, what they are doing, and how they think or what they have said about the issues or problem and the other people in the case. Use the topical areas in your outline of the case and flesh them in, but do not overdo it. It also is a good idea to work consistently so you can keep your ideas and themes connected.

The Element of Disguise

It almost always is necessary to preserve the anonymity of the case organization and the people in it; therefore, it almost always is necessary to disguise their identities, keeping only the events and facts that relate to the issues. There are many reasons for this. Some of them are suggested by Leenders & Erskine (1973):

1. To prevent embarrassment and possible loss of business market status, or credibility of the case organization.

2. To prevent embarrassment and possible adverse impact on the careers of the individuals involved;

3. To keep the organization's competitors from obtaining confidential information and data;

4. To keep case-study participants and others from contacting the organization to "find out what really happened"— a source of harassment.

The case organization is most likely to request some form of disguise if the issues or actions in the case are controversial, if the report could affect the people involved, or if the publication of the case could affect subsequent events.

The most obvious form of disguise is to change the name of the organization. It frequently (but not always) may be necessary to change the names of the people in the case. Depending on the nature of the case problem and the organization, it may or may not be advisable to change the nature of the product or industry. Many people believe that one cannot disguise the nature of the organization without losing or obscuring one of the most salient features of the case. However, some organizations are so well known that they would be recognized immediately by the case users if the nature of their business or service were not disguised. In such a circumstance it may be necessary to change the description of the product or service to another in the same basic area of

endeavor (e.g., an alcoholic-treatment center to a weight-loss center; a manufacturer of one type of appliance to that of another type of appliance). Different cases have different areas of sensitivity. Discussion with the contact person and top executives of the case organization about the amount and nature of disguise needed can help to clear up these issues and establish clear expectations before the case-writing process actually begins. A case is of no use if it is not released.

More subtle forms of disguise include changing dates and locations, if this can be done without destroying important facts. Changing the region of the country in which the organization is located is difficult because it affects the labor situation, wage rates, climate, transportation, market, local regulations, and so on. Inventory and sales figures, turnover statistics, and other data that would benefit competitors of the organization frequently must be disguised. Sometimes this can be accomplished by multiplying *all* figures by a constant such as .93 or 1.1 (Leenders & Erskine, 1973). In some cases, only certain types of disguise are required; i.e., it may be possible to reveal the identity of the organization and merely change the names of the people or to change identities but keep facts and financial data. What usually does not work is to change the job descriptions or positions of key figures in the case or to disguise one department so that people are likely to think that it is another one in the same organization. It probably is easiest to disguise all salient facts or none at all. As would be expected, more complicated cases are harder to disguise.

Just the Facts, Please

In writing the case, stick to factual details, even if you alter or manipulate those details. Use your creativity to disguise, not to invent. Check for consistency in disguising people, divisions, organizations, etc. Use what actually happened to focus on the themes that you have identified.

It is not a good idea to attempt to write about a particular field (e.g., chemicals, law, engineering, publishing, banking) without getting the technical details as well as the facts straight. These details may include laws, regulations, competition, pricing, the market, and so on. Disguised details especially can slip you up. The participants who are using the case study will spot inaccuracies and focus on them, which will distract them from the purpose of using the case study at the least. It also will cause problems of credibility for the facilitator who is using the case study. Even inaccuracies in little details can do this; another reason not to use details that are not pertinent or necessary. To avoid this, have an expert check the draft of the written case. Then revise it.

It is not the job of case writer to point out his or her own point of view, opinions, preferences, evaluations, or solutions. Of course, all researchers will have some prior experience, knowledge, interests, and theories that will influence their perceptions, even if they are scrupulous about trying not to let them interfere with how the case is reported. Similarly, all case writers will form opinions about the cases on which they work. However, it is imperative to the learning objectives of the case-study method that the writer does not allow his or her perceptions or pet theories to be evident in the

written case. The purpose of the written case is to supply the information that will enable the case participants to take on the problems and circumstances of the people in the case.

Neither should facts be hidden or obscured. It is very important to keep the objectives of the case study in mind. Even if the case is complicated or there is more than one issue, the participants should be able to find clues and determine what is relevant. If there are too many unnecessary facts or the issues are not clear, the participants easily can become sidetracked and lose much of the benefit of the training. The purpose of the case-study method is not to build "detecting" skills but to develop the participants' skills in selecting which information is important and in analyzing and evaluating that information.

In presenting the case history, the writer should include nonverbal data. This may include nonverbal communications and avenues and patterns of communication within the organization. It also includes the values, norms, and attitudes—the operating assumptions—that exist within the organization and its relevant subsections. It includes things that are not said (but may be implied) and the context in which something is said, not just whether or not it is true. The participants who use the case study may use this information to determine *why* they think something was said. It also is important to report the opinions of people in the case as opinions, not as facts. All quotations should be reported as direct quotations, not paraphrased or interpreted, and the person who spoke should be identified. The case writer also should note patterns but not interpret them. Such patterns include what people have done and are doing and the people with whom they do it. If possible, include the conditions under which people act and what the outcomes of their actions might mean to them and others. All factors that can affect the situation should be included, whether these factors be physical or human ones. The timing and sequence of events must be kept clear, and *all sources of data must be identified*.

Additional facts to include are data relating to the organization and flow of work; the sequence of operations; task-relevant interactions; pressures on groups, departments, and executives; financial data; the amount of inventory and raw materials; sales data; marketing plans; and relevant physical factors such as the amount and age of equipment and physical layouts. Diagrams, charts, tables, and figures can be used to illustrate or clarify important points and to add interest. These and other illustrative materials such as reprinted data should appear in the text at the point at which they are pertinent to the case.

In describing the people in the case, be careful not to use stereotypes. The people who use the case will resent or suspect them. It is all right to describe typical behaviors of people and their roles, but not in terms of ethnic or sexual or job stereotypes. In fact, avoid doing anything that could detract from the realism of the case and cause the use rs not to take it seriously. For example, if you are disguising the identity of the organization or the people in it, do not substitute humorous names. This may be

acceptable in some structured experiences and other interventions, but not in case studies.

One of the most difficult challenges of writing a case study is supplying all the information that is needed without overdoing it, without giving the participants more than they can absorb and use. A written case should be significant, interesting, and complete but not overwhelming. The participants need enough to arouse their interest and generate discussion, but there must be room for them to ask questions and generate alternatives. The case writer cannot expect to give the participants all the information that a person in the actual case organization would have, nor is it necessary to do so. Too much information is as bad as too little.

A Checklist for the Case Writer

Writing

1. Have you sorted and organized your materials and notes? Have you prepared an outline of the case?
2. Does your introduction tell the case users what the case is about and what they are to do with it?
3. Have you started with an overview of the salient facts of the case and what will be included?
4. Does the case begin at a logical point (e.g., with a statement of the presenting problem)?
5. Have you included all necessary information: the organizational structure, people, roles, relationships, operating assumptions, financial data, sales and marketing data, physical layouts, nature and sequence of operations, pressures, time and sequence of events, etc.? Did you stick to the facts, without embellishing or interpreting?
6. Have you included charts, diagrams, figures, and other visual aids where appropriate?
7. Have you deleted unnecessary descriptions, dialogue, and details?
8. Have you disguised the organization consistently and in accordance with your discussions with the contact person?
9. Has your technical data been checked by experts in the field?
10. Are you including notes for the facilitator?

Revising

1. Does the case contain all the information that is needed by the users? Is it presented in logical order?
2. Have you eliminated unnecessary information?
3. Have you checked your word usage, spelling, punctuation, grammar, sentence and paragraph structure, etc.?
4. Has the draft been reviewed by an experienced case writer or an expert in the field of the case organization?
5. Has the draft been reviewed by your contact person?

The case writer should stop the case description at the point where action is to be taken. The participants in the case will take over from that point. They should not be directed toward a particular solution or course of action.

NOTES FOR THE FACILITATOR

Many case studies, especially those that are published in a book of cases, contain a section of "Notes for the Facilitator" (generally called "teaching notes" in a case study prepared for a college course). This usually includes suggestions for using the case study: the degree of experience or prior knowledge needed by participants to use the case effectively; how and where the case might be used in a training sequence; and what other facilitators have tried and what happened (e.g., things that worked or did not work). The writer may use this opportunity to suggest different ways of using the case study, different focuses, questions, different alternatives or solutions, and so on. This section often contains a summary of the actual actions that were taken in the case organization and the results.

However, other information about the case that the participants do *not* have should not be provided. If the facilitator should use such information, the participants most likely would call "foul." The case writer also should resist this last opportunity to analyze the case or to prescribe a solution. In fact, no information should be included that would serve to *limit* the creativity or possibilities of the users.

As each facilitator uses the case, he or she can add to this section, noting insights, ideas generated by the participants, and answers that he or she may want to remember in the future. If a case is to be used more than once by the members of a training staff, all can benefit from the comments added each time a case is used about how to handle it. Each facilitator must remember that each group is different; notes from past training sessions do not provide assurance of how any new session will turn out. At the least, this section can help facilitators in selecting cases to use.

REVISING

When the initial writing of the case study is completed, it is a good idea to set it aside for a brief period of time—to distance oneself from it—in order to gain objectivity before reviewing the draft and preparing to revise it. However, this should not be so long that the details are no longer fresh. No matter how satisfied one is with the first draft, one can be sure that it requires a lot of revision.

There are many objectives of the revision process. The first task is to scrutinize the way in which information is presented and to eliminate unnecessary information. The case must be looked at through the eyes of the users. Does the draft include all the information that is needed to analyze the case? Is the information clear? Is it aided by visual representations when appropriate? Have you "taken sides" among the personalities involved, analyzed the information rather then merely presenting it, slanted

anything? Conversely, is there too much information? Are charts, tables, and other data presented unnecessarily?

Next, check to see that the information is presented in an order that makes sense. This may not be chronological order, but the chronology should be apparent. It should be remembered that the case study is a training tool. One must always keep the possible training objectives in mind. A good case makes the facilitator's job easier.

The next objective is to *edit*. This involves rereading and further revision. This is the time to check the spellings and meanings of words and to clarify sentences. To paraphrase an old line, what you said may not be what you meant. Also check sentence and paragraph structure. Few sentences or paragraphs cannot be made more succinct or polished. Take a look at the writing style. If necessary, consult *The Elements of Style* (Strunk & White, 1979), *The Chicago Manual of Style* (University of Chicago Press), the United States Government Printing Office Style Manual, or a similar reference. Once you have revised the content, reread the text one last time to check the spelling, grammar, and punctuation (you will be less likely to become stuck in the content if you focus on these separately).

When you have completed your revision of the first draft, ask a colleague or an expert in the field to review it. Make any necessary revisions before submitting it to your contact person in the case organization. Ask this person to evaluate the case in light of *anything that might interfere with obtaining a release* by the organization.

GETTING THE RELEASE

You must obtain a formal, written release, signed by an authorized representative of the case organization, before the case can be published and distributed. Your contact person should be able to identify potential problems before the written case is turned over to other executives (up the hierarchy) for review. Several people in the organization (executives other than your contact person) may want to review the final draft of the case before agreeing to release it for publication. If you have the opportunity, let each person know that the case has been reviewed by others and who they are. Any of these people may suggest rewording, additions, and/or deletions. They are apt to scrutinize financial data, information about new products or plans, and direct quotations. It may be necessary for you to reassure these people that all information about the organization except the written text of the case will be held strictly confidential. (In fact, you may be required to destroy your notes and backup materials.)

Most releases are for publication and distribution for educational purposes only. The case writer or the organization for which he or she works usually obtains copyright to the case. The text of the written release should include a statement that the case (with the title named) has been read by authorized representatives of (name of case organization). It should also state that "I (we) authorize use by" (name of case writer or organization that will claim copyright) "to print, copyright, distribute, and use the written case in educational or training programs" (or for educational or training

purposes) "without change." The official signature(s) should be followed by the person's name, title, organization, etc., and the date of signing. Of course, these guidelines are general; the specific wording may vary with each case.

◼ A BACKGROUND FOR USING SIMULATIONS IN HUMAN RESOURCE DEVELOPMENT

WHAT A SIMULATION IS AND WHAT IT IS NOT

Although the classic definition of simulation is a representation of something, in most applications today, simulation tends to mean the testing or use of a model. Models themselves represent, they do not explain. By represent, we mean that a model depicts or mirrors some aspect of reality (the form, not necessarily the content) and shows the interrelationships or processes of the component parts of the model, sometimes over time. In fact, a simulation is both a model and a process. Process implies change, and in the use of almost all simulations in business or education, some factors of the model are changed in order to study the effects. For our purposes, then, a simulation is a process based on a model of a process, an *operating* model of a real system or a model of change in the system. It is one form of modeling. (For more on models, see "Using Lecturettes, Theory, and Models in Human Resource Development," Section One of Volume 23 of the *Pfeiffer & Company Library*.)

There are several types of simulations. These include the following:

1. *Verbal model.* This is a *description* (oral or, more often, written) of relationships between the components of the model. It may include statistics. It is not as precise as analog, digital, or mathematical models. Furthermore, because the person who writes the model selects the words to be used, it may be slanted, consciously or unconsciously, toward that person's point of view.

2. *Diagrammic models*. These consist of representations such as pictures, maps, and diagrams (including flow diagrams). They are more flexible than mathematical models and more specific than verbal descriptions. They allow alternatives to be depicted by a "branching mode" (see the description of a decision tree later in this section). Such models are used in urban renewal, traffic engineering, other types of engineering, organizations, computer producing, and military war games. Computer graphics have greatly enhanced the possibilities and creatability of diagrammic models.

   One specific type of diagrammic model that is being used more and more is the flow chart or flow diagram, a depiction of the sequential and dynamic aspects of a situation or problem, i.e., its behavior over time. Such diagrams permit recycling but not simultaneous processes. A flow diagram can be an entity in itself or part of a more complex simulation.

3. *Analog models*. These include representations or simulations of physical realities. Although the term "analog" most often is applied to all such models, in fact, a model that has the same properties as the original but a change in scale is

an "iconic" model. An example of this is a smaller-scale physical model—such as an architectural model—that represents the physical *appearance* of something (i.e., shape and dimensions). A true analog model (from the word "analogy") implies representation by other properties. Many analog models, such as wind tunnels, replicate physical *conditions or effects* (such as, for example, wind velocity or pressure).

4. *Analytical or mathematical model.* In this type of model, the referent system or reality is represented by a set of equations with measurable variables. This typically is used when numbers are a major part of the reality and the user wants to determine probability. Such uses include accounting, financial and economic forecasting, strategic planning, distribution, supply and demand, and other business applications. Mathematical models have been used for a long time in written form by organizations and universities for business training and by the military for purposes of allocation and tactical warfare. Although they are used in some psychological studies, they are not suited to the study of human relations problems because of the difficulty in quantifying behavior. In training, their primary use is in the calculations necessary for two-person, zero-sum games.

5. *Digital simulations.* More simulations than models, these are totally computerized. They are much more complicated than written mathematical models. The computer programmer uses the binary system (zeros and ones) to represent discretely the variables in other realities. However, in creating a digital simulation the programmer must cover every single, pertinent detail, in sequence, because the computer has no imagination. A computer simulation can be *static*, that is, representing a cross-section (a particular point in time), or *dynamic*, representing a time series.

There also are simulations that are hybrids—combinations of analog and digital. The "flight simulators" used to train pilots often are a combination of analog (physical) models and digital simulations.

Verbal models, diagrammic (including charts and pictorial) models, and iconic and analog models are nonsymbolic, as are mathematical or quantitative models such as analytic models (in the mathematical sense, e.g., the economic theory of an organization), and numerical models (e.g., a particular organization's accounting system). Digital simulations, however, are symbolic.

It is important to remember that a model or a simulation of how the model operates is a *representation* of reality; it is *not a duplication of the reality* itself. In particular, behavioral simulations should be regarded as experiments. A simulation is intended to provide experience in working with a system such as the one that is represented, but—as in real life—each experience is different. It is not to be expected that an actual person or a real-life organization will behave exactly as a simulation did.

In most cases, a simulation will include all the factors and variables that are necessary to "run" it, but will not include extraneous data that are present in the referent

system but not vital to its operation. For example, in a simulation of a business organization, the titles of the executives who make pertinent decisions may be included, but if the model is primarily economic and not behavioral, there will be no personal information to turn those titles into roles. Many economic business simulations depict a *typical* organization rather than a specific one; because there are no actual role incumbents, background information about the persons who hold various positions will not be included.

A RATIONALE FOR USING SIMULATIONS

Simulations can be used in human resource development for several purposes. They are especially useful in behavioral and economic research to test hypotheses, theories, and models. Because a simulation imitates the real-time behavioral characteristics of a system, it can be used to test hypotheses about what occurs in the system. Predictions can be made, then a simulation can be used to reinforce the existing hypothesis or to develop new hypotheses when cause-and-effect relationships are not clear. A simulation also can be used to validate or compare theories. (For definitions of—and a discussion of the differences between— hypotheses, theories, and models, see "Using Lecturettes, Theory, and Models in Human Resource Development," Section One of Volume 23 of the *Pfeiffer & Company Library*.) Theories also can be combined. A simulation can be even more useful in questioning the details of a model. In all these applications, alternatives can be explored, experiments can be made. As questions and possibilities arise, changes can be made, and the simulation can be rerun. Ideas can be expanded. The effect of such use of a simulation is to provide the equivalent of real-time experience in using or manipulating the system, be it an economic model, a model of an organization, or a behavioral model. As will be seen later, this can be particularly useful in teaching and training as well as in research (Guetzkow, Kotler, & Schultz, 1972).

Simulations often are used in business planning and decision making and in resource allocation to predict and study the effect of uncertain variables or additional data. Many of these simulations include stochastic elements or the use of random numbers. (These are discussed later in this section.) In fact, business and administrative science simulations seem to be more "applied" than those in most other areas of social science; such applications combine experimentation and analysis for practical, rather than purely research, purposes. They usually involve the use of computers to measure the effects of variations in input data or structural parameters on output or results. In such uses, the simulation is used to ask "what if?" Different policies and strategies can be used to test the system's response, be it a market, economy, budget, or the like. This can be used to generate best- and worst-case scenarios. Such simulations typically are used in planning to "weigh the odds" and as "trial runs." Related to this are the use of simulations to find the best solutions and the monitoring of a program as it goes along, against simulation projections.

In using a computer for such experiments, in addition to having an accurate simulation, one must program in the probable effects of proposed actions. As has been stated previously, the computer has no imagination; it will not supply assumptions or details.

Another use of simulations that resembles the business applications is that of training. Social or organizational systems are simulated either by physical means or computer program, and the participants enact typical roles that would be found in such a system. In management training, for example, a physical simulation of an office environment could be created, and participants could be assigned the roles of members of the top-management team, given pertinent information about the organization (hospital, museum, bank, agency, manufacturer, etc.), and told to complete some task such as making plans for the next quarter or year. Some simulations are complex "in-basket" activities (see a discussion of this type of activity in "Using Structured Experiences in Human Resource Development," Section One of this volume). If the participant group is large, the players can be divided into teams, each of which represents a department or division within the organization. The simulation then would require each "department" to accomplish some task (such as creating its functional plan for the next year) and also would require it to exchange information with the other teams in order to accomplish its task. Cooperation and collaboration often are major parts of the learning experience in training simulations.

One useful application of interest to HRD practitioners is the use of simulation to develop consultation skills. According to Boyer (1987), this approach can be used toward the end of the consultant's cognitive education or at the beginning of the practicum phase, to integrate cognitive, interpersonal, and personal skills.

Although the in-basket activity and the design that Boyer describes for training consultants are relatively pure simulations, most training simulations are relatively structured; they have rules and other built-in procedures. These simulations are called "games," and they are discussed in later parts of this section. In order to understand gaming, however, one first must know something about the design and construction of pure simulations.

THE HISTORY OF SIMULATIONS

For our purposes, the history of simulations is tied to the history of simulation *games*, which is presented in detail later in this section. The most significant occurrence in the history of simulations is the introduction and growing use of digital computers that began in late 1950s. Before that time, it was difficult to find analogs for business; since then, simulations have become a major tool in business analysis and planning. One of the major uses of simulations in the 1940s and '50s was that that the RAND Corporation and others had developed for use by the military and, later, the diplomatic corps. The first published use of the Monte Carlo method (see definition that follows under "Random Numbers, Stochastic Variables, and The Monte Carlo Method") for scientific

application appeared in the *Journal of Chemical Physics* in 1953; simulations have been used extensively for scientific inquiry since then.

The first business simulation was created by the American Management Association in 1956; others soon were developed for teaching purposes in major universities (UCLA, Carnegie Tech, Yale, Harvard, Tulane). In the early 1960s, businesses such as IBM and General Electric also developed simulation games to train their managers and other experts within the frameworks of their particular systems.

In addition, behavioral simulations were developed for use in psychological experiments in the early '60s, beginning with HOMUNCULUS, a computer model of a social person (Gullahorn & Gullahorn, 1972). This simulated how people make behavioral decisions in interactions with others. Other computer models of personality were developed in the late '60s. Personality processes were represented by computer program subroutines. These generate behavioral or verbal outputs in response to inputs. Used first for research in psychiatry, psychology, and psychotherapy, they were expanded to study social organizations, demographics, social policies, information dissemination and diffusion, political (electoral and legislative) processes, international relations, socialization processes, and other group processes as well as individual behavior and decision making.

Most of the early computerized simulations were written in FORTRAN or other general computer languages such as ALGOL, COBOL, and PL/1. Special packages of routines or procedures such as GASP, a FORTRAN subroutine, were developed to be used with these general computer languages for simulations. Later simulations employed various computer simulation languages, developed in the 1970s, such as GPSS, SIMSCRIPT, SIMSCRIPT II, MILITRAN, SIMPAC, and SIMULA. These substantially reduced the amount of time required for programming and debugging, thus reducing the cost of writing simulation programs.

Today, computer simulations are used by businesses, other organizations and economic systems, communities, public services, municipal resources, disaster relief agencies, public and private transport systems (land, air, and water), traffic engineers, architects, astronauts, social scientists, geologists, diplomats, and the military, and in the fields of education, sociology (particularly demographics), international affairs, medicine, all types of engineering, geography, biological science, education, economics, mathematics, nuclear physics, chemistry, ecology, city planning, urban renewal, land use, fish and game management, water resources, forest management, conservation, mining, housing, police communications, and fire prevention, as well as management education and training.

