A BACKGROUND FOR USING LECTURETTES IN HUMAN RESOURCE DEVELOPMENT

OVERCOMING THE "ANTI-HEAD" BIAS

At the beginning of the human potential movement, there was a persistent "anti-head" bias in human relations training. This anti-theoretical, anti-cognitive, and anti-didactic bias may have caused many participants, as well as facilitators, to discount or undervalue cognitive input in a group experience. Participants often do not want a lecture; they would rather talk about their feelings or stress their concerns for practicality. In response, some facilitators may have neglected the support that theoretical material can provide.

From its inception, the aim of human resource development has been the integration of affective and cognitive learning, with the two aspects reinforcing and "synergizing" one another. Most group facilitators today are not anti-intellectual, recognizing that "head" learning is just as valuable as "gut-involved" experience. Furthermore, there now are clear models of the experiential learning process (for example, see Kolb & Fry, 1975) that specify the points at which cognitive inputs are needed. The vast majority of trainers are more sophisticated than ever in understanding and using the dynamics of the learning process. Our bias is for the practical application of theory and research to training. "Gut" experience and "head" learning can support, alter, validate, extend, and complement each other. Both affective and cognitive data are important in HRD. Facilitators need to develop a repertoire of interventions, including theory and background inputs, that they can use in a variety of situations and activities. In human resource development, cognitive information usually is presented in lecturette form.

THE DIFFERENCE BETWEEN LECTURES AND LECTURETTES

Although the lecturette is based on the lecture method, there are differences as well as similarities between the two methods. Both the lecture and the lecturette format have a clear content focus and a theme or topic; in both cases, structure, order, and clarity in presentation are necessary. Both, of course, involve an audience, and, more importantly, the lecturer and facilitator both want to gain the acceptance of the audience for the ideas that they are presenting.

Aside from the most obvious difference, that of length, there are several significant ways in which lectures and lecturettes differ. Lectures tend to have greater depth and detail, while lecturettes more often are imprecise outlines and are more simplified in content. Lecturettes, however, tend to generate a much greater degree of rapport between the facilitator and the participants than that which exists between the lecturer and the audience. Perhaps the most important difference is in the basic purpose. A lecture is intended to transmit knowledge and to intellectually enlighten the audience. A lecturette most often is aimed at helping the participants to make a connection between their experiences and what those experiences mean; to understand why it might be desirable to change their behavior; and to make enlightened choices about such changes.

The Lecturette Method

Experience-based learning is not the only strategy available to group facilitators; vicarious learning often is experienced as useful. The lecture method sometimes is the most appropriate way to help participants to learn from their experience. Although it easily can be overruled, the lecturette is one of the simplest ways of providing additional, vicarious learning to participants.

A lecturette is a brief, clear talk that provides an explanation of a principle, model, theoretical position, research finding, process, or collection of thoughts that is pertinent to the participants' current learning needs. It is intended to establish a common language bond between the trainer and the participants by providing a mutual frame of reference. The facilitator can include lecturettes in training designs in several ways:

- incorporated directly into training designs as introductions to particular group activities or events,
- interjected as explanations into processing sessions, or
- used as handouts.

Written with the participant audience in mind, the lecturette extends the learning that participants derive from direct experience. Lecturettes should be succinct and direct, with an emphasis on clarity and ease of presentation. They are not intended to be comprehensive or technical statements of theoretical positions.

There is, of course, a potential pitfall in the use of lecturette material. We do not advocate "killing gnats with sledge hammers"; too much emphasis on cognitive material reduces its effectiveness. The lecturette, like many other tools, requires a deft touch.

A RATIONALE FOR USING LECTURETTES

Helping individuals to integrate personal learnings with conceptual material based on theory, models, or research findings is among the most important objectives of human resource development. The purpose of lecturettes is to reduce the gap between what participants experience in the affective sphere and what they understand cognitively. Lecturettes provide stimuli to which group training participants can respond with new levels of awareness. This promotes the cognitive understanding of individual experience and group dynamics.

The lecturette is a simple and flexible tool to provide additional input for participants. It can be used in several ways and for several purposes. It can be delivered

in large group sessions, commonly called "community" sessions, or it can be used as the need arises in an intensive small-group session. It can be offered to participants before the workshop, prior to an activity, during a group meeting, as handout material during the session, or in a summary session. It can be carefully planned and structured or presented spontaneously, as needed. In the experiential learning cycle (described in Section Two of this volume and in "Using Structured Experiences in Human Resource Development" in Volume 21), a lecturette can be useful in solidifying the generalizing phase, during which abstract principles are drawn from specific observations. In this way, the lecturette caps the inductive process; consequently, it can then be used deductively to illustrate generalizations about human behavior. As summary handouts or group discussion tools, background for verbal presentations, and thought provokers, lecturettes can serve the group facilitator's need for sound conceptual content.

The lecturette, however the facilitator chooses to use it, has many advantages. When a lecturette is provided by the facilitator as a "cognitive map" of the experience that is to follow, it can be a highly effective method of focusing the participants' learning from the structured experience or group setting toward theoretical models. It also is effective when delivered *after* the group experience, not only as a method of focusing the participants' experiences toward a theoretical model but also as a guide for the participants in transferring their learning to their everyday experiences by functioning as a guide to their behavior.

As a learning device for the participant and as a theoretical intervention for the facilitator, the lecturette is an excellent, direct, and useful means of infusing cognitive material into the training experience.

A GUIDE TO PRESENTING LECTURETTES

Some of the best lecturettes are spontaneous; others, especially those that present detailed material, require preplanning and practice on the facilitator's part. As a teaching device, lecturettes are less formal than a full-dress lecture and are usually confined to a single topic. Rather than comparing and contrasting ideas, the lecturette describes one point of view. It is most effective when it is provocative, that is, when it stimulates the generation of hypotheses and supports the building of theory rather than when it attempts to provide the final "truth."

DEVELOPING AN EFFECTIVE LECTURETTE TECHNIQUE

Delivering a good lecturette is a matter of skill, but it is a skill that most people can acquire without a great deal of difficulty. The general considerations to be taken into account in the facilitator's actual discourse can be thought of in several related categories, including content, manner of presentation, and useful aids. Some guidelines follow for developing an effective lecturette technique.

Knowing the Audience

Because of their experience, adult learners are more likely to be critical, at least on some level, of the content and presentation of training programs. Theories, models, problems, and examples must be realistic and relevant; adults relate their learning to what they already know. Their perception of relevance also is a factor in the degree of transfer of learning. Therefore, it is a good idea to learn something about the backgrounds of participants in a training program in order to prepare examples that have meaning for them.

Taking Risks

Before the presentation, the facilitator needs to understand and consider his or her own motivations, purposes for using the lecturette, and audience. Risk taking is, however, a necessary element in presenting effective lecturettes; one should allow for juggling alternatives, changing one's mind, and offering unplanned asides. In this way, one can model risk-taking behavior for the participants. One way to elevate the risk is to know one's subject and speak extemporaneously, rather than to deliver a "canned" presentation. This also makes it easier to juggle alternatives at the last minute, as appropriate.

A Positive Approach

It is important to start the lecturette with a positive approach. The facilitator should establish contact with the audience by introducing himself or herself and why he or she is there and by sensing who the participants are and why they are there. It is important to prepare the group members by telling them what one is going to do and why it may be interesting to them (i.e., why they should be interested, what is in it for them). It also may be appropriate to establish expectations by telling them what they will be expected to do as a result of the lecturette, e.g., *how* they are to listen (for information only, critically or evaluatively, etc.).

A lecturette is most effective if the presenter appears to be excited about the subject, enthusiastic, as well as natural and human. This may involve "psyching" oneself before beginning the session. The facilitator's own personal energy and sense of having fun and being with the group all contribute to the quality of the lecturette.

The facilitator can emphasize the value of what is being presented without being negative about opposing views. Put-downs, sarcasm, and "isms" should be avoided.

Effectiveness of Content

To assess the learning needs of the group and to match those needs with an appropriate lecturette requires the full use of the facilitator's creative powers. The facilitator's role in cognitive learning involves responsibility for developing concepts in a basic and clear form. The sources of these concepts may be the participants themselves (as in experiential lecturettes), the facilitator's own thinking, or the varied professional sources of knowledge accessible to the facilitator.

Whatever the subject matter, the facilitator can increase its acceptability by reminding the participants why it is important. The facilitator also can use humor (discussed later in this section) to temper the intensity of the event. Facilitators should avoid using jargon and should offer their own points of view about the lecturette material rather than simply reporting the ideas of others. It is a good idea to use concrete examples with which the audience can identify easily, rather than generalizations.

Brevity

By definition, a lecturette is short—thirty minutes or less. A longer time period decreases involvement and changes the participants into a passive audience. Experiential lectures, in which the presenter punctuates his or her comments with skill practice, role plays, or short discussions, may take more time; even so, the presenter is wise to stay within the thirty-minute boundary to avoid giving more material than can be assimilated. "The mind cannot absorb what the behind cannot endure" is someone's maxim for sermons and other types of lectures; it undoubtedly applies to lecturettes as well.

Proper Sequencing

Lecturettes can be used near the beginning of a training sequence or right before a break. In the experiential learning cycle, the lecturette can be presented prior to the activity if information is needed to provide a "set," but it is more appropriately given during the generalizing step. When used in conjunction with an instrument, a lecturette *follows* the administration and scoring phases and serves as a prelude to the interpretation phase. Lecturettes after a meal often are deadly, as are lengthy "wrap-ups" at the end of a day.

Presentation

How the facilitator presents the discourse is significant to its impact. The following are important elements of presentation.

Pacing the lecturette to accord with the audience is important. Keeping pace with the reactions, understanding, and moods of the participants is necessary—being aware of their puzzlements or incomprehension, attending to nonverbal cues concerning boredom or excitement, and responding to such cues make contact easier. The facilitator should slow down or speed up the presentation on the basis of these cues. Interrupting the discourse from time to time by initiating brief activities or by soliciting comments and examples from the audience also varies the pace of the presentation.

Because the presentation is oral, clarity is essential. A simple organization, a clearly delineated progression from point to point, appropriate restatements or recapitulations—these devices are simple but very helpful. It often is useful to present the outline of the lecturette visually, to help the participants to follow it. Another technique is to keep the flow clear by using frequent recaps to "tie up" sections and make distinctions between topical segments.

Metaverbal communication. Modulating one's voice (varying the tempo and tone) helps to keep the group alert, attentive, and interested; so does making and maintaining eye contact with the audience. An understanding of neuro-linguistic programming (Bandler & Grinder, 1975, 1979; Grinder & Bandler, 1976, 1982) also can help the facilitator to vary his or her presentation so that it "speaks to" or "grabs" the participants or so that they "see" the point. The facilitator's body language also is important; nervous or excessive gesturing may reduce the impact of what the facilitator is saying.

The facilitator also should be aware of the physical setting in which he or she is operating. Leftover posters tacked to the wall behind the speaker, for example, may present a continued, inappropriate distraction.

 Verbal crutches. Many facilitators whose speech is fluid and precise in spontaneous conversation freeze when presenting detailed material. Verbal crutches—lots of ahh's, uhmm's, profanities, you know's, and don't you see's—can become irritants for the listeners. The presenter will find it useful to contract with a co-facilitator who can observe him or her closely during the presentation and submit feedback about it is or her speech and body movements.

The facilitator should *not read* the lecturette except, perhaps, for brief, direct quotations. Reading both reduces the personal touch and increases the audience's tendency to lose interest.

Questions and other interactions. Questions and comments from participants frequently enrich a lecturette presentation, but they also can be a nuisance. The facilitator should state at the beginning whether he or she prefers to hold questions until the end of the presentation. The facilitator also may want to check several times during the presentation to see if the audience is following the lecturette, by asking if it is making sense and being heard. Handling questions with sarcasm or defensiveness will call attention only to the sarcasm and defensiveness—not to the point the facilitator wants to get across. One very useful technique is to solicit statements (rather than questions) from the participants.

Useful Aids

The facilitator will find that theoretical materials are received better when they are accompanied by the use of dynamic but uncomplicated visual media such as the overhead projector, posters, chalkboard or newsprint diagrams, charts, graphs, and so on. Also helpful are concrete, specific, personalized examples with which the audience can identify.

• *Charts, graphs, and posters*. Simple, two-color visual aids can be prepared on newsprint and hung on easels or on the wall with masking tape.

Many facilitators prefer to create such charts or lists as they speak, to create a dynamic illustration and to reinforce their main points as they are made. For example, in delivering the lecturette on the Johari Window that is presented at the end of this section, the facilitator would draw each box (representing one of the four areas) at the same time that it is explained. In such a case, to post a complete depiction of the model ahead of time could distract the audience from the discussion of the component parts. Participants are more likely to pay attention to what is being presented if they are not wondering what "those other things" are.

Some facilitators, however, find it difficult to speak and write legibly at the same time, so they prepare their posters beforehand. Because participants frequently copy charts and diagrams, it is a good idea to check posters for accuracy before they are displayed. To add emphasis and to keep the discussion focused, parts of these previously prepared charts, lists, or other graphics can be covered until the presenter wants the audience to see certain material. Key words penciled in on the newsprint (which the presenter can see but which are not easily visible from the audience) can substitute for the facilitator's "notes."

Handouts. Lecturettes are short enough to be quickly and cheaply reproduced as handouts. Material from the Pfeiffer & Company Annuals or other sources can be photocopied for distribution after a lecturette. In this form, they can serve as takehome reminders. If participants are told that there will be a handout on the topic under discussion, they are saved from the distraction of taking notes while listening; with the knowledge that a handout is to come, they can devote their full attention to the presentation.

Handouts also can be read on the spot and discussed. The facilitator can give a quick overview, allow five to ten minutes of reading time, and then conduct a full- (or small-) group discussion. This procedure—which need take no more than an hour—emphasizes participative, open, conceptual learning, just as experiential activities emphasize participative, affective, and personally oriented learning.

- *List building*. In most training events, participants want to hear about a number of topics that do not deserve lengthy treatment. A list of such topics can be generated by the staff and participants and discussed in a general "rap" session toward the end of the training program.
- *References* for the materials presented are extremely helpful. Many participants want to know where they can find a more detailed discussion of the topic. To say, "Oh, it's somewhere in the 1989 issue of so-and-so journal, I think, and the author's name is Ellsberg or something like that" can frustrate or infuriate a well-meaning participant. A correct reference citation will be appreciated and lends credibility to the presentation.

Lecturettes on Tap

The facilitator will find it helpful to have some basic lecturettes committed to memory. Models and theories of communication, leadership, motivation, group process, and methods of learning are useful in almost every training event. Having a repertoire of ready-to-present information in his or her head increases the facilitator's responsiveness (and saves on excess baggage fees at the airport). See "Sources of Lecturette Material" later in this section.

Finally, lecturettes are intended to stimulate the thinking of the facilitator on rather specific topics. Subjects can be followed up with further reading, and one's own unique formulations or revisions can be developed, which then can be shared with others in group training. It is certain that some users will disagree with one or another lecturette presentation. Such disagreement can be channeled into productive directions by using the stimulation it provides to rethink one's own position and to refine or modify that position to deal with the problems the user sees in the lecturette.

These clues and hints are not prescriptive or exhaustive, but they have been proven helpful many times in group work and are useful guidelines for facilitators to consider when they are presenting lecturettes. Appropriately used and presented, the lecturette becomes an essential element—useful for both facilitator and participant—in a training or workshop experience.

Ultimately, the success of a lecturette depends on the skills of the facilitator—the sets of specific behaviors that he or she can call on at will. Two such sets of behaviors that are particularly important for effective lecturettes are (1) techniques for involving people in the lecturette and (2) tactics for adding impact to the lecturette.

MAKING CONCEPTUAL INPUTS EXPERIENTIAL: INVOLVING PEOPLE IN LECTURETTES

Because lecturettes, by their very nature, can set up a norm of "I talk, you listen" between the facilitator and the participants (and because lectures often can be dull, lifeless, and boring), the lecturette must be used carefully and creatively to keep the participants actively involved in the learning process.

Songwriters call the first few bars of a song the "hook," because these initial bars must grab the listener and get him or her to want to hear the rest. The "hook," typically is a bit of music that can be hummed or whistled easily, allowing the listener to become actively involved in the song. In the same way, the facilitator must get an audience actively involved in a lecturette. This is a significant factor in whether training "takes": many adults learn best by doing; they want to be involved. Merely talking and/or demonstrating can lead to boredom, frustration, and apathy on the part of the audience.

The facilitator can develop skills to prevent participant apathy and passivity. The presentation of theoretical models or research findings to groups can be enlivened by making the lecturette experiential. The facilitator can build into the input some pauses for experiential interchange (e.g., incorporating dialogues and other interactions into the presentation). It is a good idea to plan for a variety of inputs in order to stimulate all five of the participants' senses.

With a little imagination the facilitator can make almost any conceptual input experiential. The advantages for doing so are primarily as follows:

- *Checking understanding*. Because considerable screening of information occurs as participants listen to a lecturette, it is important for the facilitator to determine the accuracy of the communication and to clear up any misconceptions. Experiential exchanges help to isolate misunderstandings of concepts.
- *Excitement*. Participants are more likely to be receptive to input that they experience in a lively manner.
- *Expanding the data base*. Using experiential techniques in conjunction with lecturettes capitalizes on the experience pool (both "here and now" and "there and then") that exists within the participant group.
- *Involvement*. In general it is important to design any training or consulting activity in such a way as to avoid putting participants in a passive posture,

because commitment can result only from a sense of ownership through meaningful involvement.

- Maintaining rapport. Presenting conceptual inputs can create a sense of distance between the facilitator and the group. The group may come to depend on the facilitator to explain everything, rather than to look within itself for conceptual models.
- *Relevance*. It is difficult to anticipate what will be significant to each member of a group. When participants are engaged in activities correlated with conceptual input, they make the content immediately credible for themselves.
- *Two-way communication*. The facilitator models effective communication when the content is continuously clear, and two-way exchanges are much more likely to meet this criterion than is one-way telling.

The next discussions tell how to make conceptual inputs more experiential. It tells how to use experiential techniques to promote readiness for learning, how to link input with participation, how to integrate cognitive inputs, and how to add impact to lecturettes. After you read though these sections, you may want to refer to the lecturettes at the end of this section and think about how each of them would be enhanced.

There is one potential disadvantage of adding experiential components to lecturettes. Participants may become overly involved in the experiential components of the event and may not gain a sense of perspective or overall understanding of the information being disseminated. That is, *the experience should not overshadow the cognitive learning*. The facilitator needs to fit each segment of input and activity into an overall framework and reinforce that overview throughout the experience.

Numerous methods for making conceptual inputs experiential are available for experimentation. In the discussions that follow, several representative ideas are presented to be used before, during, and after lecturettes.

Preparing for Conceptual Inputs

It usually is advisable to engage in some activity to promote readiness for learning a model. These methods are best carried out quickly, leading directly into the facilitator's presentation.

- Assigned listening. The audience is divided into thirds, with each segment instructed to listen in a particular way. One group listens for points with which it agrees, another for points with which it disagrees, and the third for points that need to be clarified and/or amplified. Reports can be solicited from these groups midway through the lecturette, and assignments can be changed for the second half.
- Associations. Participants call out their associations with the topic of the conceptual input, e.g., "Conflict is" This gives the facilitator a sense of the "audience," and it promotes a feeling of connectedness to the topic. A simple

method is to put a heading on a sheet of newsprint (for example, "OD is") and record spontaneous responses of participants.

- *Energizers*. These activities usually are fun and they entail physical movement. Although they are almost content free, they prepare participants for a period of seated work. During interchanges, an example of an energizer is to applaud each participant.
- Imagery. A guided image can be conducted to establish a mental and emotional set for the input. The technique of using guided imagery is discussed in Training Technologies Volume 21 in the section "Using Structured Experiences in Human Resource Development" and in more detail in *The 1976 Annual Handbook for Group Facilitators* (pages 191-201).
- Plus-minus-question mark. The facilitator instructs participants to make three columns on note paper, headed with the symbols "+," "-," and "?." Individuals make notes about their predispositions toward the theory topic. These are called out and may be posted.
- Self-assessment. Participants are instructed to apply the conceptual input to themselves. Then the facilitator solicits personal statements from participants about their experiences with the topic.
- *Spontaneous lecture*. The group brainstorms ideas about the planned topic. Then individuals stand and talk briefly and extemporaneously on various aspects of the topic.
- *T-charts*. On a sheet of newsprint, the facilitator makes two columns, headed "Good News" and "Bad News," and posts reactions to the topic (e.g., "stress") as the participants call them out. Or the facilitator may make three column headings: +, -, and ?, and list the participants' positive statements, negative statements, and questions about the topic under consideration.

These methods can be used together, of course, but the facilitator needs to be careful not to make the preparation so involved as to detract from the input to follow. The data generated by these activities can give clues about how to begin the lecturette.

LINKING INPUT WITH PARTICIPATION

The facilitator's purposes during a lecturette are to provoke task-relevant thinking, to correct and clarify misunderstandings, and to keep the participants involved. During the presentation of the lecturette, the facilitator needs to maintain effective contact with the participants and to break up the input with interspersed activities that will give points added meaning. The following methods can aid in keeping participants at work during the event:

- Asking for examples. Instead of giving examples related to the cognitive input, the facilitator can ask participants to offer their own personal examples. For instance, the point may be "A manager may be required to use different styles with different employees." The request is to "think of an incident in your experience that illustrates this point." This can provoke both task-relevant thinking and productive sharing.
- Asking questions. The facilitator also can involve people with questions, if they are used properly. Attempting an answer in front of a group can feel very risky to the participant: "What if I make a fool of myself?" Thus, the facilitator must first develop a climate in which comments, ideas, and feelings are *at the least* accepted as worthwhile efforts and are never "put down," explicitly or implicitly. One way for the facilitator to do this is by modeling, that is, by asking questions and then answering them. This gives the participants a good idea of the kind of answers that are expected of them. While doing this, the facilitator will usually observe that some members give partial responses or nod agreement with the facilitator's response. These audience responses should be reinforced, verbally ("Right!") and nonverbally (smiles, nods, etc.). Modeling lets the facilitator test the responsiveness of group members and does not risk the "plop" of a question left hanging, unanswered, in the air.

Answering one's own questions can, of course, be overdone. The facilitator should ask questions pertinent to the topic and give the participants an opportunity to answer. If the facilitator does not give the participants the opportunity to respond, even though it is obvious that they are ready to do so, the facilitator increases their level of frustration—to a negative effect. At the least, some people-those who might have become most involved—will tune out.

When people begin to volunteer answers, it is particularly important for the facilitator to avoid covert cues of disapproval for "wrong" or undesirable answers. Such cues often are given without the facilitator's awareness, for example, through body language and tone of voice. Participants are particularly likely to be turned off by verbal reassurance combined with contradictory nonverbal clues. Typically the facilitator has a rough idea of the answer desired. When the answers offered are not on target, the audience should be given progressive hints, clues, or pieces of the answer. When the facilitator just repeats the question and tries to "drag" the answer out of the group, resistance is generated, group members become frustrated, and the facilitator loses the group. When used appropriately, lecturette questions can lead group members to independent, creative thinking and to a fuller and more interactive discussion of the concepts being presented.

Checking for understanding. The facilitator can stop from time to time and ask the simple question "What do you hear me saying?" Distortions, misinterpretations, and omissions then can be dealt with before the conceptual input is continued.

- *Current events*. This is similar to asking for examples. In this case, the facilitator asks the participants to offer examples from current events to illustrate points in the lecturette.
- Interviewing. The participants are instructed to form dyads (this can be as simple as having persons sitting next to each other turn to face each other). The lecturette is interrupted at selected points, and the members of the dyads are instructed to interview each other regarding their beliefs about the topic. A good practice is to encourage interviewers to avoid "yes/no" and "why" questions and to experiment with "what" and "how" ones.
- *Interviewing the facilitator*. Participants act as reporters at a news conference and pose questions to the facilitator on the points just raised in the lecturette.
- *Right-left comparisons*. At appropriate points during the lecturette, the facilitator stops giving input and instructs the participants to compare their reactions with the persons on their right and on their left. After these discussions, similarities and differences are reported to the total group.
- "*Right now*, I...." At appropriate points in the presentation, the facilitator solicits statements from the participants. These statements begin with the phrase "Right now, I...." Variations include "Right now, I'm thinking ...," "Right now, I'm feeling ...," and "Right now, I'm imagining"
- Sharing of personal experiences. Audience involvement generally is increased through the sharing of personal examples or experiences by participants or by the facilitator. The facilitator may ask group members for critical incidents they have experienced that could be analyzed using the concepts being presented. Members might be asked to share fantasy episodes concerning the lecturette content: "What do you imagine would happen to you if you were trying to use the behaviors I have been describing?" If the content being presented has fairly personal aspects, the sharing might be done in self-selected subgroups. Sharing the results of assigned tasks (see the discussion that follows) is a way to increase the involvement of participants even more.
- Synonyms and euphemisms. Participants devise an alternate terminology for any technical language or jargon in the conceptual input. This task can be carried out in subgroups.
- *Task assignments*. The audience may be given a task as part of the lecturette. For example, listeners may be given any of a variety of writing tasks such as taking notes in order to share later with the group or a subgroup what they heard.

They may be asked to rewrite in their own words certain points the facilitator makes. As the lecturette proceeds, they can be given brief breaks to write down concrete personal examples that illustrate the points being made. Members of the audience can be assigned the role of observer in order to identify certain behaviors modeled by the facilitator. Participants can be asked to set personal learning goals for the lecturette session, individually or in subgroups. The farther the audience's task is from the traditional task of taking notes, the better. The range and exact nature of task assignments is limited only by the facilitator's imagination.

One of the sample lecturettes found at the end of this section ("Don't You Think That ... ?: An Experiential Lecture on Indirect and Direct Communication") includes experiential activities in its design. It begins with an activity to prepare the group members for conceptual input. This simple task focuses the group's attention on a particular phenomenon. Then the theory is introduced, and some examples are described. In a second activity, the members have an opportunity to provide behavioral examples, demonstrating and reinforcing their grasp of the topic so far. Further points or examples are introduced; the participants provide behavioral examples, share inferences about them, and discuss their reactions. The theory input may continue, allowing time for participants to practice and discuss the topical examples in small groups. The lecture focuses on the negative effects of the behavioral examples, and the participants take time to practice improved behavior. Finally, the lecturer describes alternative behaviors and their benefits and gives the conclusion or "so what" part of the lecture. The participants then discuss how they can apply their learnings to back-home situations, and each participant makes a commitment for at least one application when he or she leaves the training setting.

What this method does is structure the theoretical input so that participants are not asked to assimilate more than they can remember at one time. The activities interspersed throughout the lecture allow gradual absorption and clarification of the theory and encourage the participants to connect the theoretical concepts with reallife situations. This prepares them to practice techniques and/or improved behavior, leading to application of the theory or skill in their everyday lives.

It is important to repeat that using these techniques to excess can work against cognitive integration. The significant considerations are to keep participants actively involved with the content and to make certain that they see the "big picture." Making conceptual inputs experiential is an effort to facilitate change in model-based ways.

CLOSING: INTEGRATING COGNITIVE INPUTS

When closing the lecturette, the facilitator's objective is to integrate the cognitive input, clear up misconceptions, test understanding and learning, and plan for transfer. There should be some activity that builds on the conceptual learning; otherwise, the retention of the content will be lessened. Lecturettes should be sequenced in such a way that they link the previous activities with later ones. Several methods can be employed to reinforce the conceptual learning.

Handouts. Conceptual learning can be reinforced by giving participants the essential content in print form after the lecturette has been presented. If this is done before or during the presentation, participants can distract themselves through reading instead of listening. The facilitator needs to announce beforehand that a handout will be provided after the lecturette, because some participants will resent having taken notes unnecessarily. A significant proportion of the participants, however, will listen better if taking notes at the same time and will do so even if handouts are going to be distributed. A rule of thumb is to provide a handout for any lecturette in which participants are likely to feel anxious that they will not be able to write everything down.

Having numerous pre-prepared posters on the wall prior to presenting conceptual input also can make many participants tense. Some persons copy posters rather than listen, and they often can be behind or ahead of the point that the facilitator is discussing.

- Linking with other experiential methods. A lecturette can lead into a structured experience or it can augment the generalizing stage of the experiential learning cycle. In addition, lecturettes are incorporated into using instruments in training. The theory-input step in using an instrument is, in effect, a lecturette. Participants can create their own instrument spontaneously, based on the conceptual input.
- Planning of applications and goal setting. Participants are instructed to work individually or in pairs to apply the concepts presented in the lecturette to actual situations "back home." In pairs, some goal-setting criteria can be applied, and partners can make contracts for action or behavioral change.
- *Question/answer period*. This traditional teaching method helps to clarify points in the lecturette. A good practice is to have participants rehearse their questions with one another before asking them of the facilitator.
- *Quiz*. The facilitator administers a test based on the concepts in the lecturette. The presentation may be oral, posted, or printed. Individuals respond to the items, compare their answers with one another, and discuss any disagreements with the facilitator. It is important *not* to establish a traditional classroom-like atmosphere with adult learners. The use of this method should result in a sense of inquiry, not in anxiety about learning.
- *Role playing*. Subgroups are formed to create role plays to illustrate various points in the conceptual input. These skits are presented to and discussed by the total group. (See the section "Using Role Plays in Human Resource Development" in Training Technologies Volume 21.)
- Skill practice. The facilitator demonstrates the application of one or more concepts from the lecturette and structures situations to provide opportunities to act out effective behaviors in practice activities. For example, after a lecturette on assertion theory, participants can practice saying no to unwarranted requests in various situations. Or participants may form dyads and practice turning questions into statements.

Statements. The facilitator explains that most questions posed after a lecturette imply points of view, so the participants are invited to make declarative statements to the facilitator and the group about the content of the lecturette. The facilitator then directs a discussion of the points raised. This method requires some patience on the part of the facilitator, because many participants have been conditioned heavily to ask "expert" questions rather than to look within themselves for meaningful reactions. Many participant questions are statements in disguise, however, and need to be turned around before the facilitator responds.

The major concerns of the facilitator after presenting a lecturette are to ensure that the input has been understood clearly and that it has practical usefulness for the participants. The "so what?" and "now what?" stages of the experiential learning cycle need to be applied to conceptual inputs as well as to structured experiences.

When the presentation is finished, *summarize* it clearly, restating the significant points that have been made. Then *challenge* the listeners to experiment with new behaviors or new approaches and *encourage* them to take risks in applying new ideas.

In a sense, all learning is experiential in that there must be some experience on which to base one's behavioral changes. What these methods can do is to increase the likelihood that the learners will have meaningful contact with concepts and that talking through this experience will result in self-directed change toward more effective behavior. The purpose of the lecturette in HRD is not to enlighten so much as to provide the basis for choice.

ADDING IMPACT TO LECTURETTES

What involvement techniques cannot do, of course, is make a dull presentation interesting. It is a good idea to stimulate participant reaction by adding "punch" to the lecturette. There are a number of possible tactics to increase the effectiveness or impact of a lecturette. Six specific tactics in three categories can be suggested: things that depend to a great degree on facilitator skills; things that are simple but still depend on facilitator skills; and things that are based on preparation by the facilitator rather than on behavioral skills.

Skill-Based Tactics

Using Humor

Perhaps the best way to increase impact is the use of relevant humor. Good public speakers and lecturers soon learn how useful humor can be in maintaining audience interest. In the most serious of situations, humor becomes all the more useful in serving to reduce tension so that people can focus on the task instead of on their own anxieties. In less than crisis situations, one of the strongest audience turnoffs is an overly serious demeanor.

Unfortunately, there is no way for facilitators suddenly to become funny just because they desire to be so. Using humor appropriately is a skill. Many people can learn to deliver simple jokes (although even this takes practice—on friends, spouses, or co-workers, not on group participants), and almost everyone can learn to tell one reasonably funny joke. However, it is not enough to memorize and correctly retell a good joke; in order to "grab" one's audience one must use humor in context, with reference to specific topics and situations with which the listeners are concerned (or are, at least, able to identify). No matter how funny it is, if a joke is totally out of context and bears no relation to the content of the lecturette, it is better not to use it. One of the primary rules for using humor in lecturettes is that it must flow out of the content situation (rather than being forced into the topic).

There are at least four rich sources of appropriate humor. First, there is the "Bob Hope" fund of humor: current events. Local or national news that can be turned toward the topic being presented provides potentially good humorous material. Second, and perhaps easier to use, are the many available "joke books" that catalog humor by topic, from "one-liners" to long anecdotes. Used carefully, often with personal touches, such resources can be worthwhile investments (many such books are available in paperback form). Third, and safest, is humor focused on oneself. Such jokes are unlikely to offend others. They also expose the teller to the audience, and this often is desirable both for building rapport between the facilitator and the participants and as a behavioral model of self-disclosure. Everyone has some humorous stories based on personal experience. The challenge is to relate them to the topics of concern to the participants. Fourth, and probably most difficult for most people, is the use of puns and "shaggy dog" stories. Although skill in presenting such humor can be cultivated, it is best left to those people who seem to have a particular talent for it. A good pun can be memorized, but often it is difficult to fit one into a lecturette. Because this type of humor so often is based on the immediate situation, the person with a natural talent for it can best and most easily exploit such an opportunity.

As a general rule, the facilitator should remember that the objective of humor is to increase involvement and participation. Jokes that alienate or make fun of people are not likely to aid in developing rapport. Other than the obvious problem of offending participants, humor can backfire in several ways. First, the joke may "fizzle." This is relatively harmless and even can be used to humorous advantage. What is worse is the case in which the participants' attention is focused on some point that is different from the content that the facilitator was using the joke to emphasize. Worse, the participants may remember the joke but forget the message. This is less likely to occur if the joke is appropriately related to the topic; a totally pointless joke may draw laughter but also may reduce the facilitator's effectiveness in communicating the major points of the lecturette. A final pitfall also concerns the focus of the participants' attention: a joke that aims at the facilitator can draw attention to the person at the expense of the lecturette content. The best type of humor is that which flows naturally and spontaneously out of the situation. Over-planning or inappropriate use can result in no laughing matter.

There are a variety of approaches to developing skills in using humor. Most people can learn to tell a simple joke and can practice on friends, family, and colleagues. As part of a more programmatic effort, one can work with a co-facilitator and contract for help in using humor. This can work very well if the other person is skilled in the use of humor. It is important to find safe situations for practice; one might volunteer for informal presentations in classes or staff meetings or one might join a club such as the Toastmasters, the purpose of which is the development of public-speaking skills. Finally, a local college, extension, or community college might offer classes that deal with the use of humor.

Practice and effort will not make a bore into a raconteur, but such efforts are very likely to provide one with the skills adequate for the effective use of occasional humor in delivering lecturettes.

Using War Stories

A second tactic that, to a great deal, depends on the facilitator is the "war story," e.g., "Back in '69, I was working with a group of managers in a large manufacturing firm . . ." Used judiciously, war stories can liven up a lecturette, emphasize a point, illustrate a concept, or pull together an argument as a concluding tactic. Like a joke, a war story should relate very obviously to the content of the lecturette. Unlike good jokes, which often cannot be planned, appropriate war stories can be "programmed" for use when needed.

The key question for the facilitator to ask is whether the war story serves a specific purpose. If that purpose is not obvious, the participants may decide that the teller is merely conceited, self-promoting, or rambling. Too many war stories in one context also can annoy or fatigue the listeners. In using war stories, as in using other techniques, it is important to remember that the purpose and outcome of the technique are more important than the technique itself.

Simple Tactics

Although public speaking is an art that many people are not only unaccustomed to but also rather poor at, it is possible to pick up some basic skills with only minimal practice. The use of visual images is one such simple, skill-based tactic. Many people have a rather limited capacity to visualize situations. Thus, the more vivid a word picture the facilitator paints to illustrate the concept, the more impact the lecturette will have. A detailed verbal picture can be prepared and tried out in advance on friends or colleagues. With a little practice, the skill of painting word pictures will become second nature.

A verbal technique that has been used in teaching over the course of history is the analogy, the use of similarity to transfer the understanding of one thing to another. For example, in a course on assertiveness, the analogy of two people trying to balance on a teeter-totter, and how power is distributed when balance is not achieved, is a useful analogy. The analogy of target shooting also could be used in this situation. In

discussing the concept of feedback, the analogies of a thermometer and a missileguidance system often are used.

Another simple skill tactic centers on providing behavioral examples and "modeling," that is, giving as concrete as possible a description of the behavior that is the subject of the lecturette and then proceeding to demonstrate that behavior. A lecturette situation often offers opportunities for audience interactions that will demonstrate critical points. Unfortunately, this often may be done inversely: exhortations to openness, for example, combined with the facilitator's refusal to acknowledge a member of the audience who has a question. Such poor behavioral examples will backfire, often without the facilitator being aware of the cause. Although audience members rarely fail to observe such negative examples, they frequently do not see positive connections. The facilitator not only must demonstrate the behavior as an example of what is being presented verbally.

Technological Tactics

Two final tactics that can add impact are based on technical preparation. The first involves the use of audiovisual aids, which requires judgment rather than skill. Such aids must be more than "pretty pictures"; they must correctly represent the content in a way that clarifies or simplifies it while at the same time being visually impressive and memorable. The simplest such aid is a printed summary handout of the lecturette. Depending on available resources and creativity, a very wide range of audiovisual aids is possible (e.g., from a newsprint flip chart, posters, an overhead projector, slide shows, audio cassettes, films or videos, all the way to a laser-illuminated, three-dimensional, holographic display).

The last tactic is to provide the audience with a problem that can illustrate the application of the concepts being presented. This problem can be from the facilitator's own experience (and, therefore, can also build involvement as noted previously) or it can be a prepared case. Often a case can be found or prepared to lead participants through several steps, with more conceptual input between steps. Such cases can be quite long; for example, it is common to find Harvard Business School cases in four or more parts of five to ten printed pages each. There also are cases in several parts that are two or three pages long in all. A wide range of relatively accessible cases now exists. Because of such availability, the use of a case problem usually is a question of selecting the best example rather than of locating a case that is appropriate. (The use of case studies in HRD is discussed in more detail in "Using Case Studies, Simulations, and Games in Human Resource Development" in Training Technologies Volume 21.)

Of course, neither participant involvement nor audience interest will guarantee that a lecturette will be effective. Effectiveness depends also on the quality of the content presented.

SOURCES OF LECTURETTE MATERIAL

The field of human resource development is rich in the amount of solid, practical content that has been shared in the form of books, films, audiovisual materials, and the like. Books on career planning, communication, conflict, consulting, group dynamics, intercultural encounter, management and leadership, meetings, organizational change, performance appraisal, power, stress, team building, training, and a host of other topics abound. Most larger college and university libraries have a good selection of information of interest to HRD professionals and their clients. Some publishers such as Pfeiffer & Company, the American Society for Training and Development, Leadership Studies, Science and Behavior Books, the National Training Laboratories Institute for Applied Behavioral Science, Tavistock Publications, and others specialize in publishing materials specifically in the fields of human resource development and applied behavioral science. There are numerous journals such as the *Journal of Applied Behavioral Science* and *Group & Organization Studies*, and many general publishers also produce books and other materials in this field.

Compilations such as the *Annual* series; *Theories and Models in Applied Behavioral Science* (four volumes); and the *Pfeiffer & Company Library*, all published by Pfeiffer & Company, contain a wealth of theoretical material, lecturettes, and models. There also are many books available that are collections of articles about specific content areas. Examples of these include *Leadership and Social Change*, edited by William R. Lassey and Marshall Sashkin (1983), and *Understanding and Managing Stress*, edited by John D. Adams (1980). Library card catalogs, the Bowker Company's Books in Print (found in most libraries), and topical bibliographies can provide a rich supply of publications from which to obtain useful, pertinent theories and conceptual models.

The end of this section contains examples of various types of lecturettes, including presentations of theory and models.

THE EXPERIENTIAL LECTURE

Using input from participants can provide a stimulating and potentially powerful mode for presenting lecture material in a group. We call this approach the "experiential lecture." That is, the lecture "material" is embedded in the learners. It is the facilitator's task to tap that material, to focus it, and to make it come alive conceptually.

GUIDELINES

There are a number of guidelines to keep in mind if an experiential lecture is to emerge successfully in a training design.

Motivation

The learning climate established must be one that fosters support for participants' contributions. The facilitator should create the lecturette within the context of the group's learning needs. Sequencing is important; the effective lecture provides a bridge between what precedes it and what follows.

Preparation

Participants should be prepared adequately for their role in creating the lecturette. Using brainstorming techniques, interviewing fellow participants about a topic, and writing down notes to oneself about the topic under consideration can facilitate the unfolding of the lecturette.

Illustration

Specific cases, problems, and anecdotal material provide rich sources of material for the experiential lecture and increase the group's psychological ownership of the final lecturette.

Reaction

The experiential approach gives the facilitator and the participants an opportunity to respond to ideas as they emerge. In addition, by assuming that most questions contain points of view, opinions, or feelings about a particular item, the experiential lecture invites participants to answer questions that are asked during the presentation. Reacting to concepts as they evolve helps to integrate them.

Focus

The facilitator's ability to focus ideas and points of view into a useful frame of reference is a prerequisite for presenting effective experiential lecturettes. Providing a theoretical foundation to understand the behavior elicited over the course of a training event enables participants to validate newly acquired concepts.

Closure

A sense of psychological closure around events or concepts explored during the lecturette is necessary. This enables those involved to move to the next learning opportunity. However, it is unrealistic and, after a point, undesirable to have complete "closure" on a topic. Concepts should remain open to further examination—fluid rather than static.

USES OF THE EXPERIENTIAL LECTURE

Potential uses for the experiential lecture include the following:

- 1. To give participants a specific referent as they think about applying new insights to their everyday behavior;
- 2. To establish a mental set about a particular idea or point of view;
- 3. To prepare participants to interpret instrumental feedback;
- 4. To summarize learning experiences.

Experiential lecturettes provide an avenue for solid learning and a practical way to blend theory with here-and-now learnings. It is the facilitator's job to diagnose precisely the needs of a learning group, to intervene at the appropriate level, and to follow through with the data generated. By presenting, exploring, and living experiential lecturettes, the trainer gains the flexibility to help the participants in the group to reach their learning goals.

A BACKGROUND FOR USING THEORY IN HUMAN RESOURCE DEVELOPMENT

THEORY AND HYPOTHESIS

The first definition of theory in the *Random House College Dictionary* is "a coherent group of general propositions used as principles of explanation for a class of phenomena." The second definition is "a proposed explanation whose status is still conjectural, in contrast to well-established propositions that are regarded as reporting matters of actual fact." Later, the text distinguishes between "theory" and "hypothesis":

A theory properly is a more or less verified or established explanation accounting for known facts or phenomena. A hypothesis is a conjecture put forth as a possible explanation of certain phenomena or relations, and serves as a basis of argument or experimentation by which to reach the truth.

This distinction frequently is not made in the applied behavioral sciences. Although the formal logic of science requires that practice be developed out of tested, validated theory, in the behavioral sciences, one typically sees this process reversed: techniques, methods, and "tools," developed out of need and for the sake of utility, are slowly integrated with concepts to produce theoretical explanations for human behavior. What often is called theory is, in fact, merely a working *hypothesis*. Such an hypothesis frequently is based on a specific set of conditions and "fails" when applied to a different set of conditions. Thus, a major problem with this process is that it often results in theories that are "exclusive," as opposed to "inclusive," and very narrow in terms of the phenomena described. Thus, we discourage the practice of calling an hypothesis—even a probablistic one—"theory."

As Stan Herman (1976) points out, most of us tend to be "theorizers," either consciously or unconsciously. Our ideas and hypotheses may be structured and formal or merely loose collections of assumptions. The advantage of hypothesis and theory is that they can help to make the world more predictable and help us feel in control of situations. However, the very act of mobilizing our ideas in order to understand and control what is *going* to happen detaches us from the event itself and our involvement in it. In the act of theorizing, one places oneself outside the event as an observer. Thus, only part of our awareness and energy is available to deal with what *is* happening.

Hypotheses and theories can "filter" our thinking and distort our perceptions, functioning as screens between events and our experience of them. For example, one may attempt to "theorize" before an event, that is, in preparation for it. Then one most often attempts to confirm one's hypothesis in the ensuing transactions. Aspects of the event that do not fit the pre-established theoretical framework are discounted, distorted, or perhaps not even perceived. When such "lock-in" occurs in the midst of an event, a slightly different, though related, pattern is revealed. Many people seem compelled to try to "pigeonhole" incoming information into one or another of several possible hypotheses until, finally, one pigeonhole is declared the winner. Then, once more, subsequent information may be selected to conform with that theory.

We do not argue that practice is irrelevant for theory development; practice is actually the best source for the observations and ideas that must be the basis of theory. However, to generalize practice requires a sound theoretical base. One must develop the theory that a particular application reflects; otherwise one is in danger of generalizing from unique cases—a human error that probably accounts for a large amount of our difficulties. "If it worked for me, it has to work for you," says the pure practitioner, ignoring the fact of different contexts, concerns, capacities, and perhaps even problems.

Appropriate uses of theory and the process of theorizing can, of course, be useful. In Buddhist literature, there is an expression that says a wise man will use a raft to cross a river, but once on the other shore, he will leave the raft behind. Theories can be treated like the raft; they can be learned and then let go. Sufficient trust in one's internal processes is necessary; when a theory is relevant to the situation, it (or appropriate parts of it) will reoccur to one's mind. Theorizing also can be useful at the conclusion of an event. Looking back over a series of occurrences and generating some tentative hypotheses about the behavior and interactions of individuals involved may be helpful—if the theorizing does not become restrictive and force subsequent life experiences to be seen in its framework. Sometimes, giving up trying to control and predict where or how something ought to go can allow space for a new and surprising clarification to emerge.

WHAT A GOOD THEORY IS AND WHAT IT IS NOT

Definition

A "real" theory is a cluster of explicit, relevant assumptions systematically related to one another and to a set of empirical definitions. From these are derived hypotheses that are, in turn, subject to experimental tests. In this way, specific predictions can be made about what will occur under specified conditions. Predictions are tested, resulting in data that either corroborate the predictions—and underlying theory—or require modifications of the theoretical assumptions.

Function

Theory serves a variety of functions. The most important are: (a) codifying accumulated knowledge within one, consistent, overall framework and, in this way, (b) clarifying and simplifying the complexity we find in the real world while (c) directing the further development of knowledge through (d) guided experimental applications.

Theory is *heuristic*, that is, it is capable of generating research and new learning; it incorporates known findings into a logically consistent framework; and it clarifies and

simplifies the complexity of natural or concrete events. An additional primary function of theory is its utility—for practical application and use in particular situations.

Theory generally is developed indicatively, when it emerges from or is linked to those techniques and methods already in practice because of utility or necessity; practice generally is developed deductively, from tested and validated theory. In the applied behavioral sciences, a unified and systematic theory provides the basis for a model that can be applied in practice to human beings and human systems.

"Good" Theory

The elements of a definition of theory come from several sources, most notably Hall and Lindzey's (1957, 1970) classic discussion of psychological theory, which continues to make sense when applied to the field of HRD, and Lewin (1948; see also Marrow, 1969). The definition is, admittedly, value laden. Good theory does not ignore what it known. It must be comprehensive—all information relevant to the theory is involved within it—because it should be applicable to *all* the situations related to the subject of the theory, not just some situations. Nor does it overcomplicate; rather, it clarifies. Good theory must be clear and simple because it should be understandable, in its essentials, by anyone of average intelligence, not just by a few geniuses. For example, while complex in its more intricate details and implications, the basic elements of Einstein's general theory of relativity can be understood by the average person. By describing the basic structure of relationships among data, good theory makes our world more comprehensible.

Good theory leads to the development of more and deeper understanding. It must point to further research because it is desirable to understand our world (including ourselves) better, and we know that it is not possible ever to fully understand such complexity. We need guidelines and directions for the development of greater understanding.

Sound theory in HRD is vital in order to make the impossible possible. We never would have been able to explore our solar system in a Ptolemaic universe; a radical rethinking of the planetary system was necessary before the distance of space could be bridged. Our views of inner space also require revision periodically; we need theory to help us perceive what really is there so that our work can serve to enhance the human condition. A realistic theory does not purport to incorporate all truth, but has clear implications for where—and how—to look for more knowledge. Good theory includes specific, practical, action implications. It enables problems to be linked to solutions; intelligible chains of logic provide prescriptions for action. Most of all, good theory must be useful, because in our value system—and in many others—the final and essential test of the goodness of anything is whether it has beneficial uses and whether it can improve the quality of human life.