However, the story has not ended. In the past, computers have been limited in that they could compute in a linear fashion only. Now, a new breed of computers based on parallel processing architectures have been developed. These "super computers" can execute more than one instruction simultaneously. This breakthrough opened up heretofore unimaginable possibilities for computer applications.

◧ DEVELOPING SIMULATIONS

UNDERSTANDING ASPECTS OF SIMULATIONS

Although the majority of actual simulations (as opposed to some board games and other games that are not actually simulations) now used in training are computerized, not all are. It is possible to develop a simulation of a business entity, for example, that can be manipulated by participants with the aid of calculators and without the use of computers. However, more and more training simulations are computerized. Obviously, it would be impossible to actually create a computer simulation without a knowledge of computer programming. Nevertheless, there is information that nonprogrammers should know if they intend to request or use computerized simulations for training or other purposes. This information also can be helpful in working with programmers to develop new solutions. With the exception of details that are specific to the use of computers, all the information in this section applies to noncomputerized simulations as well. Because this discussion is concerned with simulations as training technologies, we will focus on the development of simulations that will be used for training "games," not those designed for research. However, many characteristics of the two types of simulations are the same.

There are basically two types of simulations used in training: (a) those that deal with economic business concerns and (b) those that deal with behavior. Business and economic simulations primarily are used in training managers. These include not only economic considerations (mathematical) but also interrelationships between the many components of the organization. In training, these components and the variables in them will be manipulated to show the effects of different courses of action. Thus, the basic theories or operating procedures on which the simulation is based must be explicit as well as logical, and the simulation must include all variables and must be able to compute the effects of change in any of those variables. This makes simulations very difficult to construct.

There are three basic focuses in business simulation (Newell & Meier, 1972):

1. *Type of problem.* The focus here is on specific, decision-making aspects of physical and economic systems (e.g., businesses, communities, and service organizations) such as inventory, scheduling, budgeting, and distribution systems.

2. *Scope of System*. These simulations encompass an entire organization rather than parts of the organization. They include its divisions, feedback systems, and individual decision-making processes. The interactions of the various subsystems must be included. However, because it usually would be impossible or impractical to include all the components of an organization, the simulation developers must determine what will be *done* with the information and then decide which operations and what data to include.

3. *Methodology*. This asks what the simulation will be used for, (e.g., practical use such as forecasting or budget setting, or operational gaming for training purposes). For heuristic purposes (e.g., to teach analytic, decision-making, or planning skills), simulations must include the rules of the game, policing and umpiring functions, and other game variables in addition to what is required for pure simulations. (We will discuss these later.) With each methodology, one must determine what kinds of decisions (changes) will be made, what information will be needed, and what processes are involved.

STAGES IN DEVELOPING A SIMULATION

Defining the Objectives and the System

The first step is to identify the objectives of the simulation: what it will *do* and how it will be *used*. This may require stating a specific question to be asked, a hypothesis to be tested, effects to be studied, or a problem to be solved. This must be stated explicitly; all terms must be defined, and all criteria must be specified. One must identify the referent system or organization, the business (product or service) that it is in, and provide some background related to the problem or question to be raised.

Constructing the Model

A simulation is a mathematical or physical model of a real system, represented by a set of equations or the physical behavior of an analog. It must accurately represent how the system being modeled actually operates. Simulation results are the responses of the model system to a particular set of initial conditions with *specified interactions between components of the system*. These linkages include inputs and outputs (interactions) between subsystems and to and from the outside environment. Examples of these initial conditions and interactions include organizational (system) policies, management practices, patterns of influence, norms, operations, fixed and variable costs, time periods, and informational and decision-making systems. The model may even contain behavioral information, such as hierarchical power or pressure on people for certain decisions or responses (expressed in percentages).

One of the major problems in developing a simulation is finding sources of valid data and collecting the data that you want to include. Some sources of data are organizational records and reports, interviews with executives and financial personnel, customer or client profiles, market studies, sales figures, economic profiles, and competitor analyses. The following is a list of the kinds of data that *may* need to be included in a business simulation.

■absenteeism, accounts payable, accounts receivable, adaptive strategies, administrative expenses, advertising budgets, advertising schedules, age of work force, arrival and departure dates ■ back orders, balance sheets, bonuses, building permits ■ capacity per unit, capital equipment, capital investments, carrying costs, cash flow, cash generated, cash required, clerks, connection costs, competition, competitor analyses, computer availability, computer down time, construction costs, consumer demand, costs, credit memos, customer service, customs regulations ■ damage, delays, departmental budgets, depreciation, distributors, district sales management, dividends, due dates ■ economic conditions, engineering capability, equipment, expansion, expenses, export regulations ■ facilities, financial statements, functional analyses, functional plans ■ geographic considerations, government regulations, gross margin percentage, growth rate ■ handling costs, health regulations, hierarchy ■ import regulations, income statements, indirect costs, inspections, insurance, interest rates, inventory levels, investments ■ job scheduling ■ labor negotiations, labor rates, labor strikes, lead time, legal considerations, loans ■ machine load and capacity, machinery, mailing lists, maintenance, manufacturing costs, market growth or decline, market research, market share, marketing budgets, markets available, materials ■ net profit, new technologies ■ office supplies, operating costs, orders, overhead ■ packaging, pay raises, pension or retirement plans, performance in previous quarters, permits, plant capacity, plant investment, postage, pricing, probabilities of occurrence, product image, production capacity, production costs, production rate, production time, production volume, profit and loss ■ quality control, quotas ■ raw materials purchased, raw materials recycled, refunds, research and development, retail price, retailers, retooling, returns, royalties ■ safety regulations, salaries, sales administration, sales commissions, sales distribution, sales estimates, sales forecasts, sales offices, sales persons, scheduling and dispatch, shareholders, shifts, shop performance, setup time, shipping/drayage, spoilage, start-up costs, stock, supply and demand, surplus ■ targeted production, tax rates, turnover ■ unions, utility costs ■ vacations, variances, vendors, volume ■ wait time, warehousing, waste, work force, work load ■ year-to-date, etc.

The time scale of the simulation may be an important variable. Other variables may include the use of specific planning methods and whether the system to be simulated is in a steady-state, growth, or declining mode.

Endogenous and Exogenous Variables

Some variables are dependent variables that describe the behavior of the system—the results of relationships and interactions—and are built into the model. These are called "endogenous" variables. Examples of these are inventory and production scheduling.

Other forces or variables are independent of the state of the system and therefore in the external environment; they are "exogenous." Examples of these are the Dow Jones Average and the value of the dollar. It is important to identify all the pertinent endogenous and exogenous variables and to describe the cause-and-effect *relationships* among them accurately.

Many simulations involve random, or stochastic, variables. Models that have no stochastic components are called deterministic models. If there are stochastic variables, assumptions must be made about the probability distribution or known probability distributions must be included. "Random" numbers must be generated. This can be done by using a table of random numbers or by using computer subroutines to have the computer generate "pseudorandom" numbers. (A more complete discussion of random numbers and stochastic variables is found later in this discussion.)

It usually is impractical to include all possible variables in the model; the simulation developers must decide which are pertinent and attempt to include those variables that reproduce the important features of the real system. They must remember that their task is to represent reality, but they cannot reproduce it. A balance must be reached so that the model is not overly complicated. This is particularly relevant in developing a computer simulation. The computer must be *told everything that it needs to know* in order to generate what the users need to know. All variables must be described precisely, but the complexity of the model affects the amount and difficulty of programming, the computing time, and the validity of the model. It is important to keep the objectives of the simulation in mind.

Estimating Initial Conditions for Computer-Simulated Models

A first step is to estimate the numerical values of the constants and initial values for the parameters of the model and its exogenous variables. These values should provide reliable statistical estimates describing relevant features of the actual system. If the simulation is dynamic—or time-dependent—the program developers also must assign an initial time to the values of variables in the model (e.g., the end of the last full fiscal year or the present time). The sensitivity of the model to each of the initial conditions should be evaluated by comparing corresponding simulations in which distinct values are individually chosen for the initial parameters.

Creating a Computer Program

To develop a computer simulation, the equations must be put into computer-coded form, that is, a computer program must be developed. The algorithm (the set of rules for solving the problem in a logical sequence and a finite number of steps) to be followed by the computer in generating the sequence of values of the endogenous variables is described by a flow chart or flow diagram. The solution values of the endogenous variables are obtained by combining—as specified by the equations of the model and the algorithm—the assumed values of the exogenous variables with stochastic disturbance terms (Adelman, 1972).

A computer simulation can be programmed in a general computer language or in a simulation language. Simulation languages require less programming time but are less flexible than general languages. Simulation languages also have errorchecking techniques. But general languages are more flexible in terms of the output reports that can be generated. In addition to the computer and simulation languages listed in the "History" portion of this section, specialized computer languages have been developed for particular applications (e.g., SIMULATE for economic models; DYNAMO for industrial dynamics and management decision making in a dynamic organizational environment); and languages that permit a digital computer to simulate an analog computer, such as CSMP, CSML, MIMIC, SIMIC, SSSL, DSL/90, and MIDAS. List-processing languages such as IPL-V, LISP, SLIP, and COMIT do not have flow or timing capability. These languages generally are used for nonbehavioral processes (Guetzkow, Kotler, & Schultz, 1972).

Because of their heuristic nature, models to be used in training do not have to be as complete, complex, or exact as those for actual business-decision simulations. However, they should be relatively complete and accurate. The amount of time required to create the program depends on the complexity of the model, the amount of data, and so on. It can range from a few days to several months or years.

Testing and Retesting the Program

Next, the program must be tested repeatedly to see if the assumptions on which the model is based are valid, if it is an accurate representation of the real system. The computed solutions of the model equations must be realistic; that is, the model must be able to predict the behavior of the real system. The program is adjusted until the simulation acts like the system being modeled. This process can be very complicated and complex. One method of checking program output is the use of historical data or predictive forecasting under different combinations of controllable conditions, such as (a) analysis of variance (the distribution of computer-generated output compared to corresponding historical data); (b) a chi-square test (same frequency distribution between computer-generated data and historical data); (c) factor analysis (on computer-generated dynamics and real system dynamics); and other methods.

The simulation may have to be run numerous times over stipulated time scales. For example, it could be run fifty times, each simulating sixteen fiscal quarters or four years.

RANDOM NUMBERS, STOCHASTIC VARIABLES, AND THE MONTE CARLO METHOD

When designing a simulation that models a social, administrative, or economic system, one must take into consideration the random variables over which the users of the actual system have little or no control. These random (or stochastic) variables must be included in the model if the simulation is to be used to make inferences about the behavior of the real system. In most simulations used for human resource development, the element of

chance is introduced by the inclusion of human decisions and/or random numbers. Deterministic simulations do not include random fluctuations and, thus, have no stochastic variables.

The fluctuating variables in the simulation are characterized by a probability distribution. "Random numbers are associated with a set of data in order to select a random value from the data" (Jones, 1972). They can be generated by using a table of random numbers or by having the computer generate them (in the latter case, hey are actually "pseudorandom" numbers, but in most applications, they function equally well).

Including stochastic variables in a simulation by using pseudorandom numbers is generally referred to as "the Monte Carlo method" (a reference to the roulette wheel or dice used in gambling). Although this terminology is not always technically correct, it is widely used. The Monte Carlo method generally is used in applications in which the system is in equilibrium. There also are dynamic simulations that are used to look at time-dependent variables. These techniques allow the inclusion of a statistically distributed range of values, that is, they take a *sample* from the possible outcomes. Because this technology is so complex, we will not discuss how it is actually done in this volume; however, the HRD practitioner who wishes to have a simulation developed (or who has a client who has requested one) would do well to keep these technical considerations in mind.

A simulation also can be used to evaluate risk. In a business application, for example, one could use a simulation to do a risk analysis of various courses of action in deciding how to expend capital. One could try out the best and worst possibilities by adding the risk factor in calculating possible return on investment. Random numbers can be used to calculate a large number of possible values with associated probabilities. The interrelationships of the factors considered (e.g., money invested, production volume, product price, operating costs, market share) and cause-and-effect relationships such as the value of the dollar, market growth, etc., must be included. One would then test for the range of probabilities.

Other simulation subroutines can be programmed to cover things such as depreciation, return on investment, given cash flow, special tabulations, written reports, graphs, and so on. These can be changed and run more than once. One can use the same basic program and vary the subroutines to work with different aspects of the business or model.

THE DECISION TREE

If one is not using a computer, one can draw a decision tree to help to identify alternatives and their possible outcomes. This is a graphic representation of choices that is roughly analogous to diagraming a sentence or constructing a mathematical equation. It provides a way to look at and explore possibilities. Both quantitative (financial or

objective) and qualitative (emotional or subjective) choices can be evaluated in this manner (Jones, 1972). The following is a simplified example of a decision tree that might be used at Pfeiffer & Company.
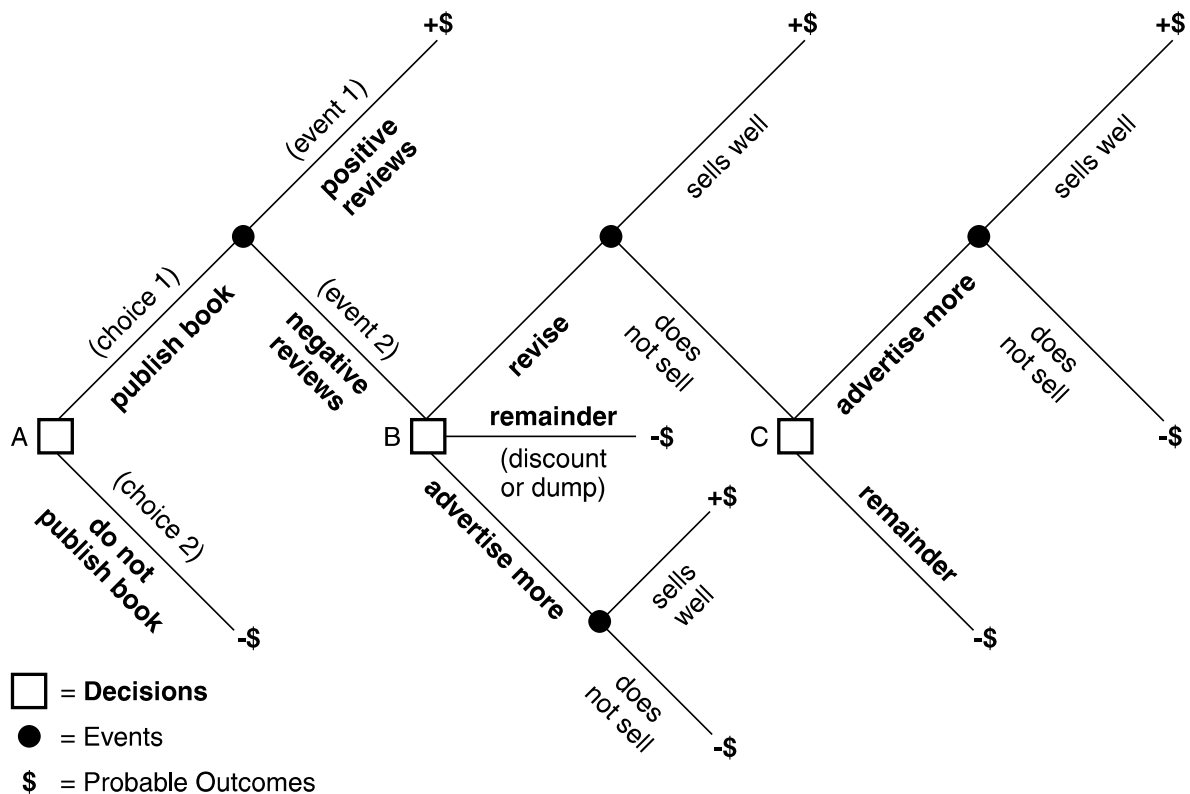
Sample Decision Tree

Note that the possible decisions are represented in a branching mode, i.e., there are points at which one of two or more decisions could be selected, and for each possible decision there are potential positive and negative effects. Numerical values such as percentage probabilities, estimated costs, possible profits and losses, etc., can be added to the decision tree, as can other factors such as people and risk (Jones, 1972).

THE DIFFERENCES BETWEEN SIMULATIONS AND GAMES

As we have said previously, a simulation is not always a game. A simulation is a representation of one system by means of another system that behaves similarly to the original. The simulation usually is less complex than the original, which makes it easier to analyze and manipulate. Simulations can be used for tactical and exploratory purposes.

One basic definition of a game is that the simulation or model is not rigid in terms of its structure and rules; it can be manipulated by the players (Shubik, 1975). Most experts agree that the distinction between a simulation and a game is that the latter

includes the element of human interaction as well as the necessary structure that defines how the game is to be played. Furthermore, not all games are simulations (Greenblat & Duke, 1981). Some games are more free-form and do not involve the use of precise models. Some present a scenario and then let the players take over. Some are really structured experiences or experiments.

The purpose of a game is to involve the players in the operation. The system and/or environment in a game need not be a model of an actual one; it can be a composite or a totally fictitious one that is similar to those encountered in real life. It need not contain all the data or variables encountered in the real world; only those factors that are needed to provide the learning or practice needed and to affect the play and the outcomes are required. In many games, the players have roles.

Like case studies, games are used widely for training. In business and management education, simulation games provide an opportunity for participants to test a variety of techniques and theories. Participants can use different methods of analysis and compare them. They can learn how to apply specific theories and techniques in analyzing information and making decisions. They also learn about the interdependence of functions because the game requires them to work with and through other people in order to accomplish their objectives. This teaches them about communication patterns, consensus, influence, conflict management, and other aspects of group dynamics. A simulation game allows the participants to try again; this increases creativity because the risk is far less than it would be in the real world.

How Games Differ from Case Studies and Role Plays

Because they require more interaction, decision making, and immediate feedback, games tend to be more involving and more realistic than case studies. Typically, case studies are used to focus on interpersonal issues, whereas games are used more to focus on economic considerations, strategies, and plans. Gaming helps the participants to learn about a particular type of *system*: how it functions and operates and how to function effectively in it.

While the feedback in role playing is primarily to create empathy with the role players, the feedback in gaming is to make the consequences of certain decisions or strategies explicit. Gaming also includes an element of risk and uncertainty that is not present in case studies or role playing, especially if the game is based on a simulation that has random or stochastic terms.

■ A BACKGROUND FOR USING GAMES IN HUMAN RESOURCE DEVELOPMENT

WHAT SIMULATION GAMES ARE

Games are based on models or simulations that relate to the field in which the participants are learners. Game models can be analog (verbal, graphic, or physical), mathematical, or digital (computer programs). In pure computer simulations, the computer makes decisions and takes actions; such simulations are not used in gaming. In computerized simulation *games*, the participants interact with the computer. They make decisions, enter data and changes in the computer, and receive computerized feedback on the results of their actions.

In most games, the players have roles, such as vice president of marketing or controller. These roles may be played by individuals or teams. They may be equal or unequal, specific or general, rigid or flexible, complex or simple, etc.

Most games also begin with a scenario that describes the system in which the roles and tasks are to occur and states the task to be done or problem to be solved. Some information is general to the system and some pertains to specific roles.

Other information, in the form of charts, diagrams, financial statements, market or competitor analyses, other types of reports, statistics, models, and so on, is generally included in the game. In some cases, this information is provided to players, but in others they have to ask for (perhaps even search for) the information they need.

In the typical simulation game, the participants are presented with a business situation and a task or problem that they must achieve or solve in a defined period of time. Some games are designed to be run in an hour or more; others may take several days. It is the participants' job to discern and analyze the significant factors in the situation. Many are based on economic models. In the typical business game, the participants must consider numerous organizational, economic, and market factors. In computerized games that have incomplete data, the participants must search for the information that they need. Many contain uncertain conditions, a reflection of real-life markets and circumstances. Management games may involve personnel and resource problems as well as economics.

The participants generally work in teams (which may represent departments of the same organization or, more often, separate but equal organizations). The participants must gather data and analyze them, using relevant management or business skills. They must examine relationships among a host of variables, test assumptions, and explore options. They must consider the various effects of different decisions (choices and actions) and identify alternatives. In most cases, this involves studying components of

the system (functional analysis) and doing functional planning as well as system planning. The purpose of many business games is to train decision makers to think strategically, so each participant team is required to develop a strategy, decide on the actions to be taken, and implement those actions.

An "accounting" system that is built into the game records the players' choices and actions and their consequences as they occur. In a computerized game, this system also monitors the effect on and updates the scenario. Depending on how choices and plays are entered, it may also track what each role (player) does. Complex computer games have not only economic and structural information about the system but also built-in assumptions about behavior and responses. Financial statements and other data that provide feedback on the consequences of the various actions are generated. This allows the participants to see cause-and-effect relationships and to identify and discuss what might have been done differently. It provides the participants with a simulated business experience.

A majority of the instructional games used today are in the area of business (e.g., management, economics, planning). In learning about a business or profession, it is necessary to have both an overview—a sense of the whole—as well as an understanding of the components, the functional areas. Both aspects are necessary in order to achieve a perspective. Most organizations today are too large and too complex to permit managers or others to gain direct experience in their many components. Gaming provides a way to obtain a sense of how the components operate and how they affect the total system and vice versa. In order to do this, the games are pared down to relevant aspects of the organization or system; they are not what is termed "environmentally rich." Data are edited and succinct, and extraneous details are omitted. Time is compressed so that the decisions that the participants make in a few hours or several days simulate the operation of the modeled organization or department over several months or years. Thus, a game does not present the total reality of the organization or system, but a functional model or simulation of it.

The games that we will discuss are those designed to facilitate specific learning goals; they are not designed for research or for fun. They can be used for a variety of educational purposes, including learning how to deal with models and simulations, learning specific business principles or techniques, learning how to explore and analyze data before making decisions, learning about decision-making processes in groups or organizations, or studying specific data related to a particular field or organization. All involve some skill practice. All have similar components: players, roles, goals, activities or tasks, constraints, rules, and payoffs or consequences (McKenny, 1967).

Many games used in training are analog or mathematical and do not involve the use of a computer. These games tend to be less complex and less expensive. They often are used to illustrate specific problems, skills, or functional areas. Examples of these are board games (e.g., Paul Hersey's *Situational Leadership® Simulator*) and games in which the participants are given oral and written information and perform calculations by hand or calculator without using a computer. In these games, the facilitator explains

the procedures of play and the rules and provides the feedback. (In computerized games, these functions—including the functions of empire and referee—are built into the program.) In-basket activities are a simple type of simulation game. These tend to be less structured and more environmentally rich than computerized games. Computerized games, on the other hand, tend to be more expensive and complex, but they offer some possibilities that the others do not. In computerized games, for example, the rules are more enforceable because they are programmed in a cause-and-effect manner.