THEORY IN CONTEMPORARY HRD

Contemporary HRD is the serendipitous offspring of Lewin's action research of the 1940's. HRD professionals, inspired by Lewin's motto ("If you want to find out how something works, try changing it"), have explored human interaction in every conceivable setting. Those explorations have resulted in a respectable collection of data and the formulation of much theory.

HRD has some special characteristics as a field. It is, first of all, eclectic. The activities of HRD professionals are diverse, and the phenomena we confront are quite complicated. Hard facts are scarce; even the most clearly stated theoretical relationships must be qualified by "it depends." The practitioner is likely to be influenced by learning theory, personality theory, clinical psychology and psychiatry, social psychology, education, management theory, organizations, communications, political science, and perhaps a touch of Eastern mysticism. This diversity of sources is enriching and exciting, but it also makes comprehensiveness, integration, and synthesis difficult.

Secondly, current theory is largely descriptive. It organizes and categorizes what is known and attempts to reduce complexity. In i the effort to simplify and offer practical assistance, HRD practitioners may overlook the facts of individual differences and multiple motivations for human behavior.

Thirdly, current theory is action oriented. Theory is used to provide a rationale and framework for interventions in a change process. The emphasis is on reaching goals, but such a concrete focus often ignores theory's heuristic function of sparking new generalizations and suppositions about what still is unknown. Another Lewin motto ("No action without research, and no research without action") is worth noting here.

THE USE OF THEORY: SCIENCE OR ART?

In some ways theory and practice in HRD are analogous to science and art. In both relationships, each element serves to stimulate the other, but the relationship between science and art sometimes is less than happy because of their inherent differences. Science involves development of a theory, objective observation of phenomena, and assessment, evaluation, and modification of the theory. The ultimate result of this process is "truth." Art, on the other hand, involves style, judgment, and values; it can be said to be an *expression* of truth. Another interesting difference is that in science one's theory or model must always work; when it does not, one must determine exactly why, and the theory then is modified and made more perfect. In art, however, one often hears the artist or critic say that something "works" or does not work, but one rarely, if ever, finds out why.

Such uncertainty also is characteristic of the behavioral sciences in general and of HRD in particular. It typically is seen as a problem and sometimes is stated as the reason why behavioral science is not truly a science. Behavioral scientists have tried to cope with this problem by building more complex models, since "science" seems to demand theoretically perfect predictability from models.

When cause and effect are not clear (as often is true in the behavioral sciences), we construct models that contain more variables, with more indirect connections. (For example: "B follows A only when X is present; when Y occurs rather than X, the effect is C rather than B.") If we identify enough conditions, we can explain anything. Unfortunately, this often is said to be a result of random errors of measurement. (If we had measured A perfectly and had identified all the components of condition X, it would have been obvious why the result was D and not B in a particular case.) Indeed, it may be that we are better off—and freer—without the final word. The truth, to paraphrase Lord Acton's famous maxim on power, tends to corrupt, and absolute truth may corrupt absolutely.

One might argue that it is not valid to make an analogy between behavioral science and physical science. The question then is whether behavioral science is really art rather than science, or whether some of our beliefs about the definition of science are incorrect.

Freud and Einstein shared at least one very important scientific premise: both insisted on the absolute validity of the model: *if* A takes place, *then* B must follow. B does not follow A half the time or part of the time, but all the time. If B does not follow A, we have measured one or both incorrectly or some important condition is missing from the model. The premise allows for no other possibilities.

Modern physics has moved away from Einstein's deterministic beliefs toward the more uncertain, "probabilistic" theory pioneered by the man who invented quantum physics, Nils Bohr. Bohr asserted that the fact that a particular electron may or may not behave in a certain way is not an error in measurement but, rather, is random chance. Most new evidence supports Bohr. In the "hard" sciences, therefore, scientists are less certain about what causes what and are even suggesting that sometimes—on a subatomic level—"cause" and "effect" may be interchangeable terms.

This may suggest that it is time to reevaluate the analogy between physical science and behavioral science—not to assert that they are different but to select a new, probabilistic model. This would distress many people; it would suggest that case studies tell little about cause and effect and that any situation could have a random-chance outcome. The implication is that there always will be failures, no matter what one does, no matter how good a practitioner or change agent one is. For people who require certainty in their lives, this premise is difficult to accept. Many hard-line, cause-andeffect behavioral scientists also would not approve of a probabilistic model for the social sciences. Like those physical scientists—and there are many—who still insist that Einstein was correct and "God does not play dice with the universe," traditional behavioral scientists will not find it easy to accept a random-chance basis for social and psychological processes. The individually centered social scientist also is likely to oppose a probabilistic approach, because it implies that one cannot learn about psychological or social processes from individual cases. This implication is not really true; Piaget has shown that one can extract basic processes from individual studies; the error is in trying to turn them into certain, cause-and-effect laws.

If one gives up the theoretical approach that says "If you engage in OD intervention A in organization type X under conditions H, K, and L, then a variety of positive results (B, C, D, etc.) will occur," how does one plan for results based on certain actions? The answer is that randomness is at the individual level, not at the aggregate level. One may well be able to specify exactly what proportion of OD efforts will succeed that are based on a certain type of intervention in a certain type of organization. It is conceivable that interventions with high success rates, in given situations, could be identified. In fact, some applied social scientists have taken just such an approach (Bowers, 1973), and that approach may be the means by which the link is found between the science of behavior and the art of practicing behavioral science.

TYPES OF THEORY

There are two general categories of theory: stimulus-response and cognitive. Most of us have heard of Pavlov, who conditioned his dog to salivate at the ringing of a bell—an extreme example of the stimulus-response, or conditioning, theories. This also is called behavior modification. The idea is that if the subject receives the proper stimulus, the response will be the desired one. Cognitive theories deal more with the acquisition of knowledge and are more humanistic in nature. They generally rely on the individual to learn through self-motivation. This is particularly pertinent in dealing with adult learners. Andragogy, the concept of adult education defined by Malcolm Knowles (1978) is based on the assumption that adults want to learn. Unlike children in school, most adults have control over whether they show up for training and whether they stay or walk out.

In HRD, cognitive theories are presented primarily by means of models, in order to make it easier for participants to "digest" and apply the concepts. The differences and relationships between theory and models are discussed next.

A BACKGROUND FOR USING MODELS IN HUMAN RESOURCE DEVELOPMENT

MODELS REPRESENT; THEORIES EXPLAIN

Although formal definitions of the word "model" may vary somewhat, in most professions it generally is agreed that a model is a symbolic representation of the functions or aspects of a system or complex event and their interrelationships. Kaplan (1965) says that models are analogs of existing or conceivable systems, resembling their referent systems in form but not necessarily in content. In addition to representing a referent system, a model usually shows the relationships among elements of the system. Lippitt (1973) defines a model as:

a symbolic representation of the various agents of a complex event or situation, and their interrelationships. A model is by nature a simplification and thus may or may not include all the variables The true value of a model lies in the fact that it is an abstraction of reality that can be useful for analytical purposes . . . models are analogies which problemsolvers use to clarify their thinking. (p.2)

Theory, on the other hand, is a set of causal relationships developed to provide a logically acceptable chain of reasoning starting from well-defined assumptions and proceeding to deductions or conclusions that conform to observation of the referent system. As Schultz and Sullivan (1972) point out:

The test of a theory is validity; the test of a model is utility.

In other words, *theories explain while models represent*. Theory sometimes is implicit in models, i.e., a model may be created to represent a theory or part of a theory. However, this is not always the case. Some models are experimental. They can be used in developing theory or testing hypotheses. Also, some theories do not suggest structures; there may be a theory without a model. The relationship between theory and model, therefore, is not clear cut. The possibilities are reiterated below.

Theory Model first	Model depicts specific part(s) of theory No model Theory explains model
Model first	No theory

In HRD, generally, a model clarifies a theory or a theory expands a model. Most HRD practitioners are interested in the teachability of ideas related to training and in using models to guide organization development interventions. Thus, this discussion deals primarily with the use of models that are concerned with human behavior and that are intended for teaching and training, not for experimenting, testing, predicting, or planning.

MODELS AS ROAD MAPS

While flying over some unfamiliar geographic area, we are always amazed that the configurations of land and sea are precisely as they are depicted on the road maps in the travel atlas. This was not always so; early maps were crude and contained masses of *terra incognita*; others described topographical features that, like Atlantis or the seven cities of gold, never existed except in the minds of wishful voyagers.

Models are the road maps of applied behavioral science. Many of the models we have are like the geographical maps of the fifteenth century. They describe accurately and in detail some well-explored areas, but they also contain large areas of unexplored territory and some mythical regions that exist somewhere between our ears. To add to the confusion, the cartographers of behavior describe the same area with different words; some describe the surface, while others dig into the depths and present what they have found there. Furthermore, in our zeal to understand ourselves, we sometimes mistake the map for the reality and forget that the model is only a pattern, an analogy. Models may be useful; they are not necessarily true.

When psychological models are used not only to describe but also to predict behavior, they begin to acquire the status of theory. As data are collected and the model is supported or confirmed, hypotheses are generated, and laws of interaction can be expressed in a systematic way.

DEVELOPING MODELS

Models have many functions. Applied behavioral scientists develop models primarily to do the following:

- *explain* various aspects of human behavior and interaction;
- *integrate* what is known through research and observation;
- simplify complex human processes;
- guide observation in such dynamic situations as group interaction;
- *teach* relationships among concepts;
- *predict* human behavior in various situations;
- *control* human relations for experimental purposes;

- *evaluate* effects of various treatments of people;
- *invent* new ideas and processes; and
- *plan* interventions into human systems.

The purpose of a model is to communicate, in an effective and simplified way, complex information that generally includes statements about the causal relationships between and among specific variables or concepts. Thus, a model facilitates understanding, prediction, and control over real-world phenomena.

Types of Models

There are several basic types of models, and it is important to be aware of which of these one is building or using. Most models in HRD are nonsymbolic models. If the model involves the same properties as the thing or system being depicted but the scale is changed (for example, a ship model), it is an *iconic* model.

If whatever is being depicted is represented by properties other than its own, it is called an *analog* model because it literally is an analogy. This type of model has been used for teaching purposes throughout history and is used quite often in HRD. Using this type of model, for example, one could develop a "switchboard" model of the human brain, to communicate more clearly certain important neurological concepts and processes. Of course, everyone is aware that plugs are not connected and disconnected in the brain as they were in early telephone switchboards, although, in limited ways, the brain functions *like* those switchboards.

Other examples of nonsymbolic models are verbal models, pictorial models, flow charts, analytic models (in the mathematical sense), and numerical models. An example of an analytic model is a model representing an economic theory; an example of a numerical model is a model of a particular organization's accounting system. These both are quantitative models, whereas pictorial models and flow charts are qualitative models.

Another, less common, type of model is intended to express, depict, or simulate how something actually works. For example, scientists engaged in research that will lead to nuclear fusion reactors have developed mathematical models that describe precisely the actual operation of such devices. This type of model, generally mathematical, is rarely used in the applied behavioral sciences. Thus, this discussion will deal solely with building and using analog models.

PHASES AND STEPS IN MODEL BUILDING

The dimensions of our model-building model are "steps" and "phases" (see Figure 1). Steps are subparts of phases; each phase has two or three steps in it. There are ten steps and four phases. The steps and phases exist in a specific sequence that describes how they are interrelated. The first two steps in model building are (a) to observe the phenomena involved in the model and (b) to identify aspects important to the model. The third step is to specify only those variables to be included.

Phases	Steps
I. Delimiting	1. Observe phenomena.
	2. Identify areas of interest.
	3. Specify which areas are to be covered.
II. Defining	4. Develop salient dimensions.
	5. Define interactions among dimensions.
III. Describing	6. <i>Describe</i> the model in writing.
	7. Depict the model visually.
IV. Demonstrating	8. <i>Test</i> the model in a new situation.
	9. Refine the model based on results.
	10. <i>Review</i> the relationships and graphic presentation.

Figure 1. A Model-Building Model

The first three steps—observing the phenomena of interest, identifying important aspects, and specifying those aspects to be included in the model—comprise the first phase, *delimiting*. In this phase, one examines, narrows, and selects the phenomena to be included in the model.

The second phase of model building is *defining* the specific variables (or phenomena) with which the model deals, along with their interrelations. Within this phase, step four is to develop dimensions, to create labels, to define and redefine the specific phenomena selected in the first phase. A number of concepts are useful in determining the aspects of the phenomena to be taken into account by a model. Some key ways of thinking during step four are taken from various academic disciplines. These are:

- dimensions
- actors
- components, elements
- forces
- resources
- variables (dependent, independent, intervening)
- functions, roles
- routines
- effects
- contingencies
- constructs

- systems, subsystems, suprasystems
- parameters, characteristics
- perimeters, boundaries

Step five in the model-building model consists of defining the relationships among the dimensions that one has chosen. This involves accounting for the observed phenomena in terms of the interplay among the various aspects of the situation that are deemed important. A number of concepts are useful in this process. One can think along several lines, such as:

- Randomness: What part does pure chance play in the situation?
- Cause and effect: Is there evidence that serial linkages can be found that would lead to inferences or causations?
- Association: What effects seem to be correlated with one another (temporal or geographical associations, for example)?
- Parallelism: What behavioral phenomena seem to track together?
- Dependence: What dimensions seem to depend on, be independent of, or be interdependent with other dimensions?
- Complexity: How do you balance the demands for simplicity in the ultimate model (for the function it is supposed to perform) with the actualities of the behavioral phenomena?
- Intervening processes: What conditions/factors/contingencies seem to mediate the responses to the stimuli in the situation?

The important consideration here is to find appropriate ways of thinking about relationships among the selected dimensions. Appropriateness is dictated by the purposes for which the model is intended to be used.

We now have partly and roughly defined the model-building model. Phases three and four (steps six through ten) are presented in the following discussion as we continue to illustrate the model building process by using it.

Phase three is *describing* the model. Step six is to describe the entire model in writing. Thus, this entire discussion is an example of step six. Step seven is to depict the model visually, as in Figure 1. Numerous graphic representations can be considered. These depictions vary of course, from very simple to highly complex. The tabulation below includes the most common.

- "black box"
- categorization, taxonomy
- concentric circles
- continuum

- coordinate systems (spatial)
- cube, triangle
- cyclical representation
- diagram
- facet design
- flow chart
- grid
- linear/curvilinear/nonlinear scales/graph
- list
- matrix diagram
- morphology
- ranking
- table
- whirlpool

These graphic representations are not models in themselves; it is only when they are married to key elements of information that they become models. The choice of graphic design depends on the hypothesized interrelationships among the defined dimensions. For example, one would not choose a two-state method of illustrating a linear process. Likewise, it may not be possible to simply and clearly represent a complicated process with one model. In such a case, it would be better to break it down into parts. It may take several tries before the appropriate representation is obtained.

The fourth and last phase is *demonstrating* that the model works. Step eight involves testing the model by applying it to a situation, case, example, or problem situation other than the one that was used in developing the model. Thus, to carry out this step, we could use our model-building model to develop a model of experiential learning or one of intervention style. This would provide experience in using the modelbuilding model as well as feedback on it, both of which are necessary for step nine, refining the model. This could involve adding important elements that were left out in the first version, simplifying concepts, or revising the written or visual descriptions for clarity. Finally, step ten is reviewing the entire model, in detail, to incorporate all the refinements and to make any further changes that are necessary because of these refinements.

In our presentation of the model-building model, we did not carry out phase four (steps eight through ten), because that would have taken us beyond the scope of this discussion. We shall leave it to the reader to attempt an application of our model.

INTEGRATING THEORY AND MODELS INTO GROUP ACTIVITIES

As we stated at the beginning of this section, most learning is achieved by a combination of experience and cognitive understanding. In group training, experiential technologies such as structured experiences, instruments, role plays, case studies, simulation games, and so on, are highly useful. (Other parts of the Training Technologies volumes deal with these experiential technologies.) However, experiential input needs to be balanced by cognitive input. Conceptual understanding is necessary if what is experienced is to be sorted out and placed into a useful frame of reference, whatever form that may take for the individual participant. The presentation of theory and models serves this purpose: to provide a frame of reference, a paradigm, that gives experience meaning and connects it to other realities.

Good models are particularly suited to this task because the concepts are represented visually while they are explained verbally. A succinct model can facilitate presentation of theory and relationships. It also can give participants something more tangible, more easily remembered than a series of words. If participants can decide where they are on the model "going in," so much the better. They can then track their own progress as they experience the dynamics, processes, and relationships being depicted.

Avoiding Pitfalls

The facilitator who has at his or her disposal a number of different models of behavior and relationships can help the participants to approach the subject from a variety of directions. One theory or one model may not paint the whole picture. Facilitators should avoid forcing their "favorite" models into discussions. There are a number of ways to interpret and explain human behavior, and selection of the appropriate means is one of the facilitator's primary responsibilities.

Typical pitfalls in using models have been described by Boshear and Albrecht (1977) and include the following:

- Trying to *stretch a model* to cover too many situations, variations, or features;
- Uncritically *accepting false inferences* indicated by the model; and
- Becoming deluded by features that portray aspects of behavior that are *not true to life*.

The first pitfall, using one model when it is not the most appropriate, is probably the most common. If a facilitator is "into" Transactional Analysis (TA), he or she may be tempted to describe most human interactions in TA terms. Unfortunately, the basic concepts most germane to the learning experience may be left out, behaviors may be forced into the TA mold, and so on. For example, in dealing with the issue of problem solving, Festinger's Cognitive Dissonance Model or deBono's Lateral Thinking Model might be more useful. Deciding which model to use—and when not to use it—is an important task of the facilitator. The second pitfall, accepting false inferences, is a more subtle one. For example, in the OK/Not OK Life Positions Model of TA, one of the four positions is "I'm OK, You're not OK" and another is "I'm OK, You're OK." Although the term "I'm OK" appears in both these positions, it has a very different meaning in each. The former frequently is the position of the maladjusted individual, the battered child, or the psychotic adult. In the latter, "I'm OK, You're OK," it represents a healthy, self-actualizing individual. Furthermore, the diagram used to represent the four life positions portrays them as corners of a continuous plane, the implication being that one can move around within the model. In many such models, what is *required to move* from A to B may *not* be depicted; it therefore needs to be explained carefully. Similarly, the terms selected for many models need to be defined and explained lest participants interpret the terms themselves in light of their pre-existing frames of reference rather than as they are defined in the model.

The third pitfall, being mislead by the way something is laid out, frequently goes unrecognized. For example, Maslow's Hierarchy of Needs (Maslow, 1970) most often is represented by a triangle or pyramid, with basic needs at the bottom and selfactualization at the top (see Figure 2). Because of our habit of interpreting symbols, the fact that self-actualization is at "the top" frequently is interpreted as meaning that those needs are better or more positive than those at the bottom or that one can "outgrow" the basic needs. This unconscious infusion of values into a model can occur for many reasons and can distort the meaning of the model.

In contrast, Paul Hersey depicts the need hierarchy as a frequencies' distribution (see Figure 3), indicating that we all engage in a certain amount of behavior from all the

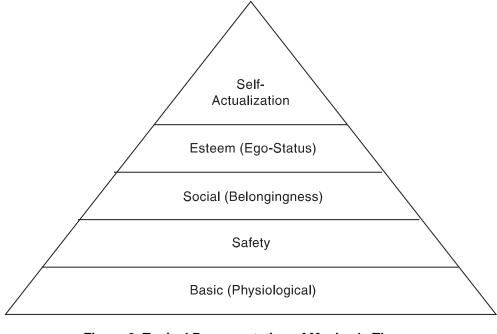


Figure 2. Typical Representation of Maslow's Theory As a Pyramid

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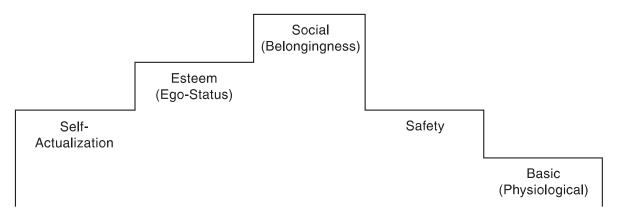


Figure 3. Hersey's Representation of Maslow's Theory As a Frequency Distribution

needs. The question then is not "at what level am I?" but "what percentage of my behavior is motivated by each need?" Obviously, this percentage can change rapidly as one's situation or environment changes.

All these pitfalls stem from one basic mistake in constructing and using models: the failure to realize that a model is an abstraction, a representation designed to help put form to words and concepts. The model is not the process or the theory. It should be stressed that a model is a tool and is limited in scope. Facilitators must have comprehensive understanding of the theory or processes that a models attempts to represent before they attempt to use it.

EXAMPLES OF LECTURETTES, THEORY, AND MODELS

The following illustrates the content and length of a typical *lecturette* for training purposes.

THINKING AND FEELING

Anthony G. Banet, Jr.

Thinking and feeling are the two major ways in which we interact with our interpersonal environment. Both are essential to constructive communication. In general, thinking ("head talk") leads to an *explanation* of the interactive situation, while feeling ("gut talk") leads to an *understanding* of it. Head talk is the prose of communication; gut talk is the poetry.

"Think" statements refer to the denotative aspects of the environment. They attempt to define, assert, opine, rationalize, or make causal connections between environmental events. Think statements are bound by the rules of logic and scientific inquiry; they may be true or untrue. Many times a think statement can be proved or disproved. Think statements require words to be communicated.

Most of us have been trained to emit think statements exclusively. We are continually engaged in cognitive work: observing, inferring, categorizing, generalizing, and summarizing; occasionally we report these thoughts to others. Frequently we are asked for facts ("Where did you put the car keys?"), opinions ("Which tastes better, California or imported wine?"), speculation ("What happens when we achieve zero population growth?"), or, sometimes, just "What are you thinking about?" Human beings like to think, and our ability to do it usually is on the short list of characteristics that distinguish us from orangutans.

Laboratory learning places great emphasis on feelings. Many participants in groups learn quickly that beginning sentences with "I think" is bad form, so they preface their remarks with "I feel" and go on to report thoughts. This bogus use of "I feel" often muddles communication.

1. "I feel like having a drink" is no expression of feeling but merely a shorthand way of saying, "I'm thinking about having a drink, but I'm still undecided." Here, "feel" is used to express an *indefinite* thought.

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- 2. "I feel that Roger's brashness is a cover for his insecurity" is not an expression of feeling but a statement of opinion, an offering of an hypothesis.
- 3. "I feel that all men are created equal." An abstract principle can't really be felt; this is a *statement of belief* an expression of faith in someone or something. It is more accurate to say, "I believe that all men are created equal."

Watch yourself when you say "I feel *that*" It's a clue that you are making a think statement with a feel prefix.

"Feel" statements refer to the connotative aspects of the environment. They attempt to report our internal affective, immediate, nonrational, emotional, "gut" response to environmental events. Usually, feel statements are personal and idiosyncratic, in that they refer to inner states, what's happening inside us. Feel statements, like dreams, cannot be true or false, good or bad, but only honestly or dishonestly communicated. Feel statements may not require words at all; when they do, they usually take the form of "I feel (adjective)" or "I feel (adverb)."

Many of us have conditioned ourselves to screen out awareness of internal reactions. We may allow ourselves to report feeling "interested" or "uncomfortable," but deny ourselves more intense or varied reactions. Laboratory learning emphasizes feeling states precisely because of this conditioning and denial. By getting in touch with our inner events, we enrich our experiences with the reality surrounding us.

Changes inside us provide direct cues to the feelings we are experiencing. A change in bodily functioning—muscle tightness, restlessness, frowning, smiling, inability to stay with a conversation—tells us how we are reacting to what is happening. The sudden emergence of fantasies, impulses ("I want to go over and sit by Kathy"), or wishes ("I wish Tom would shut up") into our consciousness can provide immediate entry into the rich and productive area of feeling communication if we can express them.

Sometimes we also can become aware of what is blocking our awareness of what we are experiencing. *Shame* is one kind of block, especially when the impulse sounds childish or regressive. *Fear* that if we communicate wishes, overt behavior will result is another bugaboo, left over from the magical thinking of childhood. Often, we have a clear *expectation of judgment* from others if we dare to express ourselves. In a wellfunctioning group, these blocks do not correspond to reality. It can be truly liberating to express your feelings without shame, fear, or judgment.

SOME PITFALLS IN DEALING WITH FEELINGS

Projection occurs when we deny our own feelings and attribute them to others. It is a common happening in groups and involves many distortions. Frequently, projections are made in an attempt to justify our own biases and prejudices.

Judging motives in others is guesswork that escalates misunderstanding. It is a sly way of focusing on another's feelings instead of your own and an entry into the intriguing but time-wasting game of explaining *why* someone is feeling the way he or she does. If you want to read minds, start with your own.

Metafeelings are thoughts and feelings about feelings. Metafeelings garble communication and often make it impossible to know where you are coming from. It is a way of distancing yourself from the immediate event and runs the risk of intellectualizing a potentially rich feeling experience. Beware of exchanges that begin, "I'm sort of guessing that when . . ." or "I think I'm sort of feeling that you'll get nowhere.

OWNING YOUR THOUGHTS AND FEELINGS

Effective communication occurs when the communicators take responsibility for their thoughts, feelings, and overt behavior, when they *own* what they do. Blaming, imputing motives, claiming that "the devil made you do it" are sneaky, dishonest attempts to be irresponsible. When you own your thoughts and feelings, the other person knows where you are and can respond more authentically to you.

You are entitled to have thoughts and feelings in your interpersonal environment. Being aware of them and the differences between them can improve your communications.

SUGGESTED ACTIVITIES

- 1. Set up a short period of negative practice during which group members are instructed to project, blame, impute motives, etc. Process the experience.
- 2. Devise a list of think statements masquerading as feel statements and have group members rewrite them.
- 3. A number of Gestalt exercises stress reporting awareness and taking responsibility. Often these take the form of beginning sentences with "Right now I'm aware of . . ." or ending sentences with ". . . and I take responsibility for it."
- 4. Explicitly ban the use of tired expressions for a short period. See what happens when "I feel," "I think," "comfortable," "rejection," etc., become taboo words.
- 5. Use projective devices (inkblots, ambiguous pictures) as a group project to help the group to understand projection.

This is an example of a lecture with a highly *experiential design*.

"DON'T YOU THINK THAT . . .?": AN EXPERIENTIAL LECTURE ON INDIRECT AND DIRECT COMMUNICATION

J. William Pfeiffer and John E. Jones

EXPERIENTIAL ACTIVITIES

This paper attempts to set forth certain theoretical concepts concerning indirect and direct communication. In order to integrate theory with practice, six activities are interspersed throughout this paper. These activities are designed to add the dimension of experiential learning to the theoretical concepts discussed.

Each of the six activities described is inserted at the exact point in the lecture at which the activity is designed to occur. Activity 1, for example, should take place before any theoretical concepts are introduced. The activities can accommodate an unlimited number of participants.

Activity 1

- A. The facilitator has the group members form quartets. No talking is allowed.
- B. Each person in each quartet writes down the first two things that he or she would communicate to each of the other people in the group. Again, no talking is allowed.
- C. The facilitator gathers and publishes information concerning how many of the twenty-four items generated in each group are questions.
- D. Participants are directed to "discard" the items they have generated; they will be asked to "communicate" later.

THEORETICAL CONCEPTS

One basic focus of human resource development is on the effective utilization of communication. Many people fear taking risks in interpersonal relationships, yet since they need to feel that they are articulate and adept at "communication," they often engage in what we can call "pseudo communication." In reality, they try to direct the risk of interpersonal communication away from themselves. They fear to present their own opinions, ideas, feelings, and desires.

Individuals who fear to take risks may want to manipulate others into fulfilling their own desires or expectations. Thus, they would be saved front being rejected or from

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exposing their vulnerability to others. Their motive also may be to control others without apparently assuming authority.

This paper attempts to illustrate several common varieties of indirect, pseudo communication and to suggest some alternatives to these misdirected patterns of communication.

NONCOMMUNICATION

One way that people engage in noncommunicative discourse is by speaking as if they represented other people, in an attempt to get illegitimate support for their points of view. For example, people who preface their remarks by saying, "I agree with Fred when he says . . ." or "I think I speak for the group when I say . . ." are not communicating. They simply are attempting to borrow legitimacy.

PSEUDO QUESTIONS

Perhaps the most frequently misused communication pattern is the question. In fact, most questions are pseudo questions. The questioners are not really seeking information or an answer to their "questions." Rather, they are offering opinions—statements. But because they do not want to risk having their ideas rejected, they frame them as questions, hoping to force other people to agree with them.

With few exceptions, we could eliminate all questions from our communications with others. As most questions are indirect forms of communication, they could be recast as statements, or direct communications. By replacing pseudo questions with genuine statements, we would come much closer to actual communication with one another.

Before we can achieve the aim of direct communication, however, we must be able to identify the varieties of pseudo questions that people tend to use. There are eight basic types of pseudo questions. Specific examples of each of these types of indirect communication are noted.

Co-Optive Question

This pseudo question attempts to narrow or limit the possible responses of the other person. "Don't you think that . . .?" is a classic example of this type. Or, "Isn't it true that . . .?"; "Wouldn't you rather . . .?"; "Don't you want to . . .?"; "You wouldn't want that, would you?" The questioner is attempting to elicit the response he or she wants by building certain restrictions into the question.

Punitive Question

A person uses a punitive question to expose the other individual without appearing to do so directly. For example, a person may be proposing a new theoretical model in training and his listener, knowing that the theory has not been properly researched, may ask him what the experimental evidence indicates. The purpose of the questioner is not to obtain information but to punish the speaker by putting him on the spot.

Hypothetical Question

In asking a hypothetical question, a person again resorts to a pseudo question. "If you were in charge of the meeting, wouldn't you handle it differently?" The questioner does not actually want to know how the individual would handle it. He or she may wish to criticize the meeting or may be indirectly probing for an answer to a question that he or she is afraid or reluctant to ask. Hypothetical questions typically begin with "If," "What if," or "How about."

Imperative Question

Another type of pseudo question is the one that actually makes a demand. A question such as "Have you done anything about . . .?" or "When are you going to . . .?" is not asking for information. Rather it implies a command: "Do what you said you were going to do and do it soon." The questioner wants to impress the other person with the urgency or importance of the request (command).

Activity 2

- A. The facilitator assigns one category of pseudo questions to each member of each quartet. The quartet is given five minutes to "communicate," with each person restricted to initiating his or her assigned category of pseudo questions.
- B. No processing time is allowed at this point.

Screened Question

The screened question is a very common variety of pseudo question. The questioner, afraid of simply stating his or her own choice or preference, asks the other person what that person likes or wants to do, hoping the choice will be what the *questioner* secretly wants.

For example, two acquaintances decide to go out to dinner together. One individual, afraid to take the risk of making a suggestion that he is not sure will be accepted, resorts to a screened question: "What kind of food do you prefer?" Secretly he hopes that the other person will name his own favorite food, say Chinese. Or he frames his question another way: "Would you like to have Chinese food?" Both questions screen an actual statement or choice, which the questioner fears to make: "I would like to have Chinese food."

One result of the screened question is that the questioner may get information he is not seeking. If the other person misinterprets the question about what kind of foods she prefers, for example, she may tell the questioner about exotic varieties of food she has experienced in her travels—not what the questioner wanted to know at all. On the other hand, the screened question may sorely frustrate the person being questioned. She is not sure how she should answer in order to give the "correct" response, and she feels under pressure to "guess" what the questioner really wants her to say.

The questioner, too, may find the results of a screened question frustrating. If the other person takes him at his word, the questioner may find himself trapped into a choice (Italian food, for example) that he does not like but cannot escape because he did not have the courage to state his own desires clearly from the beginning. Worse, both individuals may be unable to "risk" a suggestion and end up eating Greek food, which neither likes.

In marriage, the screened question may be used by one partner to punish or control the other. One individual may seem generously to offer the other "first choice," but he or she actually poses the question in order to reject the partner's suggestions and then offer, as a compromise, his or her own choice, which he or she wanted all along. Thus, the individual gets what he or she wants by manipulating the partner into the position of offering all the "wrong" choices.

Set-Up Question

This pseudo question maneuvers the other person into a vulnerable position, ready for the axe to fall. One example of the set-up question is "Is it fair to say that you . . .?" If the person being questioned agrees that it is fair, the questioner has the other person "set-up" for the kill. Another way set-up questions are introduced is by the phrase "Would you agree that . . .?" The questioner is "leading the witness" in much the same way that a skillful lawyer sets up a line of response in court.

Rhetorical Question

One of the simplest types of pseudo question is the rhetorical question, which comes in many forms. The speaker may make a statement and immediately follow it with a positive phrase that assumes approval in advance: "Right?" or "O.K.?" or "You see?" or "You know?" The speaker is not asking the other person to respond; indeed he or she wishes to forestall a response because of a fear that it may not be favorable. Often, an insecure person may acquire the habit of ending almost all statements with "Right?" as an attempted guarantee of agreement.

Or the questioner may precede any statements or requests with such negative phrases as "Don't you think . . .?"; "Isn't it true that . . .?"; "Wouldn't you like . . .?" In either case, the individual who fears risking his or her own opinion is trying to eliminate all alternatives by framing the "question" so that it elicits the response he or she wants.

A supervisor may say to a staff member, "Don't you think it would be a good idea to finish the report tonight and have it out of the way?" The question is phrased so as to make it appear that the decision to work late was a joint one. The staff member may not approve of the suggestion, but has little or no alternative but to agree.

"Got'cha" Question

A "got'cha" question is derived from Eric Berne's *Games People Play* (1964): "Now I got'cha, you son-of-a-bitch." Related to the set-up question, a "got'cha" question might run something like this: "Weren't you the one who . . .?" "Didn't you say that . . .?"; "Didn't I see you . . .?" The questioner's joy in trapping the other person is fairly palpable. He or she does not want an "answer" to the "question," merely to dig a pit for the respondent to fall into.

Activity 3

- A. The process used with the first four types of pseudo questions is repeated with the second four types.
- B. Five minutes is allowed to process the experience.
- C. The facilitator has the participants infer the statements that lie behind the questions asked; participants test the accuracy of their inferences and then react to them.

CLICHÉS

Pseudo questions are one method of indirect communication; clichés are another. When people use clichés they really don't want to communicate with another person—or they want to feel they are "communicating" without sharing anything of significance. Thus they resort to routinized, pat, standardized, stylized ways of responding to each other.

Examples of clichés abound. "You could hear a pin drop." "If you've seen one, you've seen them all." "That hit the nail on the head." "He took the bull by the horns." "She has us over a barrel." "We got our bid in just under the wire." "It's an open-andshut case." "He left no stone unturned in his search." "Better late than never." "The early bird gets the worm." "He can't see the forest for the trees." "I've been racking my brains over the problem." "Her kind of person is few and far between." "He is always up at the crack of dawn." "Let's get it over and done with." "His mind is as sharp as a tack." "Better safe than sorry." "She's as cute as a button."

No one can avoid using clichés occasionally. But the frequent use of tired, worn-out phrases diminishes the effectiveness of communication.

Activity 4

A. Participants write down as many clichés as they can in three minutes.

- B. The facilitator has participants form dyads by moving to "new" partners.
- C. Dyad partners "communicate" with each other using only clichés.
- D. Five minutes of processing time follows in groups of six (three dyads).

EFFECTS OF INDIRECT COMMUNICATION

If, then, we have established that clichés and pseudo questions are forms of indirect (and, therefore, ineffective) communication, it is important to know some of the effects that such indirect communication has on dealings between people.

Guesswork

We can note five major effects generated by indirect communication. First, it encourages each individual to make guesses about the other. Without direct, open patterns of communication, people cannot get to know one another successfully; what they do not know, they will make guesses about. Such "guessing games" further inhibit or obstruct true communication.

Inaccuracy

If people are forced to guess about others, they often may be wrong. Yet they communicate with others on the basis of their assumptions, the accuracy of which they are unable to check. Obviously, communication based on inaccurate assumptions is not clear or direct.

Inference of Motives

Indirect communication also increases the probability that people will be forced to infer the motives of one another. They will try to "psych" one another: Why is he doing that? What is her intention behind that? By communicating through clichés and pseudo questions, we hide our true motivations.

Game-Playing Behavior

Further, indirect communication encourages people to "play games" with one another; to deceive, to be dishonest, not to be open or straightforward. Clearly, such behavior leads away from the basic aims of human relations training. When the questioner is playing a "got'cha" game, for example, his or her behavior may be contagious.

Defensiveness

One of the surest effects of indirect communication is defensiveness. Because there is an implied threat behind a great deal of indirect communication, individuals tend to become wary when faced with it. Their need to defend themselves only widens the gap of effective communication even further.

Defensiveness can be recognized in several different postures, all characteristic results of indirect communication: *displacement, denial, projection, attribution,* and *deflection*.

Activity 5

- A. Participants form "new" triads.
- B. The members of each triad communicate with one another for ten minutes without using questions or clichés.
- C. Five minutes of processing time follows.

DIRECT (EFFECTIVE) COMMUNICATION

In contrast to indirect (ineffective) communication, direct (effective) communication is marked by the capacity for taking certain risks in order to understand and be understood.

Characteristics

Communication is effective when it has certain characteristics.

It is *two-way* communication, with ideas, opinions, values, attitudes, beliefs, and feelings flowing freely from one individual to another.

It is marked by *active listening*, by people taking responsibility for what they hear—accepting, clarifying, and checking the meaning, content, and intent of what the others say.

It utilizes *effective feedback*. Not only do people listen actively, they also respond to others by telling them what they think they are hearing. The process of feedback tests whether what was heard is what was intended.

It is *not stressful*. Communication is not effective if people are concerned that they are not communicating; when this happens, it is a key that the communication is not functioning properly.

It is *clear* and unencumbered by mixed or contradictory messages (verbal, nonverbal, or symbolic) that serve to confuse the content of the communication. In other words; it is direct.

Any communication always carries two kinds of meanings: the content message and the relationship message. We not only hear *what* other people say to us, we also hear implications about our mutual relationship. If we are so preoccupied with detecting cues about the latter, we may distort the content message severely or lose it altogether. When communication is effective, both messages are clearly discernible; one does not confuse or distract the other.

Approaches

Confrontation is one of five major approaches that can foster direct communication. Each person can learn to confront the other in a declarative rather than an interrogative

manner. We can attempt to eliminate almost all our pseudo questions by formulating them into direct statements.

Active listening can be encouraged. This is a powerful antidote to indirect communication. We can learn to paraphrase, empathize, reflect feelings, test the accuracy of our inferences, and check our assumptions in order to produce clearer, more straightforward communication with others.

Owning is a third means of fostering direct communication. If individuals can learn to accept their legitimate feelings, data, attitudes, behavior, responsibility, etc., then they can learn to reveal themselves more directly to other people. Owning what we are, what we are feeling, and what belongs to us is a first step toward communicating more effectively.

Locating, a fourth approach toward direct communication, is a way of finding the context of a question. Some questions we cannot answer because we do not know their "environment," so to speak. We need to learn to locate these questions before we can respond to them. Questions are usually more effective if they are preceded by an explanation of where they are "coming from."

Sharing is the final, and perhaps most important, point directing us toward effective communication. All communication is a sharing process: in attempting to communicate with others, we are sharing our views, beliefs, thoughts, values, observations, intentions, doubts, wants, interests, assumptions, strengths, and weaknesses.

For any of these approaches to be useful, we must, as we indicated earlier, be ready to take risks and to work toward a genuine sharing of a common meaning with the other person. If we are not prepared to risk, we will not attain successful, effective, direct communication.

Activity 6

- A. Participants form sextets.
- B. The learning of the experience is processed in terms of its back-home applications.
- C. Each participant contracts to find out what has happened with his or her spouse or with a fellow worker without using questions.

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The following is a lecturette that describes a theory.

LANGUAGE SYSTEMS IN NEUROLINGUISTIC PROGRAMMING

Cresencio Torres

Neurolinguistic programming (NLP) is a model of human behavior and communication (Bandler & Grinder, 1975; Dilts, Grinder, Bandler, Bandler & DeLozier, 1980; Grinder & Bandler, 1976). NLP resulted from a systematic study of Virginia Satir, Milton H. Erickson, Fritz Perls, and other famous therapists (Harmon & O'Neill, 1981). Additionally, it draws from the knowledge of psychodynamics and behavioral theories. NLP is concerned with the identification of both conscious and unconscious patterns in communication and behavior and how they interact in the process of change.

"Neuro" (derived from the Greek neuron for nerve) stands for the fundamental tenet that all behavior is the result of neurological processes. "Linguistic" (derived from the Latin lingua for language) indicates that neural processes are represented, ordered and sequenced into models and strategies through language and communication systems. "Programming" refers to the process of organizing the components of a system (sensory representation in this case) to achieve specific outcomes. (Dilts, et al., 1980, p. 2)

The NLP model embodies several key components: (a) rapport and communication, (b) gathering information, and (c) change strategies and interventions. Within the component of rapport and communication exist the dimensions of language representational systems, eye-accessing movements, verbal and nonverbal pacing and leading, communication translation skills, and representational system overlapping. The Language System Diagnostic Instrument is concerned with the most well-known dimension of this component, language-representational systems.

Representational Systems

The basic premise of NLP is that people perceive the world through information that is filtered through their sensory systems (Bandler & Grinder, 1975). Data are first processed at an unconscious level, experienced internally, and then manifested in external behavior. Language patterns are one method that people use to communicate their internal responses (Torres & Katz, 1983). NLP is a model for understanding the processes that people use to encode and transfer experience and to guide and modify their behavior. All the distinctions we make concerning our environment, both internal and external, are represented in terms of three sensory systems: the visual, auditory, and kinesthetic (Dilts & Meyers-Anderson, 1980). Smell and taste are not widely utilized ways of gaining information about the world (Bandler & Grinder, 1975).

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People who rely on their *visual* systems appear to run movies in their heads when remembering or storing information. If people are primarily *auditory*, i.e., taking information in through sounds, remembering may be like replaying a tape recorder, with original tones and dialog. People who are primarily *kinesthetic* respond to internal bodily feelings or tactile sense. They remember bodily sensations in recalling experiences.

Predicates

"Predicates" are verbs, adjectives, and adverbs that people use to describe the processes and relationships in their experiences (Bandler & Grinder, 1975). They are divided into three categories corresponding to the three major representational systems. People either see (visual) pictures and have images about their experiences, or they hear (auditory) sounds and talk about their experiences (Grinder & Bandler, 1976). For example, a visual person might say: "Look at the facts," "I see," "I get the picture," or "Let's get a perspective on this." An auditory person might say: "I hear you," "Let's listen to reason," or "It sounds like it will work." A kinesthetic person would be more likely to say: "It doesn't feel right," "Just hold on," "Let's get a handle on this," or "He didn't grasp the idea."

Each individual has a primary (more highly developed) representational system that he or she relies on during times of stress in problem solving as well as a secondary system that may be used in everyday conversation in combination with the primary system. A tertiary system may exist but it usually is beyond conscious awareness. For example, a person whose primary representational system is kinesthetic and whose secondary system is visual may be aware of what he "feels" and "sees" at any given moment, but not be in "tune" with the sounds and noises around him.

"Matching" Language Systems

It has been suggested that using the same primary language system as a client or trainee could help the counselor, consultant, or trainer to build rapport with the client or trainee (Grinder & Bandler, 1976). Although this theory has not been proven conclusively (Bandler & Grinder, 1979), the possibility exists that an HRD professional could increase rapport and trust with a client or trainee (or with the majority of group members) by using (reflecting) the other's primary language system.

It also seems that people will learn best when content is presented to them in their primary representational systems. A visual person will remember graphs, illustrations, and seeing new things. An auditory person will remember sounds and will be stimulated by changes in vocal tone, pitch, and pacing. A kinesthetic person will learn best from "hands on" experience and will remember how he or she "felt." Thus, more impact may be gained from showing things to visuals, providing interesting sounds for auditories, and working alongside kinesthetics. Conversely, if a trainee is kinesthetic or visual, and the training is presented verbally, the content may not be easily translated, and the trainee may not "get it." If a client experiences and describes things visually, and the consultant uses an auditory language system, the client may have difficulty understanding.

Of course, the trainer or consultant must first be aware of his or her own primary and secondary language systems. Then, by paying attention to the predicates used by others, the trainer or consultant can determine the systems valued by those others.

The following examples illustrate how matching or mismatching language systems can either enhance or frustrate communication.

Mismatched Language Systems

Learner (visual): "I just can't see myself doing any better in this training session."

Trainer (kinesthetic): "Well, how do you feel about not being able to do better?"

Learner (visual): "I just don't have a clear picture of what you want from me."

Trainer (kinesthetic): "How do you feel about not being able to get a handle on things that we are doing."

Learner (visual): "I don't see what you're trying to do. It's really hazy to me."

In this example, it is apparent that the trainer is not paying attention to the language system used by the learner, who "sees" the trainer as a person who just does not portray things clearly. On the other hand, the trainer may "feel" frustrated in his attempts to "reach" this trainee. Neither of them profits from this type of interaction.

Matched Language Systems

Learner (visual): "I just can't see myself doing any better in this training session."

Trainer (visual): "It did appear to me that you looked confused when I was giving out the work assignment."

Learner (visual): "I'm trying to get a picture of what you expect, but I just can't seem to focus it."

Trainer (visual): "I see. Let's look at it from some different angles and see if we can come up with a new perspective for you."

In this example, both the trainer and the learner are using the visual language system. They are actually "seeing" things from the same "perspective."

HRD professionals who know how to identify and use language systems will be better prepared to teach and relate to their trainees and clients. In addition, trainers can teach their trainees to expand their own uses of their nonpreferred representational systems. For example, a person who is primarily kinesthetic can learn to access information through the visual and auditory systems. This will increase the person's ability to learn in different contexts and from trainers with different language systems.

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This is an example of a lecturette that applies an HRD model.

THE JOHARI WINDOW: A MODEL FOR SOLICITING AND GIVING FEEDBACK

Philip G. Hanson

The process of giving and receiving feedback is one of the most important concepts in training. It is through feedback that we implement the poet's words, "to see ourselves as others see us." It is also through feedback that other people know how we see them. Feedback is a verbal or nonverbal communication to a person or group providing them with information about how their behavior is affecting you or the state of your here-and-now feelings and perceptions (giving feedback or self-disclosure). Feedback is also a reaction by others, usually in terms of their feelings and perceptions, about how your behavior is affecting them (receiving feedback). The term was borrowed from electrical engineering by Kurt Lewin, one of the founding fathers of laboratory training. In the field of rocketry, for example, each rocket has a built-in apparatus that sends messages to a steering mechanism on the ground. When the rocket is off target, these messages come back to the steering mechanism, which makes adjustments and puts the rocket back on target again. In laboratory training, the group acts as a steering or corrective mechanism for individual members who, through the process of feedback, can be kept on target in terms of their own learning goals.

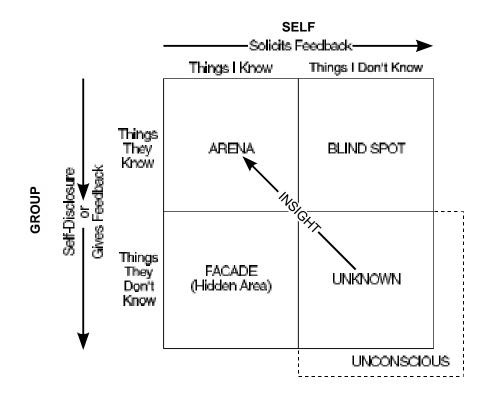
The process of giving and receiving feedback can be illustrated through a model called the Johari window. The window was developed by two psychologists, Joseph Luft and Harry Ingham, for their program in group process. The model can be seen as a communication window through which you give and receive information about yourself and others.

Looking at the four panes in terms of columns and rows, the two columns represent the *self* and the two rows represent the *group*. Column one contains "things that I know about myself"; column two contains "things that I do not know about myself." Row one contains "things that the group knows about me"; row two contains "things that the group does not know about me." The information contained in these rows and columns is not static but moves from one pane to another as the level of mutual trust and the exchange of feedback varies in the group. As a consequence of this movement, the size and shape of the panes within the window will vary.