In all games, the tasks and problems should provide insight into real-life situations. In many cases, they are related to concepts and theories that have been or will be presented in the rest of the training. Although training games may be enjoyable and rewarding for the participants in the long run, they should not be "fun"; in fact, they should be "work." Their purpose is to develop awareness, to stimulate discussion, to build or enhance particular skills, and to aid participants in applying what they have learned.

A RATIONALE FOR USING GAMES

One reason for the popularity of gaming as a training technology is that we all know *how* to learn from games (from our childhoods), even if we are not aware of it. Playing house, playing soldier, and so on, are ways in which children use games to explore and prepare for the real world. As adults in business and society, we still refer to ourselves as "playing the game," "playing by the rules," "dealing with a straight deck," and engaging in "teamwork." Games are perceived as nonthreatening ways in which to interact with others in order to attain common goals. For this reason, they are well suited to training adults in professional skills that require interaction and cooperation with others.

One of the advantages of gaming is that participants tend to feel responsible for the outcome of their team's work. They are drawn into both their roles and their team or organization's goals. As they are drawn into the "work" of the game, they tend to behave naturally, as they would in real-life situations. Feedback that is timely and specific helps them to improve their performance, and they generally do better in each succeeding round. The more "real" the game is to the participants, the more they are concerned with making sound decisions, not figuring out the game in order to "win." Because there are no "right" answers, no formulas, the focus is on the process as much as on the result.

Gaming provides an opportunity for participants to apply and test what they have learned so far and to gain confidence in their ability to organize and analyze data, evaluate and make decisions, and work with others. It increases their understanding of different business functions and of the relationships between parts of a system and the system and its environment.

While learning the specifics of the simulation task, participants also can be exposed to new insights about team functioning: the need to work with and through others, the

value of synergy in group decision making, the role of the team leader, the roles of members, the effects of collaboration and competition, and so on.

In addition, the interpersonal dynamics of the game allow the participants to learn something about themselves and how they work with other people. As they hear descriptions of their behavior during the debriefing sessions, they begin to realize the impact of that behavior on others. They have the opportunity to explore patterns that may be interfering with their effectiveness in their real-life work situations. They also can learn from the insights that other participants have. People who one sees as different or difficult to understand can become more real during the debriefing, thus allowing each participant to deal more effectively with different types of people in the future. Participants also can receive positive feedback about their working styles, which can reinforce and help them to "fine tune" effective behaviors.

Gaming can be used to acquaint participants with a wide variety of content areas and skills. These range from general behavioral skills to specialized applications in various types of organizations.

THE HISTORY OF SIMULATION GAMES

Adult "games" have been used for centuries by military forces to practice strategies and to train personnel while providing direct feedback on the effects of decisions and actions. The games of Chess, Shogi, and Go were developed from war games used in India, China, and Japan thousands of years ago. Chess was used as the model for war games in Germany in the 1600s and 1700s. It was not until 1798, in Schleswig, that the New Kriegspeil war game employed the use of maps rather than game boards. Even so, the technology of war gaming was not used in the United States until the late 1800s. Once its potential was recognized, however, war gaming was used extensively, and development accelerated. From 1946 to 1956, the Rand Logistics Systems Laboratory, RAND Corporation, and other military contractors developed games to test military strategies. Later, the RAND Corporation developed games for use by the diplomatic corps and business as well as the military.

In 1956, the American Management Association developed a "Top Management Decision Simulation"—the first business management game. It was a general management game, a model of a total organization with a single product in a single market. Teams of participants interacted and competed in making top-management decisions. In the late 1950s and early 1960s, several more games were developed. UCLA first developed an economic simulation game in a business context, the UCLA Executive Decision Game. This was used from 1956 on. The second version of the UCLA model was used in other colleges and universities, including the Harvard Business School, Tulane, and Carnegie Tech. In 1959, with expanded computer facilities, UCLA developed a third model that contained information about competitive markets and economic forecasting for industry. This was first used in several schools in

Southern California, then by the Harvard Business School in 1961. Schrieber created a "Top Management Decision Game" at the University of Washington in 1959.

Another game was developed at Carnegie Tech and used there and elsewhere. The Carnegie Tech Management Game presented an industrial case, much like the case method, with a great deal of background information. It was based on the premise that business functions are interdependent and that many business decisions require the cooperation of several individuals, even though there frequently are serious time pressures. It was designed to increase the participants' abilities to find, organize, and utilize information from a complex environment, as well as their abilities to forecast economic and other conditions and make plans. At Carnegie and other institutions, graduate students built all or part of the models for these games. This provided them with experience and also saved money (Shubik, 1975).

Games also were being developed by private enterprise, to train managers in specific types of organizations (a specific industry or product such as banking or hotel supply) or to allow practice in specific functional areas of an organization, such as marketing, accounting, or production. Some games even focused on specific subparts of particular industries. The skills involved in such games were more specialized, less generalized. Many of the simpler functional games were designed for functional managers or experts, not for top management. These games had less emphasis on conceptual problems and more emphasis on techniques. They generally were less complex and required less time to run than the university games. Some of the most important organizational games included IBM's Management Decision-Making Laboratory and Financial, Allocation and Marketing Executive (FAME) Game, developed in 1961, which was used in the IBM Management Training Program. Manufacturing, marketing, and financial decisions were required on three different "decision levels" ranging from simple to complex. This was similar to the Carnegie Tech and Harvard Business School games in some ways, but was rather rigid. Another noteworthy business game was the General Electric Planning Simulation Exercise, INTOP (International Operations Simulation), developed in 1963. It simulated management in a multinational corporation and, although very complex, allowed for negotiation. It was faster than the Carnegie Tech game or IBM's FAME but was more complex and slower than the UCLA and Yale games.

During this period of time, the UCLA game was being studied at the Harvard Business School. This resulted in The Harvard Business School's Management Game, which was used in its MBA program in 1962-63. The students worked in small groups, called "firms." This model was expanded and refined, and a new model was developed late in 1963. Simulation games were used by the Harvard Business School in both its MBA Program and Advanced Management Program to teach skills in areas such as administration, business operations, marketing, planning, auditing, and so on. This model simulated a manufacturer of consumer goods and included the economic areas of manufacturing, finance, and sales and marketing. The Harvard game was less behaviorally based than the Carnegie game and more complex than the UCLA game. It

was revised in 1966 at which time classes became "corporations," with divisions, officers, and so on. In 1972 it was revised and expanded again, becoming the Harvard Management Simulation Two. The Yale Macroeconomics Game, designed for both teaching and research, was developed in 1967.

A number of computer models of personality—some designed for psychological experiments—also were developed in the 1960s. Gullahorn and Gullahorn developed a computer model of a social person, HOMUNCULUS, in the early 1960s (Guetzkow, Kotler, & Schultz, 1972). This model involved an exchange of behavior as well as commodities (rewards and costs). It simulated how people make behavioral decisions in interactions with others. These included an "attitude structure" (concepts and beliefs), containing cognitive, evaluative, and emotional components. It was simulated by a complex structure of data in array or list form. "Personality processes" were represented by computer-program subroutines. These generated behavioral or verbal outputs in response to inputs; they contained adjustable parameters that represented personality traits so that personality traits could affect attitude structures. Used first for research in psychiatry, psychology, and psychotherapy, the emerging psychological models soon were adopted by other areas of applied behavioral science, including the diplomatic corps, those who studied international relations, and the military.

Two successful training simulations developed in the late '70s and early '80s were Looking Glass (McCall & Lombardo, 1979, 1982) and the FSI (Financial Services Industry), developed in 1982-1984 at the Graduate School of Business Administration, New York University. Looking Glass, developed from 1976-1979 at the Center for Creative Leadership, simulates a glass-manufacturing corporation. The simulation includes financial, production, and other pertinent business data. The participants are assigned the roles of managers in the company and carry out their assignments in a simulated office setting that includes desks, reports, in-boxes, interoffice mail, telephones, etc. The participants must deal with many different types of communications and problems in a six-hour period that corresponds to a typical business day. The processing of the activity takes another day. Feedback is generated by the participants themselves, by the facilitation staff, and through the use of instruments. The participants thereby have an opportunity to examine not only their general business performance, but also their communications, decision-making processes, personal impact, and a host of related issues.

The use of the digital computer has increased the application of simulations and gaming. The computer allows increased speed, accuracy, and impartiality. It reduces errors in calculation and allows increasingly complex, printed reports. As the technology of computer simulation became more prevalent and computer literacy was developed earlier in the public schools, games were developed for elementary and high school use. Board games such as chess and Monopoly were "computerized," and a whole genre of computerized games was developed purely for entertainment purposes. Computer-aided instruction (CAI) is now an accepted part of the educational repertoire. Programs exist that allow the user to construct a new game with various components.

Games that are based on realistic simulations also can be used for trying out or testing models, processes, decisions, etc. As with the use of pure simulations, this provides valuable information without incurring real-life consequences.

The cost of developing a game for use in HRD ranges from a minimal amount for basic materials to hundreds of thousands of dollars (for complex computerized games). Likewise, a simple game can be constructed in a few days, while a highly complex one can take several years to develop. The latter must be widely used in order to be economical.

GAME STRUCTURES AND TYPES OF GAMES

Many of the games used for management and business training are based primarily on mathematical models (finances and economics), rather than on behavioral models. Such games deal with decision making, with actions and stages. These games are more likely to incorporate aspects of "game theory." A model that uses game theory provides welldefined rules describing resources, goals, information available, and actions that players can take. These games have one of three major focuses or structures, described by Shubik (1975).

1. The *"strategic or normal form."* These games are relatively simple and have limited detail. They may be matrix games. For example, in a 2 x 2 matrix, two players choose among alternatives for a payoff. These may be zero sum games in which one player wins an amount equal to what the other loses, or there may be more players and more strategies from which to choose. An example of this is the well-known "Prisoner's Dilemma" (Rapoport & Chammah, 1965). The focus in these games is on the payoff. Because these games are intended to raise issues such as the win/lose versus win/win dilemma, they usually teach by analogy.

2. The *"extensive form."* In these games, the focus is on information, data, details. Typically, one player does not know what another player is doing, so no one's position is clear. In some variations, this information is known. The players must make a sequence of "moves" or other such decisions. They may choose a variety of strategies, based on the positions and moves of their opponents. In some games, such as the extensive form, players repeat patterns to prove certain points, reinforce learnings, etc. To make these games more challenging and exciting, the element of chance often is introduced. It usually is assumed that the players will not cheat.

3. The *"characteristic function form."* The focus in these games is on coalitions among the participants. They usually involve bargaining or negotiation. Obviously, such coalitions affect the strategies available to the players. These possibilities are depicted in characteristic function—showing the slow but steady gains to be made by cooperating. There may be an element of competition with other coalitions, or the players merely may be trying to outperform the norm group.

If one begins with the extensive form, one can construct a game of the strategic form; if one has the strategic form, one can construct the characteristic form, *but not vice versa*.

According to Shubik (1975), *game theory* requires the consideration of six important areas: (1) rules, words, and coding; (2) rules, rationality, information, and data-processing ability; (3) payoffs, goals, and motivation; (4) poor environments and rich environments; (5) rationality and concepts of solution; and (6) players (individuals or groups). It is much easier to meet these criteria for mathematical games and games that resemble card games or chess (series of moves) than for games that focus on behavioral interactions. This latter group includes, for example, games that focus on communication, interpersonal skills, and survival skills. These involve different motivations and payoffs. Thus, game theory is not the only basis for gaming. To illustrate this difference, the six criteria for game theory are listed below, with discussions of how they may or may not be incorporated into training games.

Rules, words, and coding. It is much easier to develop a mathematical code for a physical move—a change to the model. It is extremely difficult to code behavioral intent—statements that may or may not result in specific action. Verbal acts are not necessarily moves.

Rules, information, and data processing ability. A team effort generally is required to carry out the functions in more complex games. This may become confusing or complex because different people may interpret information or rules differently. The players also may have different levels of skill in working with the computer. Game theory requires a rational, logical approach, and this may not always be achieved in a team effort.

Payoffs, goals, and motivation. Players must be motivated to play the game; one of the typical ways in which this is done is to establish a payoff. If the game is not motivating, or if the stakes are not high enough for the participant group, boredom and distraction can result, and the goals of the game then are not likely to be met. Participants want to know "what is in it" for them, and the goals of a particular group of participants may not be the same as those assumed by the game developers, so this consideration, although important, can be difficult.

Poor or rich environments. A game that is too environmentally rich (i.e., has too much background and/or personal data) may provide more information that the participants can assimilate and use. The game developers need to decide what data are useful and then incorporate them so that the participants have an opportunity to make a similar judgment. Some data may not be included or obtained by the players because of time constraints, and some factors, such as the plans of competitors, cannot be known. In an environmentally rich game (e.g., one that requires some knowledge of a business or a person's history), the players often need to interpret rules as well as facts. Although an environmentally poor game (e.g., one that is more purely mathematical), is closer to game theory, there still may be behavioral aspects.

Rationality and concepts of solution. This relates to the second consideration. Although a rational solution is required by game theory, it usually cannot be achieved when human behavior is a factor. This may include behavioral structures within the game or the behaviors of players. A purely rational solution is a purely mathematical or mechanical one.

Players (individuals or groups). Again, this is related to the second issue. The more players there are, the more complex the game, rules, interpretations, consequences, and solutions become.

In general, a sophisticated game model will include the following:

- The physical, social, economic, and other pertinent features of the system or organization represented, the social environment for each role (player), interdependencies among players. These are givens and are incorporated into the game structure.

- The pertinent features of the outside environment that affect the system or organization, including its market, the economy, customers or clients, etc. These, too, are givens—they are part of the game.

- Timing and the sequence of play. The simulated time in which the game "occurs" can be greater than, the same as, or less than real time. For example, a round of play may take two hours and may simulate two fiscal years in the simulated organization.

- Set of decisions/actions/changes to be made, such as prices, marketing strategies, production and distribution decisions, policies, and personnel changes. Such actions are variables; they are influenced and affected by the players. How they are put into effect is not variable; it is governed by operating procedures (rules) that control the play. (The rules, in themselves, are part of the game structure.) These include particular goals, actions, and the means to win.

- Procedures for roles. These behavioral constraints are built into the game and dictate when and how activities can and are to be performed. They include rules governing the interactions between the system and its environment (what happens if). Such activities can affect base information or the model of the system. In many behavioral and operational games, players are *not* provided with all the rules; they are required to explore in order to find some of the information they need to manipulate the game. In mathematical models, rules are givens.

- Accounting procedures. These govern how information is processed—and through what channels and patterns—to make changes.

- Set of results. This dictates the impact of the decisions on the environment. For example, in business games, it may include formulas for changes in sales figures, market share, costs, profits, and so on.

- Enforcement procedures. These "police" the game; they dictate what happens if a player violates a rule. They also include the umpire/referee functions.

Different types of games call for different degrees of cooperation among the players. In some games the participants function independently; there is little or no interaction between them. These are called *mechanistic* games. Decision making is not centralized and often is achieved through voting. In *noncooperative* games, there still may be little communication among the players, but there generally is competition and conflict of interest. The continuum proceeds, through games that involve negotiation and bargaining, to *cooperative* games, which require the players to communicate and to explore common interests in order to reach their objectives.

◨ EVALUATING AND SELECTING GAMES

The first step in deciding on any training technology is identifying the goal(s) of the training—the learning objectives. Then one can ask what the best ways are to achieve those goals. The use of games is one way to relate the concepts and techniques that are being taught to the real-life environment. For example, a particular management game may be appropriate if one of the training objectives is to make the participants aware of how individual goals and strategies must be considered in light of the goals of the organization (Shubik, 1975). If it is decided that a simulation game would be more effective than, for example, a structured experience, instrument, lecturette, role play, or case study, the next step is to review several possible games in the area that is to be the focus of the learning event. The game to be used must fit in with the rest of the training program. It is definitely preferable for the terms used in the game to be the same as those used in the rest of the training. The game also should be related to the other training technologies that will be used during the course, including any handouts, structured experiences, instruments, lecturettes, audiovisuals, etc. The facilitator must decide what the sequence and flow of the course will be and plan for a balance between cognitive and experiential learning.

The model on which the game is based should also be examined. The instructions should be clear. The participants should be able to understand the game, and it should be doable. Yet it should be interesting and challenging. The model must be realistic. The environment in the model should not be static; like real life, it should incorporate—and require the participants to deal with—change. The model must not be so simple that it allows cheating or allows erratic decisions to be processed, but it should respond to actions that are reasonable, logical, and in accord with the training objectives. It also is important that the participants be able to see cause-and-effect relationships as well as the results of their actions (McKenny, 1967). Any reports or forms to be generated should look like real ones.

A CHECKLIST FOR EVALUATING SIMULATION GAMES

In considering a particular game, one needs to ask several questions. These include the following:

Objectives, Content, Structure

1. What is the stated purpose of the game? What is the name of the game?

2. What social systems and processes does the game simulate?

3. What are the training objectives of the game? In what training context is this game designed to be used?

4. What is the focus of the game (e.g., cooperative decision making, planning, forecasting)?

5. Does the game adequately simulate a relevant situation or organization?

6. Does it suit the expectations and objectives of the participants?

7. What are the motivators and payoffs to participants?

8. Can the game be modified? How easy would this be?

Complexity, Clarity, Knowledge, and Skill Required

9. What particular skills and prior knowledge are required of the participants?

10. Is the game primarily mathematical or verbal? If mathematical, how complex are the procedures?

11. How complicated are the game activities? How difficult are the rules and procedures?

12. Are the instructions clear? Are there printed facilitator and participant instructions for playing the game?

13. Is there a referee/umpire built into the program or does the facilitator perform this function?

Physical Requirements, Timing, Costs

14. How many participants are optimal (i.e., how many teams are preferable and how many—minimum and maximum—players are there on a team)?

15. What is the cost to obtain the game and what are the operating costs (including any hidden costs such as additional facilitators, computer time, materials, etc.)?

16. How much space is needed? What type of room will accommodate the game?

17. What equipment is needed?

18. How much time will it take to set up the game, run it, and process it?

19. What is the game-time equivalent of real time (compressed or expanded)?

Overall

20. Do the possible learnings and experience to be gained from the game justify its cost, facilitator preparation and training time, and participant time?

21. All things considered, would the game provide a valuable learning experience that is in accord with the goals of the training?

It is important to remember that most games are designed to generate specific types of thought processes and actions. A game that is designed for one purpose may not be

easily adapted to achieve another. It is very important to study the model on which the game is based and/or the construction, sequence, and terminology of the game to see if it actually will achieve the stated objectives. In management training, a game should require the participants to obtain information, analyze it, and make decisions. In the social sciences, games may be used to examine and explore models (Greenblat & Duke, 1981; McKenny, 1967).

STAFFING CONSIDERATIONS

Many of the questions in the preceding checklist suggest considerations about the staffing of the game. The size of the training group, the number of teams, the structure and complexity of the game, the time required, and other issues (e.g., whether teams will generate reports that must be evaluated by the facilitators) may indicate that additional staff members will be needed to facilitate the game. If this is the case, how many facilitators will be needed? What will each facilitator's *role* be? Are the available staff members *technically* able to manage the game? Is there time available before the training session for the facilitator(s) to actually run the game and discuss it before presenting it to the participants? Because games involve specific rules and procedures, it is imperative that the facilitators be thoroughly familiar with a game before the attempt to use it with a group. Even then, a game experience will not be the same with one group as it is with another. Each facilitator must be prepared to answer a variety of operational, procedural, and content questions as the game proceeds.

RESOURCES FOR SIMULATION GAMES

Many sources for simulations and games are included in the third References and Bibliography listing at the end of this volume. The following are additional sources that may be helpful.

Professional Associations

North American Simulation and Gaming Association
University of North Carolina at Asheville
One University Heights
Asheville, North Carolina 28804-3299
(704) 251-6023
Executive Director: Dr. Bahram Farzanegan
NASAGA promotes information and the exchange of ideas with game designers in North America and from around the world. Membership benefits include a subscription to SIMAGES (a quarterly newsletter) and the Sage publication *Simulation and Games.* Several games published by the national headquarters are available to members at a discount, and members have access to the national archives. NASAGA also holds an annual conference.

International Simulation and Gaming Association
NASAGA Representative: Richard D. Duke
MULTILOGUE/Richard D. Duke & Associates, Inc.
321 Parklake
Ann Arbor, Michigan 48103
(313) 663-3690

General Secretary: Prof. Dr. Jan Klabbers
c/o Faculty of Sciences
P.O. Box 80140
3508 TC Utrecht
The Netherlands

ISAGA seeks to further the development, application, and use of simulation and gaming materials throughout the world. Facilitates communication between scholars and practitioners, promotes training in the field, promotes the development of better methods, and encourages the formation of national and regional groups. Membership benefits include four newsletters per year and reductions in fees for conferences, workshops, seminars, etc., in which ISAGA participates. ISAGA has adopted the journal *Simulations and Games*, published by Sage. It also organizes annual conferences, each in a different location around the world.

Periodicals

Simages **Newsletter**
Included with NASAGA membership.
Contact NASAGA Secretary, at address given above.

Simulations and Games: An International Journal of Theory, Design and Research
Sage Publications, Inc.
275 South Beverly Drive
Beverly Hills, California 90212
(Subscription rate: $32/year, $96/three years, $9/issue. Subscription included with NASAGA membership.)

❚ FACILITATING GAMES

PREWORK

As we have stated previously, a facilitator must have worked through a game before attempting to use it with a group. This means allowing enough time to complete several practice rounds. It is imperative that the facilitator become familiar with the various components of the game and know how the game works, the sequence of decisions in the simulation, and how it responds to the players' actions. This also will give the facilitator an idea of how the participants are likely to respond to the game, what kinds of questions they will ask, and what types of problems they may have. In some games, the facilitator serves as the board of directors of the team organizations and asks questions about the teams' decision-making processes. During many games, the facilitator(s) are called on to check reports from the teams. This must be done carefully and with a full knowledge of the game, the mathematics and variables involved, and the data processing required of the groups. The facilitator also must plan for processing discussions after each round of play.

After becoming familiar with the requirements of the game, the facilitator must create a time schedule. This includes the time needed to complete each step and/or stage of the game and time to regroup after interruptions. Breaks must be scheduled in such a way that they do not disturb the pace or flow of the game.

Materials must be collected and/or prepared. The layout of the room and other physical arrangements must be attended to. These may include separate areas for participants with particular roles in the game. Care should be taken to eliminate distractions such as people walking by the windows, the ringing of telephones, people entering the room, and so on. It is preferable if the facilitator can specify that no nonparticipants will be allowed to observe the game or to enter the room while the game is being conducted.

INTRODUCING THE GAME

The participants must be introduced to the game carefully. They should be told why a game has been selected as a tool for learning (e.g., to simulate real-life conditions without the actual risk, to allow them to collect information that may be difficult or too time consuming to collect in real life, and to allow them to experience some of the pressures and rewards of working with others in an organizational setting). They should understand certain "givens" about the use of games, such as the fact that the time frames in the game will be condensed versions of real time. They should be told that the game model does not duplicate or recreate a real social system or organization but is designed to provide general experience in dealing with similar types of situations or typical

business issues. (This realization helps to avoid nitpicking about specifics if participants run into difficulty during the game.)

The participants also should understand that because their experiences during the game are generalizations of what they would encounter is real life, they will not be the same in the next situation or a similar one. Tell the participants that their job is to learn the rules and procedures of the game just as they would learn to operate within any social or organizational structure. They then will have the task of using relevant information in combination with appropriate theories or concepts to plan and make game moves. During this process, they also may learn to be explicit, find information, conduct analyses, discuss and collaborate with others, plan strategies and action steps, use feedback, and explore the concept of teamwork.

The introduction to the game also should include a brief explanation of why this particular game was selected, what its objectives are, and how it is related to other theories, models, or methodologies presented in the overall training design.

Describe the basic structure and operation of the game. Read the rules of the game, list them on newsprint, and distribute them in written form, if appropriate. (It is even better if a manual or guide for participants is provided with the game.) List and define the roles of the players. These include what they will do and under what conditions, with whom, and how it will be done. Talk about the objectives of the game in terms of the expected results. Then walk the participants through the procedures for obtaining information, making moves (entering decisions or changes), generating reports, and so on. This information also should be presented in written form, either as handouts or posters.

It can be helpful to explain that is it natural to feel somewhat intimidated or overwhelmed by the rules and processes at the beginning of the game, but that as the participants get into the actual play, some things will become more obvious. Remind the participants that they can refer to their handouts or the posters and can ask questions as things come up. Finally, assure them that the facilitators have actually gone though the game themselves and that it is doable. At this point, the facilitator must be reassuring but also must communicate enthusiasm for the task at hand.

CONDUCTING THE GAME

While the participants are playing the game, the role of the facilitator will depend on the nature of game. In some games, the facilitator will be required to serve as referee or umpire. This function uses the game rules to rate the players' responses in order to provide immediate feedback to the players on the consequences of their actions. In most computerized games, this function is built into the program and is performed by the computer. At the very least, the facilitator will be called on to answer questions about rules of play, procedures, next steps, and so on.

In a typical business game, the total group is divided into teams of four or five participants each. Each team represents a separate organization, and the team members

are assigned roles within that organization. There often are from four to eight teams (organizations in the same industry or area of service) playing the game at the same time. Each organization is assigned a different set of background data, but all are equal in the marketplace. In effect, some competition usually arises between the teams, even if it is not made explicit in the game.

Each team may be called on to make six to ten sets of decisions. Decisions rounds may be divided into periods of time that simulate fiscal years or quarters (e.g., participants make a series of business decisions representing business operations for a three-month period). For each action item required, each team attempts to come up with a common decision that is acceptable to all its members. This helps to teach consensus-seeking processes and the value of synergy in groups. Each team's decisions are reported to the facilitator, who critiques them and provides prompt feedback, or they are programmed into a computer, which immediately feeds back the business effect of the decisions. If a computer is not being used, the decisions can be entered on a preprinted work sheet—a "Decision Sheet"—on which the team members will record each decision, the action taken, and its results.

The team then pauses for analysis, feedback, and planning. During this post-round processing, the facilitator may need to stress that one of the training objectives is to teach the participants to analyze the facts in a particular situation. The facilitator can remind the participants that, as in real life, no two situations are exactly the same, so they cannot just plug in an answer from a set of patterns. In a sense, gaming teaches how to use what one has within the constraints one has. After processing the round, the team members move back into the enactment to make a new series of business decisions. Each enactment provides an opportunity for them to experiment with new techniques, utilize and apply new information, and learn from the insights and feedback provided by others.

In some games, strategies and consequences will provide the basis of the learning. In others, the teams will be required to generate periodic reports on different aspects of their operations and plans. In business games, these may include cash plans, budgets, sales projections, marketing strategies, loans, sales of stock, and so on. Some games require the facilitator to distribute information or reports at specific times during the play. In other games, the reports generated by participants will be collected and logged in by the facilitator. These reports may need to be checked and returned to the teams, if necessary, for corrections.

The facilitator will have to keep track of the timing, give time warnings, and announce the beginning and end of rounds of play, breaks, etc. Participants may need to be regrouped when they return from breaks. It is the facilitator's job to keep the process going but not to interrupt the players unnecessarily or to interfere with their work.

The facilitator also will want to observe what is happening during the game in order to determine how to improve the game during the next round or session and to prepare for the processing discussion that will follow the game. This includes monitoring the degree and types of competition that arise. It is important that the participants stay

focused on the processes involved in the game rather than on winning. For maximum learning, it also is desirable that participation be even among the players. If some people are dominating while others seem to be bored, roles of players, team processes, and/or composition of teams may need to be examined.

Because the participants may be confused and apprehensive at first, they may try to find reasons for their lack of expertise. Many will find fault with the game or the facilitator's instructions. When they begin to understand the rules and become familiar with the procedures, they will focus more on the task and begin to scrutinize information, analyze, discuss options and possible outcomes.

The Strategy Phase

As the game progresses, the facilitator may need to encourage the participants to move from analysis toward developing strategies and action plans. As they carry out their plans, i.e., make game moves, they will receive feedback, either from the game program or from the facilitator. This allows them to examine cause-and-effect relationships, reevaluate, and improve their strategies. This may be a relatively simple task or a very complex one, depending on the previous knowledge and experience of the participants and the game selected. It usually is advantageous for a team to adopt a strategy and follow it, rather than switching strategies during play.

The facilitator may want to pause before initiating succeeding rounds to examine the players' policies and strategies. At this point, conceptual input related to how the task is accomplished may be very useful. For example, it may be helpful to point out that the practice in working with others in making decisions is a valuable learning experience, no matter what types of decisions are made. Participants may need coaching on *how* decisions typically are made in organizations; their assumptions may be that all such decisions are based on economic and statistical information, while the reality is that a great deal of psychological and operational issues are involved. It is important that this aspect of the decision-making process be examined after each round of play (see "An Example of Group Dynamics in Simulation Gaming" later in this section).

At some point, the facilitator may decide that it is advisable to change the way in which the game is played in order to introduce new procedures, new patterns, or new theories to make the game better meet the goals of the session and the group. This may be a simple change, such as the way in which reports are made, or it may introduce a new element, such as negotiation or bargaining across teams. Organizational, environmental, or social/cultural factors also can be made part of the game. Of course, the elements and procedures for any change must be made explicit.

Motivation and Payoffs

Most games involve some type of payoff to the players as a motivation to play the game well. The payoff is not the same as the outcome of the game. The payoff has extrinsic value (provided by the structure or nature of the game) or intrinsic value (defined by the players). It can be psychological or economic. A player's perception of the payoff can

be affected by the role that the player has in the game or by the player's previous attitudes or biases. The players' perception of the payoff affects their motivation, and it may not be perceived the same way by all players. The norms of the group also can affect the players' perceptions of the value of the payoff.

The facilitator needs to become aware of the value of the payoff and the outcome of the game to the players in order to understand the effects of game. The values assumed by the developers of the game or the values of the facilitator may not be the same as those of participants (e.g., candy may be a reward to some and may not be to others). Other types of payoffs are dinner with the group, certificates of completion, learning new skills, being with (communicating with, learning from) other professional people, or some type of actual or simulated monetary reward. The facilitator often can gain insight into the participants' attitudes about this issue simply by asking them what motivated them, why they did what they did, and what their assumptions were.

The structure of the game also can affect the participants' behavior. Whether the game is anonymous or involves face-to-face interaction; whether it calls for individual or team activity; whether it is verbal or nonverbal; whether it involves risk taking and of what type and degree; and what the participants know about their competitors all can affect how they respond to the game. To these reactions, the participants will add their own personal values, biases, and feelings about group activities, risk taking, and competition. Some participants may have a drive to do well in front of their peers or to "win." Some will be disconcerted at the prospect of competing or taking risks, while others who are not ordinarily concerned with winning may become motivated as they get into the game. Some may compete for leadership positions within their teams, while others may respond to particular roles. A few participants may seem to be pitting themselves against the environment rather than competing with other players. Some may have more difficulty than others in understanding or adjusting to the rules and procedures of the game. The facilitator can observe all these dynamics and use them in processing the game, not only in terms of what actually occurs but also in terms of personal values, assumptions, and theories related to competition and collaboration, leadership, motivation, and so on.

Another issue that can affect the participants' behavior is the timing of the game. If people perceive that they are running out of time, they may behave (e.g., attempt to make decisions or carry out actions) in ways that are different from what they would do in other circumstances. It is important to keep this in mind in order to allow enough time for all stages of the game and also to consider this aspect in the processing discussion that follows the game. In some instances, making decisions under pressure may be an important dimension of the game. Often it is the ability to respond rationally under extreme pressure that separates the more successful from the less successful in real life.

DISCUSSION AND PROCESSING

If the game calls for the participants to take on specific roles (e.g., president, financial officer, advertising director), the feedback sessions can include many of the techniques outlined in Section Two of this volume, "Using Role Plays in Human Resource Development." For example, individuals within the group can fill out response or reaction sheets that become the basis for analyzing and learning from the process. Sufficient time must be allotted to providing feedback during the stages of the game and to critiquing, discussing, and processing the experience at the end. For example, if the action stage of the game time takes four hours, at least one and one-half hours should be allowed for feedback and processing.

In a typical processing session, the players first will share their reactions to the experience, their feelings about what happened in their groups, etc. When the air has been cleared of affective issues, they can begin to examine the model on which the game is based, the various roles that were involved, and so on. This can lead to a less generalized discussion of the actual roles in their teams, and it may be appropriate to have the participants discuss these issues in their team groups first, then report the highlights of their discussions to the total group. Before these discussions, they can be given discussion guidelines (either verbal guidelines that are reinforced by newsprint posters or preprinted handouts). The group members can compare their observations about what happened during their groups' sessions. These discussions will focus on two levels: (a) what was simulated, what happened in terms of the game task, and the results; and (b) the interpersonal (e.g., leadership, decision-making, problem-solving) dynamics in the group.

In the total group session that follows, participants can attempt to draw connections between the interpersonal dynamics and the tasks and structures of the game. It may help to have them create graphic representations. The discussions should be linked to real-world examples and extended to the participants' own work applications. Finally, they should be asked to state what they learned or relearned from the experience and how the details of the game process were different from what they expected. Above all, it is important to link the outcomes of the processing discussion to the objectives stated at the beginning of the game training.

AN EXAMPLE OF GROUP DYNAMICS IN SIMULATION GAMING

Wagner (1965) describes the use of the UCLA Executive Decision Game 2 as an example of the group dynamics that might emerge in conducting a simulation game. This game simulates the operations of a multiform, one-product industry; its purpose is to help managers and students of management learn more about top-level business planning and policy formulation. One day of play simulates more than five years of "experience." In some ways it is similar to a case study. Each team plays the top management of a different firm and makes decisions for a "fiscal quarter" on issues such as price of product, production volume, advertising budget, research and development

budget, investment in plant and equipment, dividends, etc. The decisions are entered into a computer, along with data summarizing the conditions of the firms at the end of the preceding quarter. The computer simulates the quarter's operations and prints out the following reports for each firm: sales volume, percent share of industry sales, current inventory quantity, production capacity for the next quarter, profit and loss, receipts and disbursements, and financial condition. The task of the players (managers) is to balance the controllable factors in order to make the most of available resources and potential. Efforts to increase sales must be related to costs in terms of reduced margins and enlarged budgets and phased with changes in plant capacity and production volume. Investment programs and dividend policies must be geared to profits and to available funds. All these factors must be balanced in the face of continually changing competitive and general economic conditions. The need for planning is emphasized by the fact that relatively stable policies are more effective than policies involving much fluctuation. The instructions also discuss the market, operating costs, plant expansion, finances, and goals.

In the group studied, after each decision-making period, each team analyzed its decision process, focusing primarily on interpersonal relations and group behavior as they affected business tasks. After the decision-making phase, but before the analysis, each participant was asked to complete a rating scale with four questions:

1. How adequate were the team's procedures for making this decision?

2. To what extent did I help or hinder the contributions of others to the decision?

3. To what extent did I feel helped or hindered by others in contributing my ideas to the decision?

4. How do I feel about my group?

The groups that Wagner studied evidenced three stages of behavior during three rounds of decision-making processes. The first involved *competitive* interpersonal behaviors. When this was processed (after some resistance) and the dynamics were understood, they began to overcompensate. In the second phase, some task accomplishment was sacrificed because of the heavy investment *in maintaining group harmony at all costs*. After processing this, the groups were able to move to a more *balanced* team effort that involved realistic problem solving. The disruptive behavior of the first session could be attributed to the players' lack of familiarity with business games. No specific criteria were stated regarding success in the game, so it was impossible to compare the stages of decision making with the quality of the business decisions.

The major learning here is that process analysis was needed to help the groups to make the transition to a team approach. Of course, the maturity of the group members will affect the level of decision-making processes attained. But groups should improve in consecutive plays if there is adequate processing in between.

USING SIMULATIONS TO TEACH STRATEGIC PLANNING

Changing social and economic environments, rapid technological advances, competition, and other factors make it necessary for most organizations to engage in strategic planning. In this process, the leaders of the organization must analyze how each part of the organization will contribute and how each will affect the others. They must identify alternatives in financial management, investments, production, services, physical operations, warehousing and distribution, sales and marketing, personnel, and so on. Typically this process calls for them to establish objectives and goals for the organization and to factor in possible strategies by competitors, possible economic conditions, trade restrictions, resources, etc., and to develop long-range plans and contingency plans that create a balance between the different divisions or departments within the organization. According to Pfeiffer, Goodstein, and Nolan (1986), each organization needs to go through this process annually. One of the best ways to make such decisions is to use a computerized model of the organization to test various types of data and to evaluate different strategies (Jones, 1972). Computerized gaming is an excellent way to teach managers the "hands-on" part of strategic planning. They can practice inputting data, doing calculations, and producing written reports.

◼ CONSIDERATIONS IN DEVELOPING SIMULATION GAMES

By now, it should be clear that each different game has its own procedures, rules, constraints, and so on, so no actual formula applies for creating a game. We have tried to point out that any game (particularly a computerized game) may involve a complex simulation with mathematical, statistical, and programming aspects; therefore, this discussion will not reiterate how to develop a simulation but will focus on what the HRD practitioner needs to know in helping others to develop a game for training purposes.

PURPOSE AND USE

The initial consideration, of course, is the purpose of using the game. What are the training objectives? Who has requested that the game be developed, i.e., who is the client? Why would a game be preferable to some other training technology? Then, what are the objectives of the game itself, i.e., what is it to teach or achieve? Will the game involve competition? What types of decisions will be made? Who are the players: Are they male and/or female?; What are their ages?; What is their level of education?; What are their professions? Will the group be heterogeneous or homogeneous? What previous experience do the participants have with gaming? What are their motives for playing the game? What size of group typically will play the game? Will decisions and game moves be made by individuals or by teams? It is preferable if the game design can take into account the level of sophistication of the possible participant group and allow for differences in individual capacities and decision-making styles.

The second set of questions involves the use of the game: where, how, and when it will be used. Will it be used primarily for training adult professionals or might it also be used in a university, college, or high school classroom? Is it part of a series or will it be used by itself? What, if any, follow-up is required?

THE SIMULATION MODEL

Next, the designers must determine the type of model or simulation to be used. Most games are a combination of more than one type, although one may be predominant. The focus of the game also will help to determine the vehicle: Will the participants be concerned with allocating scarce resources; will they focus on interpersonal relationships and group dynamics; or will they be learning about the interrelationships between the parts of a complex system? The focus of the game may well indicate the media to be used. This determination, in turn, will indicate the type of instructions to be

given and, if appropriate, the computer language to be used and the type of program to be developed.

The simulation model then must be developed, including background data (historic, cultural, geographic, etc.) and the current situation (the scenario), data about environmental and other forces (variables), and the symbolic structure and procedures (the mechanisms of the play, how the game proceeds). These include structures and procedures for communicating, for obtaining information, for bargaining, for indicating moves, and for evaluating moves and generating results. They must be framed in game-specific language. This is the step in which a conceptual map of the game, a flow chart, is developed.

In representing the system and the sets of interactions within it, one must make decisions about what is and is not to be included. The major components include a set of roles, the scenario, and a set of accounts (how decisions affect results and how results affect the status of players and modify the data set) (Greenblat & Duke, 1981). If the roles of players are very strong and the scenario and accounting procedures are weak, the game is, in effect, a role play. This may be most effective for studying certain interpersonal dynamics. If the scenario is the strongest element, the game will resemble a case study, which may be helpful in analyzing data and making certain types of decisions. A more pure simulation will contain a stronger set of accounts. This would be required for games in which financial and other types of decisions will affect structures and numerical data.

In designing the game, one must keep the conceptual map in mind at all times. This process may be somewhat analogous to writing a novel in which the characters, their relationships, and the times and dates of events must be consistent throughout. In a game, the components are the system, its pertinent components and characteristics, roles, linkages among components and roles, and the themes, issues, or problems to be highlighted.

STYLISTIC AND FUNCTIONAL ISSUES

Given these determinations, the designers then will be called on to make a number of stylistic and functional decisions that are not part of the basic model. These are the elements that make a game different from a simulation. They include the type or format of the game itself; how it will be staged; the degree of relation to reality; the level of abstraction; whether the message to the players will be implicit or explicit; how the players will access information; the format for providing information; the simulated versus real-time frames; which structures will be predetermined and which, if any, will be generated by the players; how elements such as power and resources will be represented; whether bargaining or coalitions will be permitted; whether there will be an emphasis on cooperating or on winning; how rounds of play will be structured; whether cycles will be repeated and whether they will become more complex; the steps and tasks involved in the play; whether there will be any penalties for failure; whether reports will

be issued to players (and, if so, how and in what form); whether the players will be required to prepare reports (and, if so, in what form, how, and when); whether breaks or intermissions will be written into the game; and so on. The designers must consider the possible players in determining how the game and its procedures will be presented to them, what processes will be used to teach them how to play the game, and how much time will be required for them to learn it. For a training game, the designers will want to achieve a balance between intense involvement (emotional and physical) and cognitive processes (analytical and intellectual). They also must decide what the balance will be between player ability and the element of chance.

In general, the object of training games is to have the participants consider the information they have, search for new information, discuss things, make choices, receive feedback on the results of those choices, and clarify their understanding of what occurred. It is best if there are at least two or three players involved in making every important decision, and five seems to be optimal. If there are only two players on a team, one is likely to dominate the other. However, if there are more than five, the decision-making and discussion processes can become endless.

In some games, the scenario is presented to the participants at the beginning of the game, but additional information also is inserted at strategic times during the play to change the nature of the problem, to increase time pressures, or to change the dynamics in some other way. Information to the players in a game that simulates an organization can be in the same form as information to the participants in a structured experience or in-basket activity. This information can be part of the game package or can be prepared by the facilitator prior to the game. In most cases, it will be in a form that simulates letters, memoranda, notes, announcements, agendas, minutes of meetings, calendars, telephone logs, other written reports, and newspaper or magazine articles.

Two related elements of game design that must not be overlooked are the police and umpire/referee functions. The first enforces the procedures, the rules, and specifies what will happen when procedural rules are broken. The second establishes mediation procedures to resolve impasses and disputes. As we have said before, these functions can be built into a computer program or they can be performed by the facilitator.

The rules of the game must state clearly and specifically what procedures are incorporated into the game or allowed and how they are to take place. If several teams are to be engaged, separate scenarios must be developed for each team. There also must be clear instructions about how players can influence or modify the structure of the game.

Some game designers include suggested procedures for debriefing the game. Because the discussion and processing stages after rounds and after the completion of the game are so important, these suggestions and guidelines can be extremely helpful. They are much like the "notes for the facilitator" found in structured experiences, role plays, and case studies. They can help the facilitators to prepare for the types of reactions and questions that the participants may generate and also can help them to

relate the game experience and learnings to the real world in order to help the participants to formulate back-home applications.

CONSTRUCTING AND TESTING THE GAME: TIME AND MONEY

Once the designers have decided what the game will include, it must be constructed, that is, a vehicle (e.g., boards, pieces, cards, models, etc.) must be created through which participants will play the game. If game is to be computerized, the program must be written, the data must be loaded, calibrated, and tested.

The scope of the game will be dictated by the training objectives but, in reality, it is limited only by the time and resources available and by what is programmed into it. In the long run, gaming can be expensive. The costs include the time and expense of building and testing the model, reproducing it, implementing the system (training operators, computer programming, etc.), running the game to test all aspects of it, and redesigning the game as necessary. To be valid, the testing would require numerous (some say as many as ten) runs. The first tests typically are with the families and friends of the game developers. The game is revised as indicated, and the second series of tests typically are with colleagues of the developers or the types of people who would use the game (i.e., facilitators and instructors). Further revisions are made as required, and then the game is tested with participants who are aware that the game is in a developmental stage. These players evaluate the game from the player's point of view. Obviously, the development and testing of a game can consume a great deal of time. In addition to human time, one must include computer time and/or time to develop or collect game materials and other supplies. In implementing the game, again there are the expenses of facilitator time (evaluation, preparation, and running the game), physical accommodations, materials and supplies, and participant time.