The first pane, called the Arena, contains things that I know about myself and about which the group knows. It is an area characterized by free and open exchange of information between myself and others. The behavior here is public and available to everyone. The Arena increases in size as the level of trust increases between individuals

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or between the individual and the group and more information, particularly personally relevant information, is shared.



The second pane, the Blind Spot, contains information that I do not know about myself but of which the group may know. As I begin to participate in the group, I communicate all kinds of information of which I am not aware, but which is being picked up by other people. This information may be in the form of verbal cues, mannerisms, the way I say things, or the style in which I relate to others. The extent to which we are insensitive to much of our own behavior and what it may communicate to others can be quite surprising and disconcerting. For example, a group member once told me that every time I was asked to comment on some personal or group issue, I always coughed before I answered.

In pane three are things that I know about myself but of which the group is unaware. For one reason or another I keep this information hidden from them. My fear may be that if the group knew of my feelings, perceptions, and opinions about the group or individuals in the group, they might reject, attack, or hurt me in some way. As a consequence, I withhold this information. This pane is called the "Facade" or "Hidden Area." One of the reasons I may keep this information to myself is that I do not see the supportive elements in the group. My assumption is that if I start revealing my feelings, thoughts, and reactions, group members might judge me negatively. I cannot find out, however, how members will really react unless I test these assumptions and reveal something of myself. In other words, if I do not take some risks, I will never learn the

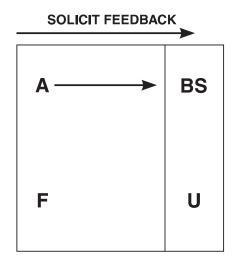
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reality or unreality of my assumptions. On the other hand, I may keep certain kinds of information to myself when my motives for doing so are to control or manipulate others.

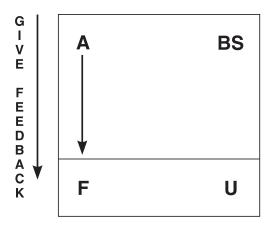
The last pane contains things that neither myself nor the group knows about me. Some of this material may be so far below the surface that I may never become aware of it. Other material, however, may be below the surface of awareness to both myself and the group but can be made public through an exchange of feedback. This area is called the "Unknown" and may represent such things as intrapersonal dynamics, early childhood memories, latent potentialities, and unrecognized resources. Since the internal boundaries can move backward and forward or up and down as a consequence of soliciting or giving feedback, it would be possible to have a window in which there would be no Unknown. Since knowing *all* about oneself is extremely unlikely, the Unknown in the model illustrated is extended so that part of it will always remain unknown. If you are inclined to think in Freudian terms, you can call this extension the "Unconscious."

One goal we may set for ourselves in the group setting is to decrease our Blind Spots, i.e., move the vertical line to the right. How can I reduce my Blind Spot? Since this area contains information that the group members know about me but of which I am unaware, the only way I can increase my awareness of this material is to get feedback from the group. As a consequence, I need to develop a receptive attitude to encourage group members to give me feedback. That is, I need to actively solicit feedback from group members in such a way that they will feel comfortable in giving it to me. The more I do this, the more the vertical line will move to the right.



Another goal we may set for ourselves, in terms of our model, is to reduce our Facades, i.e., move the horizontal line down. How can I reduce my Facade? Since this area contains information that I have been keeping from the group, I can reduce my Facade by giving feedback to the group or group members concerning my reactions to what is going on in the group and inside of me. In this instance, I am giving feedback or disclosing myself in terms of my perceptions, feelings, and opinions about things in myself and in others. Through this process, the group knows where I stand and does not need to guess about or interpret what my behavior means. The more self-disclosure and feedback I give, the farther down I push the horizontal line.

You will notice that while we are reducing our Blind Spots and Facades through the process of giving and soliciting feedback, we are, at the same time, increasing the size of our Arena or public area.

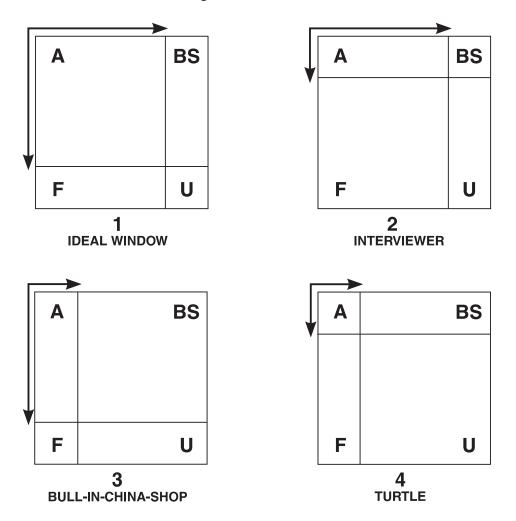


In the process of giving and asking for feedback, some people tend to do much more of one than the other, thereby creating an imbalance of these two behaviors. This imbalance may have consequences in terms of the individual's effectiveness in the group and group members' reactions to the person. The *size and shape of the Arena*, therefore, is a function of both the amount of feedback shared and the ratio of giving versus soliciting feedback.

In order to give you some idea of how to interpret windows, I would like to describe four different shapes that characterize extreme ratios in terms of soliciting and giving feedback. These descriptions will give you some idea of how people, characterized by these windows, might appear to others in a group setting.

Number one is an "Ideal Window" in a group situation or in any other relationship that is significant to the person. The size of the Arena increases as the level of trust in the group increases, and the norms that have been developed for giving and receiving feedback facilitate this kind of exchange. The large Arena suggests that much of the person's behavior is aboveboard and open to other group members. As a consequence, there is less tendency for other members to interpret (or misinterpret) or project more personal meanings into the person's behavior. Very little guesswork is needed to understand what the person is trying to do or communicate when his interactions are open both in terms of soliciting and giving feedback. It is not necessary, however, to have a large Arena with everybody. The persons with whom you have casual acquaintances may see this kind of openness as threatening or inappropriate in terms of the kinds of relationships you have with them. It is important to note, however, in your group or with some of your more significant relationships, that when most of your feelings, perceptions, and opinions are public, neither person has to engage in game behavior.

The large Facade in window number two suggests a person whose characteristic participation style is to ask questions of the group but not to give information or feedback. Thus the size of the Facade is inversely related to the amount of information or feedback flowing out from the individual. She responds to the group norm to maintain a reasonable level of participation, however, by soliciting information. Many of her interventions are in the form of: "What do you think about this?" "How would you have acted if you were in my shoes?" "How do you feel about what I just said?" "What is your opinion about the group?" She wants to know where other people stand before making any commitment. You will notice that her "soliciting feedback" arrow is long, whereas her "giving feedback" arrow is short. Because this person does not commit to anything in the group, it is hard to know where she stands on issues. At some point in the group's history, other members may confront her with a statement similar to "Hey, you are always asking me how I feel about what's going on, but you never tell me how you feel." This style, characterized as the "Interviewer," may eventually evoke reactions of irritation, distrust, and withholding.



Window number three has a large Blind Spot. This person maintains his level of interaction primarily by giving feedback but soliciting very little. His participation style is to tell the group what he thinks of them, how he feels about what is going on in the group, and where he stands on group issues. Sometimes he may lash out at group members or criticize the group as a whole, believing that he is being open and aboveboard. For one reason or other, however, he either appears to be insensitive to the feedback given to him or does not hear what group members tell him. He may either be a poor listener or he may respond to feedback in such a way that group members are reluctant to continue to give him feedback, e.g., gets angry, cries, threatens to leave. As a consequence, he does not know how he is coming across to other people or what his impact is on them. Because he does not appear to utilize the corrective function (reality) of group feedback, many of his reactions or self-disclosures appear out of touch, evasive, or distorted. The result of this oneway communication (from him to others) is that he persists in behaving ineffectively. Since he is insensitive to the steering function of the group, he does not know what behaviors to change. His "soliciting feedback" arrow is very short, and his "giving feedback" arrow is long. This style of interaction comes across as a "Bull-in-the-China-Shop."

The last window, having the large Unknown, represents the person who does not know much about herself, nor does the group know much about her. She may be the silent member or the "observer" in the group who neither gives nor asks for feedback. As you can see in window number four, the "soliciting" and "giving feedback" arrows are very short. She is the mysterious one in the group because it is difficult for group members to know where this person stands in the group or where they stand with her. She appears to have a shell around her that insulates her from other group members. When confronted about her lack of participation, she may respond with, "I learn more by listening." Group members who are not actively involved in the group or who do not participate get very little feedback because they do not provide the group with any data to which they can react. The people who are very active in the group expose more facets of themselves and provide the group members with more information about which they can give feedback. Although this kind of exchange may cause the active participants some discomfort, they learn considerably more than the participants who do not give or solicit feedback. The person characterizing the fourth window is called the "Turtle" because her shell keeps people from getting in and her from getting out. It takes a considerable amount of energy to maintain an Arena this small in a group situation because pressure that group norms exert against this kind of behavior. Energy channeled in maintaining a closed system is not available for self-exploration and personal growth.

The goal of soliciting feedback and self-disclosure or giving feedback is to move information from the Blind Spot and the Facade into the Arena, where it is available to everyone. In addition, through the process of giving and receiving feedback, new information can move from the Unknown into the Arena. A person may have an "aha" experience when he or she suddenly perceives a relationship between a here-and-now transaction in the group and some previous event. Movement of information from the Unknown into the Arena can be called "insight" or "inspiration."

It is not an easy task to give feedback in such a way that it can be perceived without threat to the other person. This technique requires practice in developing sensitivity to other people's needs and being able to put oneself in other people's shoes. Some people feel that giving and receiving feedback cannot be learned solely by practice but requires a basic philosophy or set of values that must be learned first. This basic philosophy is that the individual be accepting of himself or herself and others. As this acceptance of self and others increases, the need to give feedback that can be construed as evaluative or judgmental decreases.

A BACKGROUND TO DESIGN IN HUMAN RESOURCE DEVELOPMENT

A BRIEF HISTORY OF HUMAN RESOURCE DEVELOPMENT

Prior to the late 1940s, group work was in the province of those in the "helping professions": psychiatrists, psychologists, counselors, nurses, and social workers. With the publication of Lewin's (1947) studies of behavior in small groups and the emergence of the National Training Laboratories and similar organizations, the field broadened considerably. The laboratory method of learning and change (Benne, Bradford, Gibb & Lippitt, 1975; Bradford, Gibb & Benne, 1964) furthered the concept of human relations training and the experiential approach. Participants in training groups (T-groups) identified problems that emerged, learned the concepts and skills required to deal with those issues, and collaborated in the problem-solving process. Training group leaders served not as instructors but as "facilitators." The group became more than a setting for therapy or an object for study; it became a vehicle for learning and change in a wide variety of settings. There was a shift from observers studying the group to the group members studying themselves. The term "helper" began to include all those who facilitated group work, including teachers, administrators, community leaders, change agents, and, more recently, managers and supervisors.

Group training usually takes place in a workshop setting. The primary focus is how the individual relates to and interacts with other individuals and with groups, in terms of such things as leadership and influence, handling conflict, expressing feelings, giving and receiving feedback, competition and cooperation, problem solving, and increasing awareness of oneself and one's impact on others.

In 1969, Pfeiffer & Company (then called "University Associates") published the first *Handbook of Structured Experiences for Human Relations Training*; there are now ten volumes in all (Pfeiffer & Jones, 1969-1981; Pfeiffer, 1983-1985). Each of these books contains twenty-four structured experiences, with guidelines for conducting the activity, processing the feelings and insights that emerge, and helping the participants to focus the learnings and plan applications in their back-home settings. The first *Annual Handbook for Group Facilitators* was published in 1972. In the 1973 Annual, the concept of the experiential learning cycle was refined, and Pfeiffer & Company became a primary proponent of the necessity of working through all phases of the cycle. There are now twenty-nine *Annuals*, each of which contains a variety of structured experiences, instruments, lecturettes, and articles designed to aid in the professional development of group facilitators. In the last two decades, we and other organizations such as NTL also have offered a variety of training programs for the development of HRD practitioners. The continuing popularity of these training programs and our HRD

publications (as well as thousands of others published for training and development professionals, organizational consultants, and managers in the last twenty years) demonstrates that there is a real need for training and development materials and that they have become an established part of the way in which we live and work.

In the last ten years, the field has evolved considerably. Training and organization development have become recognized areas of professional endeavor. Most mediumsized and large organizations have recognized the need for training and development functions. Partly because of a misunderstanding of and reaction to the type of very personal experiences developed in early groups and in settings such as Esalen in the 1960s, and partly because of the realities of organizational life, the emphasis has swung away from purely personal awareness and toward the individual's impact on and contribution to the work group and the organization.

As training, organization development, and change agentry became part of organizational life, people began to realize the interrelationships among the various helping functions (personnel, training, organization development, and many aspects of management). A new awareness of what they were all about resulted in a new term and a "new" profession: human resource development or "HRD."

The field of HRD has grown extensively in the last two decades. At the end of the 1980s, it was estimated that organizations in the United States alone spent approximately \$30 billion per year on formal employee training programs. In addition, approximately \$180 billion per year was spent on informal training and coaching (Carnevale, 1986).

PRINCIPLES OF ADULT LEARNING

Fortunately, many of the key leaders in the field of HRD tend to be professionals in adult education, industrial/organizational psychology, or some other branch of the behavioral sciences. These people have a sound understanding of the principles of adult education, originally developed by Malcolm Knowles (1972, 1975, 1978). From their writings and examples, we have learned some basic truths about what we are trying to do. The foremost of these is that adults are different from children; they are aware of their abilities and their experiences and they require more involvement in the learning process. Others include the following (Goad, 1982; Hanson, 1981):

- Learning is a process—as opposed to a series of finite, unrelated steps—that lasts throughout the entire life span of most people.
- For optimum transfer of learning, the learner must be actively involved in the learning experience, not a passive recipient of information.
- Each learner must be responsible for his or her own learning.
- The learning process has an affective (emotional) as well as an intellectual component.

- Adults learn by doing; they want to be involved. One should never merely demonstrate how to do something if an adult learner actually can perform the task, even if coaching is required and it takes longer that way.
- Problems and examples must be realistic and relevant to the learners.
- Adults relate their learning to what they already know. It is wise to learn something about the backgrounds of the participants and to provide examples that they can understand in their own frames of reference.
- An informal environment works best. Trying to intimidate adults causes resentment and tension, and these inhibit learning.
- Variety stimulates. It is a good idea to try to appeal to all five of the learners' senses, in particular to those aspects identified by neurolinguistic programming: the visual, the kinesthetic, and the auditory. A change of pace and a variety of learning techniques help to mitigate boredom and fatigue.
- Learning flourishes in a win-win, nonjudgmental environment. The norms of the training setting (discussed later in this section) are violated by tests and grading procedures. Checking learning objectives is far more effective.
- The training facilitator is a change agent. The trainer's role is to present information or skills or to create an environment in which exploration can take place. The participants' role is to take what is offered and apply it in a way that is relevant and best for them. The trainer's responsibility is to facilitate. The participants' responsibility is to learn.

Traditional childhood learning, especially in public education, is oriented toward the teacher imparting knowledge to the students. Adult learning is a process of one person (the facilitator) providing the opportunity for another person (the participant) to acquire knowledge, skills, and/or awareness. Adults are more used to exercising choice; they demand more choice in the matter of what they will believe, make their own, and apply. For these reasons, experiential learning has many advantages over the traditional classroom approach, the primary one being that it is more effective—it works better. In fact, many educators now believe that it works better with children as well.

READINESS, MOTIVATION, AND CHANGE

Individuals do not change unless they are both motivated to do so and ready to undergo the process. Adults come to training experiences with preconceptions about what will happen, based on their past experiences. Participants who have taken part in experiential education previously may feel relatively prepared to engage in training. For those who have not participated in this type of training, knowing that it will not be the same as the traditional classroom method may be a source of relief or one of anxiety and fear of the unknown. As we will discuss in more detail later, it is extremely important that the goals of the program be stated clearly and that the participants be advised during the first session of what they will be expected to do during the training program.

People who choose to attend a training program generally are motivated for some reason, but people who are sent may well not be. If participants have been sent to the training by their supervisors, they may be resistant. At the very beginning of the training program, the facilitator should define the objectives and state what the possible benefits of the training might be to the participants. Individuals' feelings of resistance need to be acknowledged and legitimized at this time. The acceptance and encouragement of the facilitator and the other group members can go a long way toward encouraging someone to at least "try it." If resistance is not dealt with, it can become a chronic problem for the group.

A primary factor in generating motivation is the participants perception that the training is relevant to their needs. The enthusiastic recommendations of previous participants can help to create this perception, as can printed descriptions of the program that are distributed to potential participants prior to the actual training event. If an organization is sponsoring the program, it, too, can help to disseminate information about the personal and professional benefits of the training.

Once participants enter the program and questions of readiness and motivation have been dealt with and resolved, the participants will become involved in the process of change. This process, as described by Lewin (1947) consists of three major phases: unfreezing, change, and refreezing.



The Cycle of Change

Unless the participants have benefited from a considerable amount of previous training, they will come to the event in a "frozen" state in terms of openness to learning. Each will carry unexamined attitudes and habitual modes of perception and response. Before they can undergo change, they must unfreeze their typical attitudes and behaviors—a process that can be very threatening. In order to reduce the threat and the resulting resistance, the participants must examine their old attitudes and/or behaviors and decide that they are willing to experiment to see if some changes would be beneficial.

The atmosphere of the training group is important in facilitating change. The process is greatly enhanced when an atmosphere of support, mutual risk taking, and trust exists. The democracy and intimacy that are part of the group process support self-examination and reduce the risk of trying out new responses. In fact, the mutual process among participants creates a norm that makes change desirable, rather than a sign of weakness or failure. As participants become involved in the training group, they begin to share its responsibilities, and the group becomes more cohesive. Fears about changing are reduced, and risk taking is rewarded.

Depending on the training objectives, change can be facilitated by a number of techniques. Primarily it involves the participants examining some aspect of themselves or the area of focus, experimenting with new ways of thinking or behaving, learning new concepts that they can relate to their existing knowledge and use as models for new ways of thinking or behaving, and practicing the change with feedback and support from the facilitator and the other group members. Later in this section, we discuss the technologies that can be used to aid in this process.

Refreezing is the process by which the new attitudes and behaviors are integrated into the participants' own ways of thinking and being. This integration actually is not a frozen state, because the process of change is a cycle: once experienced it opens up the individual to experiment and change again. The extent to which this takes place depends on the extent to which the person identifies with and internalizes the change. This, in turn, is dependent on the degree and quality of support and reinforcement the person receives. If one's changed attitudes and behaviors lead to more satisfying and effective relationships or a greater sense of self awareness, or if others provide positive feedback, there is an incentive to continue the change.

EXPERIENTIAL EDUCATION

Much of what is learned in HRD is generated by the activities and interactions of the participants in the learning group. Participants are encouraged to experiment with new ways of behaving. They abstract principles, hypotheses, and theories that have some action implications from their experiences. This process is facilitated by an experienced trainer or consultant who has a background in the behavioral sciences and experiential education.

The goals of a particular training event will depend on the needs of the participants. They may be learning how to listen, how to communicate better, how to work in groups, how to negotiate, how to solve problems, how to manage conflict, how to conduct meetings, how to conduct performance appraisals, how to plan, how to develop strategies, how to be a trainer, how to be a consultant, how to perform specific job skills, or any of numerous other objectives. The goals of experiential education, on the other hand, are more general. They are: (a) to develop physical, emotional, and intellectual awareness of oneself; (b) to learn how groups function and the consequences of different group actions or processes; (c) to learn how groups interact with one another when they are competing or cooperating; (d) to learn more effective ways to solve problems; and (e) to learn how to learn (Hanson, 1981). The latter is basic to all the other goals in that it is a process through which continued personal growth is possible. It requires a willingness to explore, to examine (including oneself and one's values), to experiment, and to take risks.

Experiential learning techniques are used frequently in conjunction with other approaches in order to balance the cognitive, physical, and emotional components of the learning process. For example, rather than just reading or hearing about decision-making processes, participants in a training program may be given a problem on which they must reach some agreement as a group. At the end of the time allotted for the group's work, the group members are helped to discuss and process their interactions in order to study how decisions were made and how these decisions affected the members' commitments to the final product. At this point cognitive material (e.g., theories or models of decision making) may be introduced. This cognitive material is better understood because the participants can link it to their own experiences and their feelings about the process. Later in this section, we discuss the various types of training technologies and tell how to link them to the goals of the training.

PREDESIGN CONCERNS

Before a training event can be designed, the training objectives must be established. For training objectives to be clear, there often must be a training *needs assessment*. Also, it is much more difficult to design training if one does not know how and by whom the training will be *evaluated*. So, although needs assessment and evaluation are separate HRD functions from design, in reality they may be performed by the same people. Because of their interrelationships, they all are considered to some degree in this section.

Design is the bridge between what the trainer wants to accomplish with (or in) a training event and how it will be done. Before attempting to design a training event, one should have answers to eight basic questions:

- 1. Why is the training being conducted?
- 2. What is to be the focus of the training?
- 3. Who is to be trained?
- 4. When is the training to be done?
- 5. Where is the training to be conducted?
- 6. Who is to conduct the training?
- 7. How will the training be designed?
- 8. Why, how, and by whom will the training be evaluated?

WHY?: THE NEEDS ASSESSMENT

The preferred way to answer the "why" question is by conducting a needs assessment. It is one of the most basic skills in establishing objectives for a training event. Such an assessment can provide clarity about the expectations of the client system and can help to reconcile them with the needs of the participants. (E.g., do you want skill training or awareness expansion, team building or communication training? What are the priorities? Can these be accomplished in time allowed?) There also can be several other beneficial outcomes, including the following (Warshauer, 1988):

- Increasing the commitment of management and potential participants to the training and development effort;
- Increasing the visibility of the training function;
- Clarifying crucial organizational issues;
- Providing for the best use of limited resources;

- Providing new program and design ideas; and
- Formulating strategies for how to proceed with the training efforts.

It is not always possible to do a formal or full-scale needs assessment (some clients are sure that they know what is needed and will insist that you do just that), but it almost always is preferable. As an absolute minimum, we encourage an informal needs assessment, i.e., obtain the answers (from at least a sample of the client population) to the following questions:

- Why is the training being conducted? What is the need?
- What is expected to change as a result of this training (e.g., knowledge, skills, or attitudes—for individuals, groups, or a system)?
- What will be the impact of this training (on individuals, groups, the system)?
- How will the learnings be reinforced?
- How will results be monitored/evaluated?

A number of techniques are available for obtaining answers to these and other pertinent questions. The facilitator must consider each method and determine which (or which combination) is most appropriate to the particular client system.

DATA-COLLECTION TECHNIQUES

Several methods can be used to collect data from the sources that are available. Some require the involvement of individuals or groups; others, such as observation and review of existing data, require less direct involvement. Frequently, two or more techniques will be used in concert (e.g., a survey questionnaire and interviews), thus expanding the range and type of information gathered. The following is a partial listing of techniques for collecting information. For a more complete discussion of data-collection techniques, refer to Bouchard (1976) and Nadler (1977).

Individually Oriented Methods

Most data-collection techniques involve either the people who are to be trained or individuals who have frequent contact with them. These techniques include questionnaires, interviews, and tests. Each method has unique features that influence its appropriateness.

Interviews

The interview is one of the most commonly used methods for gathering data, but it is most appropriate when the following conditions exist:

Individually Oriented Methods	Interviews Instruments (Questionnaires, Surveys, etc.) Tests
Group-Oriented Methods	Sensing Interviews Committees Delphi Technique Nominal-Group Technique Brainstorming
Observation	Systematic Observation Complete Observation Participant Observation
Review of Existing Data	Sensitivity Originality

- When the information to be shared is of a *personal* or *sensitive* nature;
- When some of the *questions* to be asked may need to be clarified or explained;
- When some of the interviewees' *answers* may need to be clarified or explained;
- When the data collector *does not know all the issues*, so cannot design an instrument that will pinpoint them;
- When the interviewer may want to *change gears or pursue topics further* during the questioning, based on the information that is received;
- When the group of people who will provide the information is *small* enough to allow one-on-one interviews;
- When there is *time* to conduct one-on-one interviews with all those who hold relevant information, as well as time to review the responses and extract relevant data;
- When the data collector has the *skill and means* to collate, tabulate, analyze, and interpret the various data that will be obtained.

It often is best if the person who will be conducting the interview is a neutral third party, i.e., one of the facilitators who will be designing the training, not the interviewee's boss or someone with an affiliation within the organization. This will increase the likelihood of an honest response and can help to eliminate any suspicion of bias. It must be remembered, however, that there are some people who will view any outsider as a "spy." It is helpful if the credentials of the interviewer and the reason why he or she was selected can be published in the system prior to the actual interviewing process. It is then up to the interviewer to establish a comfortable atmosphere once each interview has begun. The following is a basic outline of a typical interviewing process:

1. *Starting Out*. One problem associated with data-gathering interviews is determining whom to interview. If a training program is to be conducted within an organization, it probably is a good idea to interview a cross-section of the prospective participants (and their managers, if the participants themselves are not all managers), as well as the person who has arranged for the training. Once you have determined who will be interviewed, provide the people to be interviewed with enough notice of or details about the meeting for them to prepare themselves adequately. An unprepared interviewee usually can offer only opinions, unsubstantiated by "hard" data. Such information also may be superficial, especially if the interviewee is relatively unfamiliar with the subject or the interviewer is not highly skilled in interviewing techniques.

When selecting a room for the interview, pay attention to the surroundings. Seating should be comfortable but not too comfortable. The person being interviewed should not be faced with bright light from a window or other source. There should be a table or other writing surface for taking notes.

Plan the interview time so as to eliminate interruptions. This may mean scheduling it early or late. Be there a little early to organize your thoughts and materials, and start on time. If possible, know the name and position of the person to be interviewed and his or her relationship to the rest of the potential participant group. Welcome the person by name, offer a seat, and introduce yourself, stating why you are there. State the purpose of the interview, who else will be interviewed, and how the data will be used.

Next, describe the norms that you would like to establish, e.g., honesty and risk taking. Make it clear that what the interviewee says will be anonymous but not confidential; that is, the data from all interviews will be tabulated and reported, but "who" said "what" will not be revealed. Encourage the person to try to relax and to say what he or she really thinks or feels. Ask the person to agree to tell you if you do not ask questions clearly. Then explain the procedure: say that you will take notes (or record the answers) while the person is talking to be sure that you get the real meaning of what is said, rather than relying on your memory of it. Obtain written or recorded permission if you will be recording the person's responses on tape. Say that you will review your notes with the person at the end of the interview in order to check the phrasing. Finally, estimate the amount of time that the interview will take.

2. Asking Questions. Prepare the questions that you will ask ahead of time, so that when actually conducting the interviews you ask everyone the same basic questions. (Of course, during the course of a particular interview, you can ask the individual additional questions to clarify an answer or to follow new, pertinent trains of thought.) Check to make sure that you understand the questions that you will be asking.

Put the questions in a logical sequence, starting with less complicated and less threatening questions first. Ask open-ended questions, Such as "why . . .," "how . . .," "what . . .," and "what do you think about . . .?" This allows the person to explain facts, details, and reasons while answering the question. Do not phrase questions negatively because this could be seen as biased; make them neutral. For example, rather than

saying "Don't you think that . . .," ask "How do you think . . .?" It is important not to bias the question or lead the witness into any particular type of response.

While the interviewee is talking, take notes, using the person's own words. Try to maintain an interested, encouraging appearance and—above all—do not criticize the person's answers, rationale, or phrasing. If it is necessary to ask questions of clarification, make it clear that you are doing so merely in order to be sure that you understand accurately what the person is trying to say. This is a good time to practice active listening. Watch for verbal and nonverbal cues that could indicate that the interviewee is reluctant to discuss a particular subject, uncomfortable with the interview, overly eager to press a certain point, confused, tired, etc. You may need to change your manner of questioning or take a different tack.

If unfavorable information is introduced, there always is the fear that the source of the information will be revealed. Unless an atmosphere of trust is developed with the interviewee, the information shared may be slanted. It can take time to develop a trusting relationship. Some people never will "open up" to an interviewer, and many people will tell only what they think the interviewer wants to hear. Information acquired under such circumstances should be evaluated carefully and compared with data acquired from other sources.

3. *Finishing Up*. As you approach the end of the interview wind down the complexity of the questions. Ask the interviewee if there is anything important about the topic that you did not ask or anything else that the person wants to say. Be sure to leave enough time to summarize the person's comments so that he or she can check your understanding. Finally thank the person for participating and reiterate what the next steps will be (that the data will be tabulated, how it will be used and by whom, etc.). Leave enough time to complete your notes before the next interview is scheduled to begin.

Instruments

The questionnaire, survey, or rating scale is another commonly used method of collecting data. Any instrument should be checked for its ability to measure what is desired (validity) and the consistency, over time, of the ratings obtained (reliability). Items or questions on the instrument form should not be phrased so that the answers received are biased.

Closed-ended questions limit the responses an individual can make. For example, if the choices on a questionnaire are limited to "team development," "communication training," and "performance appraisal," but the respondent actually thinks that the problem is a lack of organizational direction, it is unlikely that the respondent will write in "more organizational direction" even if a space is left for "other." Another way in which bias can be introduced is through leading questions, those that indicate to the respondents how they are expected to answer. For example, if asked whether assistance in improving leadership abilities would be useful, who would say no? This does not, however, mean that leadership training actually is a crucial need. For a complete discussion of how to select, develop, and use instruments (including organizational surveys and instruments used for research), refer to Training Technologies Volume 22 in the *Pfeiffer & Company Library*.

Tests

Tests also can be used to assess the skills, abilities, or perspectives of an individual for diagnostic purposes. Tests are probably the least used of the assessment techniques, and are used primarily by designers of training programs to determine how accomplished the participants are before starting the program. This avoids repeating information that is already known or assuming too much prior knowledge. One of the major disadvantages of tests is that they frequently are perceived as threatening; as a result, people become quite defensive about their scores. If it is necessary to use a test prior to a skill-training program, the purpose of the test should be stated explicitly.

Group-Oriented Methods

In contrast to individually oriented methods of data collection, group-oriented methods allow people to receive assistance from other group members to support their views. Such techniques also allow members to "piggyback" on the ideas of others, generating expanded information. However, they also can limit opinions that do not represent the majority viewpoint. This limitation can be an advantage or a disadvantage, depending on whether the researcher wants a variety of ideas or ideas common to the majority of group members. The most commonly used techniques for collecting data from groups are sensing interviews, focus groups, committees, the Delphi technique, the nominalgroup technique, and brainstorming.

Sensing Interviews

Sensing interviews may be preferable to individual interviews in terms of time utilization and group support of ideas, but they do have potential weaknesses. First, as with most data-collection methods, respondents must feel that their answers will be used in the intended manner. Trust of the leader and the other group members is a prerequisite to an honest, open discussion. Second, people who were not invited to be members of the group may think that they were excluded deliberately; thus, they may feel threatened. An explanation of the purpose of the sensing interview should be made to alleviate the fears of such people.

Focus Groups

This technique is used widely in marketing. A group of customers, users, or consumers is identified (often based on certain characteristics) and brought together to provide feedback on products, services, etc. It is much like a customer survey, but the respondents are not selected randomly. One pitfall of this method is that people may not be totally honest in their answers, e.g., they may say that they travel to Europe

frequently because they wish they did or want to be seen as sophisticated. Recent studies indicate that focus-group responses tend to be more reliable if the respondents are rewarded in some way (a nominal payment or gift), because they then feel a responsibility to respond honestly.

Committees

Committees may be ad hoc or permanent advisory groups whose purpose is to provide input and guidance in program design. Alternatively, functional committees can provide insight into particular problems. Often, committee members can see skill deficiencies, attitudinal barriers, or other factors that hinder performance. Because of their expertise, they also may be able to specify what would be most useful in overcoming particular problems.

The Delphi Technique

The Delphi technique (Bunning, 1979) is especially useful if it is necessary to obtain information from individuals in a variety of locations. Generally, the process starts with the selection of a panel of individuals who are knowledgeable about a particular area of concern. These individuals are requested to identify the major aspects of a specified issue. These issues are then integrated into a questionnaire that is sent back to the panel of experts, who are asked to indicate the extent of the problem. The responses are summarized and returned to the panel members with another questionnaire. This time the experts are asked to complete the questionnaire and to explain their rationale for deviating from the mean group response on each question. The process reveals both the group members' opinions and reasons for differences of opinion.

The Nominal-Group Technique

The nominal-group technique (Delbecq, Van de Ven & Gustafson, 1975; Ford, 1975) is somewhat similar to the Delphi technique. The major difference between the two methods is that in the NGT, the panel members meet as a group to discuss the various issues. The individuals participating in an NGT activity are given a subject or theme and asked to write their thoughts about the topic on a sheet of paper. The next step is to proceed around the group, asking each member to share one thought or idea with the group, in turn. These ideas are recorded without discussion until all ideas are shared and recorded.

The major advantages of the NGT are that it ensures that every group member contributes to the generation of ideas and that multiple facets of ideas are surfaced. It also helps to gain commitment from the participants because they have had equal opportunities to contribute and to evaluate ideas.

Brainstorming

Brainstorming is similar to the NGT. In this approach, ideas are voiced as they occur and are recorded without discussion of their merit. This allows participants to build on other members' ideas. Quantity of ideas is the first concern in brainstorming. After numerous ideas are generated and no new ideas are forthcoming, the discussion turns to the feasibility of the ideas. The major advantage of this approach is that "piggybacking" of ideas can occur. The technique does not, however, assure that all members will participate.

Observation

A third group of techniques used to collect data (and to verify data collected by other methods) is observation (Bouchard, 1976). The techniques range from observing a sample of behavior to some form of "undercover" observation by a concealed observer. The advantage of observation is that behavior is more natural and people are not required to provide the information directly. They continue to function as they would normally. Ideally, this would decrease the intervention impact caused by the data-collection process. Still, observation is likely to have some impact on behavior. Subjects being observed may "perform" for the observer and thus bias the data.

Systematic Observation

Systematic observation techniques frequently require a sampling of the behavior in question. For example, interactions between certain people could be observed on a random basis. After a series of observations, a pattern would evolve, showing what problems typically were encountered. If the observation revealed particular sources of problems, it might be deemed worthwhile to design a program (e.g., training in communication, listening, problem solving, conflict management, negotiation, etc.) to deal with the sources of the problems.

Complete Observation

Complete observation occurs when the observer openly uses a video camera, film camera, audio recorder, or other such technique to record relevant behavior. This method can yield massive amounts of information. It also can require large expenditures of time and money.

This technique can be used within a training program to record participant behavior during an activity. The primary purpose of such a recording would be to allow the trainer to discuss relevant issues with the trainees without interrupting the dynamics of the original session. However, it also would allow the trainers to analyze the session later, in order to improve the design of the training program. This type of observation also can be useful in analyzing meetings and other group events prior to and after a training intervention.

Participant Observation

In a final method of observation, the observer is also a participant. This may require the researcher to actually interact in a task-related way with one or more members of the group in order to learn what is involved in doing the work. Participation gives the data collector added credibility as well as relevant examples.

In another version of participant observation, the observer *surreptitiously* observes the group. Ideally, this method reduces the bias caused when the subjects realize that they are being observed. However, because the observer is intervening in the group's activities, his or her actions can bias the results. A potentially more serious issue is one of ethics and credibility. One must consider how people will respond to data gathered by such means and whether they would trust a leader or trainer who used such techniques to gather data. This method would be especially counterproductive if the program based on the data were to require openness and trust among the participants.

Review of Existing Data

A review of existing data is useful in gathering information because the information is collected after the action, so there is no danger of biasing the behavior. An example of this technique is a review of critical incidents or performance evaluations to determine employee strengths and weaknesses. It may be possible to trace a number of incidents to common causes and, thus, to identify potential problem areas.

Although a variety of data are available in most organizations, there do not seem to be well-established techniques for collecting such data. Information collected often is in the form of case studies, which may be used to demonstrate a point during a program, indicate needs for program development, or verify the results of information acquired through other means. The keys to the use of this data-collection technique seem to be *sensitivity* and *originality*. One must be very sensitive to the type, quality, and initial purpose of the information being reviewed. Creativity and originality in interpreting and analyzing the data can lead to new insights. Historical data also can be used to supplement and confirm data collected from other sources and by other means.

DATA ANALYSIS

After the sources of needed information are identified and the data are collected, it is necessary to analyze and interpret the data. The procedures that frequently are used include some form of gap analysis, scaling methods, weighting formulas, and consensus. These procedures can be used to analyze data collected by a variety of techniques, and more than one procedure can be used to analyze a group of data. These techniques are as follows.

Gap Analysis		
Scaling Methods:	Rating Scales Rankings Nominal-Group Technique	
Weighting Formulas		
Consensus:	Voting Compromise	

Gap Analysis

A fairly easy method of analyzing data is examining the gap between where the organization or group "is" on a particular issue and where it should be or where it would like to be. The differences between actual and desired states indicate potential areas for program development. For example, a difference between 50 percent turnover for a particular firm or group versus a 10 percent average turnover for the industry would signal a potential problem. Once such differences are identified, it is necessary to attach priorities to the gaps to guide program development.

Scaling Methods

Scaling methods such as measurements on a continuum or rankings can be used to establish the relative significance of issues. Typical scaling procedures include the following.

Rating Scales

Scales frequently are used to show the importance or magnitude of various issues to the person completing the scale. The most frequently used is the Likert scale, on which the respondent indicates agreement on a continuum ranging from "strongly agree" to "strongly disagree." Other frequently used measurements include ranges of importance or desirability.

 Always
 Almost always
 Sometimes
 Almost never
 Never

 The semantic differential rating scale is used to rate bipolar attributes, for example:
 My role in the group is . . .
 Image: Comparis a comparison of the group is . . .

 Active
 Passive

 Strong
 Weak

I participate actively in the group's deliberations.

A variation of this technique is to ask the respondent to mark a scale to indicate where the respondent, group, or organization is and where it should be on particular issues. This helps to identify major gaps between the current and desired states (i.e., training needs). Other types of rating scales include forced-choice scales and sociometric ratings (rankings).

Rankings

Various data can be rank ordered in terms of their importance, desirability, frequency, etc. Individual rankings then can be combined to establish the relative value that the group places on each issue. Sociometric ratings (of individuals) allow comparison (e.g., who rated whom or what lowest and highest), thereby generating more data than just the individual rankings themselves. The design and use of these scaling methods are described in more detail in Volume 22.

The Nominal-Group Technique

In the nominal-group technique, discussed previously, the participants in a group rank the items identified in the group discussion in order of importance. The responses of all participants are compiled, and the results are reported to the group. The group ranking then can be used to establish priorities for discussion, training, or other program design.

Weighting Formulas

One of the problems in using scales is that no mechanism is provided to indicate the relative differences in the importance of the scales. Weighting formulas allow the respondents or diagnostician to attach more value to one scale than another. A common weighting method is to ask the respondent to indicate how important a particular attribute (skill, attitude, need) is, how frequently the attribute is encountered, or how deficient the subject feels in terms of the attribute. In one example, a study (Thomas & Sireno, 1980) asked managers to indicate how important a particular competency was for their subordinates, how frequently the subordinates needed the competency, and how well prepared the subordinates were in that competency. These three responses were then combined to determine the need for a program to develop the competency. This study also identified substantially different priorities for job competencies among industries—again supporting the need to customize training programs rather than interpreting training needs to fit an existing program.

Consensus

One of the most commonly used methods of reaching agreement is consensus (a majority or all members agree on an issue, a ranking, or a next step). This is not to be confused with voting, compromising, or "horse trading." Although the latter often are easy methods for decision making, they may not include a careful weighing of all the relevant information.

Voting

If a group uses a nonquantitative method to collect information, a vote of the members often is used to determine the implications of the data collected. However, one or two persons or issues frequently dominate the discussion, or individuals with high status—such as experts or top managers—often voice their views on the subject. Unless there is information that clearly contradicts these high-powered views, the subsequent vote and recommended actions will likely follow along.

Compromise

If there are a number of strong feelings about an issue, a common solution is a compromise. This often results in a nonthreatening, suboptimum recommendation that is acceptable to all but will do little to solve the problem. In fact, a compromise program could worsen the problem by raising the expectations of participants. Then, if the expected results are not achieved, the program, its sponsor, its designers, and its facilitators look bad.

Summary

To design a training program or intervention, the program designer should consider the possible sources of data, how the data will be collected, and how the data will be analyzed. Although it is possible to build a program based on an interview with a supervisor or a few potential participants, a wider perspective is helpful in assessing the needs that the program should attempt to meet. In general, the more sources of information, techniques of data collection, and methods of data analysis that can be used to diagnose a problem, the better the understanding one has of the problem or training need.

WHAT?: THE TRAINING OBJECTIVES

Once the needs assessment has been completed, the data can be analyzed in order to consider the focus of the proposed training and its aims or desired outcomes, the specific ways in which people should change; develop, or behave. With these in mind, the following points then should be considered; each will affect the training design (Cooper & Harrison, 1976):

Predetermined/Emergent Aims

- Who should determine the learning objectives (the facilitator, the participants, or both)?
- To what extent can learning aims be determined prior to the training experience?
- What is the possibility of additional aims emerging during the training event?

To what extent might the facilitators impose, consciously or otherwise, some aims because of their own values and by setting norms?

Extent of Objectives

- To what extent are training aims conceptual (cognitive) or emotional (usually personal)? This will affect the nature of the design, the materials needed, and the type of facilitation required. (See more on this important point later in this section.)
- Are the training objectives remedial (focused on participants weaknesses, problems, or lacks) or developmental (to build participants' strengths)? The extent to which activities are focused in either direction should be considered, as well as the implications of this focus.
- How long is the group learning intended to have an effect (days, months, years)? What reinforcement will be available to the participants to aid in the transition and refreezing processes?

Experimental/Experiential Aims

The choice between these aims has implications for the training design (e.g., the use of observers, data collection, process reviews) and for the facilitator's learning theory or models. Points to consider include:

- The extent to which the activity will be a joint learning experiment, in which the facilitator has a special responsibility (e.g., for helping the group to examine data in reviewing its work).
- The extent to which the facilitator allows participants to experience the activity without heavily processing it.

Identifying the Training Objective

To pinpoint the training objective, ask "What is expected to change as a result of this module?" In general, the training objective will fall into one of three broad categories:

- *Cognitive*: The acquisition of knowledge/understanding of concepts/memorization of content;
- *Psychomotor*: The practice and acquisition of new skills/new behaviors; and
- *Affective*: The development of awareness/exploration of attitudes/realization of preferences.

It is important to be clear about which of these areas will be the focus of the training. If participants are to be presented with a lecture on a particular topic, the training is in the cognitive realm (knowledge/concepts), and the objective would be to *tell* the participants about the topic or issue or to acquaint them with its major points.

The objective is not to develop their skills in dealing with it (you cannot do that with a lecture) or to change their attitudes about it (ditto). Too often, training objectives are worded as "To change the participants' attitudes about . . ." when all that happens is a lecture on why they should or should not do something. (It would at least be more effective to state what would happen if they did or did not behave in a certain way.) Although the latter may bring about some change in peoples' behavior in certain situations (because of the understanding of the consequences), it is very unlikely to change their attitudes or opinions.

Knowledge and concepts can be communicated through training modules such as reading, lectures, and discussions. Psychomotor skills can only be imparted through "hands-on" (literally or figuratively) practice such as that provided by role playing, case studies, and simulations. Affective learning (e.g., awareness training or exploration and discovery of personal attitudes) requires the participation of the trainees. Their content—their thoughts, reactions, feelings, etc.—are a great deal of the focus of this type of training experience. Obtaining this information and working with it requires more facilitating skills than presenting skills. The training technologies that can be used in this realm are role plays, instruments, structured experiences, and intensive small groups.

Note that we stated the objective of this type of training as the awareness, discovery, or exploration of attitudes. Even with time to experience something and discuss it in a training group, participants are likely to need time to reflect (and perhaps to experience the effects of changed behaviors) before their attitudes actually change. As Leon Festinger's (1957, 1964) research in cognitive dissonance shows, if you can change the behavior, the attitudes are more likely to follow. It does not seem to work as well the other way around.

Wording It Realistically

The training objective should communicate the following:

- 1. What the facilitator intends to do, or
- 2. The expected outcome or benefit to the participant.

It is important in framing the training objective to be clear about what you will do and what you reasonably can expect to happen as a result of the training. It is folly to promise that training will "improve productivity in the organization" or "change the trainees' attitudes." One of these may be what you hope to achieve, but neither can be guaranteed or measured. Rule No. 1 is: do not promise more than you can deliver. This may require that the client be educated about the reality of training and the other factors that can affect the outcome of training. To be most realistic, a statement of training objectives would begin "It is expected that" (e.g., trainees will learn how to thread a needle as a result of this program). If this is not acceptable in one's particular situation, one still should resist making a statement such as "The trainee will be able to thread a needle as a result of the program." Training cannot control for other factors in the organization, the trainees' jobs and other environments, or the individuals themselves. All participants may not be able to attend all the training sessions because of other job pressures. People's skill levels are factors over which the trainer has no control. Also, although training can impact a person's comprehension and even ability, the trainer has little control over the person's willingness to use the new learning once the individual leaves the training setting. That, in fact, is the manager's responsibility. Too often, the people who are "ordering" the training expect trainers to assume this responsibility and to guarantee an unrealistic outcome.

In writing training objectives, therefore, it is wise to stick to what you will do and what you expect to happen. Suggested alternatives are: "The trainer will demonstrate and explain how to thread a needle, and the trainees will practice this skill" or "The trainees will have the opportunity to learn how to thread a needle" or "The trainees will be presented with the theory of and practice in threading a needle." Other objectives can be "to explore," "to engage in," and so on. If the training is mandatory skills training, the objective can include an "or else" statement, e.g., "The trainees will learn how to thread a needle or they will not be certified" (will have to retake the training, will have to be retested, etc.).

Other Major Design Considerations

Before the design itself can be considered, the other principal components of the learning environment—participants, group structure, physical concerns, and training staff—must be considered in relation to the learning objectives, and several questions must be answered concerning the specific learning experience being planned. One is not ready to design until one has answers to the who, when, where, and how questions.

WHO?: PARTICIPANT CONSIDERATIONS

The Number of Participants

It is important to be able to anticipate how many people will be involved in the training program because some design components require a large number of participants while others are designed to be used with very small groups. The size of the total group will dictate the size and number of small groups that can be formed to achieve various objectives. Subgroups of three to seven members each tend to be optimal.

The designer also must consider the level of affect (emotional response) that is likely to be generated by each design component. A facilitator can handle a larger group if there will be minimal risk taking, conflict, or emotional involvement. If participants will be "pushed," the facilitator will need to devote more time and energy to each participant, so the group must be smaller or there must be additional facilitators.

The Familiarity of Participants with One Another

This consideration is important in selecting learning experiences. For example, it may not be necessary to include "ice-breaker" activities if the participants are familiar with one another. What often happens is that some participants know one another but there is an unequal acquaintanceship within the group. The design of the training event should take into account that there might be some natural subdivision because of previous social acquaintance. One can capitalize on the relationships that participants bring to a training experience by using acquaintanceship as a means of support for planning backhome applications and for follow-through. However, although intact groups (groups with established relationships), such as work groups, might achieve a greater transfer of learning, the members also might be reluctant to be entirely open. Instead, participants who are strangers to one another (and unlikely to continue the relationship after the training event) may gain greater intimacy and openness at the possible expense of a less effective transfer of learning. It can be desirable to use this information in forming groups, assigning staff to the particular groups, and selecting activities for the beginning and end of the experience.

The homogeneity or heterogeneity of the group—the group composition—also needs to be considered. Heterogeneity can lead to greater confrontation but can provide the group with a wider range of resources. Homogeneity can lead to greater intimacy and affection among participants but also to less variety, which can restrict the learning possibilities available to the group. In general, heterogeneous groups are richer, but each individual needs to be able to identify with at least one other person in the group. It also is desirable if all the participants are at about the same level in terms of content background and previous training experience.

The Backgrounds and Previous Training Experiences of the Participants

It is important to consider whether the training might be dissonant with the norms and culture of the institutional backgrounds of the various participants or of that within which the training is to take place. One might not want to ask the participants to learn and change their attitudes in ways that are contrary to the ideology of their back-home situations. The organizational climate of the client organization may not understand or be supportive of training, and the implications of this need to be considered.