In determining whether to develop a game, then, one must consider the financial aspects as well as whether one has "a good idea." Are there adequate resources (time, money, personnel) to support the design, construction, and testing phases? Has allowance been made for redesigning and retesting? What will be the costs to reproduce the game? One also must consider the marketability of the game. What is the demand for the learnings to be generated by this particular game? What will it cost the user to purchase and run the game? How much time is required to prepare for and conduct the game? How difficult are the materials to understand, manipulate, etc.? Is the game easy to ship, carry, and store? A game that has a narrow application probably would not be economically feasible unless it were simple to produce. A game that is marketable but based on a bad simulation or bad design could result in anything from chaos to the wrong kind of learning. It is hoped that this section will help to reduce the possibility of that outcome and to increase the HRD practitioner's skill in evaluating, developing, and using this increasingly popular training technology.

Principal Components of Case Studies, Role Plays, Simulations, and Games

Case Study	Role Play	Simulation	Games
Background data	Background data	System background data	System background data
Scenario	Scenario	System scenario	Scenario
	Roles	Endogenous and exogenous variables, stochastic variables	Roles
			Variables
		Methodology, accounting procedures	Methodology, accounting procedures
			Symbolic structure and procedures (rules) of operation

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■ APPENDIX 1: EXAMPLES OF STRUCTURED EXPERIENCES

Shades of Difference: Exploring Metaverbal Communication

Arlette C. Ballew

Goals

- To demonstrate the impact that metaverbal aspects of communication have on the perception and interpretation of meaning.
- To allow the participants the opportunity to practice using metaverbal aspects of communication.

Group Size

Two to seven groups of four members each.

Time Required

Approximately two and one-half hours.

Materials

- A copy of the Shades of Difference Lecturette for each participant. (Optional: the lecturette may be delivered orally by the facilitator.)
- A copy of the Shades of Difference Instruction Sheet A-C for two of the members (A and C) in each group.
- A copy of the Shades of Difference Instruction Sheet B-D for the other two members (B and D) in each group.
- A copy of the Shades of Difference Opinion Sheet 1 for two of the members (A and B) in each group.
- A copy of the Shades of Difference Opinion Sheet 2 for the other two members (C and D) in each group.

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- Blank paper, a pencil, and a clipboard or other portable writing surface for the recorder from each group.
- A newsprint flip chart and a felt-tipped marker.
- Masking tape for posting newsprint.

Physical Setting

A room in which all groups can work without distracting one another and a breakout area (a corner of the meeting room, a hallway, or a small, adjacent room) in which a small group can meet without being overheard by the rest of the participants.

Process

1. The facilitator announces the goals of the activity, gives each participant a copy of the Shades of Difference Lecturette, and allows a few minutes for the participants to read the lecturette. (Optional: the facilitator may deliver the lecturette orally.) (Five minutes.)

2. The facilitator divides the participants into groups of four by any appropriate method and directs the members of each group to designate themselves as member A, member B, member C, and member D.

3. The facilitator calls all members A into the breakout area and gives each of them a copy of the Shades of Difference Instruction Sheet A-C and a copy of the Shades of Difference Opinion Sheet 1. The facilitator instructs the members A to read their sheets and prepare for their presentations. While they are reading, the facilitator tells the remaining members of the groups that they will be hearing a presentation of an opinion and are to listen carefully and to watch for verbal and nonverbal indications by the speaker that back up or conflict with his or her statement of opinion. (Five minutes.)

4. The members A return to their groups and read their opinion sheets aloud, as instructed. (Five minutes.)

5. Members B, C, and D in each group give member A feedback on what metaverbal cues seemed to reinforce or detract from member A's presentation of the opinion. (Five to ten minutes.)

6. The facilitator calls the members B into the breakout area, gives each of them a copy of the instruction sheet B-D and a copy of the opinion sheet 1, and tells them to read their sheets and prepare for their presentations. The facilitator tells the remaining members that during each succeeding presentation, they are again to listen and watch for metaverbal cues. (Five minutes.)

7. The members B return to their groups and read their opinion sheets aloud, as instructed. (Five minutes.)

8. Members A, C, and D in each group give member B feedback on what metaverbal cues he or she used that reinforced or detracted from his or her presentation. (Five to ten minutes.)

9. The facilitator calls all members C into the breakout area, gives each of them a copy of the instruction sheet A-C and a copy of the opinion sheet 2, and directs them to read their sheets. (Five minutes.)

10. The members C return to their groups, present their opinions, and receive feedback from the other members of their groups. (Ten to fifteen minutes.)

11. The preparation, presentation, and feedback process is repeated with the members D, who receive the instructions for B-D and the opinion sheet 2. (Fifteen to twenty-five minutes.)

12. The members of each group are asked to discuss how they felt while trying to present their "opinions" and whether they were unusually aware of using metaverbal aspects of communication in their presentations. (Ten minutes.)

13. The facilitator asks each group to select a recorder, gives blank paper and a pencil to each recorder, and asks the groups to identify the metaverbal cues that aided the presenters who were "for" the statements and those that aided the presenters who were "against" the statements while the recorder lists them. (Ten minutes.)

14. The total group is assembled, and the recorder from each group, in turn, reports the group's list of metaverbal cues that reinforced the "for" presentations. The facilitator writes these on newsprint. Then each recorder reports his or her group's list of metaverbal cues that reinforced the "against" presentations, while the facilitator records them on a separate sheet of newsprint. (Fifteen minutes.)

15. The facilitator asks the participants to suggest other metaverbal cues that they may have used or seen someone use that could reinforce or negate what the speaker was saying or that carry a specific message of their own. These also are listed on newsprint. (Ten minutes.)

16. The groups of four are reformed, and the members are directed to discuss the answers to the following questions among themselves (these questions are listed on newsprint and posted where all participants can see them):

   ■ What questions do you have about some metaverbal behaviors of your own that you think might confuse other people?

   ■ How might you improve your use of metaverbal communication to clarify or enhance your own communications with others?

   ■ What specific plans can you make right now to improve your use of metaverbal communication in your interaction with one other (specific) person? (Fifteen to twenty minutes.)

Variations

- After step 16, group members can form pairs and contract with their partners to report on their progress in, confusion with, or issues around attempting to improve their metaverbal communication skills.

- Triads can be used instead of groups of four. Only one of the opinion sheets would be read, with the third member of the triad reading it humorously.

- Opinion sheets can be assigned in such a way that each participant is instructed to read an opinion with which he or she does not agree (with *no* other instructions). The listeners would be instructed to determine whether the presenter agreed with the statement, based on a discussion of the presenter's metaverbal cues.

SHADES OF DIFFERENCE LECTURETTE

People communicate in more than one way. What we say to another person is only one of the messages that we send. My tone of voice, pitch, and use of pauses can tell you that I am joking, that I am very serious, that I am angry or sad, and so on. My gestures, my bodily stance, the tilt of my head, and the way I use my eyes or eyebrows also can convey a message or reinforce or negate the verbal message that I am sending. Even the words or sounds that I use between pauses can indicate whether I am feeling sure or unsure, honest or dishonest, or a number of other conditions. These various messages are known as metaverbal ("along with" or "beyond" verbal) communication.

Your interpretation of my communication is based on several things: your needs and feelings, the words I use, the way I use my voice in saying those words, the way I stand or sit, the way I look at you, my gestures, and so on. If my "body language" and my voice are not congruent with my words, you may become confused or you may distrust my intentions. In fact, if my metaverbal communication is incongruous with my stated message, it may indicate that I am feeling ambiguous or unclear about what I am trying to communicate. (In some cases, I may be trying to confuse you.)

If I want my communication with you to be as clear and unambiguous as possible, I need to pay attention to *all* the messages that I send at one time. If I am frowning, I can tell you whether I am angry, perplexed, or just thinking. If I am joking, I can smile or raise my eyebrows to let you know that I am joking. If I am trying to extend sympathy but fear that my awkward words will sound gruff, I can speak softly and perhaps touch your shoulder.

By paying attention to *how* we communicate—on many levels—we can do a great deal to improve the clarity and effectiveness of *what* we are attempting to communicate.

SHADES OF DIFFERENCE INSTRUCTION SHEET A-C

In a few minutes, you will be asked to read a statement of opinion to the other members of your group. Read the opinion as though you wholeheartedly agree with it and endorse it. Look now at the opinion that you have been given and think about how you might read it to the members of your group in a way that convinces them that you believe it and would like to convince them to believe it.

SHADES OF DIFFERENCE INSTRUCTION SHEET B-D

In a few minutes, you will be asked to read a statement of opinion to the other members of your group. Read this statement as though you are seriously opposed to the subject matter discussed. You may want to try reading the statement with sarcasm, pointing out its obviously ludicrous points with your voice. You may want to emphasize certain sentences that speak negatively against the subject themselves. Look now at the opinion that you have been given and think about how you might read it to the members of your group in a way that convinces them that you are opposed to the subject under discussion and that you would like them to oppose it also.

SHADES OF DIFFERENCE OPINION SHEET 1

Billboards are an important aspect of American business. Let's face it; in today's competitive environment, businesses need all the advertising they can get. What better way to send a message to Mr. and Mrs. America than to catch them while they are driving down the road without other things to distract them. The kids aren't in the bathtub; there's no one at the front door; there's nothing in the oven—just the scenery and the billboards. In fact, billboards are the scenery in some places. They brighten up lonely stretches of road; they provide art in a barren landscape. More importantly, they tell people about products and services that they might not hear about in other media such as television, newspaper, magazines, and radio. Billboards help the consumer to choose between products and services (why this cigarette is better than that cigarette; why this bank is more trustworthy than that bank, etc.). People have come to expect to see billboards; they've become part of the American way of life.

SHADES OF DIFFERENCE OPINION SHEET 2

Soap operas and their prime-time counterparts have become part of American life. People watch them to find out how other people live, to gain insight into the personalities of people who make things happen, and to bring a glimpse of the real world into their ordinary lives. In soap operas, the men usually are doctors or lawyers or have inherited money, and the women don't work and don't need to. This vision of how the other half lives is made more realistic by the situations and crises that the characters face. People watch the problems and conflicts of the characters in a soap opera or family saga and compare them to help them put their own lives and problems into perspective. The "soaps" tell people that there are many different kinds of families with many different kinds of problems but also that, in many ways, we are all alike. These dramatic portrayals help people to distinguish between right and wrong, between what is really important and what is not. They help us to consider the moral implications of things that could happen to you or me.

◨ PAROLE BOARD: EXPLORING INDIVIDUAL AND GROUP VALUES

Arlette C. Ballew and Charles A. Beitz, Jr.

Goals

- To provide participants with an opportunity to explore their values concerning characteristics of individuals.
- To explore how individual values affect individual and group decisions.
- To explore the impact of group values on decision making.

Group Size

Twelve to twenty-four participants (three subgroups of three to six members each, with one or two additional participants per subgroup serving as observers).

Time Required

One hour and forty-five minutes to two hours.

Materials

- A copy of the Parole Board Candidates Sheet for each participant.
- A copy of the Parole Board C Background Sheet for each member and each observer of Parole Board C.
- A copy of the Parole Board L Background Sheet for each member and each observer of Parole Board L.
- A copy of the Parole Board M Background Sheet for each member and each observer of Parole Board M.
- A copy of the Parole Board Observer Sheet for each observer.
- A newsprint flip chart and a felt-tipped marker.
- Masking tape for posting newsprint.

Physical Setting

A room with movable chairs and sufficient space to accommodate the meetings of the three subgroups without any subgroup disturbing the others. It is preferable to have a large room for the total group and three separate rooms in which the subgroups can meet.

Process

1. The participants are requested to form two subgroups, based on whether they typically consider themselves to be "liberal" or "conservative." They are asked to make this decision quickly and not to spend too much time worrying about labels. The facilitator then forms *three* subgroups of approximately equal size, one of "conservative" members, one of "liberal" members, and the last of a mixture of liberal and conservative (or those who could not decide). In the case of a group in which nearly all participants label themselves the same way, the facilitator may ask some members to role play a different tendency. Depending on the total number of participants, one or two members of each subgroup may be designated as observers. (Five minutes.)

2. Each subgroup is told that it is an official board of inquiry for a correctional facility. The subgroup is serving as a "Parole Board" to determine which prisoners should be let out of the facility early, before serving their full terms of imprisonment. Participants are encouraged to enter into the spirit of the activity (especially if they are in a subgroup that does not reflect their real tendencies) and not question the factual validity of the information provided. Each participant is given a copy of the Parole Board Candidates Sheet. In addition, each member and observer of the liberal subgroup receives a copy of the Parole Board L Background Sheet, each member and observer of the conservative subgroup receives a copy of the Parole Board C Background Sheet, and each member and observer of the "mixed" subgroup receives a copy of the Parole Board M Background Sheet. Time is allowed for the participants to read the sheets. (Fifteen minutes.)

3. The facilitator announces that it is time for the parole boards to meet and directs each one to a separate area of the room (or to a separate meeting room). The subgroup members are told that they will have forty-five minutes in which to determine their individual choices and to discuss the candidates with the other subgroup members and reach consensus on which ones will be granted parole. Observers are instructed to record observations on their copies of the observer sheet. The subgroups are told to return to the primary meeting space at the end of the allotted time. (Five minutes.)

4. The subgroups conduct their meetings simultaneously. After ten minutes, the facilitator suggests that the participants conclude their individual decision

making and move on to the consensus phase of the activity. He or she also notifies the participants when they have ten minutes left, when they have five minutes left, and then calls time. (Forty-five minutes.)

5. When the total group has reconvened, each "parole board" is asked to announce its decisions: the names of the three candidates that it nominated for parole and any special conditions of parole for each of the three. The facilitator writes each subgroup's decisions on newsprint. (Ten to fifteen minutes.)

6. The facilitator asks the participants to try to step out of their advocacy positions and to try to put their focus on what happens in a group when its members must reach consensus on a serious issue. The facilitator then initiates a discussion of the activity, keeping the focus on learning themes generated by the activity, not on the "rightness" or "wrongness" of any subgroup's decisions. After the participants respond to each of the following questions, observers are asked to report their recorded observations.

   ■ How did the subgroup members feel about the responsibility of determining the fate of the six candidates? If some members felt differently from others, why do you think this happened?

   ■ What values seemed to be operating within each subgroup? How did the subgroup's values differ from one another?

   ■ What processes did the subgroups use to guide their discussions and reach their conclusions? How did these processes typify the values each subgroup represented?

   ■ How did the fact that subgroup members' values were similar or different affect the decision-making process?

   ■ Did any one subgroup fail to nominate three candidates for parole? If so, what happened during that subgroup's deliberations that prevented a decision? (Fifteen to twenty minutes.)

7. The facilitator leads a concluding discussion based on the following questions:

   ■ What did the participants learn from this experience about how personal values affect individual and group decision making?

   ■ How can these learnings be applied to future decision-making situations, both individual and group? (Five to ten minutes.)

Variations[1]

■ Three subgroups are formed, and each is given the task of designing a new correctional facility (prison). Each subgroup is to generate: a description of the physical facility, staffing needs, equipment needs, and a list of training programs

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[1] The variations were created by Charles A. Beitz, Jr.

for employees. On the role sheets, one of the subgroups is designated "liberal," one "conservative," and one "mixed," but the subgroups are not told that they have been given different orientations. The results of each subgroup's planning session are depicted on newsprint and posted, so that differences in design, staffing, equipment, and training are apparent. Processing includes the differences in the results, how the subgroup's orientation affected its process and its results, each subgroup's significant issues, and learnings and applications.

■ The activity in variation 1 can be amended as follows: At the beginning of the activity, the facilitator verbally and graphically presents a model of organizational subsystems (e.g., Kast and Rosenzweig's "Organization System Model" or Jones' "Organizational Universe Model"). Time is allowed for questions and clarification. (The first learning goal then becomes "To present a model of organizations and their subsystems.") The subgroup's tasks include descriptions of organizational structure, unit tasks, authority, work flow, and special rules and regulations.

■ With smaller groups, just the liberal and conservative designations can be used to highlight potential contrasts.

PAROLE BOARD C BACKGROUND SHEET

In this location, persons who have been convicted of serious crimes typically are sent to a correctional facility (prison) for periods of time ranging from five years to life. However, not all prisoners remain imprisoned for the full length of their terms; some, whose conduct while imprisoned has been good and who are believed to be capable of being rehabilitated, are released early, or "paroled."

A paroled person must meet certain conditions in order to remain at liberty outside the correctional facility. These conditions relate to conduct, use of addictive substances, employment, housing, area in which the person may travel, and so on. In addition, a person who is "on parole" must report once each month to a "parole officer," who monitors the person's conduct, employment, housing, associates, etc. If the parole officer determines that the person has exceeded the conditions of his or her parole, that person is apprehended and returned to a correctional facility.

You are a member of a Parole Board, a group of people who meet at regular intervals of time to determine which, if any, of the prisoners who have be incarcerated long enough to be eligible for parole will, in fact, be released before their full terms of imprisonment.

Obviously, you do not want to recommend anyone for parole who may engage in criminal behavior or in any way be a menace to society when he or she is released. Also, you do not want to increase the strain on the already-overloaded parole officers by assigning people to them who are apt to violate their conditions of parole.

On the other hand, the correctional facilities all over the country are overfilled, and the parole system is a way of releasing the prisoners who may be able to lead normal, productive lives while keeping the more dangerous ones "locked up."

Six prisoners currently are eligible—and have been recommended by the prison authorities—for possible parole. Your task is to nominate three candidates for parole; then your subgroup must reach consensus on *which three* of these six candidates will be released on parole. You may nominate only three persons.

Keep the following guidelines in mind as you try to reach consensus:

1. Avoid arguing for your individual judgments. Approach the task on the basis of logic.

2. Avoid changing your mind simply to reach agreement and to avoid conflict, but support solutions with which you are able to agree somewhat.

3. Avoid "conflict-reducing" techniques such as majority vote, averaging, or trading in reaching your decision.

4. View differences of opinion as a help rather than a hindrance in decision making.

The parole board on which you serve is "conservative."

You will have forty-five minutes in which to complete these tasks.

PAROLE BOARD L BACKGROUND SHEET

In this location, persons who have been convicted of serious crimes typically are sent to a correctional facility (prison) for periods of time ranging from five years to life. However, not all prisoners remain imprisoned for the full length of their terms; some, whose conduct while imprisoned has been good and who are believed to be capable of being rehabilitated, are released early, or "paroled."

A paroled person must meet certain conditions in order to remain at liberty outside the correctional facility. These conditions relate to conduct, use of addictive substances, employment, housing, area in which the person may travel, and so on. In addition, a person who is "on parole" must report once each month to a "parole officer," who monitors the person's conduct, employment, housing, associates, etc. If the parole officer determines that the person has exceeded the conditions of his or her parole, that person is apprehended and returned to a correctional facility.

You are a member of a Parole Board, a group of people who meet at regular intervals of time to determine which, if any, of the prisoners who have be incarcerated long enough to be eligible for parole will, in fact, be released before their full terms of imprisonment.

Obviously, you do not want to recommend anyone for parole who may engage in criminal behavior or in any way be a menace to society when he or she is released. Also, you do not want to increase the strain on the already-overloaded parole officers by assigning people to them who are apt to violate their conditions of parole.

On the other hand, the correctional facilities all over the country are overfilled, and the parole system is a way of releasing the prisoners who may be able to lead normal, productive lives while keeping the more dangerous ones "locked up."

Six prisoners currently are eligible—and have been recommended by the prison authorities—for possible parole. Your task is to nominate three candidates for parole; then your subgroup must reach consensus on *which three* of these six candidates will be released on parole. You may nominate only three persons.

Keep the following guidelines in mind as you try to reach consensus:

1. Avoid arguing for your individual judgments. Approach the task on the basis of logic.
2. Avoid changing your mind simply to reach agreement and to avoid conflict, but support solutions with which you are able to agree somewhat.
3. Avoid "conflict-reducing" techniques such as majority vote, averaging, or trading in reaching your decision.
4. View differences of opinion as a help rather than a hindrance in decision making.

The parole board on which you serve is "liberal."

You will have forty-five minutes in which to complete these tasks.

PAROLE BOARD M BACKGROUND SHEET

In this location, persons who have been convicted of serious crimes typically are sent to a correctional facility (prison) for periods of time ranging from five years to life. However, not all prisoners remain imprisoned for the full length of their terms; some, whose conduct while imprisoned has been good and who are believed to be capable of being rehabilitated, are released early, or "paroled."

A paroled person must meet certain conditions in order to remain at liberty outside the correctional facility. These conditions relate to conduct, use of addictive substances, employment, housing, area in which the person may travel, and so on. In addition, a person who is "on parole" must report once each month to a "parole officer," who monitors the person's conduct, employment, housing, associates, etc. If the parole officer determines that the person has exceeded the conditions of his or her parole, that person is apprehended and returned to a correctional facility.

You are a member of a Parole Board, a group of people who meet at regular intervals of time to determine which, if any, of the prisoners who have be incarcerated long enough to be eligible for parole will, in fact, be released before their full terms of imprisonment.

Obviously, you do not want to recommend anyone for parole who may engage in criminal behavior or in any way be a menace to society when he or she is released. Also, you do not want to increase the strain on the already-overloaded parole officers by assigning people to them who are apt to violate their conditions of parole.

On the other hand, the correctional facilities all over the country are overfilled, and the parole system is a way of releasing the prisoners who may be able to lead normal, productive lives while keeping the more dangerous ones "locked up."

Six prisoners currently are eligible—and have been recommended by the prison authorities—for possible parole. Your task is to nominate three candidates for parole; then your subgroup must reach consensus on *which three* of these six candidates will be released on parole. You may nominate only three persons.

Keep the following guidelines in mind as you try to reach consensus:

1. Avoid arguing for your individual judgments. Approach the task on the basis of logic.

2. Avoid changing your mind simply to reach agreement and to avoid conflict, but support solutions with which you are able to agree somewhat.

3. Avoid "conflict-reducing" techniques such as majority vote, averaging, or trading in reaching your decision.

4. View differences of opinion as a help rather than a hindrance in decision making.

The parole board on which you serve contains some members who regard themselves as liberal, some who tend to be conservative, and some whom you have not been able to label.

You will have forty-five minutes in which to complete these tasks.

PAROLE BOARD CANDIDATES SHEET

The following prisoners have served the required amount of time and have met the prison criteria to be eligible for parole. The task of your group is to approve *three* of the candidates for parole and specify any special conditions of parole for each of the three selected. It is suggested that you read the following descriptions individually, make your own individual choices, and then discuss the issues in your subgroup.

Candidates

James Johnson, age 28. Johnson was convicted on two counts of armed robbery. On both occasions, he entered a small food store and forced the cashier (at gunpoint) to give him money from the cash register. He did not fire the gun on either occasion. He has served ten years of a fifteen-year prison term.