Before attempting the design, the facilitators should try to learn something about the backgrounds of the participants in regard to experiential approaches to education. This includes information about the initial goals, needs, and readiness of the participants. It is important to know whether participants have been in similar training programs before, because they may already have experienced some training activities that are being considered in which the learning depends on the novelty of the experience to the participants. It may be that some participants have been engaged in activities that are highly similar to those that are being planned. This need not be a negative factor; people who have experienced similar training before may be formed into an advanced group; they may be spread out deliberately across several learning groups; or they may be asked to volunteer for demonstrations of here-and-now interaction.

In addition, it may be helpful to know what the attitudes of the participants are regarding one another and the stated content or objectives of the training program and whether they have received any preparation for the training event from the sponsor. The latter can be achieved by means of word-of-mouth communication, a memorandum to prospective participants, or a brochure that specifies the learning goals of the event.

WHEN?: THE LENGTH AND TIMING OF THE EVENT

The length and timing of the training event are important in that the sequencing and timing of particular events are dependent in part on whether the training takes place at one time or is spaced over several meetings. Training that occurs weekly for an hour or two presents a significantly different design problem than does a one-day event. In many cases, a primary issue is how to accelerate learning within time constraints. In a brief contact design such as one evening or one-half day, some learning modules would not be attempted because either there would not be enough trust developed in the time available or more data might be generated than could be processed adequately. Likewise, spaced sessions (e.g., weekly two-hour sessions) probably would produce a less intimate and less person-centered experience, whereas more condensed or intensive sessions (e.g., a one-week retreat) might offer more personal growth. Spaced sessions may allow greater analysis of group dynamics and encourage members to "work through" issues between sessions.

Defined time limits within the event itself also can affect the training. Setting limits for various activities can encourage participants to express useful information by the end of the allotted time period, but also can establish the facilitator's role as the locus of control or authority. Similarly, the facilitators need to decide whether starting and ending times for sessions, break times, and meal times will be adhered to strictly or loosely. The facilitator should ask the person who is requesting the training program whether starting and ending times, lunch times, and break times can be arranged to suit the participants. If the client says "no," the time constraints are givens. Norms will develop as a result of the following factors: (a) the total time allocated to the group experience; (b) the time distribution (sessions at regular intervals, one intensive week, etc.); and (c) session time limits and adherence to limits.

Finally, if the event is to be conducted within an organization, the length and timing of each session should coincide as much as possible with organizational realities such as schedules, work loads, cafeteria hours, transportation, and so on.

WHERE?: THE LOCATION AND PHYSICAL FACILITIES

This consideration is important in that it is easier to develop what is called a "culturalisland" effect in a retreat setting than it is in the everyday environment of the participants. It is more possible in a retreat setting to capitalize on the development of norms of meaningful openness, experimentation, and sensitivity in creating an environment in which people are genuinely resourceful to one another during the free time of the training event. Some of the most significant learning in HRD training takes place outside the formally planned sessions.

The physical facilities also are important; ordinarily movable furniture and privacy are desired. Auditoriums usually are too inflexible, and sometimes very large open spaces are detrimental to the training design. It also is important to anticipate whether the training event is likely to be interrupted by nonparticipants, telephone calls, and other annoyances.

The physical setup also can affect the training. The designers should consider where and how the groups will work; what kind of atmosphere the physical surroundings will create; and how the physical environment can be arranged to support the learning objectives. For example, different group arrangements can have different effects. A circle of chairs distributes power and promotes interaction. Flexible seating often is desired so that participants can move around, form groups, and so on. For processing, the fishbowl (or "group-on-group") arrangement can be particularly effective. Tables can be a hindrance for attitude training, and sometimes even chairs can. In such cases, it is best to have circles of chairs or to have the participants sit on the floor. Wider tables create more distance and more formal interaction. People at the ends of rectangular tables tend to have more power and control. On the other hand, circular, square, and triangular seating arrangements tend to equalize power. No matter what the seating arrangements, it is best if participants select their own places.

WHO?: STAFFING CONSIDERATIONS

The sixth concern is the availability of qualified staff to facilitate the training program. This includes consideration of the personalities, styles, preferred learning models, philosophies, and assumptions of the various staff members, which might cause role conflicts. The following issues should be resolved prior to the training event, and the design should be agreed to by all who will be involved in facilitating the event.

Skills/Repertoire

The facilitators' ability to handle certain types of group experiences and their range of competence should be a major consideration. The design of the experience should take into account the capabilities of the staff members as well as their preparedness in attempting various learning goals. If the staff members are minimally qualified, it may be necessary to use a great deal of instrumentation and structure to make up for their lack of supervised experience. The intensity level of the training event also should be modified somewhat depending on the expertise of the available staff. If the credentials of the staff members are somewhat suspect, it may be necessary to develop fairly strict controls on the amount of affect that is generated in the experience itself; i.e., activities

that might generate a great deal of feeling data might not be used because, in general, they require much more expertise on the part of the facilitators.

Personality and Style Variables

Some facilitators work more readily with their own aggression, some with their affection, and others remain detached and unemotional. These differences may be justified or institutionalized as differences in role perception and style, but they really may be attributable to personality differences (i.e., personal styles or social styles) among staff members. Because the models of role conflict and resolution of interpersonal differences in the staff team could influence the participants' learning, it is important to review style preferences when selecting the training staff.

Facilitators also may have differences of opinion about training approaches. The following are some examples of these and suggestions for handling them (Cooper & Harrison, 1976).

- Mechanistic/Organic Approaches. If one staff member insists on structuring a group experience, and another wants to respond to group needs spontaneously, the entire experience may suffer. In such a case, it is necessary to synthesize these two approaches into a productive design.
- *Modeling/Scanning*. Trainers who adopt a learning theory based on modeling might find that they are encouraging noticeable but short-term change. If, instead, they encourage group members to use one another as learning sources, through an approach based on scanning the interactions of group members, participants may actually show less change, but the approach may prompt major, internalized change.
- Group or Personal Growth. Staff disagreement about the level of intervention can create normative problems in that participants can receive conflicting messages about the learning objectives of the group. On the other hand, the conflict can provide the participants with a wider range of learning. These issues include the orientations of the facilitators toward (a) understanding the dynamics of the group or (b) developing the growth potential of individuals, as well as whether they believe that these orientations can co-exist.

Staff Composition

The composition of the training staff will influence the norms and learning objectives of the participants. The inclusion of both male and female staff members can provide opportunities to focus on issues that otherwise might not surface. Other variables include the number of staff members and the mix of staff members with different occupational identifications.

Administration of the Program

Finally, in planning the staffing of an event, it is important to know whether the trainers also will be the administrators of the program. This requires more time and effort on their part and may create a somewhat conflicting situation.

HOW?: IMPLEMENTATION CONSIDERATIONS

The Contract

This item may be the most important and it has two dimensions. First, it is critical that the facilitator have a clear sense of what the contract with the client system is. In the best circumstances, this consideration relates to one's skill in conducting a needs assessment, in determining learning objectives, and in specifying goals. At one end of the spectrum, the client may specify what is to be done (what type of training is to be delivered), although few clients have the expertise to stipulate how this is to be achieved. It then is the facilitator's job to determine whether he or she can accept such an assignment in good conscience. Generally, the client will ask for some type of training; the facilitator will ask relevant questions; and then the facilitator will suggest what type of training might be most appropriate, based on the completion of some degree of needs assessment. When the training to be delivered is agreed to, the means of delivery may be specified in the contract, or it may be left up to the facilitator to determine what will work. In such a case, the facilitator may want to leave some flexibility in the design in order to negotiate aspects of it with the participants.

The contract between the facilitator and the participants is the second dimension of contracting. It is important to narrow the expectation gap between oneself and the participants in the training event. It also is important to recognize that the psychological contract and the legal contract may not be the same. It is important that the goals and the learning method of the event be specified beforehand in language that both the staff members and the participants can understand. The design is far more likely to have a chance to be effective if the participants come to the learning experience knowing what to expect, why they are there, and what they have contracted to experience. However, it is also important to establish more specific expectations, behavioral norms, and so on, with the participants at the beginning of the training event. In some cases, this can best be achieved by means of a contract between the facilitator and the participants. Egan (1972) and Karp (1985) describe the development of such contracts.

Access to Materials and Other Aids

Access to training materials and other aids in terms of availability, budget, and convenience is an important consideration. Some materials, such as standardized measurement instruments, are expensive, and others require a great deal of time to prepare or assemble. Some teaching aids, such as videotape recorders, are difficult to carry from place to place. The facilitator needs to develop an inventory of materials that

are available: newsprint flip charts, felt-tipped markers, easels, and masking tape; chalkboards, chalk, and erasers; blank paper and pencils; overhead projectors and other audiovisual aids; as well as work sheets, instruments, and handouts. It often is very useful to have duplicating equipment at the training site.

Opportunity for Follow-Through

A final consideration is the opportunity to follow through with the participants after the training experience is formally ended. Although this concern is listed last, it is by no means of least importance. When developing a design for a learning event, it is important to know beforehand what is going to happen afterward. Is it going to be feasible for participants to meet again to work through the problems of transfer of training? Are they going to have access to one another on a day-to-day basis? Is the staff going to be accessible to them afterward? Is it possible to have follow-up sessions some weeks or months later to ensure transfer of training? Part of the application of learning to the participants' own work and social settings can be designed differently if there is an opportunity for some support and follow-through work after the training event is completed.

Prior to developing the design for a particular training event, the facilitator should explore what he or she has to work with in terms of time, space, staff, money, human resources, and materials. Once such an inventory is completed, the facilitator may conclude that the contracted goals of the learning experience are unattainable given the resources that are available. The facilitator then may want to renegotiate the contract or attempt to develop new resources for the event.

WHY, WHAT, HOW, AND WHO?: TRAINING EVALUATION

The issue of training evaluation raises several questions:

- Why is evaluation being done?
- What is being evaluated?
- Who should set the learning standards?
- Who will be conducting the evaluation, i.e., who will judge the results of the training (participants, facilitators, both of these, outside individuals or groups)?
- How is the evaluation to be done, i.e., how will results be monitored/evaluated? By what measures? By what criteria?

The answers to the first two questions will help to answer the overall question: "Should evaluation be done?" Evaluation is not always necessary, and unnecessary evaluation may not be a good idea because it is time consuming and expensive and because it generates expectations that something will be done with the data obtained. So the answer to the "should" question almost always is either "Yes, if" or "Not unless" Yes, if it is driven by a purpose: to *determine* something or to *justify*

something. No, if the results will *not be used*, if the trainers or the client do not care what the results are, or if the subject matter or results may be too sensitive.

The purpose of evaluation is to obtain information. Before initiating or agreeing to an evaluation effort, it is wise to ask: What kind of information do you need? What kinds of questions are you trying to answer? What questions will give you that information?

The impetus to begin training and development in an organization often comes from management's belief that training is an important benefit to employees, that it is a worthwhile investment, and that it will help employees to fulfill their potential. However, management also hopes that it will increase personal and job satisfaction, increase motivation and productivity, and decrease turnover. In today's organizations, the emphasis often is on "the bottom line," return on investment. Managers and others who contract for training programs need to understand that it is impossible to measure the effects of training in such terms. One would have to measure all the other factors in the organization, over a stipulated period of time, in order to determine what part training played. Obviously, this would be almost impossible if not merely more time consuming and expensive than would be realistic. However, many managers still ask for training to be measured in terms of "increased productivity" or "effect on morale" or similar results. The HRD staff must educate such people in the realities of measurement and research. Behavior does not change in the moment at the time of training. A host of personal and organizational factors affect how well the training "takes" and whether changed attitudes or behaviors are permitted, supported, and reinforced in the work place. Too often, the people who expect an evaluation are as confused about what is to be measured as they are about why the evaluation is being done.

Probably the best reason for evaluating training is to help the facilitators to examine the design and to improve it, if necessary. Probably the worst reason is to prove that the training was worth the time and effort that it took. If those who are sponsoring the training (this problem occurs primarily in organizational contexts) do not understand the intangible effects of human resource development, the trainers would be wise to educate them or to seek work elsewhere.

What can be measured realistically is whether the participants were satisfied with the training; whether they felt valued because of having been offered the training; whether they thought it was interesting, helpful, or useful; and whether they think that they will use the skills, change their attitudes or behaviors, or have achieved some type of self-development as a result of the training. Some discrete skills also can be measured in a short period of time.

The most important thing in deciding to do evaluation is to be clear about why you are doing it, what or whom you are doing it for, and what or whom you are evaluating. Evaluation done for the purpose of justification is different from evaluation done for the purpose of documentation, and that is quite different from evaluation done to determine something. The evaluation forms or survey materials should be geared toward obtaining the responses or the quantity and quality of information that you need.

For example, justification might include the need to show that the trainees were satisfied with the training. The evaluation form then would not ask "Were you satisfied with the training?"; rather, it would contain questions such as "Which activity (or part of the training) was the most satisfying?" The report then could say that the data shows that

_____ percent of the trainees found _____ portion of the training to be the most satisfying.

For documentation, you may need to show that so many people attended, that there was follow-up, that the training was timely or what was requested, etc., or you may need to keep a head count in order to show that so many people were trained per year or that so many managers were included in the HRD efforts.

In order to determine something, you need to frame the inquiry so as to elicit useful information (e.g., What other job skills would be useful in this training program? How do you plan to use this training?) The techniques used to obtain information for evaluation purposes are basically the same as those used to obtain information for the needs assessment.

If the training facilitators are not to be involved in the evaluation phase, they should be permitted to assess the evaluation methods and to know who the evaluators will be. This is necessary for two reasons. The first is that one cannot design effectively until one knows what will be evaluated. When the goals of the training and the outcomes to be measured are specified clearly *and are related to each other*, the training staff has a clear notion of what to design for.

The second reason to ask questions about evaluation before beginning are related to professional ethics if not self-preservation. If it is not clear that the evaluation has a realistic purpose, that the proper issues or people are being assessed, that the methodology suits the purpose, and that the evaluators are qualified to conduct the inquiry, then the facilitators may well question whether they want to accept a training assignment that will be evaluated inappropriately.

DESIGN COMPONENTS: THE TRAINING TECHNOLOGIES AND OTHER ACTIVITIES

As we stated previously, the training objective, not the content area, indicates the design components/training technologies to be used in any training module and in the overall training design. Designing training for human resource development involves *putting together sequences of learning experiences—training modules—in relation to the goals of the event*. There are numerous ways to structure learning experiences; twelve design components are described in this section. In many experiential training design. However, any one of these components or technologies may not be appropriate in all situations. One needs to select the technologies to be used based on the type of learning to be achieved (cognitive knowledge/concepts, psychomotor or behavioral skills, or affective awareness/attitudes) and the focus or content of the training.

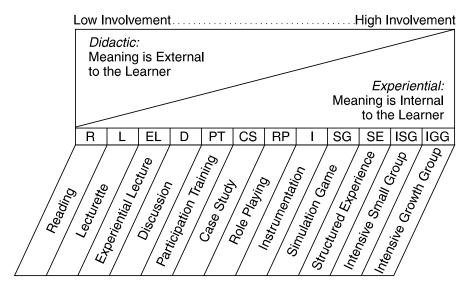
THE INVOLVEMENT CONTINUUM

The chart on page 91¹ illustrates the relationship between learner involvement and the source of the content in training.

Reading along the bottom of the chart, we see a classification of training design components, ordered according to the extent to which they incorporate participant involvement and the participants' content. The components on the left involve high *external* (facilitator-generated) content, low feedback, and high control of learner responses. These are the didactic techniques, in which meaning is external to the learner. Those on the right involve low external content (most of the content being generated by the participants' experiences, reactions, and insights), a high degree of feedback, and low control of learner responses. These are the experiential techniques, in which meaning is internal to the learner. Although the continuum in the figure has been described in terms of increasing participant involvement, it also can be viewed in the same relationship to other dimensions such as risk taking, self-disclosure, and interaction.

The least involving intervention is reading, in which the learners are in a *reactive* mode, passively receiving and vicariously experiencing. The most involving interaction is the intensive growth group, in which the learners are encouraged to be *proactive*, to take responsibility for their own learning. In between these two extremes are activities that range from lectures to structured experiences.

¹ Based in part on Hall, 1971, *The Awareness Model: A Rationale of Learning and Its Application to Individual and Organizational Practices*, Conroe, TX: Teleometrics; and R. Tannenbaum & W.H. Schmidt, May-June, 1973, "How To Choose a Leadership Pattern," *Harvard Business Review*, pp. 162-164, 166-168.



Involved Continuum for Various Training Technologies

It is our bias that the more experiential the learning can be, the more it will "stick." One cannot assume that complex material can be learned by listening alone (especially if that material relates to behavior). In fact, many studies (Knowles, 1972, 1975, 1978; Tough, 1979) have shown that adults learn primarily by doing. Therefore, our view is the goal of training should not be to teach a point of view; although it may be *understood*, it still remains the point of view of the teacher. The goal of training is to open up the learners to the exploration and examination of new concepts and new behaviors that they will choose to make part of themselves.

However, to accomplish one's training objectives, one must achieve the *integration* of both affective and cognitive learning (or affective, cognitive, and psychomotor in the case of physical skills training). Cognitive input, often in the form of models and theories, helps the learners to make sense of what they are experiencing and feeling. It provides a way of interpreting their current experiences and establishes guidelines for future behavior. It is especially useful in the generalizing phase of the experiencial learning cycle. The infusion of cognitive material into the training experience (e.g., for knowledge/concepts training or to augment experiential learning) can be accomplished in several ways. One may provide a reading book or printed handouts prior to the training experience; one may provide handouts during the experience itself; one may deliver brief lectures (lecturettes) in large-group sessions, commonly called "community" sessions; or one may comment very quickly within an intensive small-group session about the theoretical implications of a particular set of behavioral data.

READINGS AND HANDOUTS

There are two important things to remember in using printed materials in training. The first—and perhaps most often overlooked—is that they should be *readable* (clearly

printed and reproduced). There is a better than average chance that bad copies simply will not be read. Working to learn is one thing; struggling just to read something is another.

The second dictum is that the readings must be *related to the goals and content of the training*. If a handout is on the same topic as the training but does not make the same points, it might confuse the participants or cause them to question the validity of the points raised. Printed materials should explain, supplement, or reinforce what is learned in the training. If a handout is merely for the purpose of acquainting the participants with other points of view that are not part of the training program, it should be distributed at the end of the session and its purpose should be clarified.

LECTURETTES

A lecturette can be used prior to or following a learning experience to provide a kind of cognitive map for the experience that is about to ensue or it can be used to help focus the data from a particular activity or experience. It provides a way of helping participants to "make sense of" the learning that they are experiencing. It also can help to heighten the probability that the participants will relearn how to learn from their everyday experiences by providing them with a cognitive model for guiding their behavior.

The facilitator needs to develop a repertoire of lecturettes that can be used to highlight particular processes at any given time during a training event. The lecturettes in the Pfeiffer & Company *Annual* series and in *Theories and Models in Applied Behavioral Science* (Pfeiffer & Ballew, 1992) are intended to provide resources for such brief, theoretical inputs. Because lecturettes frequently are used to augment structured experiences, many also will be found attached to specific structured experiences in both the *Annuals* and the *Handbooks* and, therefore, in the experiential learning activities in the *Pfeiffer & Company Library*. More detailed information on the use of lecturettes can be found in Section One of this volume.

Lecturettes are aided considerably by visual presentations. Sometimes the use of a flip chart can make a lecturette easier to follow, and the outline of the lecturette can be posted for participants to refer to throughout the experience. For example, a lecturette on the criteria of effective feedback can result in a poster listing such criteria. During the training event, participants can be guided in giving and receiving feedback by the set of considerations that become internalized through the experience. Sometimes the posting of such material serves as a means of guiding participants' behavior without the need for staff members to remind them of particular learnings. Section Three of this volume contains more detailed information on the use of a variety of audiovisual aids.

EXPERIENTIAL LECTURES

The experiential lecture is more involving than the traditional lecture because it incorporates activities on the part of the audience. Interspersed among the sections of

content are brief inputs from or interactions among the participants, which fill out the conceptual input supplied by the facilitator. These interruptions are designed either to personalize the points of the lecture and/or to generate readiness for the next topic. (See Section One for more detail on making lectures experiential.)

DISCUSSION

Discussion is a time-honored teaching intervention that has been extended and refined in experiential training. It can be used in knowledge/content training to raise, clarify, or reinforce concepts. It can be used in skills training to exchange ideas and insights about how something works or to raise and answer questions. It is an essential part of the experiential learning cycle in awareness/attitudes training (see the discussion of the experiential learning cycle in Section One of Volume 21 and also later in this section). It is, therefore, a component of the processing of all the technologies to the right of it on the continuum: participation training, case studies, role playing, instrumentation, simulation gaming, structured experiences, and intensive growth groups. In initiating a discussion, the facilitator is asking the participants to use the content of the training. They can be asked to use the points of the discussion to develop a list or to identify something to be used in the next activity. Facilitating productive discussion is one of the HRD professional's most valuable skills.

PARTICIPATION TRAINING

This includes training in participative skills such as listening, running a meeting, agenda setting, customer service, and so on. It is a type of "how to" or skills training. For example, if the training were designed to improve the participants' group-membership skills, the content might include cognitive input (lecturettes, handouts, discussions) on role functions in groups, group development, etc., and some activities to allow involvement and practice (e.g., role plays, instruments, practice, and feedback). It is toward the left center of the continuum because the emphasis still is on imparting information to the participants, although some of their reactions and experiences are included in the content, and they are provided an opportunity to practice and improve their skills. Skill development may be the most difficult type of training for the facilitator because it requires careful balancing and sequencing of both cognitive and participative design elements.

CASE STUDIES

Studying a case scenario, analyzing it, deciding what should be done, and discussing it within small groups in order to make recommendations are more involving for the participants than any of the preceding technologies. However, case studies draw on less of the participants' own content than role plays, instruments, structured experiences, or intensive growth groups. The purpose of using a case study is to enhance the

participants' abilities to think, to analyze (to use information), and to decide on a course of action. This provides the participants with an opportunity to explore their own thinking and decision making with those of others. It falls squarely into the realm of skill development, having conceptual components as well as experiential ones. Case studies can be used in a variety of settings; they most often are used in management, business, law, medical, and social-service training.

For guidelines on selecting, using, and developing case studies, refer to Section Three, "Using Case Studies, Simulations, and Games," in Volume 21.

ROLE PLAYS

In a typical role-play activity, a predetermined situation is acted out by the participants, but they provide their own words and methods of dealing with others. Reactions and results are discussed by the role players and observers, and then the same role players or new participants act out the scene again, attempting to apply the insights gained from the group discussion, focused toward a particular objective. Role playing generates a sample of role players' own behaviors, which are influenced by their feelings and responses to others. This affective (feeling) data becomes important content in the training; participants discuss their feelings, exchange feedback, and learn from the consequences of their behavior. Thus, with role plays we begin to tap into more of the participants' content. We still may have the objective to expand some conceptual understanding and/or skill (focusing on whether they did it effectively) or generating awareness (focusing on how it felt)—maybe all of them in that order. Although role plays are extremely useful in helping participants to examine, practice, and develop skills in communication, problem solving, conflict management, and so on, they also explore the participants' feelings, responses, and insights about their own behavior and that of others.

In developmental role playing—in which the participants develop the problem or situation to be explored as well as the role-play scenario—the activity becomes even more experiential. The use of both structured and developmental role plays is discussed more thoroughly in Section Two of Volume 21.

INSTRUMENTATION

Instruments are questionnaires, rating scales, surveys, or other types of forms on which participants report information about themselves (self-assessments, styles, preferences, etc.) or their situations (families, groups, jobs, managers, organizations, etc.). The information obtained is *provided by* the participants (because it is their content, they cannot readily deny it) and is intended to be *used by* the participants (instruments are not tests). However, the focus or content of the information is based on a particular theory or model (e.g., styles of management, how people do something) on which the items of the scale or questionnaire are based. The participants' responses to the instruments are

scored, interpreted, and discussed in terms of the theory or model. This is the didactic component of instrumentation.

Such nonclinical measurement or feedback devices can be highly useful in an experiential design. They can focus particular behavioral science concepts and can provide a set of data that participants can use in studying themselves intra-and interpersonally, in studying group composition, and in discovering new behaviors that they can practice within the relative safety of the training milieu. Instruments are not substitutes for experiential approaches but often can serve as highly effective means of *focusing* learning around a theoretical model. They are not to be used simply to present concepts because they invite the participants to explore their beliefs, reactions, and what they might do about them in regard to the subject matter.

In administering an instrument, facilitators generally will introduce it by encouraging the participants to be very open in responding to the items, then direct them to complete the scale or inventory, then deliver a brief lecture on the rationale underlying the instrument (the theory or constructs). They will then check understanding by having the participants predict their scores. The instruments are then scored (usually by the participants themselves), and the facilitators illustrate the interpretation of the scoring by using their own scores as examples. They then have the participants practice interpreting one another's scores (usually in helping pairs), with reactions following interpretation. This is followed by posting the data to build norms for the total group and then processing the data in intensive small-group meetings that focus on the personal relevance of the data at a relatively higher level of support than characterizes individual interpretation.

There are many sources of instruments that are designed to be used in human resource development. The Instrumentation sections of the Pfeiffer & Company *Annuals* provide easy access to instruments that can be incorporated into a variety of training designs, and many of the structured experiences in the *Annuals* and the *Handbooks* also include specific instruments in their designs. The Pfeiffer & Company *Instrumentation Kit* contains 105 reproducible instruments from the *Annuals*, the *Handbooks*, and many other Pfeiffer & Company publications. Many publishers in the field offer instrument packages on a variety of topics. Training Technologies Volume 22 provides a step-by-step description of the seven phases in administering an instrument as well as guidelines for evaluating, selecting, and designing instruments.

SIMULATION GAMES

A simulation game is based on a model of how some system (communication, financial, organizational, etc.) operates. The participants assume roles within the system and manipulate the system toward some objective. In this way, they are able to discover the processes and interactions involved, be they human, financial, organizational, technical, or mechanical. As with most games, simulation games have rules of operation, and there are prescribed consequences for various moves. Learning is obtained through several

means: working with others, working within the system, realizing the consequences of decisions/moves, retrying, and discussion. The participants are highly involved in the operation of the game, but the content is predetermined; it does not originate from the participants except in terms of their reactions, their questions, their learnings, etc.

Explicit information about the selection, development, and use of simulation games is found in Section Three of Training Technologies Volume 21.

STRUCTURED EXPERIENCES

A structured experience is a design module in which the participants learn through completing the experiential learning cycle (described later.) They engage in some activity that is designed to produce certain effects or learnings, they announce their reactions, they discuss what happened and what that means, they draw conclusions and make generalizations about their learnings in terms of the real world, and they plan applications. The structured experience is the only training technology that attempts to complete the experiential learning cycle in a stated amount of time. Thus, structured experiences stress high participation and processing of the data generated during interactive activities. Much of the learning content is generated by the participants; they reveal information to themselves about the topic or focus of the learning. Because the topic is narrowed and focused, it is relatively safe to explore it within the confines of the structured experience. The task of the facilitator is to take what is generated and, using the phases of the experiential learning cycle, focus it back down to the training objective.

A wide array of activities is available to the group facilitator in planning a structured-experience design. (For example, the Pfeiffer & Company Annual series, 1972-1994, and the Handbooks of Structured Experiences for Human Relations Training, Volumes I through X, 1969-1985, and the structured experiences from these are contained in the Experiential Learning Activities volumes of the Pfeiffer & Company Library.) The Pfeiffer & Company Structured Experience Kit contains reproducible structured experiences from the Annuals, the Handbooks, and twenty-four other publications. See also the References and Bibliography section at the end of this volume and the other volumes of Training Technologies.

This technology is highly useful and flexible. Once facilitators have mastered the techniques of running and processing structured experiences through the experiential cycle, they can use them anywhere in which they fit. Any given activity may be appropriate in, for example, a leadership-development design or in one that focuses on team development, but because the goals of the two events may be significantly different, the processing of the data generated by the structured experience would be decidedly different. For example, there are several structured experiences in which small groups receive materials and organize themselves to construct something. In some basic types of training, the behavioral and feeling data that are generated by the experience would be processed in a group session in which people would focus on their own

emerging awareness and on their feelings and reactions to the behavior of others. They would exchange feedback of a very personal nature about the effects of the process and the effects of one another's behavior. In a leadership-development or managementdevelopment workshop, the same activity might be processed in terms of leadership styles that emerged during the activity, styles of influence, roles people played, and decision-making procedures. There also might be an attempt to process the data in terms of a theory of leadership.

Structured experiences generate and focus data toward particular learnings, but the major skill in using them is in adapting them to the particular learning needs of the participants and in assisting the participants in processing and integrating the data that are generated. Section One of Volume 21 is a concise guide to evaluating, selecting, presenting, and designing structured experiences.

INTENSIVE SMALL GROUPS AND INTENSIVE GROWTH GROUPS

An almost endless variety of small groups has been developed in the training field. At first, they consisted of the T-group or training group (see Jones, 1972), the D-group, or developmental group (which uses a variety of questionnaires, rating scales, and other instruments and learning devices in the place of a facilitator), encounter groups, counseling groups, and therapy groups. In all these, the participants engage in self-assessment, feedback, disclosure, risk taking, experimentation, and consensual validation.

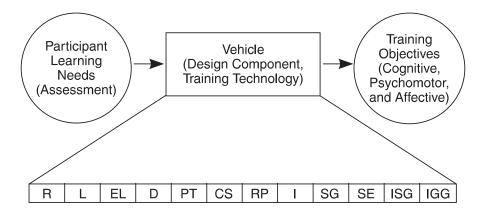
All these groups are characterized by high participant involvement and interaction. The data for learning come from the life experiences and here-and-now reactions of the group members. Participants are expected to integrate their learning into new self-concepts on their own terms.

The use of intensive small groups is the dominant feature of experiential education. Perhaps the most well-known is the small discussion or processing group typically used in training and development work; this becomes the basic building block in the training design. A variety of small groups can be put together on a short-term basis for the purpose of processing the data of a particular learning experience, providing the opportunity for risk taking, trying of new behavior, or testing of ideas for back-home application. In addition, it sometimes is desirable to build leaderless activities into training events.

Ordinarily one wants to build as much heterogeneity as possible into small-group composition, with the stipulation that there be enough commonality among participants so that any given participant can identify with at least one other person in the group. It is important to establish some home base within the learning experience—a place in which participants can experience support and safety and where they can attempt to integrate what they are learning about themselves. The intensive, small-group experience becomes such a base.

SELECTION CRITERIA

Facilitators continually are faced with the task of planning activities to meet the learning needs of participants. The problem of choice can be represented graphically as follows:



Each design component or training technology is useful for a different purpose, and there are training situations in which each would be appropriate. Thus, a design component, technology, or intervention is chosen after an assessment of the learning needs of the participants and a statement of training objectives and the type of training required for the particular module, at that particular point in the learning sequence. The time available, group size, nature of learners, complexity of content, possible resistance, materials, staff, and physical arrangements also are considerations.

In training modules that are focused on cognitive learning—the understanding of concepts and the assimilation of knowledge—readings and handouts, lecturettes, experiential lecturettes, and discussion are used primarily. In skills training, the design components on the left of the continuum may be used to establish a background, and case studies, simulation games, and role plays may be added to provide the simulation of actual experience and to allow the participants to practice, receive feedback on their actions, and retry. With the experiential approaches found on the right half of the continuum—those that primarily stress active participant involvement versus passive receptivity—the learning is more affective and presumably is internalized more effectively. To provide highly experiential learning, role plays, instruments, structured experiences, and intensive small groups can be used in combination with lecturettes, handouts, discussions, etc., in an almost infinite variety of highly innovative, flexible designs.

The maturity of the group, the skill and experience of the facilitator, and the environment in which the training takes place also help to determine which approach is used.

Next, we will discuss some major considerations within the training design to ensure that these components are utilized effectively.

DESIGN SKILLS

IDENTIFYING GOALS/OBJECTIVES

The ability to develop a learning design that is relevant and effective is dependent on a number of skills on the part of the group facilitator. The major set of skills relates to the ability to identify the learning goals of the training event very specifically. Two elements are important here: the first is determining whether the training that has been requested is appropriate to the people who will be attending. If the goals of the event are not appropriate to the participant group, the members may well have a negative reaction to the training, ranging from confusion to resistance and resentment.

The second element is being clear about what the real goals of the training are and how they will be achieved. It cannot be stressed enough that experiential education is goal oriented, and it is important for the facilitator to learn ways to be able to clarify the goals for a particular training event or a *particular part* of a training event so that they are the drivers of and motivators for the particular learning experience itself. The two mistakes most often made in this area are misrepresenting what will be accomplished during the event and using design components ineffectively.

A classic example of the first error is stating that the participants' attitudes will be changed or that they will learn new skills and then designing a program to disseminate information. Training modules that consist primarily of content that the facilitator wants to impart to the trainees fall into the *cognitive* area, which we will refer to hereafter as *knowledge/concepts* or "K." These include learning and using rules, classifying and recognizing patterns, identifying symbols, detecting, making decisions, and recalling bodies of knowledge. The design components through which this is achieved are found on the left side of the involvement continuum; they include readings and handouts, lectures, and discussions. These require the trainer to have good presentation skills.

Training that is designed to improve the participants' *skills* must go beyond didactic components and allow for practice, feedback, processing discussions, and more practice. This includes performing gross motor skills, steering and guiding-continuous movement, positioning movement and recalling procedures, and verbal communication. Models and procedures become an important part of the content. Some of the trainees' reactions and insights also become part of the learning content in this area. Because skill training in HRD often involves verbal and behavioral skills as well as psychomotor skills, we will refer to this area as *skills* or "S." For skill training, the technologies located in the center of the continuum are most appropriate, and the facilitator must not only have an understanding of the skill itself but must also know how to use these technologies.

Finally, affective learning includes the development of awareness, the discovery of preferences, and the exploration (and possible change) of attitudes. This type of learning is best initiated by highly participative activities in which the content of the session is drawn from the participants. To best remind us of what this type of learning is about, we will refer to it as *awareness/attitudes* or "A."

These different training objectives can be illustrated as shown in the figure that follows. This leads us into the second mistake most often made in designing training modules.

RELATING ACTIVITIES TO GOALS/OBJECTIVES

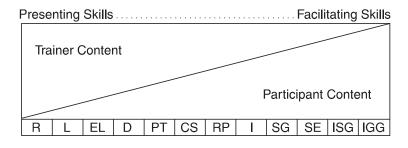
It is imperative that facilitators be clear about how much of the content of a training module is to come from outside the participants (to be imparted to them) and how much is to consist of drawing content from the participants and using it, exploring it, and processing it to promote increased understanding and new learning. The following checklist can help in selecting design components that are appropriate.

К	S	А
Knowledge, Concepts, Cognitive Input and Memorization	Physical and Behavioral Skills	Awareness, Discovery of Preferences, Exploration of Attitudes
New ideas	Practice	Personal biases
Procedures	Application of ideas	Preferences
Points of view	Models (procedural, applying the process)	Unique interpretations
Models (teaching about the model)	Procedures	Applications of ideas
		Models (used to clarify personal applications)
		Processes

- 1. How much *involvement* do you want from the participants? How much do you need to accomplish the training objectives? (If none, maybe all you need are good readings, lectures, platform skills, audiovisuals).
- 2. How important is disclosure? discovery? self-understanding? feedback? (For example, these would be critical if you were preparing the participants to be managers.)

3. How much of the participants' *content* do you need to achieve the training objective?

The primary thing to remember in applying all this is to be honest about what you are trying to do. The mistake that facilitators most often make is using activities such as questioning, role plays, instruments, and structured experiences—which open up the participants—and then *not using* what is generated: the participants observations, feelings, and insights. If you want to teach the participants a particular content, it is not a good idea to initiate a structured experience, generate their feelings and ideas, and then ignore these and lecture. It is not a good idea to solicit their opinions and then edit them so that they only reflect what you had in mind. When you open up or stir up the participants, generating their ideas and feelings, they expect you to work with them. We also have seen trainers ask questions of the participants and then ignore the participants' responses or, perhaps worse, edit or rephrase them so that the trainers can create a list that says what they want it to say. The rule that is being violated here can be phrased in several ways: "Do not ask the question if you do not want to deal with the answer" or "Do not start what you are not prepared to finish." The following illustration may help to reinforce this concept.



This does not mean that a training program cannot include cognitive components as well as highly participative ones. Any or all of the training technologies may be appropriate in some part of the training design; the key is to structure each *module* to achieve what you want to achieve *at that time and in that sequence*. In an overall training design, there might well be some combination of modules that focus on cognitive input (knowledge/concepts), skills practice (skills), and high participant participation (awareness/attitudes). If one is clear about the overall training objectives for the program, one then can determine the objective for each session, and then the objective for each segment of the training design is. One module may be designed to impart basic concepts, the next one may be designed to draw out the participants' reactions to and experiences with these concepts, and the next may be to have the participants create a pictorial model of a process related to the concepts. If each module is congruent (i.e., the training technology or design component is congruent with the training objective), the modules can be sequenced in an order that makes sense.

The second key is to sequence the modules so that the participants are not confused or frustrated by the apparent discrepancy between the stated goals and what is actually being done. Such dissonance can impede or block learning. The training design is simply a blueprint for how time is to be used to accomplish the training objective. Knowing clearly what you are trying to do, doing it simply and in the most appropriate manner (selecting the right vehicle), and sequencing modules to build from one type of learning toward another is what good design is all about.

IDENTIFYING PARTICIPANT GOALS

A closely related set of skills involves helping the participants to identify and clarify their own goals as they relate to the stated goals of the event. It is important that training activities be carried out in reference to highly specific goals that are related to the behavior of the participants. Each participant should have something to work for during the training experience. The expectation check at the beginning of the training program can help to serve this purpose.

BEING SENSITIVE TO PARTICIPANT RESPONSE

A fourth set of skills in designing experiential educational events relates to sensitivity to participant response. The facilitator learns to anticipate how participants are likely to react to particular components of the design and becomes adept at anticipating the cumulative effects of the design. The facilitator should be able to make some probability statements about the receptivity of participants to particular learning experiences at a particular point in the event. Part of this sensitivity involves acquaintanceship with the client system. It is important that the facilitator be able to know how participants are likely to react to particular structured experiences and to particular foci within the overall experience. For example, if the training event is to begin with a nonverbal activity, how much tension is this likely to create in this particular set of participants at this particular point in its development? How are the same participants likely to react to a similar activity after they have been together in a retreat setting for two days? Sensitivity to the probable participant response is developed from experience with a variety of learning activities, with a variety of clients, and with a great deal of staff discussion of experiences in similar learning situations.

TIMING

Sequencing and the planning of time are critical elements in training design. A training design is actually a blueprint of how the available time will be used. In designing each training module, it is crucial to take into consideration the time that will be needed for orientation, maintenance, instructions, distribution of materials, questions and answers, processing, etc., and to subtract that from the total time available when planning time for structured interventions such as lecturettes, discussions, case studies, instruments, structured experiences, and so on. A good way to think about this is in terms of what Dr.

Phyliss Cooke calls "the dance," a series of four steps that take place in each training session, no matter how long the total event is.



I. *Orienting*. When participants enter the training room, the first task is to help them to "get their heads into (or back into) the room." At the beginning of a training event, this requires a good deal of effort. At the beginning of subsequent days or after breaks, participants may need to be helped to clear away their outside realities before they can focus on the training. It may be wise, for example, to ask if anyone had trouble in traffic that morning or if anything important or exciting happened during the lunch break. Remember, you cannot run a race until the horses are at the gate.

The amount of time required for this step will depend on the location of the module in the overall design. It no doubt will take longer for the participants to align themselves at the beginning of the first day than it will at the beginning of the second day. Similarly, the beginning of a day and the beginning of a module after a meal break probably will require more time than the beginning of a module after a short break. If things are running smoothly, the latter may require only a minute or two, whereas the task of opening the initial session may take from several minutes to an hour or more.

II. *Relating*. The next step is to establish task and relationship orientations, to deal with the participants' "what" and "who" questions (generally not verbalized), to help them to buy in psychologically. The "what" includes an overview of the event and a clarification of the training objectives or goals and the roles of the facilitator and the participants. The "who" means who they are and the establishment of norms for working together. The features and benefits of the session can be described briefly. If there is resistance, it needs to be explored. A getting-acquainted, icebreaker, or warmup activity in this step can provide data about whether the participants are ready to proceed. During this step, the facilitator needs to convince the participants that something important is going to happen before they take their next significant break.

What actually happens during steps I and II is described in more detail in a following discussion, entitled "Opening the Session."

III. *Doing*. The next task is to work on achieving the training objective—the knowledge, skills, or awareness component and the core content. This may include a lecture, a discussion, a list-building process, a structured experience, or any of the other design components, as appropriate. As we stated previously, the time allotted for this step should allow for questions and answers, rearrangement of seating, processing discussions, and whatever else might occur that is related to the task objective. Participants should understand their task objectives during this phase so that they know what they are working toward.

IV. *Transitioning*. The final step in each training module is to actually work toward transition, the transfer of learning from the training setting to the real world. One cannot expect the participants to complete a training module and automatically know how or be

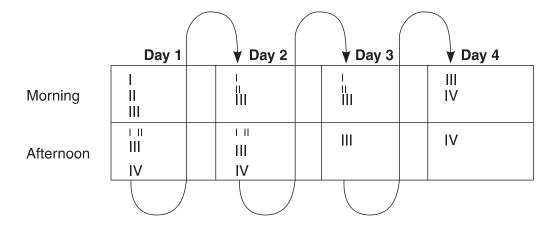
willing to "do" something. The facilitator needs to build toward transition in the design. The sequence should be smooth and logical, and new content should not be added toward the end. The focus here is on integration and application; typical structures are subgrouping and practice teams. In the beginning and middle of the training event, the transition will be directed toward the next module, toward preparing to accomplish the next learning objectives.

Transition also is the final objective of the overall training event, so adequate time should be planned at the end of the event to focus on the issue of transition of the overall learnings to the participants' real-life situations.

One aspect of transition that often is neglected is the need for reinforcement and support in applying new learnings and new skills and in practicing new behaviors. If participants will not be receiving support in their work or home environments, they can make contracts with one another (usually in pairs or trios) to telephone or write to report successes, ask for advice, and provide reinforcement for one another. The facilitator also may be available after the training has ended to counsel and provide "strokes."

What training designers must remember is that the clock does not drive the design; the designer uses time. The task of designing is to decide how the time will be divided into chunks (modules) within each session and each day. Each module consists of a different dance—the four steps of orienting, relating, doing, and transitioning—built around a specific training objective. Step three may consist of more than one design component, but all parts of the module should have the same content focus or learning objective. The figure at the top of page 129 may help to illustrate this concept.

The question for the designer is how to allocate the time within each module and within each day so that they lead to the final transition. It is important not to run out of time and shortchange or skip step IV at the end of each day. It is also critical that step IV not be shortchanged or skipped in the final day or final session. If you miss the transfer, the training program may well have been a wasted effort.



The following is an example of how to begin looking at the time available for a day of training.

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1 day = 7\frac{1}{2} hours = 450 minutesMinus: 4 breaks at 10 minutes each<br/>(2 in a.m., 2 in p.m.):40 minutesLunch:75 minutesSlippage:30 minutes145 minutes = 305 minutes
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It is always necessary to plan time for slippage, which can be anything from people coming in late and needing to be "caught up" to the inevitable "side trips" resulting from questions and comments during discussions and activities.

This leaves not 450 minutes in which to achieve steps I through IV, but 305 minutes. Depending on what day of training this is and, therefore, how much time steps I, II, and IV are likely to require, the designer can determine how much time is available for step III, the knowledge, skills, or awareness components—which generally are thought of as the learning part of the training. In fact, if one is designing for the final day, the time allocated for the transition phase may be equal to or greater than the time allocated for the knowledge, skills, or awareness phase. Any of the design components may be selected to effect the transition as long as they end with questions such as "So what?" or "Now what?" or "How will you use this in . . .?"

In planning both time and sequence, it is helpful to block out the days and modules visually (as we have done previously in this section), to enter the steps required in each module, and to compute how much time will be available for each before selecting the design components to be used in each step and each module. In this way, one is less likely to plan an activity that one simply does not have the time to execute properly.

SEQUENCING

The task of sequencing is one of the most important sets of skills in training design. Learning events are not put together in a random way; it is important that the facilitator be able to see the impact of one particular training component on the one that immediately follows it. Sometimes the objective is to close things down; at other times the objective may be to open things up in order for the next training module to be more effective. One of the major purposes of this section is to expand the group facilitator's awareness of sequencing considerations in training designs. Every component of the design should fit into an ordered scheme that begins with the learning objectives and results in the attainment of the goals of the event. This means that *each activity* within the training experience *should build from the previous sequence of activities and toward the next one.*

Balance also should be considered in the sequencing so that the participants are not overloaded with either cognitive or experiential components. Activities should be varied in terms of type, length, and intensity. Within content blocks, activities should progress from less difficult to more difficult, from less risky to more risky, from easy concepts to more complex ones.

There also should be a balance between tense moments and relaxed ones. Although some tension or discomfort may be required for change to take place, there must be some comfort so that people can integrate their learnings and share their insights. Because of this, skills should be demonstrated by the facilitators or selected participants before they are practiced and they should be practiced before they are actually used.

Sometimes it is important in the sequence to have thematic material that runs throughout all the components of the training design, thus allowing for the processing of a variety of events and experiences against the same theoretical model.

Even the breaks and the meals should be planned strategically, and the effect of the interactions within breaks and meals needs to be anticipated as one plans for the events that follow. It is ideal if participants can digest their learnings and practice their new skills between sessions (during breaks). Toward this end, they should be encouraged to go to lunch and dinner with other participants in the training event. Many participants may be sluggish after meals, so it is a good idea to plan an energizing activity when regrouping to get them back into the training mood.

Balance and pacing also should be considered in planning the activities of the staff members so they that do not become fatigued or burn out.

COLLABORATING WITH OTHER FACILITATORS

If two or more people will be co-facilitating an event, it is best if they co-design it. If this is not practical or possible for some reason, they at least must discuss the overall purpose of the design and the methods that will be employed. How will facilitation be shared? Will there be a leader or will the task of facilitation be shared equally? How much freedom does each trainer have to make changes in the design, the timing, etc.?

In our experience, it usually is more effective and efficient for one facilitator to accept responsibility for the initial design of the training event and to work with other facilitators to edit the design to make it more relevant to the learning needs of the participants in light of the goals of the event. It is expensive to bring together a group of facilitators to build a design from the ground up. It is true that when staff members create a design themselves, they are more likely to have a sense of investment, involvement, and psychological ownership in what is planned. They are likely to approach the implementation of the design with more vigor. It is also true, however, that

training staffs ordinarily do not have a great deal of time to prepare for a particular event. We find it useful to have an initial, tentative design that the staff will edit rather than to build one from the beginning.

One of the major problems in design has centered around collaboration skills. Many group facilitators have their own favorite ways of doing things and sometimes are reluctant to collaborate in experimenting with other teaching procedures. It is sadly ironic that trainers often become locked into particular ways of working and violate their own norms of experimentation and innovation. For this and other reasons, co-designers need to process the process. It is to be expected that different people may have different orientations and different levels of energy. Discussing the process and sharing points of view can be a highly beneficial and educational experience for any trainer.

MODIFYING DESIGNS

Another important set of skills involves modifying designs while the training event is in progress. While producing a plan of activities for fostering learning, there is no way that the trainers can anticipate all the responses of the participants and all the real-time concerns that become relevant. Trainers need to develop the ability to change the learning design while it is running. This involves taking data from the participants about their own needs at a particular stage of the event's development and finding appropriate alternatives to what was planned. When the trainers discover that what was planned back in the staff meeting no longer makes sense in terms of what is happening now, they need to be able to redirect the learning experience without becoming threatened by their lack of anticipation of participant response.

Skill in designing training events involves learning how to make one's goals highly explicit and specific, learning to anticipate how particular participants are likely to respond to various learning activities, learning to put training design components together in meaningful ways, developing the ability to collaborate noncompetitively with other facilitators in producing designs, and developing the ability to redirect the learning experience while it is in progress.

MAJOR DIMENSIONS OF DESIGN

Several major dimensions will be discussed in this chapter to guide the facilitator in the process of designing a training event.

GOALS

As has been indicated previously, it is critical for the facilitator to know the priorities and learning goals of a particular training event, in order to be able to specify them clearly and to be able to keep the learning event goal directed at all times. All proposed activities should be related to the goals of the training and should enhance attainment of the learning objectives. It also is important that the facilitator be able to help participants to clarify their own goals if they are unclear. Every person in the workshop should have some' understanding of why he or she is there.

OPENING THE SESSION

Sufficient time must be allotted at the beginning of the training event for the facilitator to perform the following opening tasks:

- Allow the participants time to become settled in the room. Then welcome the participants.
- Introduce the event, stating its objectives or goals and what the participants might gain from it. The common purpose in a training event is the training objective.
- Introduce the training staff and explain their qualifications and roles (perhaps their orientations).
- Provide a brief overview of the event, session by session or day by day—what the group will accomplish in the time available. It is important that the participants understand what they are going to do and why they are going to do it.
- Delineate rules and discuss expected norms (the concepts of trust, experimentation, risk taking, voluntariness, etc.). Clarify operating procedures and explain staff expectations.
- Attend to "housekeeping": Announce the schedule (starting and ending times, lunch times, and breaks) and check to see that all participants can adhere to it. Announce whether drinks and refreshments will be available and whether participants can leave their seats to get them at any time during the sessions. Discuss the tone of the session (formal or informal) and the expected style of dress. Announce whether smoking is permitted in the training room and, if not,

where people may go to smoke. Request that participants clean up after themselves, and so on.

- Conduct a getting-acquainted activity or, at least, have each participant announce his or her name and any other information that would be helpful or useful in this initial phase.
- Check expectations: The period of getting acquainted with the staff and an invitation to open up should be followed by the establishment of some expectations for the training event. Participants can be asked "What do you expect to get out of this training event?" The more clear and specific the responses are, the better. People typically ask questions such as "Are we going to deal with (some subject)?" The participants' expectations and desires then can be checked against those of the staff. Any inconsistencies or blocks can be discussed. In some cases, it may be possible to modify the design to include material that is important to the participants or that will help to achieve their goals.

All these introductory functions should be clarified and completed before any content is introduced into the training event. Many of these functions will need to be performed at the beginning of each day, and several of them may need to be done at the beginning of each session (after breaks, meals, etc.).

GETTING ACQUAINTED AND OTHER ORIENTING ACTIVITIES

It is necessary to do something to help people to become oriented to the other group members and to the training. Most adults orient in terms of *what*—"What are we here for; what is the task?" A few are *who* oriented—"Who are these people and what are they about?" Facilitators who orient in terms of the "what" tend not to plan well for those who orient in terms of the "who," and vice versa, but both need to be covered. In skills and awareness training, the participants need more "who." "What" may be sufficient for pure content training. The training designers should know enough about the participant group to plan for them.

A primary thing to consider in designing a getting-acquainted activity is what its purpose is. Trainers frequently confuse getting acquainted activities with ice breakers, energizers, and activities designed to introduce conceptual material. The following listing may help to clear up this confusion.

- *Getting acquainted*. These activities help the group members to get to know one another and to "warm up" for the events that are to follow.
- *Ice breakers*. These activities help the group members to break through existing, self-imposed barriers or boundaries. They force or encourage participants to do things in different ways. The intended result is to loosen up both behaviors and attitudes.

- *Forming subgroups*. These simple activities provide a variety of ways to divide the learning group into smaller subgroups.
- *Expectations of learners*. Some activities are designed to elicit the expectations, goals, or hopes of the participants in regard to the training event so that these can be compared with those of the facilitator.
- Building trust/building norms of openness. Some activities are designed to create trust and a climate of openness and learning within the group. They typically involve sharing and a moderate level of risk taking; they may include the giving and receiving of feedback.
- *Energizers*. These "recharge" the group members when energy is low.
- Dealing with blocks to learning. These are activities that are designed to deal with situations in which learning is blocked through the interference of other dynamics, conscious or unconscious, in the group.
- *Evaluating learning/group process*. These help individuals to evaluate what is taking place within a learning group.

The purpose of a getting-acquainted activity is to generate enough information of a high enough quality to establish the desired climate, to enable people to feel safe, to start the process, to get people on board with one another and with the task and ready to do the task. The sequence, then, is familiarity, risk, and transition to task.

In designing or selecting a getting-acquainted activity, it is a good idea to keep people's needs in mind. If the participants are meeting and sharing with one another for the first time, they will be experiencing some anxiety. It is difficult for people in these circumstances to effectively participate in a *sequential* activity. Before their turn, they may not hear or remember what others said because they are thinking about what they will say. After their turn, they may be able to listen to others or they may be worrying about how they did and how they were perceived. Having participants take turns in random sequence can help here. Another way to ease the stress is to avoid having participants stand up to talk while others are seated. Activities that call for the participants to share information and prepare in dyads, triads, or quartets and then report out or introduce one another can be highly effective. Designs that call for the participants to mingle also are useful.

If there is some acquaintanceship and some trust and support established in the group, a sequential activity may be easier to manage. In general, getting acquainted is a stressful activity. If it is "heavy" for the group members, it should be followed by reacting (processing) time or by something equally heavy to support the participants' moods.

It would be premature to conduct an activity designed to build trust and openness before the group members have had a chance to become at least minimally acquainted with one another. Similarly, an "energizer" is not needed if things are moving along and people are involved. Even worse would be to introduce an activity as a "gettingacquainted" or "icebreaker" intervention when its real purpose is to interject some content into the participants' consciousness.

One should never begin a high-risk activity at the beginning of an event, when the participants have not yet become acquainted and established some trust and norms of risk taking. This is another reason why it is important to be clear about what one is doing and not to confuse getting-acquainted activities with awareness or skills activities. This type of manipulation is almost always perceived and resented by the participants. Remembering two things can help to prevent this from happening: (a) know specifically what your objective is and be honest about what you are trying to achieve; and (b) attend to steps I and II of "the dance" (to whatever degree is needed) before you attempt to execute step III.

Facilitator Participation

A question that often is asked is "Should the facilitator(s) be included in the gettingacquainted activity?" The answer may be yes or no. Including the facilitator affects role clarity (including the facilitator's subsequent ability to make unilateral decisions). It is difficult to say "I am one of the group members" and then follow it with "O.K., you guys, listen up!" Also, if dyads or subgroups are working on a preliminary task for a getting-acquainted activity, the facilitator may want to take that time to prepare flip charts or other materials. The decision to participate or not must be based on the needs of the participants (do they really need to hear you?), the training objectives, and the facilitator's planned role in the training process (e.g., lecturer or director versus fellow participant in experiential/exploratory learning).

TIME FOR ONGOING MAINTENANCE

As the event proceeds, time should be allotted to processing what is happening, with the expectation that participants will have questions or comments. What one does *not* want to do is plan the schedule so tightly that participants feel rushed or pushed. It is important to allow time for participants to explore what is happening to them. Facilitators often discover that the group is going in a direction that is not planned, although it is productive. In such a situation, the facilitators need the flexibility to modify the design to accommodate the learning needs of the group.

Time also should be allowed for periodic feedback from the participants to check on how the design is working. There must be adequate time at the end of structured experiences, instruments, and other activities to make sense of and reinforce the learnings. Finally, time must be scheduled at the end of each day and at the end of the workshop for summary and evaluation.

NORMS

The most meaningful expectations for the facilitator to establish and maintain are those of strategic openness, experimentation, participation, responsibility, and sensitivity to self and others. Strategic openness means avoiding the extremes of being dysfunctionally open or of colluding with other people not to talk about taboo topics. Experimentation means trying new behaviors within the workshop. Participation involves helping to make it happen for oneself and for others. Responsibility means taking responsibility for one's own learning, not expecting to be spoon-fed by the facilitator. (This might be translated as: "It is the facilitator's job to teach, but it is my job to learn.") Sensitivity to self and others means that participants should be aware of the feelings that they are experiencing and that they should also attempt to be aware of the readiness of other people to get involved with them in open interchange of here-and-now data.

VOLUNTARINESS

A major goal of experiential education is to increase freedom rather than to coerce people into activities in which they otherwise might not participate voluntarily. This is true especially if persons attend the training event involuntarily. Some people react with a great deal of tension to activities involving physical touch, and they should not be required or unduly pressured to participate in such activities. The silent member of the intensive small group may be tyrannized by other group members into saying things that the person does not want to reveal, and the principle of voluntariness may be violated. Thus, in designing the experience, one must be sensitive to the needs of some participants not to involve themselves in every single activity. The best design allows the participants to make conscious choices about their levels of involvement by ensuring that activities provide a variety of meaningful roles.

INVESTMENT AND INVOLVEMENT

In designing an interactive training event, it is important to plan not to have passive audiences at any time; every participant needs to have something to do all the time during the formal sessions. If there is going to be a lecture, the facilitator may stress active listening. If a structured experience is to be used, roles should be assigned so that every person has something to do that contributes to his or her learning within the context of the experience. (Some participants can be designated as observers, provided with observation guides, and requested to provide feedback at the conclusion of the activity.) During a group activity, all participants should have the task of noticing and analyzing process dynamics. The important thing is that, from the beginning, each participant is led to accept responsibility for learning within the training context and that ample opportunity is provided to act out this responsibility through participation.

PACING

It is important for the training staff to keep things moving and to avoid passivity and boredom, but facilitators also must be sensitive to the effects of fatigue on the participants. One can design a training event that has such a breakneck pace that participants come out of the event having been overloaded with stimuli. Some time is needed for people to think things out, and free time should be built into the design simply to give people an escape from the heavy work demands of the event.

As a general rule, when things begin to drag, it probably is time to make a change. Sometimes the most effective change simply is to point out the process that is emerging and to help participants to understand its nature. In a group meeting, for example, if there is a long silence, it may be important for the group to deal with the responsibility of the individual participants to avoid dysfunctional silence. If the pace is characterized by frequent interventions on the part of the facilitator, it may lead to dependency on the part of the participants and they may come to expect the facilitator to make things happen. The pace of the events within a laboratory, then, should be dictated by the probable fatigue effect, the necessity to provide plenty of time for adequate processing of data, and the need not to reinforce dependency on the facilitators.

DATA

Data in the form of thoughts, feelings, and behavior are always present in the training milieu. Sometimes during an event, participants may comment that nothing appears to be happening, but often this simply is evidence that they are not monitoring the complexity of the emerging process. It is important to recognize and talk about whatever is actually happening and to try to relate dynamics to the focus of the training. The data-generating techniques that have been discussed previously can be highly effective in focusing particular here-and-now phenomena toward the learning goals of the event.

FLEXIBILITY

The designer of the training experience must plan to use maximum data from the event itself to modify the design so that it meets the learning needs of the participants. This means being open to (in fact, planning) to change the design during the event. We find it useful to overdesign workshops in the sense that, at any given point, several options are being considered. Based on the information available about the participant group, certain possible design modifications can be planned ahead of time, and the facilitators need to have the skills to consider others on site as the need arises. This implies a lot of coordination (i.e., staffing time), especially if staff members are new to one another. In effect, this consideration of several options at any point becomes a kind of on-the-job training for designing learning events.

Flexibility also means avoiding "packaged" designs that are preplanned and that do not account adequately for the responsiveness of particular participants or that do not lend themselves to being customized appropriately.

STRUCTURE

There are two aspects to the structure of a training design. The first is the visible part: what people can see that tells them what is going to happen. This includes posted agendas, seating arrangements, pens, notebooks, flip charts, etc. There should be a balance of visible structure at the beginning of a training event. Too little may cause concern; the participants need to see that something is going to happen. Too much could stifle individual contributions. People want to have input into their own learning; they want to affect the amount and type of structure. In general, it is desirable to have some visible structure at the beginning of an event. This should be geared to the participants and must be congruent with the system in which the training is taking place and with the training objective.

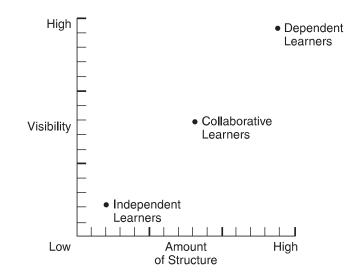
The second aspect of structure is the amount. High structure in design may not require high visibility. There can be a great deal of structure in the design, with preplanned activities, materials, etc., without it being highly visible. Participants generally want and need less structure as they begin to take responsibility for their own learning. For this reason, there is more visible structure in knowledge/concepts training and less in working with the content of the participants generated by experiential learning.

The illustration on page 115 shows the relationships between visibility and amount of structure in training design.

CONTENT, EXPERIENTIAL AND CONCEPTUAL INPUT

The facilitator must always check the content of the training against the needs of the participants. For example, if the group is experiencing conflict, a relaxation activity at the beginning of a session may make it difficult for the members to get back into dealing with the negative issues. The facilitator needs to be aware of inclusion issues in the group, developing norms, levels of participation, task and maintenance roles of members, dominance, types of influence or sources of power, verbal and nonverbal behaviors, uses of humor, treatment of silent members, decision-making processes, commitment to group process, atmosphere, and so on.

Another consideration in initiating content is the trainer's group-facilitation skills. In short, do not start things you cannot finish. Do not attempt to run activities that you have not experienced, tried out, or observed.



A third consideration is to be aware of your own preferences and prejudices and to consider whether they fit with the needs of the participants. It is important that the data and the techniques used in the training be relevant to the participants' training needs and interests. It is highly desirable that the content be related to the participants' occupations or primary concerns and that it be locally relevant whenever possible. This is particularly true in skills training and in leadership- and management-development workshops, in which the content of the activities needs to parallel closely the kinds of concerns and problems that participants ordinarily face in their work. A number of datagenerating techniques can be employed within the training sessions to ensure that the content of the learning design is relevant to the participants as they are experiencing it. The following are several useful strategies.

- Participants can be asked to make notes to themselves about particular feelings they are experiencing, thoughts they are thinking, persons to whom they are reacting, and so on. One useful technique is the "think-feel" card, on which participants are instructed to record their reactions at any particular point. On one side they are to write a sentence beginning with "I think," and on the other side they are to write a sentence beginning with "I feel." This process very often heightens the participants' willingness to share these reactions with others.
- A useful intervention is to form dyads and to ask the members of each pair to interview each other with regard to their reactions to a particular issue, event, or piece of behavioral datum at a given time. Often we ask people to use this as an exercise in active listening. Ordinarily, the interviewers should not make notes but should frequently paraphrase what they hear, to make certain that they are not translating in terms of their own reality rather than being sensitive to the phenomenological systems of the persons being interviewed.
- A list of concerns can be generated rapidly on a flip chart or chalkboard. Such a list might include issues or problems facing the group at any given moment, controversial topics or persons, etc. Participants can be asked to rank-order the

list according to some criterion such as urgency or influence. Often it is useful to ask participants first to perform a ranking independently to establish their own points of view and then to divide them into small groups, each to develop a consensus ranking of the material.

- Questionnaires can be developed that include multiple choice items, rating scales, open-ended questions, and so on. These can be used prior to or within the training event to generate data for participant learning. It is important that participants take the responsibility to process the data, and it may be desirable to post the statistical results so that the group can analyze itself.
- It sometimes is helpful for a group to look back on its own history to analyze how it has used its time. A list of topics that have constituted the group's agenda in past meetings can be generated, and the amount of energy that has been expended on any given item can be discussed. Sometimes a group discovers that an inordinate amount of energy has been expended on particular concerns and that it may be able to use its time more efficiently.
- Videotaping is an excellent technique. It is extremely difficult to recapture much of the data generated in a learning event by depending on memory alone, and the advantages of videotape—with instant and repeated playback—are obvious. Nonverbal data can be highly focused by the use of this medium, and it often is very useful in teaching process awareness.
- A group can look at its own development at any given moment through a problem-solving method called force-field analysis. A lecturette in the 1973 *Annual*, "Kurt Lewin's 'Force Field Analysis'" (Spier, 1973), describes this process.
- Occasionally, teaching the distinction between content and process is made easier by using activities whose content is obviously a simulation of "real-world" concerns. In an experiential training event, the task sometimes becomes so seductive that the group fails to look effectively at its own internal functioning. Such a process orientation can be generated rapidly through the use of an activity that focuses on interpersonal dynamics.

Participants frequently enter a training event unaware of their own incompetence in certain areas, but also unaware of their competence. One of the trainer's primary tasks is to help the participants to become conscious of the areas in which they can benefit from growth and change and also to help them to become conscious of the areas in which they have strengths and skills in order to capitalize on them and expand or refine them.

THE EXPERIENTIAL LEARNING CYCLE

In our opinion, the basis of adult training is experiential learning. It is true that this type of learning takes more time than purely didactic methods, but with experiential learning

things come to life. The learning cannot translate directly from the facilitator's head to the participant's head; it needs to be translated into the participant's frame of reference. In experiential learning 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. The key here is change. Awareness and understanding are fine, but they may not result in behavioral change; *learning* occurs when individuals adjust or modify their behavior. Thus, awareness and understanding are only part of learning. The facilitator's job is to guide the learning process and to provide a sound theoretical base from which the participants can obtain insights and models that they can use in guiding their behavior.

There are several models that describe how learning occurs (see Palmer, 1981); all state that learners move through a series of steps involving discovery, formulating and producing new behavior, and generalizing to the real world with the help of a trainer/facilitator. Our preferred description of how this process occurs (or should occur) was first published in the 1975 *Annual* and was expanded in the 1980 *Annual* (Pfeiffer & Jones, 1980). The model is presented in detail in Section One, "Using Structured Experiences in Human Resource Development," of Training Technologies Volume 21. The illustration on the next page serves as a reminder of the five stages of the model as a critical element in training design.

Experiencing

The process 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.

self-disclosure

guided imagery

Techniques that facilitate the experiencing phase are as follows:

- making productsfeedback
- creating art
- writing skits
- role playing
- transactions

problem solving

- nonverbal
 - communication

choosing

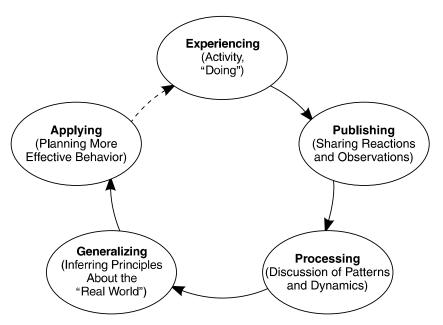
bargainingplanning

analysis

- competing
- collaborating
- confronting

Useful structures include individuals, small groups, subgroups, total groups, dyads, triads, and intergroups.

The Experiential Learning Cycle



Publishing

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

Techniques that aid publishing include:

- recording data
- posting, roundrobin listing
- go around
- whip

- free discussion
- subgroup sharing
- averaging

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 compared, explored, discussed, and evaluated (processed) with other participants. This is a crucial step in the learning cycle.

Helpful processing techniques are:

- observers
- rating scales
- themes
- completing sentences

- questionnaires
- adjectives
- discussing questions (what/how)

- interveners
- key terms
- nominations

Generalizing

Flowing logically from the processing step is the need to develop principles or extract generalizations from the experience. Stating learnings in this way can help participants to further define, clarify, and elaborate them.

Generalizing techniques include:

writing statements

 completing sentences individual analysis

key words

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 model. Applying, of course, becomes an experience in itself, and with new experience, the cycle begins again.

Techniques that aid in facilitating the applying phase are as follows:

- goal settinginterviewingpractic
 - = substauring
- practice sessions

contractingsubgtouping

PROCESSING OF DATA

Perhaps our most firm commitment in a training design is to make absolutely certain that there is adequate time for processing the data that are generated by particular design components. It is in the processing activity itself, which immediately follows every learning experience, that the participants' learnings and insights are tied together, the question of "so what?" is answered, and the transfer of learning is bolstered. If human resource development is, in fact, training for everyday work, it is important that we heighten the probability that such transfer will take place. Processing involves the talking through of behavioral and feeling data that emerge in a particular activity and then discussing the learning and action implications. A cardinal rule here, then, is: Do not generate more data during the activities and input stages than can be talked through during the processing stages. We are convinced that it is both dangerous and unethical to leave large portions of data hanging that might be integrated in dysfunctional ways within the consciousness of a given individual. The importance of providing sufficient air time within the training design to sort out and share reactions to particular events cannot be overemphasized.

A number of structures have been developed to help participants to process data. The following is a partial listing of these designs.

- Participants and trainers can be used as *observers* in some structured experiences. It sometimes is useful to provide process-observation recording forms on which the observer may make notes during the event. Sometimes we will interrupt an event to hear reports from the process observers. Occasionally we have several process observers who form a discussion panel after the event to pool their observations. We often incorporate into the design the option for any number of participants to take turns functioning as external process observers. Occasionally we set up a particular structured experience so that the participants will stop at a predetermined point to process their reactions up to that point.
- A facilitator can be used as a *consultant* to a particular group that is accomplishing a task or working on a particular problem within the work-shop. This may be done on a continual basis—that is, a consultant may be requested at any time while a group is working—or the timing of the interventions of the process consultant can be preplanned. Participants also can be trained to perform this function.
- After an activity on listening and process observation, *participants can be encouraged to use one another as consultants* in dyadic relationships that emerge during the training. If two participants are having difficulty communicating with each other, they might seek out a third party to help them to listen more effectively. This can be very useful training that can be transferred to the backhome situation. It is important for a participant to develop the ability to play the role of process consultant rather than to be a person who mediates conflict or takes sides on the content of a particular issue.
- The group-on-group, or fishbowl, design is one of the most powerful processing techniques. In this design, one group sits in the center of the room while the members of the other group(s) sit around it, outside its boundaries, and observe what the first group is doing (discussing, processing, etc.). What lends it potency is that the group operating within the fishbowl is under considerable pressure to work hard at focusing on process. In addition, the group in the center can use other participants as consultants for its own internal functioning.
- To increase the air time for individual participants, it may be useful to *divide a large group into a number of small groups* (three to six members each) for rapid processing of data. This can be structured so that there are reporters who will give brief synopses to the total group at a predetermined time of the major themes that emerged in the subgroups. Subgrouping gives many people a chance to be heard and understood in less time, and it can heighten the getting acquainted process.
- A *circle of chairs* can be placed in the center of the room with the ground rule that an individual who wishes to speak about what is occurring must occupy one of the chairs in the center. Each speaker leaves the center and returns to the audience once he or she has finished speaking. This has the effect of including

any number of participants in open interchange. It is particularly useful when working with very large groups of people. A draw-back of this technique, of course, is that people who are more reticent or who are not risk takers may be unwilling to participate.

Many people find that the transfer of learning is easier if they receive support in making action plans and commitments and in practicing new behaviors. In looking back at the process of learning in the experiential-training experience, participants sometimes can focus on particular things that they have been doing by *developing contracts*, or promises, with one another that they attempt to fulfill within a specified time. The members of the contracting pairs or groups agree to telephone one another or write in order to receive assistance and reinforcement and to report progress. This process of contracting can lead to highly useful applications in the back-home setting. We sometimes incorporate within the helping-pair design the writing of contracts for back home application of specific learnings, with planned follow-through built into the contract. Participants also can be encouraged to make contracts with others in their work settings to practice and receive feedback on specific behaviors when they go back to the job. The nature of the learning will dictate whether or not this might be helpful.

The bridging and application processes work best after people have thought about their old patterns and behaviors and developed new frames of reference; thus, it is important to allow time for the processing of relevant segments of the training as it progresses. This also allows the participants to put it all together before the final application step.

A final part of the facilitator's task in helping participants to plan how to apply their learnings from the training is to help them to prepare what they will do if their new behaviors meet resistance in their back-home settings.

The next discussion contains some sample sequences and explanations of the rationale behind them.

SAMPLE DESIGN SEQUENCES

There is, we believe, an organic sequence of activities that is useful to consider in designing human-interaction training events. This section will delineate this sequence in terms of the design components discussed previously. Although the emphasis often is different, the flow of activities within different kinds of learning programs overlaps somewhat. To serve as examples, we primarily will consider the design of two kinds of training events that often are developed by group facilitators: personal growth and executive-development workshops.

PERSONAL GROWTH DESIGNS

In a personal growth setting, although there are definite learning goals that involve the use of skills in their accomplishment, there is less emphasis on skill building than there is in many other types of workshops. The three key goals in personal growth are developing awareness of self and others, learning how to give and receive feedback constructively, and increasing skills in interpersonal relationships. Toward these ends, skills in listening, expressing, and responding are needed, and their development must be integrated into the design of the experience. These three skills will be discussed more thoroughly in the next section. This is one of the areas in which these two basic concepts overlap.

The flow of learning that is implied in the tabulation that follows suggests a sequence of events leading to the optimum use of time in personal growth. These things need to be done in a logical flow, from getting acquainted to going home. A variety of structures can be utilized to effect this sequence, which is relevant both to retreats and to spaced meetings. The sequence is not the design of an ideal training event so much as it is an outline of the learning needs of participants in a personal growth context.

EXECUTIVE-DEVELOPMENT DESIGNS

Another genre of training is called "management development," "leadership development," "executive development," or even "communication skills." The events generally are described as conferences, workshops, or seminars, and although there may be some distinctions in content among them, they all focus on skill building and conceptual development through experiential methods. They differ from personal growth laboratories more in degree than in kind; that is, there is a comparatively higher degree of emphasis on skill building and comparatively less emphasis on awareness of feelings about oneself and others. There also is a comparatively higher degree of structure within the design and a liberal use of simulation activities. For the purpose of brevity, in this discussion we will refer to this type of training as executive development, but the content of this section generally will hold true for both management- and leadership-development programs.

Many skills are learned during an executive-development training event; they include listening, expressing, responding, participating, collaborating, facilitating, observing, intervening, reporting, conceptualizing, problem solving, decision making, planning, negotiating, collaborating, conflict management, and team building. We will discuss the ones that are listed first to provide examples, but we will not attempt to provide a subjective ranking of their importance within the training program.

Listening is a basic communication skill and it is reinforced throughout the training experience by means of structured activities and through the process of paraphrasing within small-group meetings. Expressing one's thoughts and feelings is practiced through nonverbal exercises, process-reporting exercises, intensive group meetings, and so on. Responding to the communication of others is the third basic communication skill that is reinforced. The intent here is for people to develop a heightened awareness of and sensitivity to the persons to whom they are responding so that they are able to communicate within a system that has meaning to others.

Leaders need to know how to be followers because following is a part of leading. Participating in group activities in which the "leader" is simply one of a group of people working shoulder-to- shoulder is an important skill and should be practiced during the training session. In developing skill in collaborating, participants are encouraged to learn how to use conflict functionally and to avoid conflict-reducing techniques (such as "horse trading") in order to determine the best judgement of the group in solving problems. Leaders need to develop the ability to facilitate other people's growth by encouraging them to take responsibility for the task that faces the group. Some skill building is needed in defining management/leadership as the facilitation or sharing of responsibility.

When observing, leaders need to be able to see the complexity of intraindividual, interindividual, intragroup, and intergroup phenomena, so some skill development should be planned within the program to help leaders to learn about the behavioral manifestations of interpersonal dynamics. Closely related to observing is skill in using what one sees to help a group to improve its own internal functioning by learning about its ongoing process. Leaders need to develop the consultation skill of process intervention. In addition, they need skills in reporting or summarizing large batches of group content in order to provide succinct accounts of what has been decided.

Conceptualizing is perhaps the most complex of executive skills. This involves looking at human interaction from a theoretical point of view. Conceptual models can be incorporated into executive-development training in a way that allows the participants to develop their own theories of management or leadership.

The following sequence is, we believe, an organic, logical, and effective flow of activities that need to take place in executive development workshops. Again, this

sequence is proposed as relevant whether the training takes place over a weekend or during a semester-long course.

Personal Growth

1. *Getting Acquainted.* The major need at the beginning of an event is for the participants to establish some familiarity with one another, so that the initial caution with which people interact can be eased. the unfreezing process begins in the initial stages of the event. Numerous getting-acquainted designs are available in the HRD literature and as structured experiences in the Pfeiffer & Company Annual and Handbook series.

2. Closing Expectation Gaps. It is important that the goals of the experience be made explicit and that they be correlated with the goals of the participants. It is equally important that participants and facilitators have a clear understanding of what each expects of the other. The most difficult training situation we know of exists when participants expect one kind of experience and staff members expect something else. Under this condition there needs to be immediate negotiation and clarification of assumptions.

3. *Legitimizing Risk Taking*. Early in the training experience, it is significant for participants to test their willingness to know and to be known by other people, to express their feelings, to explore how other people are reacting to them, and to attempt new ways of behaving in relation to other people.

Executive Development

1. *Getting Acquainted*. Here the basic need is to infuse a note of psychological safety into the proceedings by familiarizing participants with one another and with staff members on a personal level. The effort is to create a climate in which people can have easy access to one another. It is important in the beginning of such an experience for people to be able to establish their credentials. Often participants feel a strong need to impress people with who and what they are.

2. Closing Expectation Gaps. In an executive-development workshop, as in a personal-growth training event, it is important that the goals of the experience be made explicit and correlated with the goals of participants. It is equally important that participants and staff members have a clear understanding of what expects of the other. If the facilitator determines that there is a wide expectation gap, he or she must immediately negotiate to close it.

3. *Roles and Shared Leadership.* The concept of roles and function of different group members and the notion of dynamic, shared leadership should be introduced. This sets the tone for using theoretical material in an experiential format to focus on oneself as leader in relation to other people.

Personal Growth (cont'd)

At this point it is important that risk taking be legitimized and reinforced as a norm in the training setting

4. Learning About Feedback. Soon after the beginning of the personal growth event, it is useful to provide some instruction about the feedback process so that effective sharing can be heightened in the intensive, small-group sessions an in the free time between formally planned sessions. (See the "Guidelines for Giving and Receiving Feedback" at the end of Section Two, "Using Role Plays in Human Resource Development," in Training Technologies Volume 21). Lecturettes, structured experiences, instruments, role plays, and trainer interventions can help to provide an atmosphere in which feedback becomes expected and experienced freely. These methods also can be used to introduce some conceptual models to guide participants in the sharing of information about one another.

5. Developing an Awareness of Process. After the intensive small group in a personal growth event has had a brief history, it often is highly useful to begin to explore the dynamic processes that are emerging in the development of the group. This exploration may be done through a fishbowl procedure or a variety of other designs previously discussed. The group can grow more rapidly if it stops occasionally in the interaction among members to process the patterns that are beginning to emerge in its development.

Executive Development (cont'd)

4. Learning About Feedback. Soon after the beginning of the training experience, it is useful to provide instruction in the feedback process so that effective sharing can be increased. Lecturettes, structured activities, instruments, and trainer interventions can help to provide an atmosphere in which feedback becomes expected and experienced freely.

5. Developing an Awareness of Process. After the executivedevelopment training group has had a brief history, it is highly useful to begin to explore the dynamic processes emerging in the group. This may be done through a fishbowl procedure or a variety of other designs, many of which are discussed in this section. The group can develop effectively if it stops occasionally ion the interaction among members to process the kinds of leadership and roles that are beginning to emerge.

Personal Growth (cont'd)

6. *Integrating Conceptual Models*. Transfer of learnings is more likely to be achieved if the participants receive assistance in integrating the behavioral and affective data of the experience by looking at some theoretical models of personal and group development. This can be done through the use of instruments, lecturettes, demonstrations, and so on.

7. *Experimenting with Self-Expression*. Growth in awareness of self and others can be heightened through the use of expressive techniques such as nonverbal exercises and guided imagery. Toward the middle of the personal growth experience, often it is useful to build into the design some opportunity for people to "stretch" their personal development through the use of symbolic self-expression.

8. Planning Back-Home Applications. Ideally, plans for backhome application begin to develop from the beginning of the training event. For example, an early experience that often is useful is a goal-setting activity, with reassessment in the middle and at the end of the event. Often we use role playing, contracting, and helping pairs for applying the learnings from the experience to particular back-home situations. Toward the end of the experience, considerable effort should be made toward getting participants to accept responsibility for making definite plans for changes that they want to institute after the training experience is over. These plans need to

Executive Development (cont'd)

6. *Competition Task.* Early in an executive-development event, it is a good ideas to introduce an activity that is likely to result in participants' exploring the functional and dysfunctional effects of interpersonal competition. Sometimes a competitive atmosphere is established deliberately, such as in an intergroup model-building activity, or it may arise spontaneously in a relatively unstructured task experience.

7. *Collaboration Task*. It is useful to follow a competitive experience with an activity in which people are expected to attempt deliberately to collaborate with other people on a task. The aim is to demonstrate that collaboration is a possible and desirable, even within a culture that rewards competitive spirit.

8. *Consensus Task.* Closely related to the collaboration task is consensus seeking. Many structured experiences can be chosen that involve a number of people in arriving at collective judgments that are superior to individual judgments. This kind of experience attempts to illustrate the concept of synergy.

Executive Development (cont'd)

Personal Growth (cont'd)

be evaluated in the light of criteria for application, and this evaluation often is best done in collaboration with one or two other individuals with whom the participant feels comfortable.

9. Assisting Re-Entry. Closure activities in a personal growth experience should enable the participants to move back into their ordinary environments with a minimal amount of difficulty. Activities that emphasize feeling and cause participants to be "high" can result in dysfunctional reentry into their immediate back-home situations. It is important to assist participants in exploring the observation that they are full of consciousness of themselves. At this point they are far more sensitive to their feelings and are more willing to be involved with people in open, trusting ways than are their "real-life" associates who have not just spent a considerable amount of time in a personal growth laboratory.

This general sequence does not imply a rigid structure. It simply is an attempt to highlight the needs of participants to develop an ability to talk with one another, to learn how to make sense out of the interaction that is occurring, and to heighten the development of ways in which they can use the experience in their everyday lives. 9. *Planning Back-Home Applications*. Toward the end of the training experience it is important for the participants to begin making definite plans for particular behaviors that they want to experiment with and/or change in their back home management or leadership situations. It sometimes is useful to have participants write letters to themselves about what they are going to attempt to change, based on both cognitive material and their own experiences during the training.

In addition to a sequence of activities fostering skill building and the development of a set of concepts about management or leadership, some material is thematic throughout an executive-development training design. Three concepts should be stressed during the event itself: process awareness, criteria of effective feedback, and theories of management/leadership. The design of the executive-development workshop in general, then, consists of encouraging participants to experiment with leadership phenomena, involving them in a series of activities to explore leadership from the point of view of looking at themselves in roles, exploring group effects and the dynamics of competition and collaboration, and planning the transfer of learning to their management or leadership situations back home.

PROFESSIONAL DEVELOPMENT IN DESIGN

BUILDING A REPERTOIRE

A number of steps can be taken to improve one's ability to design training experiences. A first step in developing such skill is to build a repertoire of materials that can be used in design work. The facilitator can become familiar with structured experiences and instruments available for use in training and can master an array of lecture materials that he or she can call on at a moment's notice to explain particular phenomena in the training setting. The "References and Bibliography" section at the end of this volume provides an abundance of materials to aid the facilitator in this regard.

CO-FACILITATING

A second step in improving one's ability to design training is to be active in seeking opportunities to work with a variety of other facilitators. This has a number of important advantages. One has the opportunity to observe what actually happens in the training setting and how things are handled by other facilitators. One can receive concentrated, highly specific feedback on one's style as a facilitator, can improve one's ability to diagnose participants' needs, and can spend staff time critiquing the design and debriefing training sessions after they are completed. This, we believe, is the best professional-development strategy currently available. There is no substitute for experience with other qualified professionals, working in a training setting with actual participants.

VARYING CLIENTS

A third step is to seek out opportunities to work with a variety of client groups. This requires that the facilitator be flexible in design and avoid developing design packages that may be irrelevant to the learning needs of particular clients. There are obvious ethical restrictions on the facilitator in seeking out clients. Human-interaction training generally is considered to be a professional-level activity; therefore, professional ethics require that facilitators not over represent their qualifications. Within ethical restrictions, however, one can grow professionally by generating experience in working with a variety of participants.

STUDYING DESIGNS

Another activity that can result in professional development in designing training experiences is to study other facilitators' designs. This is a somewhat controversial

subject in that, within the field of HRD, there is a tendency for facilitators to be closed and possessive about the designs they have developed. It is not uncommon for facilitators to conclude that they have developed a program that is highly salable, and one often encounters reluctance to share designs with other professionals. At some point, what happens is the systematic violation of a norm that we try to sell to clients: to be open and collaborative. Pfeiffer & Company conducted a life-planning workshop some time ago in which over half the participants attended primarily to learn how to conduct the program themselves. We renamed the event the "rip-off lab" and had a good laugh about it. What was significant about the experience was the fact that before the workshop began, the participants' hidden agenda was a taboo topic. We made it an open subject and legitimized it so that people would not feel the need to conceal their motives from the training staff.

In studying other facilitators' designs, however, it is important to remember that many designs are copyrighted and that studying a design to learn what works or what is unique is different from taking somebody else's design *in toto* and using it out of context. Others' designs almost always are, in some aspect, irrelevant to the particular needs of another client system. Learning what works, how to create, and how to adapt should be the objective.

ATTENDING WORKSHOPS

A fifth step that facilitators can take is to attend professional development workshops. Many learning experiences are available for the human resource development professional that afford opportunities to obtain supervised practice in the design of training laboratories. Various training organizations, such as the National Training Laboratories, offer such professional-development programs.

ATTENDING LABS AS A PARTICIPANT

Finally, it is very useful for the facilitator to attend training events occasionally as a participant rather than as a staff member. The human element is the critical point in effective facilitation. The most significant ethical boundary impinging on HRD professionals is the need to remain healthy: not to deceive themselves about who they, are, what they are up to, where they are going, and so on. Experiencing training as a participant means living by the same kind of values that we are attempting to teach other people and continuing to develop our ability to provide experiences that offer meaningful human contact with other people. The major need in staff development is to integrate one's personal and professional development. Personal growth is necessary but not sufficient; even though the facilitator may be a highly effective person, he or she still needs the technology of laboratory education in order to be effective in fostering the development of other people.

PRACTICING WITH OTHERS

The following are a dozen suggestions for the members of planning teams who want to enhance their design skills.

- 1. Agree on the general goals of the session you are planning (and the topical area that participants will explore during your practice session).
- 2. Develop a few ideas privately (individually).
- 3. Share your individual ideas and augment them spontaneously.
- 4. Evaluate ideas privately (individually).
- 5. Share your evaluations and identify areas of agreement.
- 6. By consensus, select the most salient idea. (Remember that the objective of this practice session is to provide you with an opportunity to learn about design from having designed and implemented a short training model, not to create a perfect design.)
- 7. Develop a design that will allow your participants to:
 - Experience (an activity that generates useful data);
 - Reflect on what was experienced (share reactions and observations; compare reactions and dynamics and clarify learnings; and develop principles, hypotheses, and hunches about the relevance of their learning to outside issues); and
 - Apply (plan new behaviors in realistic situations based on the learning that has emerged).
- 8. Try out your design within the team, if possible.
- 9. Solicit reactions to the design from an external consultant, if possible.
- 10. Conduct the design with workshop participants, soliciting detailed criticisms.
- 11. Reconvene with your planning group. Review the results of your session. Debrief team functioning and learnings gained from having worked as a member of the team on this design.
- 12. Modify the design and invent variations, if possible.

PILOT PROGRAMS

As indicated above, a test run of a design module or full design can be a very worthwhile endeavor if the situation warrants it. For example, such a situation might exist if you do not have a lot of experience in designing training modules, if you want to use something that may generate a lot of affect or be tricky in some way, if you are just not sure about the design, or if the training will be conducted for a large number of people and you want to be sure that they do not perceive it as a waste of money. Running a pilot program also can be a way of sending a message that you work carefully, but this can backfire if you are perceived as being overcautious or inexperienced. As the preceding list indicates, a trial run enables you to obtain specialized feedback for evaluation.

The best group for a pilot program is a receptive audience of decision influencers not the type of people who have a "show me" attitude but those who can provide constructive and useful feedback and advice.

SELECTING TRAINING SITES

The selection of an appropriate physical setting for a training workshop is a critical variable in the learning process. Although the "perfect" place does not exist, it is important that the advantages and disadvantages of a site be weighed carefully against the goals of each event to maximize the participants' learning potential.

LOCATION AND SETTING

Training that takes participants away from their place of work eliminates the distractions of their daily routines and the interference of their colleagues. This contributes positively to the investment and involvement that participants have in the training event. When workshops last more than one day, it is ideal to have people sleep and eat at the site. Informal interaction among participants is increased and contributes to their learning, much of which occurs outside the regular workshop.

Ease of transportation and proximity to public carriers (e.g., airports) are important considerations for a public workshop. Getting to and from the training site can become a major dissatisfier if directions are not clear, costs are too high, or travel time is too long. A useful rule of thumb is to hold public events within forty-five minutes of a major airport and near major cities. Going into a major city is a plus for many participants.

The basic considerations for training settings are privacy, attractive grounds and buildings, a humanistic staff, moderate costs, and limited distractions. We strongly prefer "retreat" settings, if possible. Both religious and nonreligious locations where the staff is accustomed to offering service and direct support to conferences and workshops are satisfactory sites. Many colleges and universities also have excellent facilities available, especially in the summer months. There also are several professionally run conference centers located in various parts of the United States, but they tend to be more expensive than nonprofit locations.

Many facilitators choose motels and hotels as training sites, but most motels and hotels do not meet the basic considerations. Although hotels often cater to conferences, because the house staff usually is not well trained to meet the unique needs of a workshop design and the meeting rooms often are either too sterile or too ornate, much of the trainer's energy may be spent in coordinating details and solving problems. However, these difficulties can be minimized by careful shopping, close coordination with the contact persons, and a visit to the location in advance. The following are useful resources for finding and selecting workshop sites:

- Official Meeting Facilities Guide. Published semiannually by the Business Publications Division of Murdoch Magazines, a division of News America Publishing, Incorporated, in Secaucus, New Jersey.
- Hotel & Motel Red Book: The Official American Hotel & Motel Association Lodging Directory for the Business Traveler. Published annually by Panel Publishing, 590 Ygnacio Valley Road, Suite 300, Walnut Creek, California 94596.
- *OAG (Official Airline Guide).* Published every other month by Official Airline Guides, Inc., 2000 Clearwater Drive, Oak Brook, Illinois 60521.

Country clubs are another type of site to consider. During their off-seasons, the rates are more moderate than those of hotels, and clubs often possess many of the physical and service advantages offered by retreat houses. Another plus is that, as with colleges and universities, there usually are excellent recreational facilities available. Physical activities during breaks in the schedule can add needed variety to a workshop. If a beautiful site with excellent recreational facilities is selected, time should be planned to allow participants to use those facilities.

ROOM AND BOARD ARRANGEMENTS

A variety of room and board arrangements can be negotiated with sites, but there are two basic options: (a) a daily rate for room, meals, and refreshments and (b) a sleeping rate only, which allows participants to take responsibility for their own meals wherever they choose. These two options often can be combined in various degrees.

The first option is advantageous for some participants but it can be a problem for those with special dietary needs. The second option provides for individual preferences on the part of participants but may fail to foster a climate of community.

The choice of options should be based directly on the goals of the event. If team building is the goal, for example, the prearranged community-meal arrangement is the best choice. If individual learning is the goal, allowing participants to be responsible for their own meals is an appropriate and simpler choice. The facilitator should be aware of these factors in considering, for example, the choice of a retreat setting where only prearranged meals are available or a hotel in a city known for good restaurants.

Meals that provide the greatest variety for the least cost are a basic concern when selecting a training site. Cafeteria or buffet service is preferable to served meals because of the time and menu flexibility. Most retreat centers, colleges, universities, and conference centers offer this type of meal plan as a package with the room rate. However, it is important to check on the availability of vegetarian plates, diet drinks, etc.

Whether to include the cost of arranged meals in the workshop fee when using hotels and motels is always a question. Because of the problems of forty-eight-hour

guarantees, costly menu items, and the relative inflexibility of serving time and range of choices, we often decide to have participants at our workshops eat in the coffee shop or at nearby restaurants. Such a decision does diminish the group's sense of community, but it is usually easier for the participants. However, one major advantage to having the hotel serve lunches and/or dinners is that the meeting room (which often exceeds \$100 a day) is usually free.

Even if meals are not included in the training package, it is a good idea to have coffee and tea available in the meeting room. The trainer can arrange for an informal setup that is checked by the house staff prior to the start of each session. There usually is an extra charge for this service, but many places include it in the room rate. Soft drinks may be fairly expensive, but they should be included when the workshop is being held in a warm climate. Refreshment costs, like many other necessary incidentals during a training event, can mount rapidly and become a major expense if not carefully monitored.

It is useful to arrange an after-hours social event, perhaps with beer, wine, and soft drinks, to help promote informal interaction and learning. (Many trainers schedule only 8 a.m. to 5 p.m. days, but we think that too many free nights detract from the importance of the workshop; during week-long events, however, a night off in the middle of the event is a good idea.) It is important to check the alcohol policies of the training site; sometimes liquor is prohibited, or there may be a requirement that the site provide a bartender, usually at considerable cost. If a hotel is used, the trainer can rent a large suite for parties and ask that participants contribute to the refreshment fund.

If participants will be paying for their room and board separate from the tuition, it is convenient to negotiate a fixed daily rate that each person pays directly to the site. The "administrivia" of number of meals, single and double rooms, extra charges, etc., can be time consuming if assumed by the facilitator. If such a direct arrangement is not possible, one staff person can be designated to handle all the details with the site and to collect money and organize arrangements with the participants. The primary goal is to minimize problems and distractions from the participants' point of view.

PSYCHOLOGICAL SETTING

Outcomes for those involved in a training event can be dramatically impacted by the psychological setting of the site. If the site has rigid rules and people who disapprove strongly of any behavior that deviates from the conservative norm (such as crying or touching), the trainer obviously should not choose that site for conducting a personal-growth lab. Trainers are strongly advised to consider the goals and content of the training event and to select a site that will contribute to the achievement of those goals.

Privacy

The degree of privacy required in a training site varies with the purpose of the training. If the event has a personal-growth focus, it is more important to provide a high degree of privacy for participants in the training room and the living accommodations. Participants are more likely to experiment with new behavior of a very personal nature in a setting that is safe from prying or judgmental eyes. If the event is less personal in its orientation and interaction is less intense, the requirement for privacy is lessened. However, some level of privacy that precludes strangers from wandering into meeting rooms and encourages participants to interact with one another during and between sessions is advisable in any training event. In organization development meetings, for example, much of the material discussed may be proprietary and confidential and require a degree of privacy.

A very important variable in privacy concerns the other groups using the site and the degree of probability that the groups will intermingle or share facilities and create dysfunctional competition and annoyances, draining energy away from the purpose of the event.

Comfort

The color, lighting, condition, and general aesthetic quality of meeting and living areas can have a dramatic effect on the learning that takes place. If the areas are drab or uncomfortable, a great deal of energy may be displaced into complaining and negative projections. If the site is extravagantly decorated or contains obviously religious art, the decoration may distract from the training content. A relatively neutral but pleasant environment seems to work best. It is wise to select a site with adequate light that is adjustable to the needs of the event and a color scheme such as pale green, off-white, or beige. Too many large windows also can be a distraction. In general, the site should be of an aesthetic quality similar to that with which most participants are familiar.

Size of Meeting Rooms

No one likes to be crammed into a cubicle in which body heat alone can raise the temperature fifteen degrees in one hour. Nor do most people enjoy the feeling of a tenperson group lost in an auditorium designed to seat five hundred. Experience indicates that twenty-five square feet per person attending the event is a good rule of thumb. The shape of the room also is crucial. It should be square rather than long and narrow. This criterion is one of the most difficult to meet at many sites; the trainer often may be forced to compromise to some degree. The larger the number of participants, of course, the bigger the problem. Ceiling height does not seem to have a great deal of effect as long as it is not less than eight feet (if it is lower than this, many people tend to feel smothered).

If more or fewer participants than expected appear, the trainer should look into the possibility of obtaining a different meeting room.

Normal Usage of Site

Meeting sites usually are designed with some specific purpose in mind. Older sites often were constructed for classroom arrangements, which may or may not prove adequate for a training event. Many new sites, however, are designed to accommodate laboratory learning. The purpose for which the site is used most often will give the trainer some indication of the psychological climate. If it is a country club or resort, it may be more conducive to recreation than learning. Heavy drinking may be a norm, detracting from the purpose of the event. If it is a religious-retreat site, there may be very strong norms that (although peripheral to the operation of the site) may cause considerable consternation and goal diffusion for many participants. Such issues as "quiet hours," dress codes, normal age range, and the level of the staff's psychological ownership of the site may pose serious problems for or contribute materially to the success of the event. An "uptight" site manager may turn an otherwise successful event into a psychological disaster for trainers and participants alike. Whether it seems plausible or not, the behavior of a busperson assigned to the meeting area can have a great deal of influence on the participants' learning. (The incentive of a good tip contingent on the achievement of very specific behaviors can ameliorate a problem in this area better than a complaint to the management.)