Johnson was eighteen years old at the time he committed both offenses. He comes from a poor, lower-class family that was abandoned by the father. He dropped out of high school at the age of sixteen. Although he did not join an organized street gang, he kept company with several gang members as well as with other high school dropouts (several of whom had been convicted of misdemeanors).

Johnson was surly and uncommunicative for the first three years of his prison term. Then he began to work in the prison library and, with the encouragement of the librarian, he joined a program to learn how to read. He began to show an interest in reading and learning and, in his fifth year in prison, passed an examination that qualified him for a high-school equivalency degree. Since that time, he has continued his education, with the guidance of the prison counselors. He hopes to enroll in a community college, to work part-time, to receive a degree, and to pursue a career as a medical technician.

Johnson blames his previous conduct on his family background and lack of role model. He says that he now has developed better values and has realistic goals and a sense of direction, which were lacking in his youth.

Norman Jennings, age 40. Jennings is an accountant who was convicted of embezzling $10,000 from his employer. He has served three years of a five-year sentence.

Jennings is from a middle-class background. He received a college degree in accounting. At the time of his offense, he was thirty-seven years old, a bachelor who lived alone. He was described by his associates as "quiet," "shy," and "not very sociable." Six months prior to the discovery of his embezzlement, he met a thirty-year-old woman in a restaurant near his home. They began to see each other regularly, and Jennings believed that he was "in love" for the first time.

At his trial, Jennings said that the woman asked him to steal the money to provide "for their life together." Unfortunately, she left town soon after his arrest, so could not be questioned about her part in the affair. The fact that the police were unable to locate

her, although it is known that she was seen and in good health just after Jenning's arrest, led his attorney to depict Jennings as an unsophisticated "puppet" of an experienced, scheming woman.

Jennings says that he has learned his lesson. While in prison, he studied advanced accounting and kept informed of new accounting procedures. He expects to be able to pass the examination to become a certified public accountant when he is released. He believes that his chances of employment are good, once he has had an opportunity to explain himself.

Frederick Upjohn, Jr., age 38. Upjohn was convicted of selling cocaine and has served ten years of a fifteen-year sentence.

The only son of a wealthy entrepreneur, Upjohn holds a university degree in music education. Following his graduation, he became a member of a rock-music band, which made several successful recordings and became quite popular. Upjohn received critical acclaim for his talent and had many fans. During seven years of touring world wide with the band, Upjohn experimented with drugs and eventually became addicted to cocaine. He was arrested for selling cocaine to an undercover agent who was posing as a recording-studio technician. He was twenty-eight years old at the time.

While Upjohn was incarcerated, his father passed away, leaving him with a substantial private income.

Upjohn says that now that he is drug free, he has no intention of becoming involved with drugs again. He intends to resume his career as a musician.

Lucille DuBois, age 38. DuBois was convicted of soliciting for prostitution, which is a felony in this location. This is her second conviction. She previously served a full, five-year prison term as the result of a similar conviction. She has served five years of an eight-year term for the most recent offense.

DuBois is from an upper-middle-class family. When she was eight years old, her father (a successful professional man) was convicted of sexually abusing her and sent to prison. The mother subsequently suffered a series of nervous breakdowns; when the mother was unable to care for them, DuBois and her brother were taken in by a series of aunts and uncles. DuBois ran away from home at the age of sixteen and apparently drifted into prostitution as the only way she could find to support herself. From the age of twenty-one to the time of her first conviction (at age twenty-four), she often worked as a waitress, returning to prostitution when she was out of work.

A relative who owns a successful restaurant has offered DuBois a job as a waitress upon her release from prison. If she is paroled, she plans to accept this offer. She says that she is "too old" to return to her former life, and believes that she can work her way up in the family business.

Emilia Cumo, age 55. Cumo has served twenty years of a thirty-year sentence for manslaughter. She was convicted of administering an overdose of medication to her mother.

At the time of her conviction, Cumo was thirty-five years old and unmarried. She had lived with her widowed mother for her entire life. Her mother, who was sixty-nine years old at the time of her death, had suffered from Alzheimer's Disease for the previous six years.

At Cumo's trial, the prosecution portrayed her as a scheming woman who had tired of the responsibility of caring for her parent and who wished to live without responsibility on her mother's money.

The defense maintained that Cumo's mother had previously begged her to "help her to die" if and when she became so incapacitated that she would be an embarrassment to herself. In the last eighteen months of her life, the mother's condition had deteriorated so that she did not know who or where she was, did not recognize anyone, and was frequently confused and distraught. The defense pointed out that although Cumo had agreed to her mother's request to ease the mother's mind, she had not acted on her promise for a year and a half while she agonized over the moral consequences of taking a human life versus not keeping her promise and allowing her mother to suffer.

Cumo's brother and sister, both married, are divided in their view of her actions. The brother calls Cumo a "cold-blooded murderess." The sister supports Cumo, maintaining that their mother's life was a "living hell." She has invited Cumo to live with her family if Cumo is released on parole.

Jacob Knowles, age 46. Knowles has served eleven years of a twenty-year sentence for vehicular manslaughter. He was convicted of killing a twelve-year-old girl while driving under the influence of alcohol.

Prior to his conviction, Knowles had been cited repeatedly for driving while drunk, and his license had been suspended. When he was arrested at the scene of the girl's death, he had been driving without a license or insurance coverage.

Knowles had been employed as a sales manager for a nationwide building-parts firm but, six months prior to his conviction, had lost his job for showing up at work while drunk.

While in prison, Knowles entered an Alcoholics Anonymous group. He is a vehement spokesperson for the benefits of such programs in helping addicted persons to recover. He says that prison "saved my life even though it was too late to save the little girl's."

If released on parole, Knowles hopes to find a job as a counselor in a program for alcohol and drug abusers.

PAROLE BOARD OBSERVER SHEET

Instructions: Use the following questions to guide your observations of the interactions within your subgroup. You will be asked to share these observations as part of the concluding discussions.

1. What discussion took place about the subgroup's responsibilities? What individual differences were evident in terms of accepting these responsibilities?

2. What values were articulated within the subgroup? (Focus on values that might be labeled "liberal" or "conservative.")

3. How did the subgroup reach its conclusions? Did the processes reflect the values that the subgroup members were espousing?

4. How did similarities or differences in individual values affect the discussion and the decisions?

5. Did your subgroup complete the task? If not, what behaviors prevented completion?

■ APPENDIX 2: SAMPLE ROLE PLAY

The New Truck Dilemma

Norman R.F. Maier, Allen R. Solem, and Ayesha A. Maier

FOCUSING THE PROBLEM

Whenever people are involved in a joint activity, the question of fair treatment becomes an important issue about which opinions differ. Although a supervisor may try to be fair, he soon realizes that no amount of effort on his part to do the right thing is appreciated by everyone. Consequently, he often welcomes rules and company practices, because they promise to protect him from the charge of playing favorites. These same rules and formalized procedures may be regarded by employees as arbitrary, inconvenient, and a way of disregarding individual differences in needs; yet employees prefer them to favoritism, which they believe will occur if supervisory judgments prevail. Management sees rules and formalized procedures as necessary evils that interfere with flexibility and personalized practices. However, these procedures also serve as guides and protections from complaints and permit the supervisor to let the blame fall on the rule. Thus, the rule can be attacked by both parties to a dispute.

It is necessary to clarify the issues involved in a dispute over fairness. Disagreement on issues of fairness may be unavoidable because choices and preferences are, by their very nature, self-centered. It is apparent that if all members of a group had an equal desire for an object, regardless of whether each had an equal claim to it, there would be a struggle since each would try to get it for himself. An outsider might, however, work out a just solution by dividing it equally between members of the group. When an object can be shared or divided, opportunities for finding fair solutions exist providing that each member respects the claims of others. When, however, needs and claims differ among group members and an object cannot be shared, the difficulties mount.

Some of the more common fairness issues include the following situations:

- How can vacations be scheduled more fairly?

- Who gets time off during hunting seasons?

- What is a fair division of overtime?

- Who should do a disagreeable job?

- Which unit should try out the new chairs?

- Which group should get more space as a result of a move to new quarters?

- How can office space be allocated so that some are not left with less space or less elegant furnishings than others?

Frequently, supervisors are unaware of the many factors that play a part in a dispute about fairness. As the previous list of problems shows, prestige is an issue, and when social recognition is part of the problem of fairness, the emotional involvement is strong.

The incident in this case hinges on the issuing of a new truck to one member of a crew of workers, each of whom uses a truck in his work. The foreman finds himself in a situation in which he must make a wise and fair decision. Since the replacement of trucks has been infrequent, the importance of making the right decision is apparent to the foreman.

The multiple role-playing procedure is used in this case because it is desirable to obtain solutions from a number of groups.

MULTIPLE ROLE-PLAYING PROCEDURE

Preparation

1. The participants form groups of six persons each. If the last group has only five persons, they may assume that one of them (George) is home because of illness. Less than five persons may act as observers of role-playing groups.

2. All participants read the General Instructions for Role Players. This data may be consulted during the role play. The instructor may wish to post on newsprint the facts about the repairmen and their trucks.

3. Each group selects one member to play the foreman, Walt Marshall.

4. Other group members play George, Bill, John, Charlie, and Hank. If a group has only five persons, the foreman reads George's role and assumes that he has talked to George on the telephone.

5. The member of each group playing the foreman studies his role sheet. When he has read it, he stands up to indicate to the instructor that he is ready to role play.

6. Crew members study their role sheets. They avoid reading other roles or discussing the roles with one another.

7. The observers (if any) read their instructions in preparation for their observation of the role play.

8. Each crew member writes his role name on a slip of paper which he wears as a name tag so that other members know who he is.

9. The crew members assume they are in the foreman's office waiting for him.

10. When all participants who are playing the part of the foreman have indicated by standing that they are ready to begin role playing, the instructor asks them to sit down. This signals that the foremen have entered their offices to begin the discussions.

11. Crew members greet the foreman on his arrival, and the role play begins.

Process

1. Groups need between twenty-five and thirty minutes for role playing. Those who have not finished at the end of twenty-eight minutes are given a two-minute warning signal.

2. During the role play, the instructor lists on newsprint the appropriate headings for the recording of solutions and other results from the groups. Sample Table 1 illustrates the types of headings and the method for recording data that may be used. The first letter of each crew member's name is arranged in a column. One column is needed for each group. Arrows may be used to indicate any exchange in trucks. (These should be added later.) An arrow from the left pointing to a name indicates the man who got the new truck, while other arrows (to the right of names) indicate who got his truck, etc. For example, in Group 3, John receives the new truck while Charlie gets John's truck, and Charlie's truck is to be discarded. (This is not a typical solution.)

3. In addition to making arrangements for recording the exchange in trucks, the instructor should plan space for other data. Suggested headings are given below:

   a. "Repairs" indicates whose truck, if any, will be fixed up in any way.

   b. "Number of Exchanges" serves to record the number of men who benefit by the fact that a new truck is introduced into the crew. In Group 3, shown in the sample table, both John and Charlie receive different trucks as a result of the solution.

   c. The heading "Foreman Satisfied" is used to indicate whether the foreman is satisfied or not with the solution reached in the discussion.

   d. A fourth heading, "Dissatisfied Drivers," is used to record the initials of the men who are not satisfied with the outcome.

Collecting Group Data

1. The foreman for each group reports (a) the decision for his group, by indicating the name of the man who gets the new truck, the disposition that is made of his truck, etc.; (b) whose truck, if any, is to be repaired; and (c) whether or not he is satisfied with the outcome.

2. The instructor diagrams the solution as the foreman reports it, and fills in lines (a), (b), and (c) of the table.

3. The crew criticizes the foreman's report if they see fit, and all who are dissatisfied give their reasons—to be reported on line (d) of the table.

4. Observers, if used, briefly report on the discussion process each observed, commenting especially on (a) how the foreman presented the problem, (b) how the crew responded in the discussion, and (c) any helpful or interfering things the foreman did.

5. The process is repeated until all groups have reported. If more than twelve groups participate, it may be necessary to limit complete reports to ten groups and request the remaining groups to confine their reports to the presentation of their solutions.

General Discussion

All participants then discuss such topics as the following:

1. In what ways are the solutions alike or different?

2. Which of the several solutions is best? (The percentage of satisfied individuals is determined.)

3. What factors influenced differences of opinion on the "best" solution?

4. Could a foreman have made a fair decision on this problem? How many members in a group could he please?

5. What sets of values enter into the question of fairness? (The arguments used by various individuals are listed on newsprint.)

6. Could a company write a rule for the fair way to distribute the new trucks?

7. What solutions would be unacceptable to management? Were any such solutions suggested by groups and, if so, could they have been prevented?

8. Can the problem of fairness be settled by a discussion with the crew without the foreman attempting to influence the outcome? (Arguments for and against this position are listed in separate columns.)

9. In the opinion of each crew member, what did he like most about the foreman's conduct of the meeting, and what did he like least about it? (The instructor may make a two-column listing of these behaviors. Key words should be used to characterize a behavioral item, and check marks may be made to register duplicate contributions. Discuss various interpretations of the two lists.)

10. What other problems are basically like the new truck problem? (The instructor lists these on newsprint. In cases of disagreement, differences in opinion are indicated by means of a modifying phrase.)

General Instructions for Role Players[1]

You work for the telephone company, and one of you is the foreman while the others are repairmen. The job of a repairman is to fix phones that are out of order, and it requires knowledge and diagnostic skills as well as muscular skills. Repairmen must climb telephone poles, work with small tools, and meet customers. The foreman of a crew is usually an ex-repairman; this happens to be true in this case. He has an office at the garage location but spends a good deal of time making the rounds, visiting the places where the men are working. Each repairman works alone and ordinarily does several jobs in a day. The foreman gives help and instruction as needed.

The repairmen drive to various locations in the city to do repair work. Each of them drives a small truck and takes pride in its appearance. The repairmen have possessive feelings about their trucks and like to keep them in good running order. Naturally, they like to have new trucks, because new trucks give them a feeling of pride.

Here are some facts about the repairmen and their trucks.

	Years with Company	Type of Truck Used
George	17	2-year-old Ford
Bill	11	5-year-old Dodge
John	10	4-year-old Ford
Charlie	5	3-year-old Ford
Hank	3	5-year-old Chevrolet

Most of the men do all their driving in the city, but John and Charlie cover the jobs in the suburbs.

In playing your part, accept the facts as given and assume the attitude supplied in your specific role. From this point on, let your feelings develop in accordance with the events that occur during the role play. When facts or events arise that are not covered by the roles, make up things that are consistent with the way it might be in a real-life situation.

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[1] Role instructions are taken from an article by N.R.F. Maier and L.F. Zerfoss, "MRP: A Technique for Training Large Groups of Supervisors and Its Potential Use in Social Research," *Human Relations,* 1952, 5, 180-181. Permission to reproduce the roles has been granted by the Plenum Publishing Company, London, England.

Role Sheet: Walt Marshall, Foreman

You are the foreman of a crew of repairmen, each of whom drives a small service truck to and from his various jobs. Every so often, you get a new truck to exchange for an old one and you have the problem of deciding which of your men should have the new truck. Often there are hard feelings, because each man seems to feel he is entitled to the new truck, so you have a tough time being fair. As a matter of fact, it usually turns out that whatever you decide, most of the men consider it wrong. You now have to face the same issue again because a new Chevrolet truck has just been allocated to you for distribution.

In order to handle this problem, you have decided to put the question to the men themselves. You will tell them about the new truck and ask them what is the fairest way to distribute the trucks. Do not take a position yourself because you want to do what the men think is fair.

- -

Role Sheet: George, Repairman

When a new Chevrolet truck becomes available, you think you should get it because you have the most seniority and don't like your present truck. Your own car is a Chevrolet and you prefer a Chevrolet truck such as you drove before you got the Ford.

Role Sheet: Bill, Repairman

You think you deserve a new truck; it certainly is your turn. Your present truck is old, and since the more senior man has a fairly new truck, you should get the next one. You have taken excellent care of your present Dodge and have kept it looking like new. A man deserves to be rewarded if he treats the company truck like his own.

- -

Role Sheet: John, Repairman

You have to do more driving than most of the other men because you work in the suburbs. You have a fairly old truck and you think you should have the new one because you do so much driving.

Role Sheet: Charlie, Repairman

The heater in your present truck is inadequate. Since Hank backed into the door of your truck, it has never been repaired correctly. The door lets in too much cold air and you attribute your frequent colds to this. You want to have a warm truck since you have a good deal of driving to do. As long as it has good tires and brakes and is comfortable, you don't care about its make.

- -

Role Sheet: Hank, Repairman
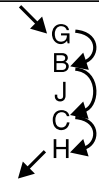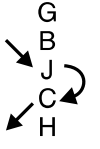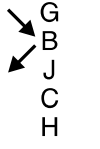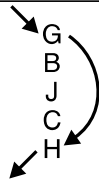
You have the worst truck in the crew. It is five years old and had been in a bad wreck before you got it. It has never been good, and you have put up with it for three years. It's about time you got a good truck to drive and it seems only fair that the next one should be yours. You have had only one accident. That was when you sprung the door of Charlie's truck as he opened it when you were backing out of the garage. You hope the new truck is a Ford, since you prefer to drive that make.

Observer Instruction Sheet

Using the following items as a guide, note what the foreman does and how the crew reacts.

1. How did the foreman present the problem?
   a. In presenting the problem, did he display the attitude of asking for help?
   b. Did he present all the facts?
   c. Was his presentation of the problem brief and to the point?
   d. Did he avoid suggesting a solution?
2. What things occurred in the discussion?
   a. Did all group members participate?
   b. Was there free exchange of feelings between group members?
   c. Did the group use social pressure to influence any of its members?
   d. On which member of the crew was social pressure used?
   e. Was the foreman permissive?
   f. Did the foreman avoid taking sides or favoring any person?
   g. What were the points of disagreement in the group?
3. What did the foreman do to help solve the problem?
   a. Did he ask questions to help the group explore ideas?
   b. Did he accept all ideas equally?
   c. Did he avoid hurrying the group to develop a solution?
   d. Did he avoid favoring any solution?
   e. Who supplied the final solution?
   f. What did the foreman do, if anything, to get a consensus on the final solution?

Sample Table 1. Results of New Truck Problem

	Group 1	Group 2	Group 3	Group 4	Group 5
Group Solution Reached	G B J C H	G B J C H	G B J C H	G B J C H	G B J C H
a. Repairs	C	NO	C	C, J, H	B
b. Number of Exchanges	1	4	2	1	2
c. Foreman Satisfied	Yes	Yes	No	No	Yes
d. Dissatisfied Drivers	G, B, J	0	G, H	G	J, C

COMMENTS AND IMPLICATIONS

This case usually results in an experience of success for the participants. Because most persons who play the part of the foreman have no preconceived solution in mind, they do little talking and are content to sit back and listen. The importance of this state of mind in the foreman can be demonstrated dramatically by asking a person who is to play the foreman to commit himself ahead of time on a solution that he considers to be fair. Such foremen have a difficult time and are inclined to think that the crew is unreasonable. When, however, the crew members realize that their foreman wants to do what they consider fair, there is a free expression of viewpoints. It soon becomes apparent that the opinions of the crew conflict; the noise level in the room rises during this stage. Often the foreman is overwhelmed by the arguing and wishes he had not consulted the group. Fortunately, however, because he usually does not know what to do, he does not interfere too much.

After all members have stated their position, certain members of the group perceive that the conflict is leading nowhere and begin to search for ways to resolve it. Respect for the rights of others becomes more apparent and constructive suggestions are proposed. The sound level now declines considerably. A solution gradually emerges as differences are resolved and concessions are made.

It is important that the foreman refrain from taking sides or agreeing with certain persons; in so doing, he tends only to antagonize others. Rather, he must continue to be patient and regard the conflict as a problem to be solved. Since most groups reach a decision that leaves few or none dissatisfied, it is apparent that the opportunity to express conflicting opinions can lead to a resolution of conflict. In fact, the airing of different views in a freely led discussion is an essential process in the reaching of an agreement. No amount of explaining by a foreman can accomplish this end.

For those crew members who remain dissatisfied, the cause is frequently something that happened during the discussion. Often, the foreman took sides against them, other members attacked them and the foreman failed to protect them, or the foreman ignored the ideas they expressed.

Less than completely satisfactory solutions are caused by a tendency (1) to solve the problem before each member has aired his views fully, and (2) to settle on the first constructive suggestion offered. The foreman can use his status to see that these things do not occur. It is often wise for the foreman to say, "Before we settle on that plan, let's take a look at some other possibilities." It is perhaps too much to expect that all crew members in all groups will be satisfied. Certain employees will create problems. However, as in real life, they usually number less than 10 percent of the total.

Since the issue in this case centers on the question of fairness, and since fairness is a personal matter, the crucial issue is one of employee *acceptance*. The group's decision is perhaps the best way to obtain maximum acceptance, but this does not mean that the foreman should not be concerned with the solution process. He is needed to conduct the

discussion and to see that every member has a right to express himself. A point of special interest is the fact that George, the senior man, gets the new truck about half the time—but he gets it more often when he is considerate of others than when he is demanding. Seniority, it seems, is respected, but the senior member's conduct can lower this respect. Since each crew member gets the new truck on occasion, it becomes apparent that the manner in which the men conduct themselves in the discussion is one determinant of the outcome. Although the facts furnished by the role instructions are important, it must not be assumed that they alone should or do determine the solution.

The question of the objective *quality* of the solution does play some part in this case, but the results indicate that it is not a serious problem.

A poor solution is one in which a relatively good truck is discarded. It may be noted from the results obtained that most—if not all—crews reach the decision to discard Hank's truck. This solution conforms with the foreman's view and is therefore acceptable to management. Even though the foreman may not have suggested this solution, it seems that the crew may be depended on to do the right thing. Thus, the fear that a qualitatively poor solution may occur if the crew members make the decision is unrealistic.

It is possible also to argue that solutions that give several people a different truck are superior to those that give a different truck to only one or two. Participants, however, challenge this point and regard it as a matter of preference.

The frequent tendency to repair Charlie's truck is of special interest. Usually the foreman agrees early in the discussion to repair Charlie's truck. Sometimes Charlie does not even keep the truck that is to be repaired. The fact that Charlie exaggerates the condition of his truck because he wants the new one tends to be overlooked. The foreman gives in because he feels that the complaint is a reasonable one and, furthermore, that the request is an inexpensive one—particularly when he finds that everyone else, at this stage of the discussion, is asking for a new truck. It is a common error to take early complaints too seriously. Of course, trucks should be kept in repair, but what constitutes proper repair sometimes is debatable.