Philosophy of Site Management

It is crucial to the success of an event that the training objectives and procedures do not violate the philosophy or behavioral norms of the site staff. For example, if egg throwing is part of the workshop design, the trainer had better have a very direct conversation with the site management before signing a contract. On the other hand, if the event is designed for senior executives, bishops, or senior citizens, the trainer would do well to look for a site not known for its radical ideas and norms. A humanistic leadership workshop is likely to do better at a site that is managed humanistically than at a site that is rigidly controlled.

Whenever possible, it is a good idea for trainers to visit a potential site, prior to contracting for its use, in order to experience its psychological climate. Many commercial sites will provide trainers with a complimentary stay, and it is advisable to take advantage of the offer if at all possible. It may make a great deal of difference in the final decision. If trainers cannot visit the site, they should talk with someone who has been there. In any case, they should ask the site to provide references from other users.

NEGOTIATING AND CONTRACTING

The best advice in this category is to know exactly what the selection criteria are for a particular event and then shop around for the best match. The trainer should remember that in most cases it is a buyer's market. It is not necessary to grab the offer unless everything, including the price, is perfect. Shrewd shopping and hard bargaining can substantially reduce costs.

Some things to consider in negotiating:

- 1. *Cost of refreshments*. Are they priced per gallon or per person? An arrangement that allows payment only for what actually is used is almost always best.
- 2. *Meeting room rates.* It is standard practice for these rates to be prorated, based on the number of sleeping rooms and/or meals scheduled. If over twenty sleeping rooms are used, the meeting room should be free.
- 3. *Payment terms*. Are all fees payable on departure, or are thirty, sixty, or ninetyday terms available?
- 4. *Advance deposit.* Some sites require this; for a public event, such a requirement could well be a disqualifier.
- 5. *Specific contact*. It is very important to be sure that one person from the site management who is going to be on site throughout the duration of the event is specified by name.

If at all possible, the trainer should talk with this representative in advance to discuss the concerns and desires of the workshop. It is necessary to listen carefully and be sure that there is a clear mutual understanding of all requirements.

When the newsprint supply runs out or the air conditioning goes off, this person is the one to call. Without such a contact, the division of labor at many sites among housekeeping, catering, sales, room reservations, and maintenance can be very trying to deal with.

6. *Advance reservations*. Perhaps most important is to make reservations as far in advance as possible so that the features of the site can be utilized to best advantage.

If the trainer conducts similar events frequently, it may be useful to prepare a "request for bid" document that outlines all requirements, schedules, etc., in detail, leaving blank spaces for the site management to fill in with exact prices. This will help to ensure that needs and desires are met and that there are no surprises on the final bill. This document should be submitted to the site far in advance of the event, and the site management should know that bids from other sites also are being requested.

Another helpful item for the use of the facilitator is a checklist for site selection (see the sample that follows). By checking off each item as it is completed or dealt with, the facilitator can keep track of the state of the negotiations with the site.

There is a wide variety of concerns and options relating to choosing a training site, and tradeoffs in administering a particular workshop at a particular site always exist. Thoughtful choices, attention to details, and hard negotiation will help to make the site a positive contribution to the success of a workshop.

A Sample Checklist for Site Selection

Instructions: Use one copy of this checklist for each site being considered. In discussing the site with sales personnel, be sure to cover each item, check it off, and make any pertinent notes. A consideration of all the items on this checklist will provide a sound basis for contracting. Be sure to add any special requirements that you have.

Site Being Considered:	
Event:	
Goals of the Training:	
Participants:	
Staff:	
	Size of meeting room Multiple room requirement
Prearranged meals or individual	 Complimentary sleeping rooms for staff Privacy Type of furniture in meeting rooms for staff Audiovisual equipment available Attractiveness and quality of decor in meeting rooms Water, tea, and soft drinks available during sessions Cost of refreshments Ease of transportation and proximity to public carriers Policies regarding alcohol and smoking
Advance deposit required?by	
Credit terms	
Precontracting visit to site	
Name of one person on site staff to coordinate all needs before, during, and after event	

A BACKGROUND TO CONDUCTING EXPERIENTIAL TRAINING

One of the most basic assumptions of experiential training is that learning is not accomplished by merely listening or reading. A great deal of research has shown that people need to be involved in what they are learning; cognitive understanding must be reinforced by experience. For this reason, most training programs today are a combination of lecturettes, note taking, discussion, structured experiences and group activities, reading, model building, instruments, role plays, case studies, simulations, demonstrations to model skills, practice, and feedback according to specific behavioral criteria. All these activities are carried out in the safety of the training room, frequently in small groups.

Good trainers realize that there is more to facilitating learning than merely presenting a lecture or directing an activity. Considerable skill is involved in working with people, in administering instruments or conducting structured experiences, simulations, and other activities. Explicit directions for conducting an activity are not a guarantee of success.

BALANCING THE ELEMENTS

The facilitator must not allow the participants in structured experiences and other activities to become too exclusively focused on the task. Although many activities can be experienced at a "games" level, the facilitator must not lose sight of the fact that *the objective is to examine the process and related issues generated by the experience*, not to focus on the content itself. When experiences are perceived as play, they are likely to produce very little of value, and the result is seen as proof of the ineffectiveness of the activity and of the experiential learning process in general.

The activity (whether it be an instrument, role play, or group-decision-making task) is merely the vehicle by which data are generated. It is the examination of what occurred during the activity, on both a feeling (affective) and thinking (cognitive) level, that is the core of the learning experience. The trainer's job is *not* to tell the participants what they should have learned but to *facilitate* their own exploration of their reactions, the development of awareness, and the derivation of meaning from what they have experienced. Cognitive input is designed to serve as a framework around which experience can be used to build long-term learning. The facilitator's task is to balance all these elements and to do it so that the participants assume responsibility for their own learning.

In some ways, then, training is an exploration of the participants' willingness to learn and to apply what they have learned. The only way in which we can judge willingness is by demonstrated motivated behavior. You cannot assess people's behavior (or help them to do so) by delivering a lecture. Thus, if you are trying to obtain data about participants, you need to use a technology that allows them to engage in the discovery process with you. This is just one reason why it is important to draw out the participants' content; in experiential learning, what is going on with the participants is more important than what is going on with the trainer. All group facilitators should have a thorough understanding of this (see Section Two) before attempting to plan experiential learning events.

COGNITIVE MAPS FOR LEARNING

In many types of training, theories and conceptual models can help the participants to understand what they have experienced or what they are about to experience. The behavior of individuals or groups can be better understood when one can tie them to some orderly theory or model. Conceptual material can be introduced by means of handouts, lecturettes, films or videotapes, and other interventions. (Section One discusses this subject in detail.)

When explaining the rationale behind a theory, or the theory behind a model or instrument, the facilitator should strive to present the author's constructs in relation to the participants' experience. This is not the time to try to elicit the concepts from the participants; in fact, it is counterproductive to ask them for something they do not yet have and then correct them. If you want the participants to know a specific theory, tell it to them. Then ask for their reactions, associations, and so on (e.g., "This is what the authors say: what does this mean to you?").

Reinforcing the concept being presented need not be tedious or seem repetitive. The facilitator can state the idea from more than one point of view; express it as an example; have the participants state it themselves by asking pertinent questions; distribute handouts that summarize the key points; and use audio and visual media (flip charts, posters, overhead projectors, slide shows, videotapes, etc.) to emphasize and reinforce key concepts.

One of the benefits of using theoretical materials is that they can replace "folklore" ideas about people and groups. A danger in encouraging cognitive development is that some members may use conceptual material inappropriately to defend against or avoid the experience. Nevertheless, it almost always is beneficial for people to comprehend their experiences and to articulate their insights.

THE PHYSICAL SETTING

The training room should be neither too large nor too small for the size of the group and the activities planned. In general, it is better for the room to be too small than too large. If there is too much space, the chairs, tables, and so on can be grouped at one end of the

room and the refreshment table can be positioned so as to divide off the rest of the space.

Distractions such as telephones and other noises and interruptions from nonparticipants should be minimized or excluded from the training room.

It is necessary to keep the physical needs of the participants in mind when setting or deciding whether to adhere to a schedule. Most people need a physical break every two or three hours (to stretch and/or walk around, to use the restroom, to drink some water, etc.). If participants become physically uncomfortable from too much sitting, they will not be able to pay full attention to what is going on in the training. If the facilitator wants to extend a session before a break, it is wise to check with the participants to see if they agree to the extension.

In many training rooms, refreshments are placed on a table in the back of the room; participants are free to help themselves during the breaks or, in many cases, at any time during the sessions. These refreshments typically include water and/or juice, regular and decaffeinated coffee, and regular and herbal tea. Food such as cookies or pastries may or may not be included.

MATERIALS

A variety of materials are utilized by the facilitator and the participants in training programs. The most common include the following:

- name tags with adhesive backing for the participants to wear or name signs made from paper folded into a triangular or "tent" shape for participants to place in front of them at a table;
- notebooks and preprinted, three-hole punched handouts to be included in the notebooks;
- individual handouts or articles printed on 8.5" x 11" paper;
- participant workbooks;
- instrument forms, scoring sheets, and interpretation sheets;
- book(let)s for the participants to read later;
- blank paper and pencils or pens;
- lap boards or other portable writing surfaces;
- large, "flip-chart" pads of newsprint and easels on which to hang them;
- felt-tip markers for writing on the newsprint sheets;
- masking tape for hanging lists and posters created on the newsprint sheets;
- audiovisual aids with projectors, screens, recorders, etc.

In addition, specific activities may call for a variety of materials such as preprinted slips of paper, envelopes, crayons, scissors, construction paper, glue, string, paper clips, safety pins, rubber bands, or coins. We have published structured experiences in which the participants have examined lemons; built things with Tinker ToysTM or Lego® Blocks; bartered with candy bars; and used cardboard baffles, playing cards, popsicle sticks, paper cups, toothpicks, a stopwatch, dart boards, game boards, and refreshments such as raisins or nuts. The materials most commonly used in structured experiences are preprinted materials such as instruction sheets, work sheets, and handouts (made on a copying machine prior to the session by the facilitator); blank paper and pencils; and newsprint pads with felt-tipped markers and masking tape. It is a good idea to keep the materials as simple as possible so that they do not detract from the purpose of the activity.

THE FACILITATOR

DIMENSIONS OF FACILITATOR EFFECTIVENESS

Theory, technique, and research are important and invaluable in HRD, but the most critical and most real component is the human element. One of the most significant personal dimensions of a facilitator is the ability to feel *empathy* for another person. Of course, we never can fully experience someone else's situation, but it is crucial that a facilitator try to see things from another person's perspective. Another important personal dimension is *acceptance*—allowing another person to be different, to have a different set of values and goals, to behave differently.

Congruence and *flexibility* determine two additional aspects of the person. Congruent people are aware of what they are doing and feeling and are able to communicate these to others in a straightforward way. A healthy and psychologically mature person is flexible, not dogmatic, opinionated, rigid, or authoritarian. A healthy facilitator should be able to deal with another person at that person's pace.

If people have these personal attributes, they are therapeutic. Just being around them makes others feel good; they help by being well-integrated persons themselves. The most meaningful growth that facilitators can undertake is improving their own personal development, furthering their own understanding of their values, attitudes, impulses, and desires. Two of the most important interpersonal conflicts that HRD professionals must resolve for themselves are their individual capacities for intimacy and their relations to authority.

In addition to the personal dimensions, there are other components of success in human resource development.

- Skills. Certain basic communication skills are necessary in order to promote individual, group, and organizational growth. A facilitator needs to develop the ability to listen, to express (both verbally and nonverbally), to observe, to respond to people, to intervene artfully in the group process, and to design effective learning environments that make efficient use of resources.
- *Techniques*. One also can improve the effect of training and consulting through techniques and design components such as structured experiences, instruments, lecturettes, confrontations, and verbal and nonverbal interventions.
- *Theories.* Theory is a resource. It is one of the components a facilitator uses to develop and improve as a practitioner. Theories abound in applied behavioral science; there are theories of personality, group dynamics, organizational behavior, community behavior, and systems.

Practice. Many HRD practitioners are far ahead of theorists. The tendency is first to try out an idea and see if it works and then to find the research underpinnings necessary for its justification; explanation follows practice. Theory and research are inextricably intertwined with practice; one requires the other. Yet if the choice had to be made between a brilliant theorist, thoroughly grounded in theory and technique, and a stimulating, effective trainer-consultant with a well-integrated personal self, our choice would be the latter.

REQUIREMENTS FOR GROUP FACILITATORS

Appropriate training for group facilitators is an important issue in education and in the applied behavioral sciences. The trainer needs more than a package of structured experiences to facilitate learning effectively. Solid exposure to and integration of the following components are needed.

Conceptual Knowledge

It is important that the group facilitator have a solid understanding of people, groups, and facilitating styles. This knowledge may be obtained through formal means (a university or other professional training program) and/or through less formal ways such as reading or attending seminars.

Understanding People

The facilitator has direct and often intense involvement with people. Knowing about people in a theoretical sense contributes to knowing them in a personal and professional sense. This knowledge can be obtained through the study of normal and abnormal human behavior, theories of personality, and theories and techniques of counseling, as well as through other sources.

Understanding Groups

A thorough knowledge of group interaction and dynamics is required. A "cognitive map" is crucial to the adequate understanding of how groups develop and how members relate to one another. Several models are available for understanding the stages of group development (e.g., Hill, 1965; Jones, 1973) in both the personal and task dimensions.

Training Experience

Experiential learning as a group member in various types of groups is a necessary beginning. Being in a group as a fully participating member may be the best way to learn about groups. Supervised co-facilitating experience is an important introduction to the role of group facilitator. It is at this point the integration of theory, practice, and experience is approached. Supervised facilitating without a co-facilitator is the next step, and ongoing professional development is needed throughout one's practice. Such

development may be acquired through laboratories, workshops, seminars, and professional conventions.

Humanness

Specific attention should be paid to the facilitator's role as a person who interacts with others. The facilitator should strive to be a person who generates enrichment rather than a person who extracts nourishment from others. Facilitators should focus on giving trainees the opportunities to grow as individuals. Many training programs are combinations of counseling, personal growth, consciousness raising, value clarification, sensory awareness, and other experiences in addition to content training; the intent is to help participants to experience themselves and others in a growthful way.

Presentation Skills

It is important that the facilitator appear credible and professional to the participants. One of the most obvious ways in which this perception can be affected is in the facilitator's choice of clothing and accessories. Needless to say, it would not be appropriate to show up for a training program at, for example, IBM, wearing a dashiki and sandals. In some other situation, it might not be appropriate to wear a business dress or suit. The trainer should determine what the culture of the sponsoring organization and participant group is and, in most cases, dress accordingly.

It is a good idea to use the participants' language as much as possible, with the exception of the crude vernacular or excessive jargon. Before speaking, take two or three deep breaths. Slow down and speak more deliberately than you would in a normal conversation. This makes it easier to remember what you want to say next, and it also is easier for the participants to understand.

Body language also is part of the trainer's presentation. Good posture helps to present a professional image, but it need not be stiff or formal. In fact, it often is a good idea to appear to be relaxed. Look at all the group members as you speak and maintain eye contact briefly.

Preparing one's presentation ahead of time, practicing (in front of a mirror or on videotape), and observing seasoned professionals who are presenting can help to develop effective physical and verbal presentation skills.

It also is important to take the participants into consideration during any presentation. There are many books on the subject of metaverbal and nonverbal communication that can help a trainer to gain skill in reading the body language of the participants. Watch for nonverbal messages of enthusiasm, impatience, boredom, fatigue, conflict, mistrust, and so on. Other theories and models can help to improve one s presentation and facilitation skills as well. For example, an understanding of neurolinguistic programming (see McCormick, 1984, and Torres, 1986) can help to make your presentations more interesting and memorable for the visuals, auditories, and kinesthetics in the audience. An understanding of social styles (see Byrum, 1986) can help you to understand and relate more effectively to the analyticals, drivers, expressives, and amiables in the group.

Functional Effectiveness

The group facilitator needs to demonstrate competence. This is a combination of the facilitator's knowledge, personal style, and training experience. Facilitative functions can be structured or unstructured, verbal or nonverbal, exotic or traditional, but they all are intended and applied to effect desired outcomes. Lieberman, Yalom, and Miles (1973) have identified four basic, facilitative functions in encounter groups: emotional stimulation, caring, meaning attribution, and executive function.

- *Emotional stimulation* represents evocative, expressive facilitator behavior that is personal and highly charged emotionally. The facilitator performing this function frequently is in the center of the group. Personal confrontation is valued; high risk is pervasive.
- *Caring* is evidenced by the development of specific, warm, personal relationships with group members. These relationships are characterized by understanding and genuineness. Caring is a completely separate issue from technical proficiency.
- *Meaning attribution* is achieved by the facilitator's providing cognitive explanations of behavior and definitions of frameworks for change. As a functional skill, it means giving meaning to experience.
- *Executive functions* are managerial approaches such as stopping the action and asking group members to process the experience or suggesting roles and procedures for group members to follow.

Included within these four basic functions are specific behaviors. Some of these behaviors are listed in the table that follows.

в	Emotional Stimulation	Caring	Meaning Attribution	Executive Function
E H	challenging	accepting	reflecting	gatekeeping
A V	confronting	understanding	interpreting	setting standards
• 0	releasing strong emotion	supporting	explaining	giving directions
R S	intrusive modeling	modeling warmth	labeling	blocking
	catalyzing interaction	developing intimate relationships	linking	directing traffic

FUNCTIONS

Facilitator Functions and Some Inclusive Behaviors

TRAINING AND LEARNING STYLES

Deciding what approach to take in helping people to learn can be difficult, particularly when one consults the "how to" literature on the subject. The classic debate between behaviorists (emphasizing control, shaping, prompting, reinforcing, token economy) and humanists (advocating freedom, spontaneity, student-centering, individuality, feelings) is just one example of basic differences. Even if one is clear about which of these psychological orientations one favors, there are numerous ways in which one can apply them, numerous approaches and techniques from which one can choose. Or can one really choose? Most trainers recognize that different adults prefer to learn in different ways, and that people in a training program will "get it" at different points. What they may not realize is that trainers also have preferred teaching or training styles, and they may tend to use these even when they do not match the trainees' learning styles. Trainers can make a difference in how well people learn. Thus, it is wise for trainers to become more skillful in training people in a variety of ways in order to be effective with as many people as possible. This means that rather than using the learning style with which one is most comfortable, one can learn to use new techniques and behaviors to suit different trainees and training objectives.

Axelrod (1973) classifies teachers as those who rely primarily on didactic modes (that is, they pass information on to students) and those who use evocative modes (they draw information and meaning from students). Adelson (1961) describes teachers as either *shamans*, who keep the focus on themselves; *priests*, who focus on the discipline and see themselves as a representative of it; or *mystic healers*, who focus on the learners. A more useful taxonomy developed by Mann (1970) describes individual teachers as various combinations of six primary styles. The *expert* defines the role primarily as giving information; the *formal authority* defines it as directing and controlling; the *socializing agent* as preparing new members of a profession or discipline; the *facilitator* as enabling learners to develop in ways they select; the *ego ideal* as being an inspiring model; and the person as being an interested and caring co-learner.

Modes of learner response also have been studied. Riechmann and Grasha (1974) identified six learning styles: *competitive*, those who learn in order to outperform classmates; *collaborative*, who believe they can learn best through sharing; *avoidant*, who are not interested in learning content in traditional ways; *participant*, who want to learn and enjoy the sessions; *dependent*, who lack curiosity and want to be told what to do; and *independent*, who enjoy thinking for themselves. Cross (1976) details research that discriminates field-dependent students—those who perceive the world as a whole and emphasize relationships—from field-independent students—those who tend to separate elements and approach the world in an analytical mode. She emphasizes that people will be more productive if they are studying via a method that is compatible with their style.

Several instruments, or inventories, have been developed to help trainers to identify their preferred teaching and learning styles. We will discuss four of them here.

The Learning-Style Inventory

The "Learning-Style Inventory" (Jacobs & Furhmann, 1984) takes Johnson's (1976) categories of "dependent prone" learners, who need highly structured settings, and "independent prone" learners, who require greater flexibility and freedom, and adds the "collaborative prone." Any one person may learn in all three ways, but may use a particular mode in a particular situation, based on personal preferences and the unique characteristics of the subject matter or activity.

There are two versions of the instrument. One form (Trainee) provides trainers with information about their trainees' perceived learning-style preferences; the second form (Trainer) provides trainers with information about their own perceived preferences of training style. Each version contains thirty-six statements, with twelve statements reflecting a collaborative learning preference, twelve reflecting an independent learning preference, and twelve reflecting a dependent learning preference. Respondents are asked to identify two critical learning or teaching incidents (a learning highlight or peak experience) and to place a check mark in the box by each statement that is descriptive of the learning or teaching experience. If more than ten checks appear in a column, the respondent is asked to circle the ten most significant. Both versions of the instrument elicit for the respondent a combination of three scores that indicate the relative importance of each style (dependent, collaborative, and independent) in the positive experiences recalled by the individual. The two forms of the instrument, their scoring sheets, and interpretation sheets are found in the Appendix to this volume.

The D (dependent) score refers to the learners expectation that it is the teacher or trainer who is primarily responsible for the learning that occurs. The learner with a high D score has had positive experiences in which the teacher or trainer was perceived to be the expert or authority and assumed total responsibility for content, objectives, materials, learning experiences, and evaluation.

The C (collaborative) score refers to the learner's expectation that the responsibility for learning should be shared by the teacher/trainer and learners. The learner with a high C score has had positive experiences in which the teacher/trainer shared responsibility and encouraged participation in all aspects of the learning design. Such learners enjoy interaction and perceive their peers as well as the trainer as possessing expertise or input worthy of consideration.

The I (independent) score refers to the learner's expectation that he or she will be encouraged to set and attain personal goals. The learner with a high I score has had positive experiences in which the teacher/trainer is perceived as one expert who may be asked to share expertise, but who helps learners to develop their own expertise and authority and frequently acts as a resource to the learners.

No individual style is implicitly better or worse than the others. A person uses all three but has a current preference. A very high score in one mode may mean only that the respondent has been particularly successful in that mode in the past or tends to overemphasize that mode, thus limiting opportunities to develop other styles. A low score may mean only that the learner has not been successfully exposed to the particular style or has avoided learning in that way.

Research with the instrument has shown that less mature learners are more dependent in their learning styles. As they grow in maturity, they become more collaborative and then more independent in their preferences.

The key to effective training is to be able to use the style that is most appropriate, and appropriateness depends on a number of factors, including the individual's ability and willingness to learn the content and the match between the learner's style and the trainer's style. The dependent learner responds best to a directive trainer; the collaborative learner to a collaborative trainer; and the independent learner to a delegative trainer.

The table on page 178 details the relationships between learner styles and trainer roles.

The Trainer Type Inventory (TTI)

The "Trainer Type Inventory" (Wheeler & Marshall, 1986) is based on Kolb's (1976) work on learning-style preferences. In brief, this says that some adults have a receptive, experience based approach to learning; these individuals rely heavily on feeling-based judgments and learn best from specific examples, involvement, and discussion. Kolb calls these learners *concrete experiencers*. In the experiential learning cycle, such people are very receptive to and excited by experiencing the activity and publishing and sharing their reactions to it. These people may become glassy eyed during step 4, in which the group generalizes about the activity.

Some adults have a tentative, impartial, and reflective approach to learning. Such individuals rely heavily on careful observation and learn best from situations that allow impartial observation. Kolb calls these the *reflective observers*. These individuals obtain insight and learning most easily from steps 3 and 4 of the experiential learning cycle, processing and generalizing. The following figure illustrates this concept.

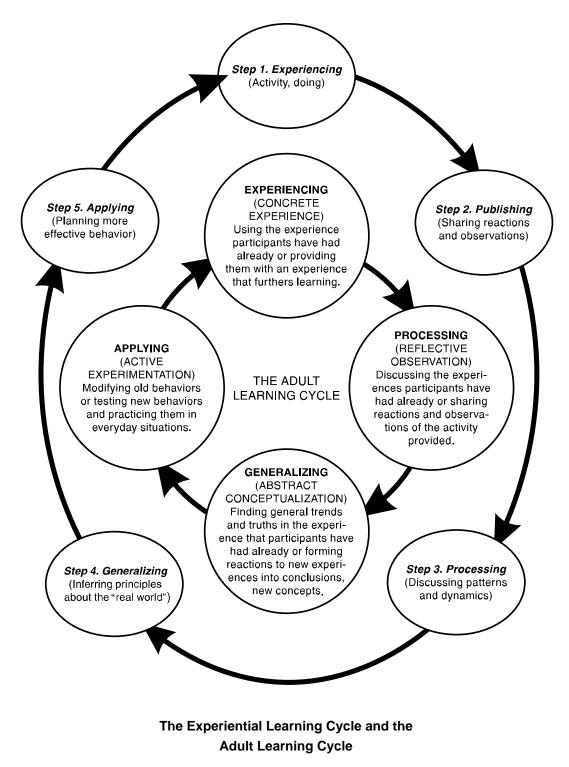
Continuing around the adult learning cycle, other people have an analytical and conceptual approach to learning, relying heavily on logical thinking and rational evaluation. These individuals learn best from impersonal situations, from the opportunity to integrate new learning with what already is known, and from theory. This group is termed the *abstract conceptualizers*; they tend to be most comfortable in step 4 of the experiential learning cycle, generalizing.

Learner Style	Learner Needs	Trainer Role	Trainer Behavior
DEPENDENT (May occur in introductory courses, new work situations, languages, and some sciences when the learner has little or no information on entering the course.)	Structure Direction External reinforcement Encouragement Esteem from authority	Director Expert Authority	Lecturing Demonstrating Assigning Checking Encouraging Testing Reinforcing Transmitting content Grading Designing materials
COLLABORATIVE (May occur when the learner has some knowledge, information, or ideas and would like to share them or try them out.)	Interaction Practice Probe of self and others Observation Participation Peer challenge Peer esteem Experimentation	Collaborator Co-learner Environment setter	Interacting Questioning Providing resources Modeling Providing feedback Coordinating Evaluating Managing Observing process Grading
INDEPENDENT (May occur when the learner has much knowledge or skill on entering the course and wants to continue to search on his or her own or has had successful experiences in working through new situations alone. The learner may feel that the instructor cannot offer as much as he or she would like.)	Internal awareness Experimentation Time Nonjudgmental support	Delegator Facilitator	Allowing Providing requested feedback Providing resources Consulting Listening Negotiating Evaluating Delegating

Finally, there are the adult learners who are called *active experimenters*. Their approach to learning is pragmatic ("Yes, but will it work?"). They rely heavily on experimentation and learn best from projects, back-home applications, and "trying it out." They must have the answer to the question "Now that I know all this, what am I going to do with it?" Step 5 in the experimential learning cycle, applying, is especially necessary for the active experimenters.

The experiential learning cycle cannot be abridged simplybecause an individual prefers one particular approach to learning; all learners must move through the entire cycle for the learning to "jell" and for the learner to "own" what was learned.

THE EXPERIENTIAL LEARNING CYCLE



Wheeler and Marshall, the authors of the "Trainer Type Inventory" (TTI), have discovered no significant relationship between a trainer's own learning-style and training-style preferences. Nonetheless, the instrument is useful in helping trainers to identify their typical training styles. Further value is found when the respondents share insights, training techniques, and advice with other trainers who want to build skills in areas outside their current repertoires or comfort ranges.

The TTI describes four training approaches, categorized as "Listener," "Director," "Interpreter," and "Coach." The listener trains the concrete experiencer most effectively and is very comfortable in the activity and publishing steps of the experiential learning cycle. The director obtains the best results from the reflective observer and usually is very comfortable during step 3, processing (particularly in helping trainees to make the transition from "How do I feel about this?" to "Now what?"). The interpreter trains in the style favored by the abstract conceptualizer (step 4, generalizing), and the coach trains in the style favored by the active experimenter (step 5, applying). These relationships are indicated in the table that follows.

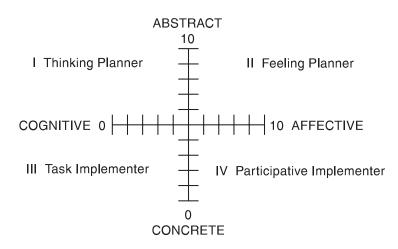
	L Listener	D Director	l Interpreter	C Coach
Learning Environment	Affective	Perceptual	Symbolic	Behavioral
Dominant Learning Style	Concrete Experience	Reflective Observer	Abstract Conceptualizer	Active Experimenter
Means of Evaluation	Immediate personal feedback	Discipline based; External criteria	Objective criteria	Learner's own judgment
Means of Learning	Free expression of personal needs	Memorization; Knowing terms and rules	New ways of seeing things	Discussion with peers
Instructional Techniques	Real-life applications	Lectures	Case studies, theory, reading	Activity, homework, problems
Contact with Learners	Self-directed; Autonomous	Little participation	Opportunity to think alone	Active participation
Focus	"Here and now"	"How and why"	"There and then"	"What and how"
Transfer of Learning	People	Images	Symbols	Actions
Sensory Perception	Touching	Seeing and hearing	Perceiving	Motor skills

A Comparison	of	Trainer	Types
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The "Trainer Type Inventory" instrument, scoring sheet, and interpretation sheet are found in the Appendix to this volume. The instrument form contains twelve sets of four words or phrases. Each word or phrase corresponds to one of the four training types discussed previously. Respondents rank the four choices in a set, transfer the number they have assigned to each word or phrase to the scoring sheet (according to the instructions), and add the numbers posted for each category. The lowest total indicates the least preferred style and the greatest area of potential growth and development. The highest total indicates the respondent's most preferred style. One possible implication of the highest score is that one might be using this training style to excess and may need to develop skills in other training approaches in order to be able to present training that will make sense or transfer to a greater range of participants.

The Learning-Model Instrument

The "Learning-Model Instrument" (Murrell, 1987) is based on a model that introduces four domains of learning based on a person's preferences for cognitive or affective learning and for concrete or abstract experiences. An assumption behind this instrument is that learning comes not only from thinking (cognition) but also from experience and feeling (affect). It assumes that the difference in a preference on the affectivecognitive dimension of learning is a key factor in how a person learns. The dimensions measured are as follows:



Murrell's Learning Model

The model's second dimension (the vertical axis) uses a concrete-abstract continuum. A preference for the concrete reflects a person's desire to come into contact with the real object, to touch it or even to physically manipulate it. The abstract end of the continuum reflects a preference for dealing with the world in terms of thinking about it and for manipulating ideas or thoughts. The vertical axis represents the way in which people tend to experience life and is loosely associated with the psychology of Jung (1924). (The preference for experiencing life in the concrete indicates a desire to experience through the direct senses.) The axes divide the model into four domains: I-thinking planner; II-feeling planner; III-task implementer; and IV-participative implementer.

The scoring sheet indicates which answers receive a score of one point. The rest of the answers receive a score of zero. The total of the scores in the first half of the instrument is plotted on the vertical axis, and a horizontal line is drawn through the point. The total of the scores in the second half is plotted on the horizontal axis, and a vertical line is drawn through that point. The point of intersection of the two lines indicates the domain of the respondent.

A person who scores low on the cognitive-affective (horizontal) axis shows a marked preference for learning through thought or other mental activity. People who grasp intellectually very quickly what they are trying to learn or who simply prefer to use controlled thought and logic will be found on the cognitive end of this axis. Rationality appeals to these individuals, as do logic and other thinking skills that are necessary for this type of learning. Although this statement is not based on hard research, Murrell says that it appears that a high cognitive orientation correlates with a high task orientation rather than with a people orientation. The research about possible left-versus-right brain function correlates a cognitive orientation to individuals who are leftbrain dominant. Therefore, the left side of the axis was assigned to the cognitive orientation to serve as a reminder.

A person who scores high on the cognitive-affective axis shows a marked preference for learning in the affective realm. Such people are more comfortable with and seek out learning from their emotions and feelings. These individuals desire personal interaction and seek to learn about people by experiencing them in emotional ways. This type of learner probably would be highly people oriented. In right-brain research, affective learners are said to be more intuitive, more spontaneous, and less linear. They seek out feelings and emotions rather than logic.

Referring to the vertical axis, people with a preference for the concrete enjoy jumping in and getting their hands dirty. Hands-on experiences are important to them. They want to keep busy, become directly involved, and physically approach or touch whatever they are working with. If they work with machines, they will get greasy; if they work with people, they will become involved.

At the other end of this axis are the individuals who have no special desire to touch, but they do want to keep active by thinking about the situation and relating it to similar situations. Their preferred interaction style is internal—inside their own heads.

A person is unlikely to be on the extreme end of either axis, and no one type of learning is best. The model merely offers a method for looking at the different styles. There is some implication that, despite personal preferences, a trainer should be capable of learning and functioning well in all four domains, because trainers face a variety of people, situations, and challenges. The instrument form, scoring sheet, and interpretation sheet are found in the Appendix to this volume.

The domains (areas between the vertical and horizontal axes) are as follows:

I: The Thinking Planner. A combination of cognitive and abstract preferences constitutes domain I. This is the place for the planner whose job is task oriented and whose environment contains primarily things, numbers, or printouts. The

domain I learner should do well in school, should have a talent for planning, and is likely to be successful in a department that deals with large quantities of untouchable things, such as financial management. The bias in formal education often is toward this learning domain, in which things are treated abstractly and the socioemotional elements often are denied.

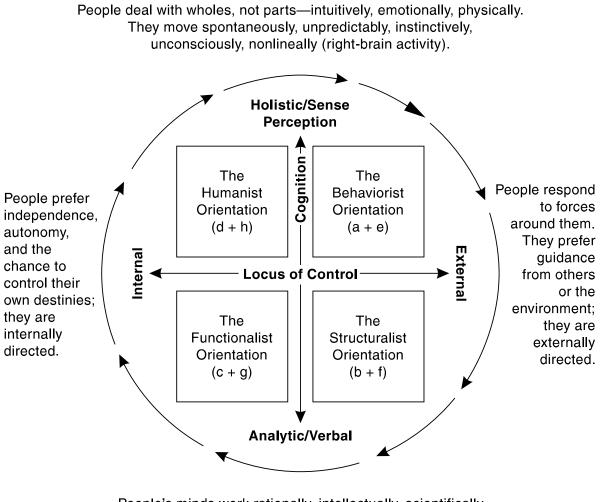
- *II: The Feeling Planner*. A combination of affective and abstract preferences constitutes the domain of the thinker who can learn and who enjoys working with people but has limited opportunity to get close to them. Socialanalysis skills are represented in this area. People in this domain should be able to think through and understand the social and emotional factors affecting a large organization. Difficulties in this area sometimes arise when good first-line supervisors who have a natural style with people are promoted into positions that prevent them from having direct contact with others, and when they are expected to determine without concrete experience the nature of and solutions to personnel problems.
- *III: The Task Implementer*. This area involves a combination of cognitive and concrete preferences. It contains decision makers who primarily want to understand the task and who can focus on the details and specifics of the concrete in a thoughtful manner. If these people are allowed to think about a situation, they can see the concrete issues and, after close examination, can make a well-thought-out decision. A person in this domain often is a taskfocused doer. If the interpersonal-skill demands are low, and if the emotional climate is not a problem, this person is likely to do well.
- IV. The Participative Implementer. A combination of affective and concrete preferences constitutes the domain of the person with people skills who has the opportunity to work closely with people. This is the place where implementers and highly skilled organization development consultants reside. This area is for those who like to become involved and who have the ability and interest in working with the emotional needs and demands of the people in an organization. It is the area most often emphasized by practical management programs, and it can be used to complement the traditional educational programs of domain I.

The Training Style Inventory (TSI)

The "Training Style Inventory" (TSI) (Brostrom, 1979) is designed to help trainers to learn about their personal impact on others in the learning setting and to form decisions about the use of various methods and techniques. It is a little different from the three instruments discussed previously, but it is pertinent because its goal is to help trainers to develop a flexible set of alternative procedures and personal skills. The instrument form and the scoring and interpretation sheet are included in the Appendix to this volume.

The TSI consists of fifteen stem phrases, each of which has four completion statements. The completion items correspond to four major instructional orientations:

the behaviorist, structuralist, functionalist, and humanist approaches. The inventory requires that each of the four statements in each group be ranked, with four points given to the most preferred response, three to the next preferred, two to the next preferred, and one to the least preferred response. Items are keyed with the small letters "a" through "h": "a" and "e"= behaviorist orientation; "b" or "f"= structuralist orientation; "c" or "g" = functionalist orientation; and "d" or "h"= humanist approach. Respondents'scores are translated into one of the four orientations, as depicted in the following illustration.



People's minds work rationally, intellectually, scientifically. Information is processed systematically, sequentially, for storage (memory) and retrieval (language) (left-brain activity). These categories present some definite contrasts in style and suggest some implications for training, as shown in the table that follows.

	Behaviorist	Structuralist
Orientation to Teaching- Learning	New behavior can be caused and "shaped" with well-designed structures around the learner.	The mind is like a computer; the teacher is the programmer.
Basic Assumptions	Training designers select the desired end behaviors and proceed to engineer a reinforcement schedule that systematically encourages learners' progress toward those goals. Imaginative new machinery has made learning fun and thinking unnecessary. Learners often control the speed.	Content properly organized and fed bit-by-bit to learners will be retained in memory. Criterion tests will verify the effectiveness of teaching. The teacher "keeps people awake" while simultaneously entering data—a much-envied skill.
Key Words and Processes	 stimulus-response = practice shaping = prompting = behavior modification = pinpointing = habit formation = reward and punishment teaching machines = environmental design = successive approximation sensitizing = extinction = token economy = mastery 	 task analysis information mapping chaining sequencing memory audiovisual media presentation techniques standards association evaluation measuring instruments objectives recitation
Interpersonal Style	<i>Supportive</i> : emphasis on controlling and predicting the learner and learning outcomes—cooperative, stimulus- response mentalities are valued. Process is product centered.	<i>Directive</i> : planning, organization, presentation, and evaluation are featured. Process is teacher centered.
Strengths	"The Doctor": clear, precise, and deliberate; low risk; careful preparation; emotionally attentive; complete security for learners; a trust builder; everything "arranged"; protective; patient; in control	"The Expert": informative; thorough; certain; systematic; stimulating; good audiovisual techniques; well rehearsed; strong leader; powerful; expressive; dramatic; entertaining
Limitations	"The Manipulator": fosters dependence; overprotective; controlling; manipulative "for their own good"; sugar-coating; hypocritical agreeing; deceptive assurances; withholds data	"The Elitist": preoccupied with means, image, or structure rather than results; ignores affective variables; inflexible (must follow lesson plan); dichotomous (black or white) thinking; superior

TSI Style Contrasts

	Functionalist	Humanist
Orientation to Teaching- Learning	People learn best by doing, and they will do best what <i>they</i> want to do. People will learn what is practical.	Learning is a self-directed discovery. People are natural and unfold (like a flower) if others do not inhibit the process.
Basic Assumptions	The learner must be willing or motivated by the process or the product, otherwise it is useless to try teaching. Performance "on the job" is the true test. Opportunity, self- direction, thinking, achieving results, and recognition are important.	"Anything that can be taught to another is relatively inconsequential" (Rogers). Significant learning leads to insight and understanding of self and others. Being a better human being is considered a valid learning goal. Can be a very inefficient, time- consuming process.
Key Words and Processes	 problem solving = simulation "hands-on" = reasoning = learner involvement = reality-based consequences = achievement = failure confidence = motivation = thinking competence = discipline recognition = feedback = working 	 freedom = individuality ambiguity = uncertainty awareness = spontaneity mutuality = equality = openness interaction = experiential learning congruence = authenticity listening = cooperation = feelings
Interpersonal Style	Assertive: a problem-focused, conditional, confrontational climate— striving, stretching, achieving. Process is task oriented and learner centered.	<i>Reflective</i> : authenticity, equality, and acceptance mark relationship. Process is relationship centered.
Strengths	"The Coach": emphasizes purpose; challenges learners; realistic; lets people perform and make mistakes; takes risks; gives feedback; builds confidence; persuasive; gives opportunity and recognition	"The Counselor": sensitive; empathic; open; spontaneous; creative; a "mirror"; nonevaluative; accepting; responsive to learners; facilitative; interactive; helpful
Limitations	"Sink or Swim": ends justify means; loses patience with slow learners; intimidating; insensitive; competitive; overly task oriented; opportunistic; return-on-investment mentality	"The Fuzzy Thinker": vague directions; abstract, esoteric, or personal content; lacks performance criteria; unconcerned with clock time; poor control of group; resists "teaching"; appears unprepared

TSI Style Contrasts (continued)

Needless to say, the instruments discussed in this section, and others like them, can be used not only to learn more about one's own preferred styles but also in actual training to help the learners to learn more about themselves. Such instruments can be very helpful in exploring and examining one's own attitudes, biases, and ways of operating. We believe that this type of self-education is a necessary step in the professional development of any trainer.

CO-FACILITATING

We believe that co-facilitating a group is one of the most important and helpful steps in becoming a professional trainer. Even after one has gained proficiency in leading groups, cofacilitating is superior to working alone. In this section, we will discuss some major advantages, some potential disadvantages, and some suggestions for avoiding problems in co-facilitating.

Advantages

Facilitating Group Development

One of the most convincing reasons for working with a colleagues as a co-facilitator is to complement each other's styles. One person may have a group-dynamics focus while the other may have an intraindividual focus. Together they may be able to monitor and facilitate individual and group development better than either of them could separately.

Dealing with Heightened Affect

In some groups (e.g., personal-growth groups or team building), highly emotional situations may arise, and the facilitator must be able to deal not only with persons who have a heightened affect but also with the "audience effect." It is difficult to help an individual to work through deeply felt reactions and, at the same time, to assist other group members in integrating this experience in terms of its potential learning. In such a situation, it is *always* advantageous to have a co-facilitator. One facilitator can "work with" the person(s) experiencing significant emotions, while the other facilitator assists the other participants in dealing with their reactions to the situation.

Personal and Professional Development

Co-facilitating offers each partner support for his or her personal development. Facilitating can be a lonely activity; the opportunities for meaningful personal development are lessened by the complexity of the facilitator's monitoring and intervening tasks. When there are co-facilitators, each can better work his or her personal-development issues both in and out of the group setting.

Another major advantage of co-facilitating is the opportunity for professional growth. Participants usually are not able to offer meaningful feedback on facilitator competence. When facilitators work together, they can provide each other with a rich source of professional reactions. In this way, each training experience becomes a practicum for the facilitators involved.

Synergistic Effect

The remark that "two heads are better than one" often has been validated experientially in consensus-seeking tasks. When people work together collaboratively, a synergistic effect often develops. That is, the outcome of the deliberation exceeds the sum of the contribution of the individuals. Co-facilitating can generate synergistic outcomes through the personal and professional interchange that results from working toward a common task.

Modeling

One way in which participants learn in training is by studying facilitators as behavioral models. Co-facilitating provides not only two models of individuals coping with their own life situations, but it also offers a model for meaningful, effective, two-person relationships. The interaction between the co-facilitators gives participants a way to gauge dyadic relationships. The likelihood that the training will transfer to the participants' back-home, everyday situations is increased.

Reduced Dependence

A recurring issue in training groups is the problem of dependence on the facilitator. Facilitators who work with many groups alone sometimes dread having repeatedly to face participants'unresolved authority conflicts. With co-facilitators, the leadership is shared and, therefore, the dependence problem is dissipated somewhat.

Appropriate Pacing

A facilitator can pace himself or herself more effectively when working with a partner. Observing and intervening in a group session are demanding, and the facilitator sometimes is not able to relax enough to permit the process to emerge at its own rate. However, co-facilitators can check each other's timing of events and provide some respite from the detailed monitoring necessary to provide meaningful interventions.

Sharp Focus

A final advantage is that issues can be focused more sharply when they are seen by two facilitators. Facilitators usually have "favorite" issues that are likely to emerge in their groups, and cofacilitating can offset biases.

Potential Disadvantages

Different Orientations

Some dangers are, however, inherent in co-facilitation, and it is necessary to be aware of potential problems. Individuals with different orientations—theoretical, technical, personal—can easily impair each other's effect in the group. It is, for example, difficult to imagine a good melding of a Tavistock-oriented "consultant" and an Esalen-trained facilitator. Such partners would likely discover themselves working at cross-purposes.

Extra Energy

Co-facilitating takes energy. Not only are the facilitators occupied with the development of the participants and of the group, but they also have to expend effort to develop and maintain the relationship that may be pivotal to the success of the training. The training subgoals include not only the facilitators' personal and professional development, but also their relationship with each other.

Threat and Competition

Because two professionals in a group may constitute more of a threat to individual participants than one would, they may see co-facilitators as colluding with each other. The "clinic" sessions that co-facilitators engage in between training sessions can arouse suspicion and create an emotional distance between the facilitators and the participants.

Co-facilitators can become competitive with each other, too. Although they may deny any concern for popularity, they may, perhaps without knowing it, engage in behavior that meets other needs besides those inherent in the training.

Overtraining

It clearly is possible to "overtrain" a group, particularly with the presence of two active facilitators. It is important to recognize that too many interventions may stifle both participation and learning. This is especially true if facilitators play the "two-on-one" game, simultaneously attempting to interpret and facilitate one participant. Groupmember helpfulness is one of the most potent dimensions of group training events. After an initiation period, participants—as well as facilitators—can make meaningful interventions. It is important that the facilitators stay out of the way in order to permit this to occur.

Blind Spots

Co-facilitators may have mutual blind spots in observing inter- and intraindividual dynamics, and it is possible to reinforce each other's failure to attend to particular areas. If co-facilitators are similar in their theory and technique, it is quite likely that they will pay attention to the same data. Thus, they may neglect (or pay less attention to) other data, thereby increasing the possibility that they will fail to notice significant learning opportunities that are outside their normal purview.

A Misleading Model

In any human situation, there is the possibility that people will react to assumptions rather than to clear understandings of one another. This, of course, can occur with cofacilitators if they are not clear about each other's positions on recurring and predictable group issues. In this event, they can provide an ineffective model for the participants. When the relationship between co-facilitators is tense, mistrustful, and/or closed, the modeling is negative. Participants may mistakenly conclude that what "works" in human relations is to behave in ways directly opposed to the values on which HRD is based.

Different Rhythms

A final potential disadvantage in co-facilitating is that the facilitators' intervention rhythms may be different. One may intervene on a "beat" of ten, while the other intervenes on a beat of three. The facilitator who is slower to react or who hesitates in the hope that the participants will take responsibility for the maintenance of the group may find obtrusive the partner who intervenes more rapidly. Disjunctive contacts that may result between the co-facilitators provide a negative model for the participants.

Avoiding the Dangers

Facilitators who are considering joining together to work with a group can engage in a number of activities to obviate these potential disadvantages. The obvious first step is to share orientations to and experiences with similar kinds of group situations.

A second way of avoiding the problems of ineffective co-facilitation is to solicit feedback frequently and regularly. As a check on behavioral perception, there is no substitute for honest and straightforward reactions.

In order to counteract one facilitator's tendency to overtrain the group and to cut into the rhythm of interventions of the other, it may be useful to count to ten—or twenty—before intervening. If any participant speaks during that time, the count is begun again at zero.

It is important that the co-facilitators be honest both in presenting themselves and in soliciting feedback from participants. In this way, they can de-emphasize the impact of their presence in the group. Each co-facilitator needs to monitor the reasons for his or her behavior in the group. Each intervention should be "located," that is, the facilitators need to know what they are observing, what they are responding to, what the needs in the group seem to be, and what the intervention is designed to elicit. Otherwise, it is likely that the intervention will meet the personal needs of a facilitator at the expense of the needs of the participants.

Testing Assumptions

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It seems axiomatic that all assumptions need to be tested continually. Facilitators clearly are not above making errors in communication. It is critical that they check the bases of their professional judgments.

If co-facilitators experience difficulty in working together, they may solicit a third party as a consultant. This activity can produce a great deal of learning not only for themselves but also for any observers.