How to distribute the new truck is a typical example of the problem of fairness. The values and issues raised in this case are similar to those raised whenever it is impossible to treat all persons alike. If a group decides the matter, the issue is resolved in terms of needs and values existing in the group at that time. Fair solutions must be tailor-made solutions, and no formula can be written that will take all variables into proper consideration. In order to be fair, all persons concerned must be made aware of the needs of others, and participants must discover that fairness cannot be achieved by judging others.

❚ APPENDIX 3: GUIDELINES FOR GIVING AND RECEIVING FEEDBACK

Feedback in Training Groups

Philip G. Hanson

FEEDBACK AS A STEERING APPARATUS

The process of giving, asking for, and receiving feedback is probably the most important dimension in training. Indeed, the exchange of feedback is a crucial communication process in any interpersonal relationship. It is through feedback that we can learn "to see ourselves as others see us." Giving or "sending" feedback is a verbal or nonverbal process through which we let others know our perceptions and feelings about their behavior. When "soliciting" feedback, an individual is asking for others' perceptions and feelings about his or her own behavior.

Feedback as a means of exchanging personal impressions and reactions seldom is used intentionally in everyday social interactions and, when used, seldom is effective in providing a learning experience for the recipient. In the training environment, however, feedback can be exchanged in relative safety; it is the primary method by which participants develop more effective ways to monitor and assess the impact of their ongoing interactions. In an atmosphere in which choice of one's behavior and ownership of that behavior are stressed, participants can use feedback to help them make choices about changing or not changing their behavior and to test whether or not attempted changes actually are achieved.

The term "feedback" was borrowed from rocket engineering by Kurt Lewin (1947, 1951), a founder of laboratory education. A rocket sent into space contains a mechanism that sends signals back to Earth. A steering apparatus on Earth receives these signals, makes adjustments if the rocket is off target, and corrects the course. Within the training group, members can perform the function of the steering apparatus for each other by sending signals to members who are off target in terms of the learning goals they have set for themselves.

It is not easy to give feedback so that it can be accepted without threat by another individual. To master the technique, one must have courage, sensitivity to other people's needs, and the ability to put oneself in another's shoes. In the training environment, emphasis is placed on developing attitudes of caring, trust, acceptance, openness, and

concern for the needs of others. For most participants, the hardest learning is the ability to let other people be as they are, not as the participants would like them to be. The willingness to accept things as they are in the here and now is a primary prerequisite for giving and receiving feedback effectively and for using that feedback for one's own growth.

Norms for giving and asking for feedback must be continuously supported by the training staff, even when the feedback takes place spontaneously in the group (Luft, 1970). Systematic feedback sessions, complemented by the use of instruments, can help to ensure that each member participates and receives some information regarding his or her behavior from everyone in the group. Structured feedback also can be introduced by having members fill out scales describing their reactions to the group in terms of group structure, atmosphere, and cohesion, and in terms of the degree of openness or level of participation of each member.

THE INFORMATION-EXCHANGE PROCESS

Between two people, the process of feedback exchange is as follows (Figure 1): person A's *intention* is to act in relation to person B, who sees only person A's *behavior*. Between the intention and the behavior is an encoding process that person A uses to ensure that his or her intentions and behavior are congruent. Person B perceives person A's behavior, decodes it (an interpreting process), and intends to respond. Between person B's intention and responding behavior there is also an encoding process. Person A then perceives person B's responding behavior and decodes it.
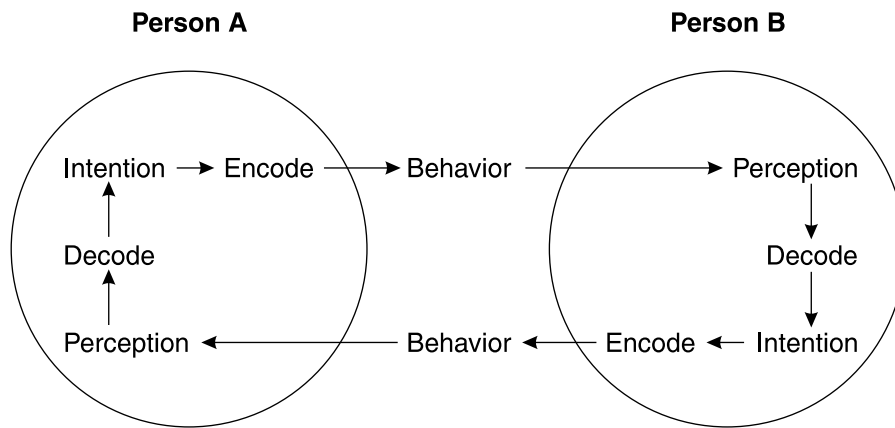

Figure 1. Giving and Receiving Feedback: A Circular Communication Process

If either person's encoding or decoding process is ineffective, the receiver may respond in a manner that will confuse the sender. For example, if one group member's intention is to compliment another by saying, "I really admire Joan's leadership of this group," the first member may be surprised if Joan responds by saying, "I am not leading the group; if I don't talk, no one else will!" Joan's decoding process leads her to hear the message as implying that she is dominating the group. The problem here is that a

number of things may have contributed to Joan's response: (a) she may have misread the intention (decoding problem), (b) the sender's statement (behavior) may not have been congruent with his intention (encoding problem), or (c) Joan may actually have read the intention behind the statement correctly, that is, the sender's intention may have been to criticize her in the guise of a compliment.

Thus, the practice of giving and receiving feedback can help people to discover whether or not their behavior is congruent with their intentions because the process focuses on *behavior* (only they know their intentions). Furthermore, the process highlights the fact that people frequently tend to give feedback about other people's intentions, rather than their behavior. By practicing and perfecting one's skill in giving and receiving feedback, one can learn more and more to stay within the here-and-now reality of a situation (the behavior) and can learn to manage the impulse to focus attention on unobservable matters (speculations about intentions, reasons, etc.).

Responsibility for Feedback

The question that frequently arises during feedback exchanges is: how much responsibility should the sender assume for his behavior and the receiver for her response? This question is especially pertinent if the feedback is negative or if it evokes a negative or defensive response. Some people are willing to assume more than their share of responsibility for anything, and other people may refuse to accept any responsibility—even for their own behavior. It is the function of the trainer to guide the group members in exploring their reactions to and utilization of the feedback process. For example, if George is habitually late for the group meetings, he may receive feedback from other members concerning their reactions to his behavior. His response may be to point out to the group members their lack of tolerance for individual differences. He may say that the group members are attempting to limit his freedom and that they seem to be investing too much responsibility in him for the group's effectiveness; he wants to be involved in the group, but does not understand why he needs to be on time.

This situation presents a value dilemma to the group: freedom of choice to change versus pressure to conform. George's observations are accurate, but his behavior is provocative. One way of clarifying this dilemma is to point out that although George is responsible only for his own behavior, the reactions of others inevitably affect him. To the extent that he cares about the others in the group or his relationship with them, he must consider their responses as information to be used in choosing what his interactions with them will be like.

GUIDELINES FOR GIVING FEEDBACK

It is possible to minimize people's defensiveness about receiving feedback and to maximize their ability to use it for their own personal growth. Feedback must be given in such a way that the person receiving it can *hear* it in the most objective and least

distorted way possible, *understand* it, and *choose* to *use* it or *not* to use it. Regardless of how accurate the feedback may be, if individuals cannot accept the information because they are too defensive, the feedback is useless.

The guidelines that follow are listed as if they were bipolar, with the first term in each dimension describing the more effective method of giving feedback.

Direct/Indirect Expression of Feelings

Joe, intending to compliment Marie, says to her, "I wish I could be more selfish, like you." Marie responds, "Why you insensitive boor, what do you mean by saying I'm selfish?" Joe then becomes defensive and retaliates, and the situation rapidly degenerates. Part of the problem here is that Marie hid her hurt feelings behind name-calling. Instead, Marie could have given Joe feedback by stating her feelings directly; that is, she could have said, "When you said you wished you could be more selfish, like me, I felt angry and put down." This method of giving feedback contains positive elements that the first does not. In her initial response, Marie stated her feelings *indirectly*; if she had described them *directly* ("I felt angry and put down") Joe could have seen clearly what her feelings were and what specific behavior of his ("when you said you wished you could be more selfish like me") triggered these feelings. He might then feel more free to respond positively to her.

If Tom says to Andy, "I like you," he is expressing his feelings directly, risking rejection. However, if he says, "You are a likeable person," the risk is less. Indirect expression of feelings is safer because it is ambiguous and offers an escape from commitment. (If confronted, Tom could deny his own feelings because he has not expressed them directly.) However, it frequently gives only half the message, and the receiver may easily misinterpret the giver's intent.

"You are driving too fast" is an indirect expression of feelings. "I am anxious because you are driving so fast" is a direct expression of feelings. It is obvious that, in the second case, the giver retains responsibility for his or her own feelings rather than attempting to coerce the receiver into assuming the responsibility. It is thus easier for the receiver to hear the message without becoming defensive and cutting off the possibility of acting on the message.

Indirect statements often begin with "I feel that . . ." and finish with a perception, belief, or opinion; for example, "I feel that you are angry." The clue that this type of statement really means "think" and not "feel" is the use of the word "that." "I feel that . . ." almost always means "This is what I really think." "I feel anxious because you look angry" expresses the speaker's feelings directly and also states a perception. The use of the word "feel" is usually authentic when it is followed by a true feeling (sad, happy, irritated, relieved, etc.). In the workshop setting, participants may need to practice giving and receiving feeling messages before they can understand this distinction fully.

Description/Interpretation of Behavior

When Marie says to Joe, "When you said you wished you could be more selfish, like me, I felt angry and put down," Marie is describing the behavior to which she is reacting. She is not attributing a motive to Joe's behavior, e.g., "You are hostile" or "You do not like me." When one attributes a motive to another person's behavior, one is interpreting that person's intention. Because his intention is private and known only to him, any interpretation of his behavior is highly questionable.

In addition, the first person's interpretation may arise from a theory of personality that is not shared by the second person. For example, if William is fidgeting in his chair and shuffling his feet and Walter says, "You are anxious," Walter is interpreting William's behavior. Walter's theory of personality states that when a person fidgets in his chair and shuffles his feet, he is manifesting anxiety. Such a theory interposed between two people can create a barrier between them that precludes understanding. The effectiveness of this barrier can be increased if the receiver's theory conflicts with the giver's. If, instead, Walter *describes* William's behavior, William may then explain his behavior by saying, "My foot is falling asleep."

In any event, interpreting other people's behavior or ascribing motives to it tends to put them on the defensive and cause them to spend their energies on either explaining the behavior or defending themselves. It deprives them of the opportunity to interpret or make sense of their own behavior and may create dependency on the interpreter, particularly if the interpreter is seen as powerful. Such feedback, regardless of how much insight it actually contains, rarely can be used positively.

Nonevaluative/Evaluative Feedback

When giving feedback, one must respond not to the personal worth of the receiver, but to the person's behavior. An individual who is told that he is "stupid" or "insensitive" will have great difficulty in responding objectively. A person may sometimes act stupidly or behave in an insensitive way, but that does not mean that the person is, by nature, stupid or insensitive. In addition to assuming the role of judge, the giver of evaluative feedback assumes that he or she can distinguish categorically between "good" and "bad" or between "right" and "wrong." Such a person may even be surprised when the receiver does not accept the feedback because of the values on which it is based.

It is difficult for people to respond to evaluative feedback because it usually offends their feelings of self-worth or self-esteem. These are core concepts about ourselves that cannot be changed readily by feedback, nor can they be interpreted easily in terms of actual behavior. It is difficult to point out to an individual the specific *behaviors* that manifest many evaluative concepts. If, for example, Joe were to be given feedback that he is "stupid," he probably would not know what behaviors he was expected to change. In addition, evaluative feedback frequently engenders defensiveness. When this occurs, the feedback is not likely to be useful or even heard. One way to avoid this is to frame the feedback in terms of the *effect* of the receiver's behavior on the sender.

Specific/General Feedback

By describing a specific behavior, the giver of feedback tells the receiver to which behavior the giver is reacting. General terms such as "hostile" or "anxious" or "stupid" do not specify what evoked the feedback response. Again, the receiver would not know what behavior to change. Even positive feedback expressed in general terms, such as "You are a warm person," does not allow the receiver to know what specific behavior is perceived as warm and, thus, the receiver cannot expand or build on the desired behavior. Again, the complete statement would be something like "When you defended Tom, I felt relieved and grateful to you."

Freedom of Choice/Pressure To Change

If feedback is understood by and important to the receiver, he will probably act on it. If it is not important to him, he may choose not to utilize it. Sometimes an expectation develops in groups that if a member is given feedback he or she *should* act on it, e.g., change the behavior in question. The sequence of feedback and change is not automatic. People should have the freedom to use feedback in any way that is meaningful to them. Imposing standards or demands for change on other people and expecting them to conform arouses resistance and resentment. Such pressures, whether direct or subtle, usually create a win-lose relationship.

Expression of Disappointment As Feedback

Sometimes feedback reflects the sender's disappointment that the receiver did not meet the sender's expectations or hopes. For example, a group leader may be disappointed that some members did not live up to their potential impact on the group, or a professor may be disappointed in a student's lack of achievement. These situations represent a dilemma. An important part of the sender's expression of feedback is his or her own feelings, including disappointment or satisfaction. If the sender withholds these feelings, the receiver may be given a false impression. If, however, the sender expresses the disappointment, the receiver may experience the feedback as an indication of personal failure instead of an incentive to change. The sender can resolve part of the dilemma by stating that the feelings and expectations are the sender's own, stemming from his or her own needs, and that it is not the responsibility of the receiver to satisfy these feelings or expectations. If the feedback reflects a caring attitude, the receiver may choose to perceive it as encouragement to change.

Persistent Behavior

Frequently, the complaint is heard that some group members persist in behaviors that others find irritating, despite the feedback they receive to that effect. The most the members can do in this case is to continue to confront the offenders with their feelings. In the case of George, for example, although he clearly has the freedom not to change, he also may have to accept the consequences of his decision, i.e., other members'

continued irritation about his absences and the likelihood of their punitive reactions. One cannot reasonably expect other group members to feel positive toward one and also to accept a behavior that they find irritating.

Reinforcement of Change

If a member changes a behavior and then does not receive positive feedback regarding the new behavior, the change may not become permanent. However, it is possible that the change may bring about positive or reinforcing consequences other than verbal feedback. For example, as a by-product of change in an individual, other people may change their behavior in relation to that individual. These new responses gradually will become more appropriate to the changed behavior on the part of the first individual.

Immediate/Delayed Timing

To be most effective, feedback should be given immediately after the behavior that prompts it. If time elapses, the receiver may not remember saying or doing the thing in question and other group members may not remember the event. Its significance to other group members may be much less than its significance to the giver of the feedback. When feedback is given immediately after the behavior in question, it acts as a mirror of that behavior, reflecting back to the doer. Also, the event is fresh in everyone's mind and other group members can contribute their observations about the feedback interaction.

Planned Feedback

An exception to the norm of giving immediate feedback is the periodic feedback session, which is planned to keep communication channels open. In these sessions, participants cover events that occurred since the last session or work with material generated during the current meeting. For this process to be effective, however, the decision to have these feedback sessions or to establish a goal for spontaneous feedback should be reached through consensus of the participants.

Group-Shared/External Feedback

When feedback is given immediately after the event, it usually is group shared, so that other members can observe the interaction as it occurs and, perhaps, comment on the appropriateness of its elements. If group members support the sender's feelings and perceptions (consensual validation), the feedback has more potency. If the sender's feedback is not supported by the group members, then the sender would have to look at his or her own behavior and its appropriateness.

Events that occur outside the group (there and then) may be known to only one or two group members and, consequently, cannot be reacted to or discussed meaningfully by other participants, who may feel left out. Because perceptions of outside events are colored by the teller's own biases, these events are not valid material for the other group

members to give feedback on. Members may listen empathically to the speakers or ask questions for clarification about the events; but commenting on there-and-then (out of the group) interactions is not the same as giving feedback on events that have occurred in the group.

Use of There-and-Then Material

The relation of there-and-then events to the here and now, and vice versa, can be productive when used as a bridge between the two. It also can be productive if some members have had long-term relationships with one another. It is important, however, to recognize both the necessity and the difficulty of involving other group members in such discussions in meaningful ways.

Consistent Perceptions

Part of each group member's responsibility is to ask for feedback from members who are not responding so the receiver will know how everyone sees his or her behavior. Group members may tend to agree or disagree privately when someone else is giving feedback. The receiver may have to be somewhat aggressive and persistent in seeking this information. Feedback from only one person can present a distorted picture because that person's perceptions of the event may differ from those of the other group members. When all members' reactions are given, however, the receiver has a more representative view of his or her behavior from a much broader perspective. If the group members are consistent in their perception of the receiver's behavior, and this disagrees with the receiver's self-perception, then the receiver needs to look more closely at the validity of the self-perception. Even if group members are not in agreement, the fact that people perceive an individual's behavior differently is useful information in itself. When *all* the data have been collected, the receiver is in a better position to make a decision about how to use the feedback.

Solicited/Imposed Feedback

In most exchanges, feedback is imposed. People give feedback whether or not it is solicited and whether or not the other person is prepared to receive it. In addition, the sender's need to give feedback may be much greater than the receiver's need to receive it. This is particularly true when the sender is upset about something concerning the potential recipient. In many situations it is legitimate to impose feedback, particularly when a norm exists for giving as well as for soliciting feedback or in order to induce a norm of spontaneity. However, feedback usually is more helpful when a person solicits it. By asking for feedback, the receiver indicates a willingness to listen and a desire to know how others perceive his or her behavior.

In asking for feedback, it is important to follow some of the same guidelines as in giving feedback. For example, people should be specific about the subjects on which they want feedback. Individuals who say to the group, "I would like the group members

to tell me what they think about me" may receive more feedback than they planned. In addition, the request is so general that the group members may be uncertain about where to begin or which behaviors are relevant to the request. In these cases, other group members can help the receiver by asking questions such as "Can you be more specific?" or "About what do you want feedback?" Feedback is a reciprocal process; both senders and receivers can help each other in soliciting and in giving it.

Sometimes it also is important to provide feedback on how a person is *giving* feedback. If a receiver is upset, hurt, or angry, other group members can say to the sender, "I, too, feel angry about what you just said to Tom" or "What other way could you have given the relevant information without evaluating or degrading Tom?"

Many people want to know how their behavior is perceived by others but fear the consequences of asking for such information. How easily people will ask for feedback is related to the trust they have in their relationships. One unfortunate consequence of giving feedback is that the receivers may misuse it to reinforce their negative feelings about themselves. This is particularly true of people who have negative self-images. When individuals appear to be using feedback to increase self-criticism or to confirm questionable feelings about their self-esteem, it is helpful to point out what is happening. If this is not done and the process continues, other members eventually may stop giving feedback to the individuals in question because they may begin to feel guilty about "loading it on" those individuals.

Focus on Easy-To-Control/Difficult-To-Control Behavior

To be effective, feedback should be aimed at behavior that is relatively easy to change. Many individuals' behaviors, however, are habitual and are developed through years of behaving and responding in certain ways. Feedback on these kinds of behaviors is often frustrating because the behaviors may be very difficult to change. Repeated negative feedback about such a behavior (e.g., smoking, biting one's nails) can lead to a sense of failure if the receiver has been unable to change the behavior. In fact, behaviors that serve to reduce tension may be increased as tension builds in the individual as a result of pressure to change.

In giving feedback, one frequently must determine whether or not the behavior in question represents a mere habit or is the result of a deep emotional or other factor. Sometimes it may be helpful to ask whether or not the receiver perceives the behavior to be modifiable. Many behaviors, however, can be changed relatively easily through feedback and the individual's conscious desire to change.

Motivation To Help[1] /Motivation to Hurt

It is assumed that the primary motivation for participation in training is to help oneself and, at the same time, to facilitate the growth of others. When individuals are angry,

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[1] The word "help" as used here means "to help the relationship to be more productive snd satisfying." It is not used in the sense of the helper-helpee relationship.

however, their motives may change to hurting the people toward whom the anger is directed. Frequently, the conflict turns into a win-lose confrontation in which the goal of the interaction is to degrade the other person. It is difficult when one is angry to consider that the needs of the other person are as important as one's own. Feedback that is motivated by anger generally is useless, even when the information is potentially helpful, because the receiver may need to reject the feedback in order to protect his own self-image.

Coping with Anger

There are several ways to cope with anger. One is to engage in a verbal or physical attack; another method is to suppress it. One consequence of suppression, however, is that internal pressure builds to the point where one may lose control of one's behavior and act out the feelings destructively. A third, and better, method is to acknowledge and talk about personal feelings of anger without assigning responsibility for them to another person. In this way the anger dissipates without being acted on or suppressed. Anger and conflict are not in themselves "bad"; they are as legitimate as any other feelings. In fact, conflict can be growth producing. It is the manner in which conflict or angry feelings are handled that can have negative consequences. Only through surfacing and resolving conflicts can people develop competence and confidence in dealing with them. Part of the benefit derived from training groups is learning to express anger or to resolve conflicts in constructive, problem-solving ways.

Applying These Guidelines

The process of giving feedback obviously would be hampered if one simultaneously attempted to consider all the guidelines given in this article. Some are needed more frequently than others, e.g., feedback should be descriptive, nonevaluative, and specific, and should embody freedom of choice; one learns to apply these guidelines through practice.

The preceding guidelines also can be used diagnostically. For example, if the person receiving feedback reacts defensively, some of the guidelines probably have been violated. Group members can ask how the receiver heard the feedback and can help the giver to assess how it was given.

GUIDELINES FOR RECEIVING FEEDBACK

The responsibility for the potential usefulness of feedback lies not only with the giver but also with the receiver. Even though the giver may have utilized all the preceding guidelines, the receiver may still reject, distort, or misunderstand the feedback. There are many people who are not ready or able (for whatever reason) to hear any criticism of their behavior without negatively judging themselves or the giver in a way that discourages any further exchange of this kind of information. The problem for the facilitator and other group members is to be sensitive to these issues and, at the same

time, to not be manipulated or coerced into supporting the norm of playing it safe or avoiding confrontation. Group members who are extremely anxious about the feedback process can exert considerable pressure, directly or indirectly, on other group members to avoid or dilute their exchanges. A resolution of this issue is to create norms for the exchange of honest feedback and, at the same time, to reinforce norms of encouragement and support rather than for pressure, conformity, or reciprocity. The norms can be facilitated by spelling out ways of receiving feedback that will minimize the tendency to defend against it.