Personal Awareness

In confronting the potential disadvantages of co-facilitating, partners can create for themselves opportunities to experiment with and to enlarge both their personal development and their professional expertise. The following inventory can help facilitators to become more aware of their assumptions, preferences, and motivations in facilitating groups.

Learning Style: (Write a statement of approximately one hundred words to explain your concept of how people learn.)

Personal Motivation: (Complete the following sentence: I am involved in training because . . .)

Expectations: (What things do you expect to happen in the type of group in which you will be working? What would be the best thing that could happen? What would be the worst thing?)

Intervention Style: (What are your typical responses in the type of group in which you will be working?)

1. When starting the group, I usually . . .

- 2. When someone talks too much, I usually ...
- 3. When the group is silent, I usually . . .
- 4. When an individual in the group is silent for a long period of time, I usually . . .
- 5. When someone becomes upset or cries, I usually . . .
- 6. When someone comes in late, I usually ...
- 7. When someone introduces outside information about family or friends into the group context, I usually . . .
- 8. When group members are excessively polite and unwilling to confront one another, I usually . . .
- 9. When there is conflict in the group, I usually . . .
- 10. When there is a group attack on one individual, I usually . . .

- 11. When group members discuss sexual feelings about one another or about me, I usually . . .
- 12. If there is physical violence, I usually . . .

My favorite interventions in this type of group are:

My typical "intervention rhythm" (fast/slow) is:

My style characteristically is more (a) nurturing or (b) confronting.

The thing that makes me most uncomfortable in groups like this is:

Other information about me that might be useful to a co-facilitator (e.g., FIRO-B scores, social style, NLP preference, training/learning style, etc.) is:

Coordinating with the Co-Facilitator

In planning to co-facilitate a training event, there are several things that trainers can do to enhance the process. The first is to establish a personal connection with each other for at least an hour to share information and expectations. This includes sharing responses to the inventory in this section, discussing professional experiences, and explaining what personal issues each anticipates working on in the group. It is a very good idea to state some of your co-facilitation patterns and to indicate the behaviors that your co-facilitator

might see as idiosyncratic. It also would be helpful if each of you were to note issues that have arisen in your past work with other facilitators.

When you have shared this personal information, it is time to define together the training goals of the event on which you are about to work; to reach consensus about the expectations and experiences of the participants; and to discuss your reactions to the makeup of the group, its size, and any other special considerations. Then work to reach agreement on the following issues.

Operating Norms

- 1. Where will each of you sit during the sessions? When presenting and not presenting?
- 2. Who will open and end each session?
- 3. Are there differences in status between you? If so, how will this be handled? How will it be presented to the participants?
- 4. Will there be open-ended or specific time periods for starting, breaks, etc.? Will you end at specific times?
- 5. What are your preferences for attendance for yourselves and for the participants? Will either of you be free to leave the group or will you both remain part of the group during all sessions?
- 6. How much "there-and-then" discussion will be allowed? How do you define "here-and-now"?
- 7. How (and possibly when) will you make theory inputs, and which of you will do what?
- 8. How will you work to facilitate transfer of learning and back-home application? Will there be follow-up and, if so, how will it be done?

Co-Facilitating Style

- 1. Where, when, and how will you deal with issues between you?
- 2. Can you agree to disagree? How much tolerance is there for differences?
- 3. Will you encourage or discourage conflict?
- 4. How much of your behavior will be role determined and how much will be personal and individual?
- 5. Is it possible to use each other's energy; that is, can one of you be "out" while the other is "in?"
- 6. How will you establish and maintain growth-producing norms?
- 7. What is *not* negotiable with each of you as a co-facilitator?

Ethics

- 1. What are your responsibilities if someone in the group has psychological difficulty? Are you responsible for referral? What responsibilities do you have after the training experience is over?
- 2. What responsibilities, if any, do you have for screening participants?
- 3. Are you adequately qualified? How will you communicate your qualifications to the participants?
- 4. What are your ethical standards and typical corrective measures with regard to issues such as sexuality, prejudice, and so on? (In the U.S., offensive communication based on sex, race, religion, age, disability, or country of origin tends to be prohibited by law.)

After sharing information and discussing it, it might be a good idea to take a break in order to review and consider the information that you have received from each other, then meet again to discuss any items that need clarification.

Clinics

"Clinicking" is the term that some trainers use for the brief, "how-are-we-doing, whatshould-we-consider-changing" meetings that co-facilitators have during the breaks in a training event and at the end of each day. Some of the questions that you may want to ask are as follows:

Diagnosis

- 1. On a scale of one to ten, how did things go in this session?
- 2. What is happening in the group(s)?
- 3. Are there any problems that need to be addressed? If so, what are we going to do about them?

Soliciting Feedback

- 1. What did I do that was effective?
- 2. What did I do that was ineffective?
- 3. How am I doing as a co-facilitator?
- 4. To what degree are we colluding, that is, not sharing all the information we have?

Renegotiation

1. As we re-examine our contract, do we find anything that we ought to renegotiate?

- 2. How are we feeling about each other?
- 3. What is each of us going to do in the next session?

Finally, it is important to have a debriefing session at the end of the training event in order to conduct a final clinic and to discuss what happened, what was or should have been done, and what each of you learned from the experience. The following questions may be helpful at this time:

- 1. To what extent were the training goals achieved?
- 2. Under what conditions would we work together again?
- 3. What are our personal and professional learnings from this event?
- 4. What can I do personally to improve my training competence?

WORKING WITH GROUPS

GUIDELINES FOR INTERVENTIONS IN GROUPS

Stages of Group Development

All ongoing groups go through certain stages of development, regardless of their particular tasks. The facilitator needs to be able to determine which stage a group currently is in, what options for growth are available at any given stage, and what group-interaction problems might be anticipated in that stage. Patterns that deviate from the usual suggest problems and a need for intervention. However, interventions should be located: the trainer must know what he or she is responding to, what the intervention is designed to do, and how it fits in with the general needs of the group. In this way, the facilitator can monitor and influence the development of the training group. Such flexibility requires an intervention repertoire.

An understanding of the development of the group also creates implications for leadership behavior. A facilitator's reluctance or inability to change leadership styles limits the facilitator's effectiveness and the group's chances for success. The objective is to help the group to progress from a collection of individuals to a cohesive unit whose members can work together proficiently. Of course, there always will be a struggle to maintain the balance between personal relations and task accomplishment, but the facilitator who knows what to look for can maintain this balance more easily.

Numerous classifications of the stages of group development have been presented in the HRD literature (e.g., Charrier, 1974; Cooke & Widdis, 1988; Kormanski, 1985; Tuckman, 1965; Tuckman & Jensen, 1977). The figure that follows illustrates the relationships between some of these classifications.

Tuckman	Charrier	Cooke & Widdis
Forming	Polite	Polite
	Why We're Here	Purpose
Storming	Bid for Power	Power
Norming	Constructive	Positive
Performing	Esprit	Proficient
Adjourning		

The stages are sequential and developmental. A group will proceed through these five stages only as far as its members are willing to grow. Group cohesiveness seems to depend on how well group members can relate in the same phase at the same time. Each member must be prepared to give up something at each step in order to make the group move to the next stage. The timing of each will depend on the nature of the group, the members, and the leadership of the group. Issues and concerns must be resolved in each stage before the group can move on. If the group is not able to resolve such issues, the dominant behavior will become either apathy or conflict, and group disintegration will result.

In Tuckman's model, the first stage is called "forming." This initial stage is broken into two in other models; Charrier calls them the "polite" stage and the "why we're here" stage, while Cooke and Widdis call them the "polite" stage and the "purpose" stage. Personal relations are characterized by dependency, and the major task functions concern orientation.

The Polite Stage

Relationship and Task Behavior

In the first phase of the group's life, members are occupied with orienting themselves personally and interpersonally and becoming comfortable with the physical setting. In general, they have a desire for acceptance by the group and a need to be sure that the group is safe. Members set about gathering impressions and data about the similarities and differences among them and forming preferences for future subgrouping. Many members are aware of their own hidden agendas. There are differences in members' needs for structure, but there is a general desire for cohesion through successful interaction and task accomplishment.

Rules of behavior seem to be to keep things simple and avoid controversy. Serious topics and feelings are avoided. To grow from this stage to the next, each member must relinquish the comfort of nonthreatening topics and risk the possibility of conflict.

Facilitator Interventions

Formal leadership is needed to provide structured interaction. The group has low task maturity, so the facilitator style that is required is a highly directive approach involving high task, low relationship behavior. The facilitator should make expectations clear, instruct the group members in what is to be done and how and when it is to be done, and supervise closely. One of the facilitator's tasks is to help the group members to resolve dependency relationships and to become oriented toward the task at hand.

At this point, nonverbal and verbal activities that allow for private data gathering can help the group members to move on. The facilitator must create an atmosphere of confidence and positive attitudes. Establishing pairs and/or subgroups that work together briefly can enhance the interactions among group members. As members give up individual comfort in controlled topics and tasks, they begin to risk possible conflicts.

Recommended interventions include structured getting-acquainted tasks (not unstructured milling), introductions, name tags, personal information sharing, review of agenda items, exploring similarities among members, and brief physical tasks such as assembling notebooks, moving chairs, distributing materials, and checking rosters. These help members to anticipate one another's future responses to group activities.

It is too early in the life of the group to attempt activities that force team formation, present fixed time schedules or agendas, explore differences of opinion, require consensus or voting, or rush into content areas or participative skill building.

The Purpose Stage

Relationship and Task Behaviors

In the next stage, participants begin to seek clarification and agreement about the purpose of the group and may express concern about the fit between individuals and the group's purpose. In the interpersonal realm, there is increased desire for and attempts by *individuals* to win subgroup approval (it is too early for members to feel group identity). Members seek identification with others whom they perceive to be similar and desire evidence that they are valued by others. Cliques may emerge.

In the task realm, the members tend to depend on the leader (the facilitator) to provide structure, establish ground rules, set the agenda, and so on. Some members may demand a written agenda. Tasks must be specified and clarified so that there is a common understanding of what the group is expected to do. A common theme is why they are there, what they are supposed to do, how they are going to do it, and what their goals are. There is a sharply higher need for evidence of structure and a fear of loss of control over tasks and topics. There may be concern about requirements of commitment to an unacceptable group goal. When the objectives come from outside the group, the members still will discuss them in order to gain understanding and commitment.

Facilitator Interventions

The most effective facilitator style in this stage is one of high task behaviors with some relationship behaviors added. The facilitator should supply a visible structure and materials and facilities geared to the tasks of the group. The participants should have the opportunity to participate in setting norms and to experience various pairings and subgroupings. What is needed for movement in this stage is the opportunity for input and participation. Each member must be able to put aside a continued discussion of the group's purpose and commit to a purpose with which he or she may not agree completely. Activities that will surface negative reactions and bipolar dimensions among members' attitudes, experiences, and preferences can help the members to move into risking personal attack. The participants should begin to give up task clarification and move into task commitment.

Useful interventions in this stage include clarifying goals, setting goals, checking expectations, planning to reduce gaps, discussing task relevance, making conforming agreements, and brief activities relevant to the group's task. Also helpful are subgroup discussion tasks yielding procedural suggestions or recommendations.

Interventions to be *avoided* included group problem solving, preference-based team formation, consensus tasks, tasks requiring volunteers for fishbowl activities or demonstrations, and skill-practice sessions.

The Power Stage

Relationship and Task Behaviors

Tuckman calls the next stage "storming"; Charrier calls it "bid for power"; and Cooke and Widdis call it the "power" stage. It is characterized by competition and conflict in the personal-relations dimension and organization in the task-functions dimension. Even if the conflict remains hidden, it is there: the result of members' unresolved conflicts with regard to authority, dependence, rules, etc., and the conflict generated by organizing to get work done.

It is expected that the participants will develop a desire to probe and explore their own and others' hidden agendas. Because of fear of exposure or weakness or fear of failure at tasks, there will be an increased desire for structure or clarification and commitment to structure. Attempts to resolve struggles will rely on rules, voting, arbitration, and appeals to the formal leader. Questions will arise about who is going to be responsible for what, what the rules are, what the reward system is, and what the criteria for evaluation are. These reflect conflicts over leadership, structure, power, and authority. There may be wide swings in members' behavior based on emerging issues of competition and hostilities. Members will attempt to influence one another's ideas or opinions, and there will be competition for attention, recognition, and influence. Cliques will be most potent (as members find that they can wield more power), and there will be testing of clique commitment. Because of the discomfort generated during this stage, some members may remain completely silent while others attempt to dominate.

Progress in this stage requires some testing and some risk taking. This includes establishing a norm for and strategies to engage in positive confrontation, nondefensiveness, listening, and openness to influencing and being influenced. It means risking exposure of personal agendas and the effects of personal attacks. It also means giving up personal or subgroup preferences and establishing recommitment to the purpose of the total group. Individuals must give up defending their own views and risk the possibility of being wrong; in other words, they must develop some humility. The members must move from a "testing and proving" mentality to a problem-solving mentality. The most important trait in helping groups to move on to the next stage seems to be the ability to listen.

Facilitator Interventions

At this point, the most effective facilitator style is one of high task and increasingly high relationship behaviors. Although still providing task directions, the facilitator now adds clarification, explains the rationale behind the task, and provides the opportunity for questions from the group. It is essential that the facilitator also manage the conflict in

the group effectively; too little control can allow chaos, while suppression of all conflict can lead to apathy. The objective of this developmental phase is to assist the group members to assume more responsibility for tasks. As the participants demonstrate that they are willing and more able to carry out tasks, the facilitation engages in relationship behaviors such as support, praise, encouragement, and attention.

Interventions that can help during this stage of the group's development include confronting dysfunctional behaviors; training in communication, influence styles, and conflict management; and helping the group to create a common language. Assigning roles and functions and role negotiation also can be helpful. Activities can include demonstrations, structured experiences, presentation of models, third-party work, and assigned tasks.

Interventions to be *avoided* are those that establish formal leader roles that could have long-range implications, those that overemphasize norms of cooperation and polite behavior, and activities that emphasize nonverbal communication. Because suspicion of motives is high and trust is low, feedback in this phase can be stinging, so attempts to promote feedback should be managed with great care.

The Positive Stage

Relationship and Task Behaviors

The "constructive" (Charrier) or "positive" (Cooke & Widdis) stage corresponds with Tuckman's "norming" stage and the beginning of his "performing" stage. Now the personal relations are characterized by cohesion: group members are engaged in active acknowledgment of all members' contributions, community building and maintenance, and solving of group issues. They can celebrate strengths and accept or plan to address weaknesses. They are open minded, listen actively, and accept differences. They are willing to change their preconceived ideas or opinions on the basis of facts presented by other members, and they actively ask questions of one another. Leadership is shared, and cliques dissolve. Free-flowing subgroups are based on task needs rather than on members' similarities or previous cliques. Norms are upheld, and there is trust in the group and a willingness to change and grow. As trust and acceptance have increased, the need for approval has decreased. It is during this stage of development—assuming that the group gets this far-that people begin to experience a sense of groupness and a feeling of catharsis at having resolved interpersonal conflicts. They begin to share ideas and feelings, giving and receiving feedback, sharing information related to the task, and exploring actions related to the task. The major task function is data flow. Creativity is high. The members may, however, choose to abandon the task briefly in order to enjoy the cohesion being experienced.

The down side of this positive stage is that members may fear the loss of cohesion that they have worked to establish; they may cling to the hope of maintaining the status quo and regret the inevitability of future change. It is very disruptive to bring in a new member at this stage, so it is important that there not be a change in group membership.

Facilitator Interventions

The group members now are committed to the task but may be somewhat unwilling to assume total responsibility for it because of a lack of confidence. The appropriate facilitator style now is one of low task behaviors and high relationship behaviors. By reducing the amount of directive behavior, the facilitator allows the group to assume increased, shared, task responsibility. This participative leadership style includes sharing ideas, facilitating group decision making and problem solving, and providing feedback and socioemotional support. As the group progresses toward the end of this stage, it will become more selfmotivating and will need less support from the facilitator.

This is a good time to foster celebration. Strategies can be developed to explore the "magical" aspects of group interaction, to reinforce cooperative and collaborative attitudes and activities, and to develop a group identity. The facilitator can aid in this process by generating planned celebration. The group can be encouraged to develop a motto or symbol, and group photos or other tangible group-identity vehicles can be created. Group interviews, group assessments, and planning for group needs all can help in affirming cohesion. Activities can include those based on sharing, helping, listening, questioning, and building.

Less structure needs to be imposed on the group; it now should be ready to act cohesively to take on certain challenges. These include creating tangible benchmarks for checking progress toward goals, cross-group competition, the ability to risk breaches of trust, and the willingness to give up group cohesion. It is necessary to achieve these if the group is to move on. The group can be given internal tasks such as exploring group weaknesses and external tasks such as competitor analyses. External resource people can be used to help stimulate new visions. The facilitator also can ask constructive questions, summarize and clarify the group's thinking, and refrain from making any comments that tend to reward or punish group members. At this stage, the leader should trust the group to achieve its maximum potential and try to blend in with the group as much as possible.

It would *not* be helpful in this phase to introduce changes in routines or in group composition, to generate intragroup competition (which could cause regression), or to emphasize individual members' preferences, strengths reactions, or decisions. Nor is this the time to bring up the subject of termination of the group.

The Proficient Stage

Relationship and Task Behaviors

The "performing" (Tuckman), "esprit" (Charrier), or "proficient" stage (Cooke & Widdis) is not reached by all groups. It is marked by interdependence in personal relations and problem solving in the realm of task functions. By now, the group should be most productive. Differences in members' goals are accepted, are not threatening, and do not impede work toward group goals. Group members' personal agendas are assumed or accepted and do not elicit threat or suspicion. Individual members have

become self-assuring, and the need for group approval is past. Members can work singly, in any subgrouping, or as a total unit. They are both highly task oriented and highly person oriented. A nonpossessive warmth and feeling of freedom result, so individuality and creativity are both high. Relationships between individuals are empathic. There is unity: group identity is complete, group morale is high, and group loyalty is intense. Activities are marked by both collaboration and functional competition. There is support for experimentation in solving problems and an emphasis on achievement. The overall goal is productivity through problem solving and work.

Facilitator Interventions

In this ultimate stage, the facilitator should be willing to turn over responsibility for decisions and implementation to the group and engage in both low task and low relationship behaviors. The group is competent, confident, and highly motivated; it does not need the task directions or the socioemotional support that the facilitator has provided heretofore. The leadership style is one of delegating with minimum supervision. In fact, the group members may regard more task or relationship behavior from the facilitator as interference or a lack of trust. However, although the facilitator's role is reduced, it is not eliminated. Channels of communication must remain open to provide for pertinent interchanges of task-relevant information. In addition, periodic reinforcement for outstanding achievement may be appropriate.

This is the stage toward which the group has been progressing, so interventions now are geared toward maintaining it. Group membership should be closed; if a new member is introduced, the feelings of esprit will be destroyed and the group will regress to an earlier stage. Any attrition should be de-emphasized. There should be plans for the maintenance of group identity. This can include items of membership identification such as buttons, sweatshirts, or signs. The vitality of the group is maintained through planned rotation of roles and functions and planned changes in membership on task projects. Achievements are celebrated through rituals of visibility and congratulation.

It would be dysfunctional at this stage to institutionalize roles, functions, or procedures, such as having a permanent chairperson or permanent decision-making processes. It could be equally dysfunctional to test radically new procedures.

The Final Phase

The last stage of the group's life prepares for termination of the group. Tuckman calls this stage "adjourning." It involves the termination of task behaviors and disengagement from relationships. A planned conclusion usually includes recognition for participation and achievement and an opportunity for members to say personal goodbyes. Adjournment of the group should be accomplished within a set time frame and have a recognizable ending point.

Concluding a group can create some apprehension—in effect, a minor crisis. The termination of the group is a regressive movement from giving up control to giving up inclusion in the group. If such a crisis results in a decrease in task ability or willingness

(regression to a previous stage of group development), the facilitator can reassess the current needs of the group members and use the appropriate degrees of task and relationship behaviors. Usually, the participating style (low task behaviors and high relationship behaviors) will be most appropriate because it facilitates the task termination and disengagement process.

By now it should be obvious that the ability to diagnose the group's stage of development is not enough. Employing the appropriate facilitator style and appropriate interventions or activities with each stage of the group's development means attaining skill in actually changing to and using different styles and in using a wide variety of interventions. This is a challenge and a necessary developmental step for the group facilitator.

MAJOR GROWTH PROCESSES IN GROUPS

Groups exert powerful influences, and these pressures can be either beneficial or detrimental to the welfare of their members. Many different types of groups can foster the growth of the individuals who comprise them. A combination of processes that can be engendered in a group can create both the conditions for and the methods by which members can learn about themselves in supportive ways.

The five, major, growth processes that can be observed in groups are selfassessment, self-disclosure, feedback, risk taking, and consensual validation. Each of these processes will be examined separately, but it is important to remember that it is their interaction that accounts for much of the immense potency of social interaction for shaping the behavior of individuals. The goal in unleashing these processes is to assist individuals in making "wise" choices, based on three criteria: *awareness of self*, *awareness of options*, and *willingness to take responsibility for consequences*.

We want to stress the interdependence of these processes, the centrality of selfassessment, and the importance of the trust condition to support each process. Although it is not necessary for these processes to be initiated in a given sequence, the one in which they will be discussed here roughly parallels the development of many groups that are formed for personal growth or team building.

Self-Assessment

The core of personal learning is looking clearly at oneself. Unfortunately, our ability to distort information about ourselves is almost limitless. The key to individual growth in any effort that can be described as humanistic is self-assessment. The first criterion of the "wise" choice is selfawareness.

In any group in which members are looking critically at themselves, there is the likelihood that new insights will emerge. If the group exists to promote growth on the part of its members, it needs to emphasize the need to relate what happens in the group to individuals. The key questions often are: "Who am I?," "What am I up to?," "Where am I going?," and "What difference does it make anyway?"

The concept that an individual has about self is a remarkably stable aspect of personality. It has a profound effect on how the person behaves or chooses not to behave. Our self-concepts come from "significant others," usually in the formative years. Sometimes what we have learned about ourselves from those whom we have trusted shapes large parts of our lives. We all have self-concepts although we may not be aware of what they are. We defend ourselves when we feel threatened, and we open ourselves to learning in a hightrust situation. It is as though the self-concept is surrounded by a membrane that is thick under threat and permeable under trust.

In order for group members to be able to see themselves more clearly, additional processes must be followed. Interacting with others can provide new data about self.

Self-Disclosure

Talking about oneself in a group setting is just one form of disclosure and a potentially useful way of discovering patterns. Sharing feelings with others can be both cathartic and enlightening. We mediate our self-disclosure by choosing what to reveal, in accordance with our perceptions of what is appropriate in the situation. Group norms can have a significant effect on this. We hold back less in an atmosphere of trust than we do when we feel threatened.

Feedback

The third core growth process is feedback, or the sharing of interpersonal perceptions and reactions. We give feedback by telling others how their behavior affects us. This process greatly affects our self-concepts. Feedback from someone one knows and trusts has even more effect than feedback from a stranger or someone whom one mistrusts. In a group situation, there is the potential for both constructive and destructive feedback. Because the process is so powerful, especially when it is requested, it can result in a narrowing of one's choices as well as a clearer understanding of oneself.

Feedback needs to be managed well. When an individual solicits concrete, descriptive statements from others about the effects of that individual's behavior, that person's self-concept is probably the most permeable. If the feedback is targeted toward the growth goals of the individual, the data are likely to be useful. However, the process is risky.

Risk Taking

Some areas of the self are not directly accessible through reflection or discussion. One must take risks to reach them. Trying new ways of behaving can help us to discover parts of ourselves that we may have been afraid to explore and that may disconfirm certain aspects of our self-concepts. Obviously, some risks are foolish (the probability of negative outcomes is too high) and others have little growth potential (failure is unlikely). Trying out new behavior in a group can not only expand one's response repertoire, but also can disclose new parts of oneself.

If the group has high mutual trust, members are likely to receive support for experimenting with behavior, especially if they announce what they are doing. This is one of the keys to building trust. Talking about trust does not instill confidence; that comes from working together on commonly agreed-on objectives. The experience of success and of validated expectations of one another creates a feeling of safety.

Consensual Validation

Feedback that contains themes or common threads is more powerful than feedback that is different from each individual. One develops the idea that one is lovable (or stupid, or competent) by hearing that message from more than one person whom one trusts. This does not, by the way, mean that the feedback is accurate, but the consensus "validates" the information and increases the chances that one will internalize the characterization.

Consensual validation is one of the most powerful processes that occur in groups. It can serve as a mechanism for "correcting" one's self-concept, for counteracting one's tendency to practice self-deception. The practical implication for growth is that we can compare other's perceptions of and reactions to us and look for commonalities.

Implications for Work Groups

If it is desirable that individuals learn from their behavior on the job, it is necessary that they have opportunities to attempt new tasks, receive feedback, and experience support and rewards for development. Norms of openness, solicitation of feedback and confrontation, experimentation, and tolerance for varying perceptions must be established and maintained in the work group.

It is, however, important to remember that work groups are put together primarily to perform tasks that require the members' cooperation, not primarily to support individual learning. Task primacy means that self-disclosure, feedback, and risk taking need to be encouraged only in relation to the tasks of the group.

Implications for Growth Groups

Growth groups are assembled to provide data to individuals and to give them a place in which to try new ways of behaving. The major growth processes discussed earlier are the principal vehicles for change, and these processes should be initiated deliberately. The facilitator can help to promote trust by modeling and encouraging others to engage in self-assessment, self-disclosure, risk taking, feedback, and consensual validation.

It follows that if one wants the individual to grow in selfawareness as a precondition to making wise choices, one must ensure that the group mirrors the array of data sources in that person's usual environment. The composition of the group is important: if there is too much homogeneity, the individual may not learn how other kinds of people may react to him or her. Conversely, if the group is too heterogeneous, some individuals may experience anxiety about being "different" and may not

participate fully. A good guideline is one of controlled variety: maximum difference with the proviso that no person feels unable to identify with any other member.

GROUP NORMS

The following discussions offer criteria that are useful in making appropriate judgments about initial and emergent variables in groups. The hope is that such a list will help to increase the clarity with which facilitators and groups confront particular issues.

Feedback

If people learned from experience, older people clearly would be more skilled at relationships and behavior than younger people. How people use their experience is more important than the experience itself. Individuals learn through developing behavioral patterns guided by clear and accurate feedback about the effectiveness and appropriateness of their actions. Feedback may come from other participants, the facilitators, observers, data-collection instruments, audio- and videotape playback, or task-success elements of a structured experience.

Feedback must be valid data and be related to events and actions. Feedback also is more useful if it is relevant to behavior and situations that can be changed or modified. It is easier to change what one does than to change what one is. For example, the feedback that "You are a hostile person and should change" is less useful than "If your speech with me were less abrupt and argumentative, I could work better with you," and that is less useful than "When you interrupt me, I feel discounted and then angry." Negative motives (e.g., to punish the receiver or to establish the sender's superiority) can reduce the validity of the feedback. (For expanded guidelines on giving and receiving feedback, see Section Two, "Using Role Plays in Human Resource Development," in Training Technologies Volume 21.) The following is a summary of these guidelines:

- Feedback should be specific and objective: it should describe observable behaviors, and words should be quoted directly.
- It should not be evaluative, make inferences, or attribute feelings or motives.
- It should be given only for behaviors that can be changed.
- It should describe the impact of the behavior on the person who is giving the feedback.
- It should be requested by the recipient.

Accuracy of feedback can be checked or validated in the group setting. Recipients of feedback can be asked to state in their own words what they heard. The group also should provide support to the person receiving the feedback; its purpose is to help the person to solve problems, not to create new ones. The facilitator can help in this process by suggesting alternative or new behaviors and by reinforcing positive attempts to change.

Supportive Climate

An atmosphere of trust and nondefensiveness is necessary for people to be able to risk their ideas and feelings, behave openly, and accept feedback. All participants must be able to risk being themselves, right or wrong, effective or ineffective, without feeling that they are risking their membership in the group and the acceptance of others. This does not necessarily mean that conflict, anger, or differences should be avoided. Indeed, such emotions are more acceptable in a supportive climate.

Experimentation

An important possibility in many group training situations is the testing of alternative patterns of behavior and personal relationships. Within a supportive climate and with valid feedback, experimentation can be a key element in changing behavior. Participants may, however, use experimentation defensively: "I did not really feel like that; I just did that to see what you would do." The difference between useful and useless experimentation is that useful experimentation concerns one's *personal* behavior; experimenting with the behavior of *others* is "playing games."

Practice and Application

To gain confidence in their newly acquired behavior, participants need to practice it. New behavior needs to be transferred to and retained in situations that are external to the training setting. This sometimes is referred to as the "re-entry" problem. It is possible and profitable to test actual application if the training is conducted at intervals (e.g., weekly meetings), because individuals may have received valid feedback on their behavior. Simulated application can be used to deal with issues concerning the facilitator, including imagination about applying a new approach to the issue.

Goal Clarity

It is helpful when participants, groups, and facilitators have some clear goals and purposes. A lack of clear learning goals produces two problems: differences in individual learning needs cannot be handled, and it becomes difficult to determine the extent of progress. Goals are more helpful if they are related to specific behaviors and actions and checked against feedback. Although clear goals cannot be expected immediately, goal clarification and review should be a continuing process for individuals and for the group.

Group Growth

A group has development needs beyond the collective needs of its members; it needs time and assistance to become mature, effective, and cohesive. A group often will require more time than the same number of individuals working separately or in small subgroups, achieving different, but valued, results. "One-shot" groups need not receive specialized attention.

Group Maintenance

The need for group maintenance is closely related to group growth. In many grouplearning models, members can use group maintenance to develop their skills in group diagnosis and group facilitation. Energy invested in group building and maintenance as a preventive rather than repair measure is a positive indicator of group health and growth. The trainer can aid in this process by teaching the members about the roles of members in groups and by helping them to learn to identify and deal with dysfunctional behaviors.

Communication

Usually only a small proportion of what is said in a group is heard or understood by many of the members. Participants may be thinking about what they want to say next, what they would like to say but will not, what they think the speaker really is saying, or what they are feeling at the moment. Any of these distractions reduces the probability of listening. A positive correction is for group members to slow down the verbal communication rate or make shorter statements that others can check to ensure understanding. Checking and nonverbal communication activities are useful in this process.

Another issue that often arises in groups is when no members are speaking or visibly participating in some way. If the facilitator does not generate a discussion or activity at that point, group members are likely to complain that "nothing is happening." The facilitator can take this opportunity to help the members to see what is happening, i.e., to discuss the lack of communication at that point and what might be happening to cause it.

Structure and Procedure

"Unstructured" groups do not exist. All groups have norms and procedures, and even anarchy is a structure. It is not always sufficiently clear how formal the structure should be and whether it is imposed externally or derived internally. Structures are related to assumptions and values, as well as to the participants' abilities to cope with ambiguity. When a group can establish and maintain the degree of structure it needs for effective work and can change the structure as its needs and issues change, group growth is evident.

Group Arrangements

There are several ways in which small groups can be used, e.g., for discussion, activities, or processing. There are several ways in which such subgroups can be formed, and the facilitator may choose one method or another based on the participant group, the activity to follow, and/or the need for variety in forming subgroups. There also are a

number of ways in which group seating can be arranged, based on the size of the group and the type of presentation or activity to follow. All these are discussed in "Using Subgroups in Structured Experiences" in Section One, "Using Structured Experiences in Human Resource Development," of Training Technologies Volume 21.

PROCESSING EXPERIENTIAL LEARNING

THE EXPERIENTIAL LEARNING MODEL AND ITS APPLICATION TO GROUPS

HRD professionals continually are confronted with the task of finding more effective ways of working with people. The application of experiential learning techniques is one of the best answers. It fosters involvement and responsibility on the part of learners. The focus of the experiential learning model is on both content and process; it combines a personal reference point, cognitive and affective involvement and feedback, and theoretical and conceptual material. Thus, the participants experience issues as well as identify them intellectually. Personal relevance is derived from the participants' explorations of their own attitudes, beliefs, and behaviors; from the feedback that they receive; and from their examination of their responses to what is happening.

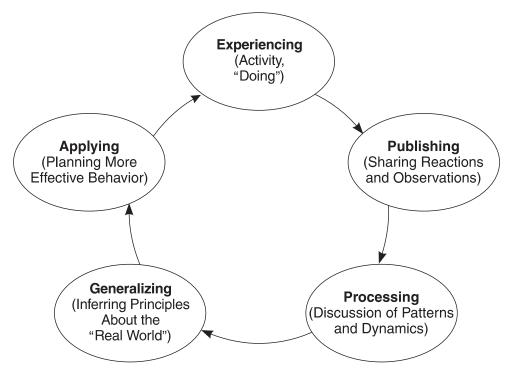
The five stages of the experiential learning cycle are as follows:

- 1. *Experiencing*. Individual data is generated by sensing, thinking, feeling, wanting, or doing something. In training, the impetus usually is an activity such as a structured experience, instrument, role play, or simulation.
- 2. *Publishing*. The individual shares or reports the cognitive, affective, and behavioral data that is generated by the experience.
- 3. *Processing*. In this pivotal step, the data are examined, and patterns and interactions are interpreted. Trends, correlations, dimensions, and effects are noted.
- 4. *Generalizing*. Testable hypotheses and abstractions are extrapolated from the data. An inferential leap is made from the training setting to everyday life, and principles, truths, and learnings are posted.
- 5. *Applying*. A bridge is created between the present and the future by understanding and/or planning how the generalizations can be tested and applied in the real world. This step works toward the transfer of learning. It may include goal setting, contracting, and practice sessions.

More detailed information about the experiential learning cycle is provided in the "Using Structured Experiences" section of Training Technologies Volume 21.

THE ROLE OF THE FACILITATOR

The facilitator has a central role in the implementation of the experiential model. The following describes the facilitator's content and process responsibilities in terms of five



The Experiential Learning Cycle

steps. These are not the five stages of the experiential learning cycle but the steps that the trainer goes through in facilitating the activity.

Step 1: Preparation

A major portion of the facilitator's responsibilities rests on work done prior to the training event. The needs of the group must be diagnosed and the training objectives defined. These are critical activities because the training components not only must cover appropriate content issues, they also must be compatible with the readiness and sophistication of the group members.

Next, the facilitator must identify and prepare all the materials needed for the experience and ensure that the physical facilities are adequate. The facilitator should spend some time reviewing the materials and the sequencing of planned events. Consequences must be anticipated and contingency plans developed. This all should be done before the training session begins.

Step 2: Introduction

At the beginning of the session there are several tasks that can affect the quality of the entire experience. First, the facilitator must introduce the event and ensure that the participants have realistic expectations about what is expected to happen.

At the beginning of each activity, the facilitator must provide clear instructions. Because many participants tend to question and evaluate a proposed activity, the facilitator's primary objective at this stage is to get them involved. Participants should be asked to suspend judgment, to become involved in the activity, and to be prepared to evaluate it later. If participants do not have sufficient trust to engage in an activity, the facilitator must invest further effort in diagnosing and working with the learning readiness of the group.

It is possible that the participants will not like the facilitator's directive style in this stage. In most cases, some control of the process must be maintained at this stage if the experience is to be effective. However, a more democratic style may well be appropriate at later stages. As we said earlier, one of the most important facilitation skills is identifying what approach is appropriate for a given situation.

In introducing an activity such as a structured experience, one should not provide too much detail in describing the task but should be specific rather than general. For example, if the total group were to be divided into subgroups of eight members each, the facilitator should not simply ask the participants to form groups of eight. Rather, they should be taken through whatever subgrouping process has been selected, in a specific sequence of actions.

Step 3: Activity

During this step—the first or "experiencing" phase of the participants' experiential learning cycle—the facilitator has both content and process tasks. The experience must be conducted, instructions must be given, materials must be distributed, questions must be answered, and so on. While the groups are working, the facilitator should note the actions of participants and compile a list of issues or relevant points that pertain to the focus of the activity and that can be illustrated by observable behavior. The participants often will attempt to draw the facilitator into their process, and these invitations are difficult to refuse. However, the facilitator should not become involved in the participants' work. A basic principle of the experiential approach is that learning can take place without direct expert intervention.

Step 4: Debriefing

The observations that the facilitator made during the activity can form the basis for the debriefing (the "publishing" and "processing" phases of the experiential learning cycle). It is during these phases that the facilitator attempts to help the participants to articulate their experiences and relate them to their existing knowledge.

Step 5: Summary

During the last phase (the generalizing and applying phases of the experiential learning cycle), the facilitator has several content tasks and some critical process responsibilities. These include linking observations of the activity to theory and helping the participants to make connections and generalizations.

Activities that appear to be unsuccessful in fostering expected learnings can be useful if meaningful principles can be extracted. Whatever happens during the activity can provide data for learning.

In order to maximize the learning that occurs and the chances that it will transfer, the time spent in steps 4 and 5 should at least equal the time required for the introduction and implementation of the actual structured experience. Inadequate provision for these debriefing and processing steps is perhaps the most common error that facilitators make.

PROCESSING QUESTIONS THAT HELP TO COMPLETE THE LEARNING CYCLE

The technique that enables the facilitator to accomplish the objectives of each stage of the learning cycle and promote movement to the subsequent stages is processing (in the overall sense of group discussion and analysis). Thus, processing skills are some of the most important facilitation skills. Because the specific means of transferring learning is determined by the data generated by the participants, the facilitator must have a large and flexible repertoire of questions to stimulate, maintain, and complete the cycle.

The effective facilitator is situationally responsive, able to guide any particular group to find learnings that are meaningful and testable for its members, regardless of whether they fit within the facilitator's conceptual scheme. The facilitator does not lead the participants to conclusions but, rather, stimulates insights and then follows what emerges from the participants.

Processing Questions for Each Stage of the Cycle

In stage one, *experiencing*, the participants typically are engaged in an activity designed to generate data. The data is not actually processed in this stage, but because there is the possibility that participants will be resistant to beginning or completing an activity, questions may be needed to facilitate this stage. Such questions would be used to (a) break down resistance by acknowledging the participants reluctance to become involved in the activity and (b) process the blockage if necessary. These questions can be used at any stage in the cycle to aid the group in moving either more deeply into the stage at hand or on to another stage.

- What is going on?
- How do you feel about that?
- What do you need to know to . . .?
- Would you be willing to try?
- Can you be more specific?
- Could you offer a suggestion?
- What would you prefer?

- What are your suspicions?
- What are your concerns?
- What is your objection?
- If you could guess at the answer, what would it be?
- Can you say that in another way?
- What is the worst/best thing that could happen?
- What else? And?
- Would you please say more about that?

In stage two, *publishing*, participants have completed the experience, and questions are directed toward generating data.

- Who will volunteer to share reactions? Who else?
- What happened?
- How did you feel about that?
- Who else had the same experience?
- Who had a different experience?
- Were there any surprises/puzzlements?
- How many of you felt the same way?
- How many felt differently?
- What did you observe?
- What were you aware of?

In stage three, *processing*, the participants have data, so questions are directed toward making sense of that data for the individuals and the group.

- How did you account for that?
- What does that mean to you?
- How was that significant?
- How was that positive/negative?
- What struck you most about that?
- How do those fit together?
- How might that have been different?
- Do you see something operating there?
- What does that suggest to you about yourself/the group?

• What do you understand better about yourself/the group?

In stage four, *generalizing*, the participants work toward abstracting superordinate principles from the specific knowledge they have gained about themselves and their group. Questions are geared toward promoting generalizations.

- What might we infer/conclude from that?
- Is that plugging into anything?
- What did you learn/relearn?
- What does that suggest to you about _____ in general?
- Does that remind you of anything?
- What principle do you see operating?
- What does that help to explain?
- How does this relate to other experiences?
- What do you associate with that?
- So what?

In stage five, *applying*, the participants are concerned with utilizing their learnings in their real-world situations. Questions are aimed at applying the general knowledge they have gained to their personal and/or professional lives.

- How can you apply/transfer that?
- What would you like to do with that?
- How could you repeat this again?
- What could you do to hold on to that?
- What are the options?
- What might you do to help/hinder yourself?
- How could you make it better?
- What would be the consequences of doing/not doing that?
- What modifications can you make work for you?
- What can you imagine about that?

A final stage can be added: the processing of the entire experience as a learning experience. The questions here are aimed at soliciting feedback.

- How was this experience for you?
- What were the pluses/minuses?
- How might it have been more meaningful?

- What changes would you make?
- What would you do less of/more of?
- What are the costs/benefits?
- Any other suggestions?

It is obvious that many of these questions focus on the same topics and will elicit similar responses, i.e., they overlap in content and meaning. However these variations on the same themes offer more than one road by which to arrive at the same destination.

Advantages and Disadvantages

As with most techniques, there are potential disadvantages of possessing a series of processing questions in one's facilitative repertoire, but in this case they are outweighed by the advantages. One disadvantage is that the facilitator may begin to rely solely on these questions without becoming knowledgeable about the concept, issue, or theory to be explored. The second disadvantage is that questions often are indirect statements that hide one's own reactions (Pfeiffer & Jones, 1974). This disadvantage can be overcome in two ways: (a) the facilitator can turn each of the questions into statements ("I would like to know what you are feeling"), and (b) the facilitator can share his or her own experiences during the processing of the learning cycle ("What happened for me was . . ."; "What I learned was . . ."). Neither of these disadvantages negates the value of a repertoire of processing questions, but both emphasize the fact that questions in themselves are neither good nor bad; it is how the facilitator uses them that is subject to evaluation.

On the other hand, the advantages are several:

- 1. If the experience is going as planned, the facilitator has a tool for guiding the experiential learning cycle at the pace, depth, breadth, and intensity that is appropriate.
- 2. If the experience is not going as planned, the facilitator has a tool for deriving learning from what is occurring, so that something beneficial is gained, regardless of the participants' attitudes and reactions.
- 3. These questions can be used with virtually any experience in nearly any situation with the vast majority of participants. They are generalizable, transferable, and guaranteed to evoke learning.

The nature of the facilitator and the skills of sharing, empathizing, and listening are most important to the appropriate use of this technique. However, armed with these questions, the competent facilitator can be assured that "something happens" in the learning process.

PRESENTATION ISSUES

A number of issues emerge during the learning process in group work, and they need to be considered ahead of time by the facilitators of group training events. If they are aware of these variables, they may be more effective in dealing with them as they arise. However, facilitators also can provoke or precipitate such issues.

MANAGEMENT OF DIFFERENCES

There are likely to be differences in the starting states, needs, personalities, learning rates, and moods of the participants. In particular, some participants may want to learn about their own styles or issues. Differences, and the conflict that arises from them, can be viewed as a problem or as a source of creativity. Occasionally, however, it may be better temporarily to avoid conflict by providing other sources of learning that may ultimately help to resolve the differences, e.g., by splitting the group into compatible subgroups to develop feedback skills before coping with the total group conflict.

The facilitator should consider how he or she and the group cope with differences and conflict—by ignoring them, debating, arguing, fighting, compromising, and so on. The facilitator should not always rush to provide support at any evidence of tension; people need some tension to change and grow and they need to learn how to deal with it. If the tension becomes counterproductive, that is the time to step in.

DEPTH OF INTERVENTION

All participants in a group may intend to work on group issues and not become involved in personal issues, but it is possible that one or more people gradually or suddenly may become more introspective as the interactions between members become more intense or complex. When this happens, the hazy boundary between training and therapy is reached. It is important at this point to stick to behavioral-data-based interventions that focus on here-and-now skills and interpersonal relations between members. This will maintain a training focus. If the focus switches to there-and-then data from one member of the group (his or her personal problems) and "interpretive" interventions are used, the group becomes a therapy group rather than a training group, and the other group members will be short-changed. The facilitator can help to make this distinction by stating that therapy is concerned with people's sense of who they are, how they got to be that way, and what they could do to change, while training is concerned with what people can do with what they are, how they behave toward others, and their skill or competence.

AMBIGUITY VERSUS DIRECTION

In many kinds of learning, one must cope with ambiguity and uncertainty, and these can be discomforting. Participants often expect the facilitator to give the group directions continually and to help whenever they have difficulties. However, a basic rule of facilitation is not to do for people what they can do for themselves. In fact, many training interventions depend on the facilitator's requiring group members to generate their own data, make their own plans, and/or deal with their own processes. In general, less mature groups need more direction and facilitation. With groups that are more mature (in terms of ability and willingness to accomplish the groups' tasks), it is better to err on the side of too few interventions than too many (too many activities or too much control). Furthermore, many believe that anxiety is a necessary force in the learning process, that it is a natural part of unfreezing and change. Participants should be encouraged to acknowledge and accept their feelings of discomfort and then to accept responsibility for and get on with the business of learning.

INTERDEPENDENCE AND AUTHORITY

It is important for the group to confront and understand its relationship with the group's authority figure—usually the facilitator. When this happens, it is a good indicator of progress in the group. If it never occurs, the quality of interdependence is questionable. Overdependence on the facilitator allows members to avoid taking responsibility for their actions and their own learning. Changes in behavior then are likely to fade when the authority person is not present or if he or she loses credibility. Interdependence between the group members and the facilitator is more healthy.

INVOLVEMENT AND INTENSITY

To some degree, the experiential model allows individuals to establish their own levels of interaction; it attempts to respect an individual's wish to be or not to be involved. Intensity is determined by the activity and by the readiness and personal learning stance of each participant in a group. Thus, if sixty individuals are divided into ten groups of six members each, one group might respond very personally and deeply to the topic while another group might handle the situation superficially. How the members respond, however, is their decision.

Much valuable information for the participants can be lost because they consciously choose not to talk about it, are unaware of it, or simply lack the skills and insight to handle it productively. Thus, the facilitator may need to comment on what is happening, direct the discussion, etc. The key is to encourage people to participate but not to pressure them.

Until individuals have and use opportunities to reveal how they perceive, feel, and do things, they have little basis for learning about themselves. Silent members often claim that they learn by observing and listening to others. In a way, this is true, but they

are presenting only the "nonincluded" part of themselves. With various results, groups put pressure on silent or nonparticipative members to join in. An effective group climate allows and facilitates self-presentation and does not force conformity to group norms in the method of that presentation.

DEGREE OF CONFRONTATION

As an integral part of many learning processes, people are confronted with feedback, evidence, and feelings from other group members and the facilitator. Judging the level of the confrontation is like gauging the difficulty of jumping across a gap—it must not be so small that it is unnoticeable nor so large that one balks or fails. A confrontation level that is too low may lead to *assimilation* ("That is common sense; I already know/do that"). Too high a level of confrontation leads to *accommodation* ("How can I make sense of that? I need to work on that"). The facilitator must determine which elements in the process can provide useful confrontation and how the degree of confrontation can be optimized.

OTHER EMERGENT VARIABLES

Subject/Method Dissonance

It is reasonable and comfortable—consonant—to learn about group dynamics in a group or about interpersonal relations while relating to others. However, it is uncomfortable —dissonant—to tell people to participate or to ask people to discuss their dependence. In the experiential situation, the contract, structure, and method should not be dissonant with the learning aims. The facilitator needs to consider the balance (or lack of it) between what the group is doing and the issues it is working on as well as the problems that might arise with a high level of consonance.

Distributive/Integrative Situations

Distributive situations tend to be either analytical (e.g., subdividing issues and distributing the parts among people) or competitive and evaluative (e.g., allocating blame and attributing results to individuals). Integrative situations usually are cooperative or concerned with the Gestalt—the whole. Particularly in the use of structured experiences, participants' socialization toward competition can bias group work toward distributive activities. Integration is, however central to the philosophy of group work. The facilitator needs to consider whether group work—and particularly any structured experiences that are planned as interventions—are likely to work toward distribution or integration.

Surface Validity

Issues of validity and credibility appear very early in group life but become less important later. Unless people feel able to commit themselves initially to the work and life of the group (at least to the extent of making a start), it is difficult to gain their acceptance/commitment. The facilitator should take into consideration whether tasks, issues, activities, and the setting of the group work appear realistic or valid to the participants and whether members seem credible to one another. Last, but not least, is the question of the facilitator's face credibility, which can be influenced by factors such as age, sex, experience, manner, and mode of dress.