Understanding What Was Said

On receiving feedback, the receiver should make certain that she understands it and should test out her understanding of it with the giver. This may include asking for clarification and amplification and repeating what she heard so that the giver can verify his perception or provide further clarification. The feedback also can be checked with other group members to see if they have the same or different perceptions.

Being Open Rather than Defensive

The recipient of feedback should try to avoid explaining the behavior, giving reasons or causes for it, or immediately rejecting the feedback as invalid. Because the feedback represents another person's experience or reality, it is neither right nor wrong. Immediately rejecting feedback or defending against it shuts off the possibility of adequately understanding other people's perceptions and of examining these perceptions in relation to one's own behavior.

Checking the "Fit"

After checking for understanding and soliciting more than one person's perception, the receiver of feedback should compare the actual behavior in question with the feedback about it. If the feedback "fits," the receiver can decide whether or not to attempt to change the behavior. If the feedback does not fit, it may be rejected or the receiver can decide to keep his options open. The second alternative, of course, is more productive for learning. Once one is alerted to the behaviors referred to in the feedback, one can watch to see if they occur in the future and may even solicit the aid of other members of the group to monitor the behavior in question.

Separating Oneself and One's Behavior

The receiver's attitude is critical to how or whether feedback will be used. If, for example, one experiences the feedback as a threat to one's sense of personal worth or adequacy, the potential benefit of the information may be lost. If the feedback confirms an already negative self-image, it may be misinterpreted or distorted beyond what was actually said. If, on the other hand, one is able to keep one's sense of personal value separate from the behaviors about which one is receiving feedback, the information

obtained can have great potential for personal growth. The difference between the *person* and that person's *behavior* may have to be emphasized repeatedly.

THE PURPOSES OF FEEDBACK

Each of us has created our own reality concerning others and the world around us. We also participate in another reality "out there" that is reached through agreement. What we see in another individual is a consequence both of what we create and of what we can agree on. Feedback can help to make us more aware of ourselves by showing us how we are experienced from another individual's unique point of view and from the group's point of view. One person's experience of another is important in order to clarify the relationship between them, even if one's experience of the other is quite different from the group's experience of that person. One provides a unique experience, the other a social reality. Giving and receiving feedback, therefore, may serve several purposes:

1. Feedback from others helps us to be aware of their experience of us. It is a way of monitoring or checking out how the relationship is going in the eyes of the other person or group.

2. Feedback enables us to know how we are progressing toward our goals. It can act as a corrective steering device when we deviate from the path toward our goals and can guide subsequent behavior in the desired direction.

3. Feedback enables us to know the effect of our behavior on others. It validates or invalidates our intentions in terms of what we actually do or say. That is, feedback serves as a check on reality.

4. Feedback enables us to compare our self-perceptions with the perceptions of others and help us to see ourselves as others do.

5. The process of giving and receiving feedback teaches us to be more observant about our own and others' behaviors and to distinguish, more accurately, what we observe from what we attribute.

6. As the norm for exchanging feedback develops in the group, a standard of objectivity also is established. Feedback about behavior is seen as information to be examined as any other kind of information would be.

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◼ APPENDIX 4: AN ARTICLE ON USING SIMULATION GAMES

Facilitating Simulation Games

Myron R. Chartier

Experiential-learning methods are widely used as major training interventions by human relations facilitators. According to Gaw (1979, p. 147), "experiential learning provides activities that have the potential to involve the whole person in the educational process." As experiential, communication devices, simulations potentially have the ability to convey a Gestaltic awareness of a referent reality. Social-simulation games, which involve participants interactively in a simulated environment and create within them an awareness and understanding of social systems, are dynamic, operating models of human realities.

   The purpose of this article is to provide the human relations facilitator with an overview of this highly involving technology. Three aspects are explored: viewing simulation games as simulated social systems, facilitating simulation games, and designing such games. The primary emphasis is on facilitation.

Games As Simulated Social Systems

Simulations are attempts to simulate social realities (e.g., marital dyads, decision-making groups, organizations, neighborhoods, cities, nations, or groups of nations). Many behavioral scientists view such entities from a social-systems perspective (Katz & Kahn, 1978; Olsen, 1968). Any scientific attempt to understand a social organism as a system involves the observer in theoretical model building. Because of the complexity of social reality, critical variables must be identified and extracted from the whole. Such processes, however, tend to oversimplify social reality in order to make it comprehensible.

Definition of a Social System

A system is a bounded set of components standing in transactive relationship to one another. In a social system the whole is more than the sum of its parts. A simulation seeks to operationalize the transactive relationships of a social system so that its functions and processes may be observed and experienced. For example, "The Marriage Game" has to be comprehended in terms of two sets of elements: those in the society at

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large and those in the individuals making marital decisions. This game posits that marital interactions take place between persons who live in a world of external social facts, many of which have been internalized, affecting conceptions and values (Greenblat, 1975).

Primary Components of Social Systems

Simulations seek to place the following primary components of social systems into an actual transactive relationship:

1. *People.* People make a system "social" rather than "mechanical." The ways in which people or groups of people interact with respect to the other basic components define the nature of a system with respect to kind (e.g., a family, a classroom, or a decision-making group) and quality (i.e., salubrious or pathogenic).

2. *Goals.* Because goals draw people together for interaction, social systems are purposeful. People develop social systems to accomplish their purposes, but goals vary in different social systems.

3. *Tasks.* To accomplish their goals, people have to perform certain tasks. Each social system has its task requirements, and they vary widely among social organisms.

4. *Structure.* In order to perform task requirements, social structure is necessary. This component is intermeshed with the other six. For example, the nature of the goals, the demands of the tasks, and the characteristics of people have a fundamental influence on structure.

5. *Resources.* Resources are needed to perform tasks and accomplish goals. These include people and their varied abilities, finances, time, space, and facilities.

6. *Values.* This component varies with the type of social system (e.g., loyalty in families, profit in businesses).

7. *Constraints.* The limits of a social system are defined by its firm (but alterable) constraints. These tenacious forces provide an ordered consistency in social systems.

THE NATURE OF SOCIAL SYSTEMS

Any one component by itself would fail to create a social unit, and changing any one component would redefine the system. The various elements acting on one another create a social system.

Social systems are open systems, that is, they receive inputs from the environment, process them, and send outputs back to the environment. However, they are also bounded systems, because they have boundaries that filter the inputs and outputs. Social

units are in constant transactive relationships with their environments. In that sense they are adaptive: "they possess the ability to react to their environments in a way that is favorable . . . to the continued operation of the system" (Hall & Fagen, 1975, p. 61).

Figure 1 is a verbal-graphic model of a social system. It portrays the various components and their transactive processes in relationship to one another and to the environment.
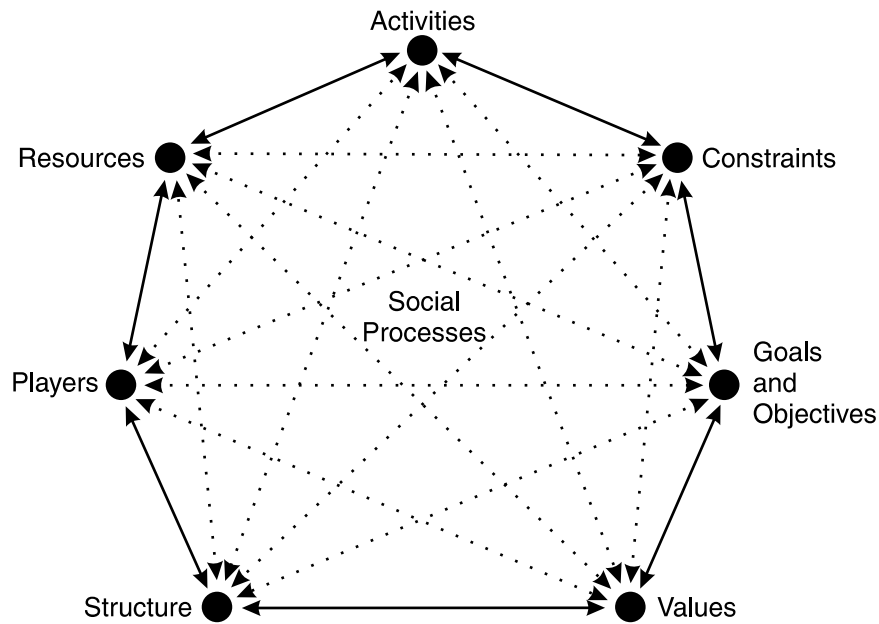

Figure 1. The Social Systems Model

FACILITATING SIMULATION GAMES

Human relations facilitators who want participants to experience the complexity of a social system, with its constant interplay of variables, will find simulations a suitable technology. The games are available for the four major areas of activity in human relations: individual, group, organization, and community (Jones & Pfeiffer, 1975), with a focus on personal growth as well as leadership, organization, and community development (Horn & Cleaves, 1980).

Evaluating Simulation Games

Most of the game manuals explain the theoretical model and state the principal objectives. After reading the rules and actually playing the game, the facilitator may discover other training values or conclude that the stated objectives have been exaggerated or that important concepts are oversimplified or neglected. The evaluation should also consider the abilities and interests of the potential participants, because simulations vary in subject matter, complexity, and sophistication.

The novice facilitator should use simple games to prevent frustration or disenchantment with games. However, the game must be difficult enough to challenge the participants. The room space and physical equipment required must also be considered. The facilitator must determine the worth and suitability of a game in relation to training objectives, the abilities of the participants, and needed facilities.

Preparing the Facilitator

The key to a successful game experience is thorough preparation. The facilitator must discover what is being simulated and how the designer is attempting to bring these processes into operation through game play. This information is often included in the instructional materials that accompany the games.

As the facilitator studies the prepared materials, he or she should try to understand the interrelationships among the game components, which parallel the elements within a social-systems model (see Figure 1).

Players

The first component consists of the *players*. Answers to the following questions will provide needed information: Are individuals or teams used? Do the players assume a role as in role-playing games? How should roles be assigned? What is the optimum/minimum number of people who can play the game? Can the game be played by an odd number of players or must the number be even?

Goals and Objectives

The next component includes both *goals* and *objectives* and should provide answers to the following questions: What are the goals of the simulated processes? What educational/training objectives does the game provide for the players? Is the game structured to communicate concepts and their utilization, or is it structured to involve people in new feelings, attitudes, and/or behaviors? The goals and objectives may be the same or quite distinct. Goals may relate to the simulated processes, whereas objectives may be related to training.

Activities

Activities in a simulation game are related to the task requirements of a social system. Relevant questions include the following: In what specific tasks does the game involve players? Is there a sequence of activities? If so, what? Is the game played in cycles? How are the game activities related to the educational/training objectives? What is required from the players? How much time is needed?

Structure

Simulation games and social systems require *structure,* which raises the following questions: What space and furniture arrangements are needed to create the simulated social dynamics? Is more than one room required? If players must move around, how much space is needed? Does the game require individuals or teams in special locations? Will the room accommodate the noise level of the activities?

Resources

The *resources* component consists of the game materials, which can range from sheets of paper (explaining profiles or scenarios for role playing) to game boards, poker chips, chance cards, score sheets, etc. The facilitator needs to know what these materials are and should find answers to the following questions: How are they related to one another? With which rules do they function? How are they related to the game activities? How much time is needed to set up materials for game play? Are there enough materials for the present purposes? What other resources and equipment are needed?

Values

Simulations—like social systems—have *values.* Some game instructions specify values, but others require the facilitator to discern the values by examining the other game components. The values may become apparent after the game is in progress.

Constraints

The *constraints* in a simulation game are its rules and procedures. A detailed study of the game rules will reveal how the game will function as a social system. Failure to understand the game rules and procedures can shortcircuit the social dynamics of the entire experience, or even cause them to fail.

After the rules and procedures are understood, the facilitator needs to decide how these will be communicated to the players. Manuals for participants, which are sometimes included with the game, are usually quite brief, because participants are rarely told all the details in advance; they learn the details as they participate. Some games are marketed with audio or videotapes that give a general overview and brief explanation of the game rules, and others require the facilitator to instruct the players orally or to provide a summary of the rules in print.

Facilitator's Rules

The facilitator must understand his or her *role* in the game because he or she is responsible for the enactment of a simulated social system through game play. The primary functions of the facilitator are understanding and interpreting game rules, answering players' questions, encouraging participation and experimentation, helping

players cope with uncertainty, and helping the participants to discuss and evaluate their experience.

After the game components and the facilitator's role are understood, defects and errors should be removed before the simulation is formally introduced in a training event. Several options are available:

1. Without actually playing a simulation game, a person can acquire a feel for it by playing the various roles and performing the activities.

2. Some simulation games need to be played in advance with several participants. These same participants could be assigned to major roles in the actual simulation or scattered among the teams so that they could help the slower participants.

3. A select number of persons could be assigned the task of learning the rules, introducing the game to a group, and supervising the play. The facilitator would then be free to help participants integrate the game experience with selected training objectives by planning a postgame discussion and related activities.

Any of these options will decrease confusion and increase the positive training experience.

Preparing the Players

After the facilitator is thoroughly prepared, he or she must prepare the players by assigning roles, deciding on the number of players, and introducing the simulation.

Assigning the Roles

In simulations with a role-playing component, there may be little differentiation between roles (for instance, all may play the role of managers) or roles may vary in the degree of activity and aggressiveness required (for example, a small number may play management roles while the rest play workers). In the latter case, the problem of casting arises. Casting practices vary from choosing numbers out of a hat to asking for volunteers, assigning roles arbitrarily, or deliberately assigning leadership roles to those who are natural leaders in the group.

Teams for a simulation should be formed heterogeneously rather than homogeneously (Chartier, 1973). Participants' satisfaction with and performance in the game are maximized when competing teams have similar potential in game competition. Team role playing may be useful with slow or easily discouraged participants. Allowing a couple to play a single role decreases frustration at setbacks and provides the security of a teammate for decisions. Team efforts also accommodate more participants and may be especially advantageous with large groups.

Some games can be played more than once so that participants have an opportunity to play different roles and gain a better understanding of the simulated process. When multiple role playing is possible, it needs to be planned and encouraged.

Deciding Number of Players

The facilitator's manual usually indicates an optimum number of players. When groups become too large, participants lose interest and training effectiveness is decreased because participants learn rules less efficiently, interact less, participate less actively, and make fewer moves (Chartier, 1973). With some games, a large group can be divided into several subgroups, each playing separately and using a set of game materials.

Introducing the Game

The introduction will depend partly on the intended use of the game and on the training objectives. The facilitator must communicate two points. First, the participants need to understand the purpose of the game. If they have never played a simulation, the briefing could include a definition of "simulation," a comparison of simulation games with other games (such as charades), and an overview of the content and value of the game. Second, the briefing should include a clear, concise statement of how the game operates. The physical layout and game materials should be discussed. Rules need to be explained and, in some cases, demonstrated. A broad overview of the roles is useful. Knowledge of these factors helps to eliminate uncertainty. Overexplaining, however, will dampen the trainees' enthusiasm. Specific questions can be handled as they arise in the course of play.

The quality of this pregame briefing is likely to affect the participants' predispositions toward the game experience, their enjoyment of the game, and their acquisition of knowledge during the game. The facilitator needs to display enthusiasm and confidence in order to present the learning experience as attractively as possible.

Facilitating the Game

The primary task of the facilitator is to help the simulation function smoothly. He or she should circulate in the room to answer those questions related to the rules of the game. The participants should discover for themselves the points of game strategy, the values of game play, and the things to be learned from participation. The facilitator may ask the participants questions unrelated to the game in order to help them arrive at their own solutions. If the facilitator forgets a rule or if a rule is not discussed in the facilitator's manual, one can be created on the spot. If materials become misplaced, the facilitator's improvisation can save the game. Active participation on the part of players should be encouraged. The extent of participation by players is directly related to the degree of learning from and satisfaction with the game experience (Chartier, 1973). The facilitator can be many things—a referee, an enabler, a coordinator, a scorekeeper, a timekeeper, and/or an observer (depending on the game) and must be imaginative and flexible.

Generally, it is unwise for someone to facilitate a game and participate in it at the same time, because facilitators who keep changing their own roles are likely to play the roles partially and poorly. If there is little to do but watch the action of the game, a facilitator may choose to participate as a player. If this is done, however, this person has

relinquished the role of facilitator and has turned the control of game flow and the postgame discussion over to the group. There is nothing wrong with this, but one must be clear about what has been done and act accordingly. A person either facilitates the game or participates, but *not both.*

Discussing the Game Experience

People find the learning experience associated with games more satisfying if play is stopped periodically for group discussions (Chartier, 1972). After each discussion, participants can resume play and try other strategies or reinforce concepts learned during the game or in the group discussion. Although the facilitator's manual may suggest how a discussion needs to be handled, the questions depend on the facilitator's purpose.

Although there is no universal way to structure the group discussion, some suggestions may prove helpful. Because simulation games tend to generate a high level of interaction, participants need to discuss what happened during the game and how they feel about it. The facilitator is the key to the quality of the discussion. Participants often like to talk about a game in personal terms—"Who did what to whom?"—before going on to more substantive matters. This aspect of the discussion can be an important experience in gaining insights into interpersonal relationships. Because the interaction between participants is obviously genuine, it gives individuals an opportunity to express how they feel about how they were treated by others during the experience. This discussion should be cordial, and the basic worth of participants should never be questioned.

The facilitator should also lead the group in a discussion of the game model. This discussion gives the participants an opportunity to verbalize their understanding of the general principles underlying the simulation and to question or elaborate on the understanding of the others. During this phase, the facilitator may—if appropriate—identify the winning teams or individuals and discuss the winning strategies.

A facilitator can use the participants' experiences in the game as a takeoff point for discussing the reality that has been simulated. This discussion process has at least two training payoffs: (a) It prompts participants to explicate their beliefs about the social reality being simulated and (b) it provides an opportunity for the facilitator to confront participants with alternative ways of viewing the referent reality.

The facilitator should encourage participants to be explicit about their experience with and in the game and to examine this experience in relation to their views of real social systems. A leading question could be "How do you think the game (or some aspect of it) compares with the real world?" If the participants claim the real world is different, the next logical questions are "How do you think reality is different?" and "Why is reality different?" Other ideas for discussing insights from simulation games can be found in Gaw (1979).

Possible Postgame Activities

One of the fundamental values of games is their ability to stimulate interest and conversation. The creative facilitator will take advantage of this and link it to other training experiences. The opportunities for interlinkage are limited only by a person's own perceptions. Listed below are a few suggestions:

1. After a group has played and discussed a simulation game, it may be motivated to pursue other activities related to the theme. For example, after playing "Dignity" a group may want to visit a ghetto and discuss life in a ghetto with the people who live there.

2. After playing a game, the participants may want to change some of the game components or construct a new game. In "Generation Gap," for example, participants may like to change the issues for discussion between the parent and the teenager. They may include issues from their daily conversation or religious values and ideas. The teenagers may want to play it with their own parents.

3. Someone might be assigned to observe and report on the participants' behaviors during a game. After playing "Starpower"—which tends to bring out unjust, fascistic, or racist behavior in the squares—a group may become interested in a study of human nature.

DESIGNING SIMULATION GAMES

If a game that fits the training objectives cannot be located, a facilitator may design one. The designing process includes identifying training objectives, describing the social system, structuring the game, and writing the rules.

Identifying Training Objectives. Knowing what needs to be accomplished with a training event is the first step in designing a simulation. The most difficult task is to decide what aspects of a given social system to leave out and which to include. The game will be easier to design if the training objectives are clear, precise, and specific.

Describing the Social System. The social system needs to be selected, carefully analyzed, and described with respect to its systemic components (players, goals and objectives, activities, structure, resources, values, and constraints). The analysis should define the social system by identifying the characteristics of the components, the interlinkages of the elements and their properties, and the operational processes of the diverse units with respect to the whole system.

Structuring the Game. After the conceptual model of a social system has been explicated, the facilitator is ready to develop a simulation game based on these elements. The structuring process involves designing, testing, redesigning, retesting, etc., until the product is satisfactory. The designer should remember that "game design is not only not a science, it is hardly a craft, but rather an 'art' in the sense that we have no explicit rules to transmit" (Boocock & Schild, 1968, p. 266).

The designer begins by creating a rough game format that seeks correspondence between the simulation and a given social reality. Decisions are necessary on the ways in which the primary components will interact with one another. As each component is placed in the game, its interface with other components needs careful consideration, because the matching of each component with the others will determine the success or failure of the game. The degree of likeness in form between the game components and the social-system components will determine whether or not the participants experience the simulated reality that is intended.

Writing the Rules. Easily understood game rules are as important as the game structure. According to Livingston and Stoll (1973, p. 30), answers to the following questions will help the participants to understand the rules:

1. What social reality does the game simulate?
2. What is the purpose of the game?
3. What does each of the game materials represent?
4. How is the game set up for playing?
5. What is the order of game play?
6. What do the participants do during each step?
7. How might a participant play a typical round of the game?
8. How does the simulation end?

As the game is put into play, problems will appear that could not be anticipated. It is important to note the successful features of the game design as well as those that failed. In observing the game play, the designer should check for both *playability* and *realism.*

A simulation game is playable if it functions well as a game. Participants must desire to play it, and they must be able to engage themselves in it. It must be interesting, enjoyable, and easily learned. The game must also be manageable.

Realism involves three questions: (a) Does the game accurately represent those aspects of the real-life social system that it is intended to simulate?, (b) Does it include the most critical aspects of the real situation and simulate them in sufficient detail?, and (c) Does it provide a feeling of being in a real social situation?

After the prototype has been tested for playability and realism, the necessary adjustments should be made. Each component needs to be examined to determine if changes are required. Then careful attention should be given to rewriting the rules before testing the game again. Although further revisions may be necessary, participants can learn from an unfinished version of a game. Indeed, they may learn as much from suggesting revisions as from playing it in its final form.

CONCLUSION

Simulations are one of the most involving technologies available to the human relations facilitator. Social simulations are based on social systems and potentially can communicate holistic awareness and understandings. Facilitating such games requires careful preparation, skillful administration, and effective discussion. Designing simulation games requires theoretical model building of a social system, constructing a game based on the model, and a process of testing and redesigning.

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