Valid/Invalid Data

It is useful for the facilitator to be clear about the ground rules for the validity of data presented in the group and to share and compare those criteria with the participants. The most valid data are descriptions of actual behavior ("You sat next to me in every session") or expressions of personal feelings ("I feel warm and cozy"). Less valid are interpretations of behavior ("You sit by me because you feel isolated") and guesses about the motives of others ("You sit by me because you want to get to know me"). Interpretations and conjectures about motives cannot be verified; they can only be accepted or denied. Their acceptance or denial, however, becomes another valid behavior. Still less valid are "we" statements rather than "I" statements ("We all feel anxious"); old feedback, which is less valid the further away from the present it is ("Yesterday I felt angry with you when you talked so much"); and nonspecific generalizations ("Some members of the group just don't listen"). The facilitator needs to keep checking whether the current data flow in the group is valid or invalid and whether it is appropriate to the work in progress.

Projection/Introjection

In projection, people attribute their own ideas, attitudes, feelings, assumptions, values, and styles to the group and to one another. In introjection, people absorb ideas, values, etc., from others. Projection and introjection can be conscious or unconscious.

Extent of Closure

The degree of closure for any issue or incident in the learning process may vary from being totally open ended to a high degree of closure. Both approaches have drawbacks. Low closure can be frustrating and can raise more issues and questions than answers. High closure can lead to encapsulation and elimination, allowing fewer possibilities for individuals to internalize learning. Learning ultimately is personal, and the results of the group's work are vested in individual members as they leave the group. Whatever level of closure the facilitator decides to aim for is likely to be a compromise based on a judgment of the extent to which closure affects learning and resolution.

GROUP SPLITTING

As the group process continues, the initial group-structure variable of size shifts to become an emergent variable. One manifestation is lateness or absenteeism, an issue related to the functioning of the group as well as to the particular individuals. A more obvious form of this issue occurs when members suggest that the group split into subgroups or when the group splits spontaneously. (Dividing members into pairs and subgroups is used as a facilitative structural intervention.) Splitting is less desirable if the total group is essential to the learning objectives.

FLOW/BLOCKING

At times, the group or some individuals may become blocked. They cannot progress and feel frustrated, impotent, or lacking in skills. These can be useful learning issues, particularly if various styles of responding to a block are explored. At other times the work must flow, feelings must be expressed, and there must be movement.

Flow can be facilitated by devices such as exercises, acting out, physical and nonverbal expression, and game-type structured experiences. Although these may appear "phony" to the participants, such contrived measures often can activate genuine results. Facilitators must be able to cope with learning while they are blocked and also must know how to facilitate flow. They then can determine the implications of their interventions, basing them on the needs of the group and the members rather than on their own skill biases.

SKILLS TRAINING

When one is starting to work with participants, if one carries too much authority in, it may not leave enough room for them to step in, fill in, and participate. This is especially true in skills training, when the learners must take the ball and carry it. When teaching highly technical skills, the trainer can say of the content "This is right," but also can ask how the participants feel about themselves in regard to it. The trainer can make a statement such as "This job requires this skill" and provide behavioral examples. If a person seems to be overwhelmed or does not seem to "get it" but really wants to try, it may be necessary to break down the skill into small enough pieces so that the person can learn one piece at a time. Determination can help people achieve a lot. It also may be necessary to provide more time; skill takes more time to develop than does intellectual comprehension.

It can be helpful to group people who have more skill with those who do not to save time in work groups. If, however, there are polarities in the group in terms of skill, a better strategy is to split the total group into polarized subgroups in order to allow time and space to work more with the group that needs it.

Safety in learning is critical to what will occur. For this reason, it is desirable if assessment of competencies can be separated from training. If pre-training assessment is

to take place, it should be conducted before the formal training session begins. Likewise, the training event *per se* should be ended formally before post-training assessment is conducted. It also is a good idea to provide the answers or a description of the process so that the trainees can check their assumptions or what they have learned.

PROBLEMATIC INTERACTIONS

Several problems can arise in group work, and the trainer needs to be able to recognize signs of trouble. The following are the most common malfunctions in training groups:

- The participants use one or another methods of *avoiding the issues* (taking flight).
- Individuals *resist the process* of the group.
- Members claim that they "do not know what to do."
- Members spend a great deal of time *analyzing* past interactions.
- Members tend to *interpret and hypothesize* about one anothers' behavior rather than meeting one another directly.
- More quiet members do not move into the group on their own initiative. Individuals or the group rationalize(s) *nonparticipation*.
- Some members *control* the group by means of specific behaviors (e.g., cynicism, hostility, silence, etc.).
- *Pairs or coalitions* are formed that impede the progress of the group.
- The group members make *tacit decisions* that affect the quality of their interactions (e.g., not to discuss certain subjects, not to allow conflict, not to get too personal or close, etc.).
- The group tends *to deal with one person at a time*. That person usually is not consulted about being the center of attention for an extended period of time. This pattern may mean that others may not contact one another until the group is "finished" with the person who is the focus of attention. Some people may withdraw from the interaction when one person is dealt with for an extended period of time. This problem may not be dealt with openly.

RESISTANCE

One of the facilitator's tasks is to help people to deal constructively with their resistance. Resistance may be caused by the fact that participants were "sent" to the training program rather than volunteering for it. It is important to surface this feeling and acknowledge its validity at the beginning of the program. Sometimes such resistance can be overcome merely by saying that such feelings are understandable and then challenging the participants to make the most they can out of the situation and to learn what ever they can for their own benefit. Resistance also may be generated by a fear of exposing oneself—of learning or having others learn about oneself. Sometimes it can be helpful to ask the participant to consider "What are the best and worst things that could happen in this training event?" before making a decision about whether or not to continue. Do not focus too much attention on reluctant group members; it can embarrass them further and lose the others. If there is too much pressure on one person, shift the focus.

Resistance may arise at any point in a training program because the facilitator is using a methodology that the participants do not see the value of. It is important that the facilitator have a way to check "how it is going"—a means of data feedback and negotiation. This may be as simple as asking questions out loud (e.g., "Are the stated objectives being met?"; "How are we doing on time?"). If resistance arises, it may be necessary to ask the participants to hang in there for a specified period of time (i.e., to negotiate), to explain what you are trying to do, or to prepare to shift gears and try something else. A facilitator should always be ready to drop an intervention if it is not working, and the participants should know how much the facilitator is willing to change the design. Some resistance stems from overcontrol; it should be remembered that the facilitator's role is to help people to learn how to do things for themselves, not to direct them or to do it for them. Training is a mutual effort; the participants' willingness and their perceived value is needed.

If the group is "cold," warm-up activities can help; "energizer" activities and things to increase active participation may be required for sleepy groups (e.g., after lunch). If group members seem to be hostile, dense, or off the subject, ask them why. If the group is in flight (e.g., given to "fun and games"), remind the members of the objectives (and maybe keep it fun for a while).

ESTABLISHING POSITIVE NORMS

It is important that the facilitators establish a climate of safety, openness, risk taking, experimentation, choice, and support from the very beginning. The facilitators should describe and model the positive norms that they want to establish in the group. They can do this by encouraging participation, letting everyone have a chance to talk, accepting what each member says, being nonjudgmental, providing support, sharing their own feelings, and taking risks. They need to model giving and receiving feedback correctly. This means eliminating defensiveness, sarcasm, put downs, and taking credit for the ideas of others. It means encouraging collaboration rather than competition. It is important that the facilitator avoid the temptation to pull rank on the participants (this violates the norm of working together collaboratively). It is all right to question ideas or behavior but not to attack individuals. Facilitators also should avoid becoming (or the perception of being) "affiliated" with a particular group member (or members).

The facilitators can help the participants to stay in the here-and-now, especially when giving feedback. They can do this by avoiding "head trips" and by giving behaviorally specific and timely feedback. The facilitator can ask individuals to describe their physical feelings (using several techniques such as imagery, lists, nonverbals, sentence completion, etc.) and their responses to what is happening in the group. Individuals also can be helped to learn to ask for feedback. The facilitators should model positive confrontation and avoid interventions of the "either/or" variety.

DISRUPTIVE INDIVIDUALS

Certain individual-level behaviors can be disruptive to the rest of the group and can be a source of annoyance. It may be a good idea to ignore certain individual behaviors at first; the person may be testing the facilitator's response and, if the behavior is not reinforced by having attention called to it, it may be abandoned. If, however, it becomes a source of annoyance or disruption to the group (assuming that the members do not deal with it themselves), the facilitator must deal with it at the individual level. At this point, it is important that such members hear the effects of their behavior *on* the other group members and *from* the other group members.

Attempts to block, monopolize, or dominate the group by individuals require trainer interventions if the group does not deal with them. The trainer can begin by reminding the individuals of the agreed-on norm of giving everyone a chance to speak. People who speak for others should be encouraged to practice "I" statements and assume ownership of their statements. The facilitator also can check with the other members to see if the person's representation is accurate. When someone verbalizes excessively, the facilitator can suggest that the person try to express the idea in one sentence. People who repeatedly put themselves down can be asked to generate a list of prouds or why they should be appreciated.

The facilitators also can model how to deal with difficult individuals for the other group members. For example, the facilitators can support creative thinking but not hostility; when people play "dumb," they can be challenged to make up an answer or choice, and the effort can be reinforced.

The facilitator can help the group to decide what it wants to do when someone attempts to switch the topic. It is up to the group to decide if it wants to accept the switch. If multiple issues develop, the facilitator can ask the group to decide in what order they will be dealt with. If the group seems to be suppressing things, the facilitator can ask what individual members wish they had said.

If the group focuses on one individual but the issue is really pertinent to several members, the facilitator needs to make a group-level observation. Even if the person is disruptive, the facilitator's comment can change the focus from the person's motivation to the effect of the behavior on the group. In this way, the trainer is much like a police officer on traffic duty (Cooper & Heenan, 1980). This applies even if a participant is questioning or arguing with the facilitator, who can ask the group if it wants this to continue.

Co-facilitating can be beneficial if there is conflict or heightened affect in group. One trainer should work with the person affected while the other helps the other group members to understand and deal with their reactions to the situation.

As the group matures, it should increase its ability to deal with such issues. The ultimate purpose, of course, is to help the group to learn to police itself.

LATENESS AND ABSENTEEISM

Different facilitators have different attitudes about the issues of starting on time and missed sessions. Although it may be important to be clear at the beginning of the session about one's own preferences, these issues really are training-group issues, and the group should decide at the beginning of the training event what expectations in regard to these issues will best help it to meet its learning objectives. If one or more members are repeatedly late or miss sessions and expect the facilitator or other participants to help them "catch up," the group should decide how it will handle this. The reality of the participants' jobs may need to be figured into the group's expectations. If the training is sponsored by and conducted in a particular organization, some participants may not be able to attend all sessions because of other job pressures. However, this can be picked up by other group members and used unnecessarily as an excuse.

Therefore, at the beginning of the event, the facilitators need to announce their preferences regarding the issues of starting on time, lateness, and absenteeism and encourage the group to decide what its standards are. For example if people have started to be late repeatedly, the facilitator can ask the group, "How do you like how we are handling our time?" It is important that facilitators say what they think is going on and check it with the group. Once expectations have been verbalized and agreed to, it should be made clear that individuals who are late will be helped or not helped to catch up, as stated. If helping is agreed to within certain limits, each member of the group can be asked to "adopt a buddy" (these need not be reciprocal pairs) to fill in late or absent members on what they have missed. Such "catch-up" sessions can be conducted during the next available break or meal. It does not matter which specific technique is chosen for dealing with members who miss sessions as long as it works; what matters is that the learning of other group members not be disrupted.

INCREASING GROUP AUTONOMY

Involvement and commitment increase learning. Adults must feel responsible for their own learning. A golden rule of facilitation is "Do not do for the participants what they can do for themselves." The facilitator should not provide all the answers, but should turn questions back to the group and encourage the members to figure out the answers for themselves. Positive reinforcement should be provided to further encourage group members to do things for themselves in the future. If the participants are very sophisticated and ready for training, the trainer can even do an emergent design, asking the group, "What do you want to work on?"

USING AUDIOVISUAL AIDS IN HRD

TYPES OF AUDIOVISUAL AIDS

Visual aids can be extremely helpful in describing objects, processes, and ideas. Consider how much a photograph helps in describing a person, how much a map helps in giving directions. According to the theory of neurolinguistic programming (Bandler & Grinder, 1975, 1979; Grinder & Bandler, 1976), many people do not remember what they hear, but they do remember what they see; these "visual" people learn better by seeing than by hearing. Visual aids can relieve such participants of some of the stress of trying to form mental images and, thus, free them more for learning. Visual aids also can make learning easier for the "kinesthetics" (who remember what they feel) because they can point to and touch the visual aids. In addition to clarifying and supporting a verbal presentation, visual aids add important variety to the overall presentation and make it more interesting. Many participants (even if they are not "visuals") expect to see the key points of the lecturette in order to reinforce them, whether this involves a printed handout or a summary outline on a newsprint chart. Of course, such devices also can help the facilitators to remember what they want to say.

There are many types of audio/visual aids. Those used most often are described here.

The Speaker

The speaker's body, clothes and accessories, gestures, voice, and facial expressions all can deliver messages to an audience. One's body can be used to demonstrate a technique; the body and the face can suggest an emotion (e.g., anger, fear, joy, surprise) or state of health. Metaverbal communication—which includes nonverbal communication such as body language, gestures, and facial expressions as well as vocal pitch and intonation—can reinforce, mock, or deny a speaker's words. One's clothing and accessories also can support or detract from one's message and intention.

Other People

Other people, such as co-facilitators or participants, can be used to demonstrate formations (e.g., team positions) and other relationships. The group sociogram is a visual representation of the relationships in a group. Such representations are much more effective than verbal descriptions of them.

A Newsprint Flip Chart, Easel, and Broad-Tipped Felt Markers

The visual aid most often used in training may be the newsprint flip chart hanging on a metal easel. In some settings, a chalkboard and chalk are used; and now there is available a white board designed to be used with washable markers. The versatile flip chart, however, has become a mainstay of the facilitator's repertoire, in part because it is portable, and the sheets of newsprint can be posted around the room during the training session and saved, if necessary, for the next one. These materials are inexpensive and can be used in most settings. The flip chart can be used to build a visual aid such as a chart or diagram step-by-step as one speaks or to list key or related words and concepts as one speaks holds the attention of the listeners and shows them that you know what you are talking about. The trainer's movements in creating such a chart or list add variety and kinesthetic impact (which helps those "kinesthetics" in the room to remember what is happening). Another advantage of this technique is that the sheets of paper can be posted in the training room so that the participants can refer to them later.

Many newsprint posters can be created prior to the training event. Various colors can be used to highlight and add impact. Even if the trainer will be creating the visual aid in front of the group, some things can be written or drawn on the paper beforehand in light pencil, which the audience cannot see. A subsequent discussion includes more about using flip charts, easels, and felt-tipped markers to create effective visual aids.

Posters

Charts, diagrams, graphs, and figures can be enlarged graphically or photographically to poster size. They can be created with felt-tipped markers and newsprint or with poster board and poster paints. Posters can be made to present pie- or circle graphs (to indicate relative portions), bar graphs (to compare or contrast two or more entities), line graphs (to show changes or trends over time), flow charts or flow diagrams (to show changes and processes over time), and tree charts (to show choices or branching modes of development). Different colors or different types of lines (dots, hyphens, dashes, solid, etc.) can be used to show differences in line graphs. In presenting them, one can use a pointer to highlight certain facts or parts.

Models

Models can be used to demonstrate things and processes. A detailed discussion of using models is presented in Section One of this volume.

Preprinted Handouts

Handouts provide simple, brief summaries of the content of a presentation. They can be consulted during a lecturette, thereby giving a clear structure to the talk, or they can serve as summary sheets at the end of a presentation to supplement what has been said. They should be distributed at the time that the trainer wants the participants to read

them; otherwise they will distract from what the presenter is saying or what the participants are supposed to be doing. Handouts also are useful for reiterating what has been said, especially if complex concepts are involved. The participants can take them home and review them later. Handouts can include figures, charts, diagrams, and other illustrations.

Photographs

Photographs are valuable only if they are large enough to be seen by all members of the audience and if they specifically and accurately represent what the presenter is trying to describe. If so, they can be powerful visual aids; if not, they can lead the audience off on tangents. Photographs should not be passed around; this will distract the audience from the verbal presentation.

Slides

These also must accurately represent what the presenter is trying to describe. The use of slides may require a darkened room. The slide screen must be transported and set up and can be a distraction during the rest of the presentation. One must have a remote control or must stand near the projector in order to operate it. However, slides can be made from color photographs, and programs can be upgraded with little difficulty.

Several types of slide projectors are available. The differences generally are in the receptacles that hold the slides (thirty-five millimeter is the most common size) and those that feed them into the projector. Some slide projectors have multiple projection capability, fade-in and fade-out devices, programmers that automatically advance the slide when cued by a signal, sound that is synchronized to play along with the images, and random access. These are more expensive and require greater skill and preparation. In addition to the slides, projector, slide tray or carousel, and screen, one should carry spare light bulbs for the projector and a heavy-duty extension cord that is compatible with the electrical outlet in the room.

The slides must be prearranged in the proper order in the holding device for use with the slide projector. It is important to run through the presentation prior to the actual training to make sure that the slides are arranged properly (they have a habit of turning out upside down or backwards). The projector should be turned off when the presenter is not speaking about a particular slide; if the visual is not the focus of attention, one wants the audience to focus on what is being said.

Opaque or Transparency Overhead Projector

This device frequently is used in training because it is inexpensive, it is flexible in its applications, it is easy to use, and the room does not need to be as dark to use an overhead projector as it does to show slides, a film, or videotape. Transparencies for use with this special projector can be made from almost any printed copy on most copying

machines, using transparent acetate material. They also can be made directly onto clear acetate with special marking pens.

The sequence of the transparencies and the verbal presentation need to be coordinated ahead of time. Space should be available for the stack of unused transparencies and for the stack of used ones. These should be placed so that the speaker or person operating the projector does not have to turn the transparencies in order to put them on the machine.

The use of an overhead projector requires a viewing screen. It also is important to have at least one spare light bulb for the projector and to take a heavy-duty extension cord that is compatible with the electrical outlet in the room that will be used. Check to see that the machine is operable and adjusted properly and that the glass and lens are clean. The projector should be placed so that everyone in the room can see the screen clearly and read the projected image without strain.

The speaker or person who will be operating the projector must stand or sit near it in order to insert and remove the transparencies in sequence. The projector should be turned off if a transparency is not being referred to at the moment. A pencil or pen can be used as a pointer with transparencies, and points of the graphic can be highlighted with a (washable) marking pen as one speaks.

Handouts and the overhead projector can be most effective for the presentation of tables of data and of complex charts and diagrams. For the most complex tables, an overhead projector is best, so that the trainer can point to the items being examined. For complex diagrams, on the other hand, handouts are better, because participants usually will try to copy the diagram while the lecturette is being delivered.

Audiotapes

Audiotapes are useful if one wants to present a recording of someone important to the group delivering a short, relevant bit of content in his or her own words. Audiotapes or compact disks also can be used to provide background music for activities involving imagery or physical relaxation or to supplement slide or silent film presentations. Prerecorded audiotapes of people speaking with different vocal inflections are available for training in listening skills and conflict management. It is not a good idea to use audiotapes merely to present content without doing it one self; this is less involving than a live presentation and is more apt to lose the attention of the audience.

Videotapes, Films, Video Disks, and Motion Images from a Computer-Generated Video-Display Terminal

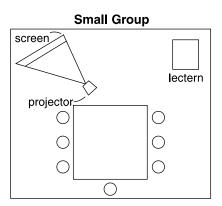
These media can add additional perspective, clarity, variety, and authority to presentations. Each has special equipment and usage considerations. They require technical familiarity for correct operation as well as setup time, so everything must be prepared in advance.

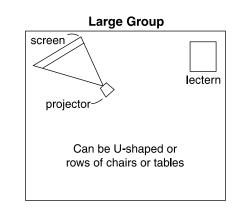
Computer-assisted instructional terminals interfaced with video disks under computer control can have graphic capability, and the video disk can include slides, motion pictures, and videotape with sound. These highly complex systems are gaining greater acceptance in the training field, but because they require sophisticated equipment that is not easy to transport, we will not go into detail about their use here. Later, an entire discussion is devoted to the use of videotapes in HRD.

Viewing Screens

Although it is not always necessary to use a screen with a slide projector or overhead projector (a clean, flat-textured, white or near-white wall will do), a screen that is of the right texture and that is well placed will make the use of such visuals much more effective. Mat-white screens provide the best image with the overhead projector. Glass-beaded and silver lenticular screens work well with color.

The figure that follows shows how to set up a projector and screen for optimum viewing. It also provides a formula for determining the image size that is required.

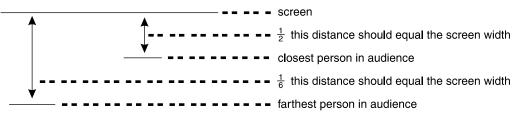




(Having the screen in a corner allows all to view it easily.)

The 2-and-6 Rule for Proper Screen Size

The size of the screen (and image) should be as near this size as possible:



How To Place a Projector Screen

If a piece of audiovisual equipment will not be used regularly, it may be a good idea to rent it when needed. Renting also allows experimentation with various types of equipment and saves the trouble of transporting equipment from one location to another.

If a decision is made to purchase audiovisual equipment, read the product warranty carefully, determine the equipment's compatibility with other equipment, and find out whether certified repair service is available in your area. When in doubt, consult with

people who actually use such equipment and take advantage of any loan programs offered by distributors.

BASIC GUIDELINES FOR PRESENTING AUDIOVISUAL AIDS

These are the two basic rules in using audio/visual aids:

- 1. *Have everything planned and ready in advance*. The more sophisticated the technology is, the more critical this is. When materials are planned and set up beforehand, the facilitator can relax and let the lecturette flow more easily.
- 2. *Keep it simple*. The purpose of a visual aid is to reinforce the verbal presentation, so any visual should be realistic, relevant, and related to the learning objectives. When used with conceptual input, visual aids can help to provide a structure for thought as well as a focus on key points. The more sophisticated technologies are appropriate for more detailed presentation of information; otherwise, they can be more trouble than they are worth. If the complexity of the structure interferes with the thought or if problems with complicated equipment obscure the content, the facilitator is better off avoiding such aids and concentrating on making a lively and coherent verbal presentation.

Any visual aid should be pleasing to the eye and should be simple and uncluttered so that all members of the audience can understand it. In preparing visual aids, keep in mind basic rules of artistic composition such as balance and scale. Every visual presentation should have a focal point. Also be sure that the visual aid reinforces the topic. Important elements of the content should stand out. Extraneous details should be omitted; they will distract the audience. The final product should be large enough (and placed so that all participants can see it easily. It also should be easy for the trainer to use and refer to. It should not compete with what the trainer is saying and should not confuse the trainer as he or she refers to it. Its purpose is to supplement and reinforce, not to compete or overwhelm.

Plan the presentation ahead of time and practice presenting it, even if you have to present it to yourself in the mirror. Review all materials carefully prior to the presentation for clarity, sequential order, and possible damage. Keep the visual aid out of sight until you are ready to discuss it so that it will not distract from what you are saying. Do not use too many visual aids; a crutch can become a distraction. Finally, when you are presenting, remember to face the audience, not the visual aid.

CREATING FLIP-CHART POSTERS¹

One does not have to be an artist to give flip charts, overhead transparencies, chalkboards, posters, or any graphics more visual impact. However, one can appear to be more professional when the quality of the visuals matches the quality of one's

¹ A large portion of this section was contributed by Danny Field, an HRD consultant from San Francisco.

facilitating and consulting skills. This section offers some useful information about creating effective flip-chart posters, but the guidelines apply to transparencies and other written visual aids as well.

Materials

A great number of presentations today utilize large paper pads that hang on movable metal easels. These pads, or flip charts, are approximately twenty-seven inches across by thirty-seven inches long. The flip charts come in various grades and weights of paper that may or may not have light-blue lines on it. The least expensive paper is unlined, newsprint-quality paper. There is a more expensive, mediumweight paper that has lightblue, vertical and horizontal lines on it in a one-inch grid pattern. This is especially useful for people who do not have a lot of experience in laying out visual presentations. If price is a problem, paper with only horizontal blue lines also is available; it is somewhat less expensive and works almost as well. Most large art stores carry these pads, which may be referred to as newsprint flip charts or layout pads.

The writing is done with broad-tipped, felt-tipped markers. (These are sold under a variety of names, including "Magic Marker," "El Marko," and "Stabilayout.") Watercolor markers are preferable to permanent markers because they do not dry out if the caps are left off for an hour or two; they do not have an unpleasant odor; they do not bleed through the paper onto the surface underneath; and their color will come out of clothing with dry cleaning. The primary colors used in addition to black are red, orange, yellow, green, blue, violet, and brown.

Mistakes can be corrected with white correction fluid (several brands are available). To avoid having the corrections bleed through, use the regular fluid over watercolor markers, and use the fluid marked for "copies" over permanent markers. A disadvantage of correction fluid is that it absorbs some of the color of the correction, so the new ink will be slightly lighter than the original. But that may be better than redoing an entire poster.

The finished posters, charts, etc., usually are posted to the walls with tape so that participants can refer to them. Drafting tape is best when sticking flip charts to painted surfaces or to other pieces of paper because it will not pull the paint off the walls or tear the paper from which it is being removed. Its disadvantage is that it is apt to come loose on vinyl wall covering or anything other than painted or paper surfaces. On the other hand, masking tape will stick to almost anything, but it may pull paint off walls and is apt to tear paper when one is trying to remove it.

Using Color

If one takes seven markers—one each in red, orange, yellow, green, blue, violet, and brown—and writes the word "COLOR" on a sheet of newsprint in two-inch high letters seven times, each time with a different color marker, one will notice that some colors are easier to read than others. Most people find blue, brown, green, and violet the easiest colors to read, though not necessarily in that order. Thus, these colors (along with black) are the best for writing words on flip charts. Of the three remaining colors, most people find yellow the most difficult to read. Therefore, use yellow only for highlighting. Orange and red should be used for words only when people are sitting fairly close to the flip chart. If any viewers will be farther away than about fifteen feet, orange and red are best used for symbols and underlining.

The following combinations of colors look best to most people:

- BLUE with green, violet, orange, and red
- BROWN with orange and green
- GREEN with brown, violet, orange, red, and blue
- VIOLET with green, blue, and orange
- RED with orange, green, and blue
- ORANGE with brown, violet, red, green, and blue

Note that green and orange go well with five other colors, that blue goes well with four other colors, that red and violet go well with three other colors, and that brown goes well with two other colors. Of course, there may be individual differences in perception, but this generalization can be used as a basic guide.

Because the objective of using different colors on flip charts is to make things stand out, it is important to select colors that have high or medium contrast with one another. This makes them easier to distinguish from a distance. In the chart that follows, each of the six colors is rated as having a high, medium, or low contrast with each of the others.

	Green	Blue	Brown	Violet	Orange	Red
Red	H**	H**	Н	Н	L^	
Orange	H**	H**	H**	H**		L^
Green		M**	M**	M**	H**	H**
Blue	M**		М	M**	H**	H**
Violet	M**	M**	L		H**	Н
Brown	M**	М		L	H**	Н

**Indicates color combinations that look well together and have high or medium contrast. These are the best colors to use together.

^Indicates color combinations that look well together and have low contrast. These colors should be used together only if the audience is sitting close to the flip chart.

In general, avoid using the other color combinations.

There are many ways in which colors can be used. Underlining particular words to be emphasized is perhaps the most common. Others include drawing boxes around

blocks of text, putting colored asterisks next to words in lists, using color to draw parentheses and other linking symbols, and using shades of the same color and/or colors that are adjacent on the color wheel to depict things that are related but different or changing.

Writing Words

The first rule of creating a written visual aid is to write clearly so that the participants can read it. Almost everybody can increase the clarity and visual impact of the words they write on flip charts. For example, many people write in all capital letters because it is easier to do, but it is not necessarily easier for the audience to read. Most people find printing easier to read than cursive writing. An initial capital letter followed by lower-case letters (e.g., This) is easier to read than all upper-case letters (all caps, e.g., THIS) or all lower-case letters (this). The following shows the five choices in writing style, in order from the most desirable to the least desirable, based on both ease of reading and ease of writing.

Printing	Mixed	ALL UPPER CASE	all lower case	Writing
Most Desirab	le		Leas	t Desirable

There are several styles of lettering that are possible; samples of these follow.



Words that are written in bold (thick) letters stand out more and are, therefore, easier to read. They also look more "intended." The bold and outline styles seem to be the easiest to draw, but most people find the bold and hollow styles to be the easiest to read. In general, the simpler, the more bold, and the more intended the style, the easier it is to look at.

To write in the bold style, write in single lines first, then go back and shade in second and third lines to thicken the letters. For the hollow style, write the words in pencil first, then outline each letter in pencil, and then trace the outline with the wide side of the marker. For the outline style, write out the entire word or phrase, then go back and outline each letter, using the wide side of the marker.

General Guidelines

When creating a poster, overhead transparency, or graphic handout for presentation, follow these basic guidelines:

- Leave a margin.
- Print clearly.
- Do not use more than four or five words per line.
- Do not overcrowd it; leave some white space.
- Balance the contents.
- Highlight the most important element(s).
- Maintain a consistent format rather than mixing several different ones. A horizontal format is best, because most people are accustomed to reading horizontal lines.
- Do not have more than three vertical columns. Try to avoid using vertical dividing lines; use space instead.
- Do condense information; eliminate unnecessary words or figures.
- Use large symbols and easily understood abbreviations.
- Design the material so that it can be read easily by the member of the audience who is farthest away.

USING POSTERS AND OTHER VISUAL AIDS

When creating a flip-chart poster (or presenting any visual aid), do not turn your back to the audience; stand so that you are partially facing the audience and write sideways. If you are using permanent markers, you may need to write on every other page so the markers will not bleed through. This also allows you to cover what is coming next during your presentation. When creating a written or graphic visual aid in front of the group, remember to summarize and to emphasize key words; the reason for the written presentation is to provide clarity or emphasis or to present an outline. If you know that you will be drawing posters to reinforce your presentation, it is a good idea to plan them beforehand. Of course, it is easiest if you can actually prepare your illustrations, lists, or charts in advance. It frequently is a good idea to sketch the visuals in pencil before filling them in with colored markers. As we mentioned previously, even if you cannot

create the entire poster, you may be able to write key words or figures in light pencil that will be visible to you during the presentation but not to your audience.

If you are listing things that the participants have said on a flip chart, write the items as they are said. Do not ask for the participants' input and then edit it or change their words to suit your preplanned lecture. A newsprint flip chart can be used to list ideas and content generated by the participants or it can be used to present what you want to tell the participants; although these two may appear the same, the source of their content is different and they should not be confused.

USING VIDEOTAPES IN HRD

Videotape is enjoying increasing use in human resource development, leading to the development of many innovative approaches. Today's closed-circuit television equipment is simpler to operate, and the shoulder-carried systems are easier to transport and store. Audiences are beginning to expect the use of audiovisual aids to learning. For these reasons, video has become an accepted and widely used training tool in a multitude of settings.

In deciding whether to use videotape one must consider the training objectives, the sequencing of other design components, and the participant group. One should not use video just because it is "up to date" or to fill time. The use of videotape opens up the participants; they have reactions to what they have seen and heard. It is, therefore, more suitable for training with an affective component in which the participants' reactions and insights are examined as well as the trainer's. If the trainer's intention is merely to instruct and to use video in the realm of knowledge/concepts (as lecture content or illustration), it is a difficult task to manage the reactions of the participants. As with any technology, it must be placed for a specific purpose and not allowed to run away from you.

Videotaping is, however, a potentially powerful tool for individual and organizational change: for facilitating personal development, interpersonal skills, and team building (Francis, 1979). Many trainers know how to run a videotape machine, but making a videotape of the group requires skill. Unfortunately, the videotape recorder often simply is turned on during group sessions, and the group members review the tape later with few guidelines or understanding of what they are to look for. Used skillfully, however, it can be very useful in developing social skills by helping participants to develop more accurate perceptions, practice more effective strategies, and communicate more clearly (Fryrear, 1980). When used interactively with practice in applying the skills that are modeled on the videotape, it provides cognitive input, visual examples, and experiential learning (Gioia & Sims, 1985). It also can be very helpful in the datacollection and feedback process. Although video equipment primarily is used to record what happens, it also can become a creative force within a group. It enables painstaking analysis and appraisal, and the emotional impact is uniquely strong. Because it is exact and objective, it makes feedback much more difficult to discount.

Using Videotapes for Group Feedback

Facilitators frequently seek ways to help participants see themselves more clearly and identify their habitual ways of working and relating with others. The process has been described as providing "fragments of a mirror." The most widely used method is specific, nonjudgmental, interpersonal feedback. However, interpersonal feedback often is colored by inaccurate projection, emotional bias, and protective inhibition. Thus, it often lacks precision, objectivity, and acceptability. The need for these becomes even more critical when one is working with people who are not group oriented (e.g., technical and management personnel).

Closed-circuit television systems offer the opportunity to give people feedback provided by themselves. What is recorded is virtually impossible to discount, so video feedback can be a powerful way to confront people in order to clarify their attitudes and responsibilities. Action can be stopped for closer examination. Typical behaviors and communications can be analyzed to develop options for change. Creativity can be enhanced by allowing trainees to make their own videotapes. Meetings, too, can be videotaped. Members' roles, leadership, participation, problem-solving and decisionmaking procedures, conflict resolution, meeting management, and several other dynamics can be studied. Training programs then can be developed to deal with problems and improve skills, and the video can be analyzed by the trainer or the group members as part of the training. It is uniquely valuable for use in multisite and international organizations in which trainees will be coming from different locations.

Group members should be told ahead of time how the video will be used and that it will be erased when the training is completed. An exception to the latter is when video records are retained deliberately so that progress can be tracked over time. The group can develop its own criteria for evaluating progress.

Some examples of specific uses of videotape in training can serve to illustrate the wide range of uses available for this medium.

Living sociograms can be created by videotaping members in an interaction such as selecting partners. Because perfect reciprocity will rarely occur, the group can examine the dynamics that arise as members perceive differences between their objectives and the objectives of others. For example, a participant may be so intent on carrying out her own goals that she turns her back on another member who is approaching her. Some members may fail to make it clear that they are selecting another person, and that person may not understand the message. Differences in approaches will provide material for study by the group.

Structured activities involving communication or role playing can be set up in order to allow the participants to perceive the effect of such things as hidden agendas, roles of group members, different styles of leadership, and so on. Members can be given role instructions or can be asked to act as they themselves would in the situation described. The videotape then is analyzed by the group, and members note and discuss pertinent patterns and dynamics, not the real-life behavior of specific individuals.

Video case studies—often utilizing role playing—are readily accepted, can be entertaining and stimulating, and provide clear incidents for analysis. In creating videotapes for analysis or for case studies, it is important *not to record or edit things out of context*. This could bias the presentation and, if perceived, make the audience suspicious of the intent or honesty of the trainer. When individuals are being taped, they should be encouraged to get used to the camera so that they do not act in a more repressed manner than usual or overact. The camera operator should be careful not to call attention to the camera or to inhibit or direct the persons being videotaped. Naturalness and honesty are much more important than polish or technical excellence in recording.

Trainers, too, can use videotape to examine their own styles and the impact they have on groups.

Reviewing the Videotape

The videotape can be reviewed by the entire group, and problem areas can be identified precisely. The group can set its own standards and monitor performance.

Reviewing the videotape is a time-consuming procedure. It takes about one or one and one-half hours to review thirty minutes of tape. For this reason, it is necessary that the trainer carefully select the material to be reviewed.

When people first see themselves on video, they often are surprised and perhaps shocked. The medium is, by nature, confronting—a factor that increases both its potency and its potential to disturb. It is important that initial reactions be worked through so that more significant levels of learning can be explored. Several video sessions over a number of days in a planned-development program allow a sufficiently wide range of feedback opportunities. The trainer must judge the appropriate depth of feedback and establish a supportive and positive climate in which participants can experiment with different behaviors and discuss their effects.

Several aspects of an individual can be explored through the use of videotape. One of these is physical characteristics (e.g., "I see sadness in my eyes"; "You clenched your fists when you said that"). Incongruence between physical and verbal communication can be explored, as can other aspects of metaverbal communication and body language. One of the main purposes of this analysis is to reveal aspects of individuals that are outside their working concepts of themselves.

Using Videotapes for Modeling

An integrated process for delivering conceptual input, enabling the participants to practice applying the concepts, and using videotapes to model application of those concepts has been developed by Gioia and Sims (1985). First the concepts are introduced by means of a fifteen- to thirty-minute lecturette. This provides a theoretical framework for future reference. Second, a roleplay simulation is used to allow the participants to experience the concepts firsthand. Third, a demonstrative videotape is used to model desired behaviors.

The efficacy of modeling as a teaching and learning technique has been demonstrated widely. The problem in translating this technique to videotape is the difficulty of finding appropriate examples. The most effective method seems to be to create the examples (write scripts) and make videotapes of people using the desired behaviors.

Presenting the Concepts

Although modeling videotapes can be created to demonstrate almost any concept pertaining to organizational behavior, we will use two topics in describing the steps in producing them:

- the effective use of contingent positive and punitive verbal behavior by a manager
- the effective use of goal setting by managers and subordinates

In this example, several training participants are asked to role play an MBO performance-appraisal interview between a manager and a subordinate. (It is expected that the behaviors demonstrated will be less than optimal.) This is done before any lecture is presented on the topic of effective verbal behavior. The role play is enacted, while the nonacting participants serve as observers and make notes about the verbal behaviors of the actors. A critique is then provided by the observers, who have been asked to focus on several analytical questions: (a) What is the "manager" doing effectively in terms of verbal behavior toward the "subordinate?"; (b) What is the manager doing ineffectively with the subordinate?; (c) What do you predict will be the effect of the manager's behavior on the subordinate's job performance and satisfaction?; and (d) How would you feel about working for this manager? It sometimes is helpful to use a portable videotape camera in order to be able to replay the role play so that participants can concentrate on pertinent behaviors. The group members then discuss the points raised in response to the role play.

A fifteen to thirty-minute lecturette is presented on contingent positive and punitive behavior and on the research findings concerning goal setting. Often, the lecturette is broken into smaller components that are presented between tapes. In discussing contingent verbal behavior, the facilitators stress that employees are rewarded only when they do something well and reprimanded only when they do something poorly. They also emphasize that rewarding and reprimanding are past-oriented. In discussing goal setting, they emphasize the setting of specific, challenging goals that will be accepted by the employee and can be measured by the manager. They also stress the use of participative goal setting and emphasize that goal setting is a future-oriented activity.

The facilitators then show a series of four, short (three- to eight-minute) videotapes that demonstrate "right" and "wrong" ways for managers to make positive, punitive, and goal-setting statements. Respectively, these four tapes focus on noncontingent, positive reward behavior; noncontingent punitive behavior; goal-setting behavior (without positive or punitive feedback behaviors); and a combination of the effective use of

contingent verbal behavior and goal setting. After each tape is shown, the participants are asked to critique it. Additional conceptual input may be provided.

Together, the experiential activity, lecturette, and modeling videotapes lead to a better understanding of the concepts presented and to long-term learning.

Creating the Training Tapes

There are at least two approaches to producing training tapes: the studio method (using professional production services and/or techniques) and the shoestring method (using participants from training programs and home video equipment).

The Studio Method

Videotapes produced by the studio method have high technical quality and a "slick" professional appearance, in part because they benefit from the use of trained actors and video technicians. The main drawbacks are the increased cost of production and the need for coordination of activities.

There are several major steps involved in making studio tapes; these are summarized as follows:

- 1. Decide what concepts you want to demonstrate with the modeling tape.
- 2. Think of a scenario that depicts the points you want to make, then write a simple, skeletal script for the scenario. It is not necessary to write a detailed script; in fact, good actors often can do a better job with only a minimal script.
- 3. Arrange for access to a sound stage/studio, Many universities have televisionproduction facilities that can be used for relatively minimal cost. If you are not affiliated with a university, you may be able to make the tapes available for university use in exchange for the use of the studio. If this option is not available, you will need to rent a commercial studio and its technical personnel. This is expensive, but is worth the cost if it results in tapes that you can use repeatedly. You can decrease the cost with some advance planning and rehearsal.
- 4. Hire actors to perform the role-play scenarios that you have written. A simple notice posted in a university theater department or local "little theater" will result in a quick response, and the cost of hiring competent, amateur actors usually is very reasonable.
- 5. Arrange a rehearsal session with the actors to go over the scripts that will be videotaped. With trained actors, this usually can be done in a few hours or an evening. This is an important cost-saving step: the more rehearsal done at this time, the less time will be required at the studio.

Give the actors an idea of what you want to portray. Be specific about the things you want to be said or done exactly as written, but let the actors know where they can ad lib. Some of the most realistic elements of the videotape often emerge when the actors add their own nuances to the script.

In the example, only one script is written, but the actors are coached to behave differently within the four variations. For the noncontingent, positive tape, the manager actor was coached to reward the subordinate verbally no matter what the subordinate's level of performance on the objectives was. For the noncontingent, punitive tape, the manager was coached to find something wrong with the subordinate's performance on each objective. For the goal-setting tape, the actor was directed to be goal oriented and to avoid either positive or punitive feedback. Finally, for the combination tape, the actor was directed to reward or punish the subordinate verbally, contingent on the subordinate's level of performance, and then to follow this evaluative behavior with goal-setting behaviors.

- 6. After rehearsal, spend some time with the director or production manager who will supervise the technical aspects of producing the videotapes. Tell this person what you want to achieve and what you would like to depict and listen to his or her recommendations about staging, props, lighting, and camera angles. With good rehearsals and advance consultation with the technical director, you probably can shoot all your scenarios in two or three "takes" in a few hours.
- 7. After the shooting, look at the takes, select the best ones, and make note of any editing you want to do. The studio then can electronically edit your choices onto a master tape and produce a final tape for your training program.

The Shoestring Method

In most ways, the shoestring method is similar to the studio method, but there are two significant exceptions:

- 1. The "actors" are not professionals, but are colleagues who have volunteered to play the roles. Once you have written the preliminary scripts for the scenario(s), it is a good idea to try them out in a training program, even to the point of directing multiple trial runs and having the training group critique the interactions. After a few such trial runs, the best role-play actors in the group can be identified and enlisted. The sequence of steps in producing the training tapes essentially is the same as in the studio method.
- 2. The other difference is that you will use home video equipment to record the role plays. All the modern video systems are relatively easy to operate. The simplest strategy is to set the camera on a tripod, choose one angle that captures all the actors in the scenarios, and just turn on the camera. Variety can be added to the presentation by using the zoom-in option, taking close-up shots of the actors as they are speaking, changing the subject of the shot, and using wide angles for the beginnings and ends of the scenes.

Obviously, a portable video cassette recorder (VCR) is preferable for showing the tapes because it can be transported to any training location. Special features such as

forward and reverse search and a pause mode facilitate training because they allow you to interact with the tape, to find and replay particular bits of action, and to stop the tape at critical places in order to emphasize points. (In fact, most modern VCRs have so many features that create teaching flexibility that many trainers are transferring their ${}^{3}\!/_{4}$ inch professional tapes to ${}^{1}\!/_{2}$ inch videotape.) In addition to a camera and a portable VCR, you will need a light bar and a tripod.

Regardless of the method used to produce training tapes, if well planned and strategically used, they can significantly enhance the effectiveness of the learning experience.

THE EVALUATION OF TRAINING: ISSUES AND STRUCTURES

DEALING WITH THE DICHOTOMY

This discussion must deal with two dichotomous issues: (a) whether training actually can be evaluated realistically in a cause-and-effect manner and in relation to the bottom line and (b) given the realization that it may not be possible, how to do it anyway because it is part of one's job to do so. We will address the first issue first.

Certain Basic Truths

It is obvious to anyone with a knowledge of behavioral science that it is impossible to prove that any set of factors as complex as those inherent in training can cause effects as complex as increased productivity or reduced turnover (Cooke & Bates, 1989). Yet the pressure is increasing in organizations to measure everything in terms of "the bottom line" and return on investment (ROI). It becomes increasingly difficult for HRD professionals to "justify" what they do, despite the obvious need (in part, caused by "downsizing" and other ROI strategies) for employees and managers who possess a wide range of skills in communication and other interpersonal relations, conflict management, problem solving, and decision making.

A major problem is that financial-analysis methodologies alone simply are not suitable for measuring something as complex as training effects, which are *behavioral* data, and most organizations cannot or will not expend the resources to support a scientific research design. To measure behavioral change would require allowing some time to pass and then returning to the work place to gather information. Determining the criteria or indicators of measurement would be a critical and complex task; they would have to be determined before the training occurs and with an exact target population. To be valid, the evaluation would utilize control groups, which poses additional implications for resource allocation. If unions are involved, this also could arouse sensitive issues.

A necessary step, then, is to educate the decision makers in these basic truths, i.e., the complexity of collecting and assessing interrelated behavioral data, the difference between behaviors and numbers, and the difficulty of trying to mix the two (the "apples and oranges" analogy). To help them to meet their needs, draw out and clarify their purposes and expectations before you agree to execute anything. Find out just what information they need in order to make decisions about training. Suggest realistic ways of answering their questions; for example, suggest that they attend a training program as full participants in order to obtain first-hand data about it.

A second educational step is called for here. A basic tenet of training is that there are three steps in the process of change: (a) *integration* (how the new information "fits" with existing conceptual knowledge, attitudes, etc.; (b) *transfer* (behavioral practice); and (c) *reinforcement* (support). Change requires development of the system to support and reinforce desired behavior—it is as simple as that. No ethical trainer can promise a quick fix without that realization. It is up to HRD professionals to help managers and other decision makers in organizations to realize the connection between training results and the system, to realize the difference between teaching people something and having them actually use it repeatedly over the long term.

It is extremely important that HRD professionals be well educated in the subject of evaluation, so that they do not promise something (in terms of evaluation) that they cannot deliver and so that they can deliver what they set out to. Here we only introduce the subject, we do not deal with scientific methodologies, but there are many books on evaluation and research methodology in the literature.

Finally, make an effort to become part of the evaluation effort so that you can influence its scope and design. If necessary, bring in outside resources to back up your position. With that accomplished, the question then becomes "How do you measure the effects of training so that the people who sponsor training will have something on which to base plans, budgets, and allocation of resources?"

THE PURPOSES OF EVALUATION

Assuming that one has enlightened management with which to work, the next question may appear to be "How should we evaluate training?" However, the question actually is "Why are we evaluating?—that is, are we trying to *determine* something or to *justify* something?"

Evaluation for determination generates information that is to be used as a factor in aiding future decisions. Typically, this type of data needs to be interpreted. For instance, a typical determination evaluation asks how participants rate the perceived value of the training session—good, fair, or poor, on a scale of one to ten. In determining what the answers indicate, one must determine what (if anything) one wants to change because of them. Another example might be one in which items were answered correctly on a quiz; this might help to determine the content that needs to be modified in a course. This is a primary use of evaluation for purpose of determination: to obtain information that will aid in improving the training design (for example, decisions related to perceived content relevance; participant satisfaction with the trainers; participant perception of job applicability of content and skills; and so on). This information can help trainers, designers, and training managers to make decisions about future training content, skills emphasis, staff allocations, learning materials, etc. Evaluation for this purpose usually is done at the end of the training event.

If one evaluates participant satisfaction and then attempts to *justify* the cost of providing training on the basis of participant ratings, one is conducting the evaluation

for a very different purpose. Evaluation for justification is intended to show the relationship of training to expected changes in behavior or outcomes on the job. These justifications may go beyond behavioral changes to fewer grievances, improved product quality, less absenteeism, etc. Most management and organizational training is not designed with a narrow enough focus or scientific rigor to allow justification of these complexities to be evaluated accurately, especially in the short range. So evaluation for justification becomes a task of generating enough hard data (not "proof") to show that the investment of financial resources in human resource development (including management development) has a measurable payoff to the organization. Such evaluation includes:

- Proving that something resulted from something else (establishing a cause-andeffect relationship);
- Verifying that a specific outcome was reached;
- Supporting a predetermined conclusion or expectation;
- Establishing the supportive documentation for a positional statement.

In other words, evaluation for purposes of justification assumes that you are planfully generating a predetermined type of information, which will support a desired interpretation, conclusion, or objective. This is not unethical, it simply differs from generating information that is to be used for purposes of determining something.

Unless the *purpose* of generating the data is clear prior to its generation, it is unlikely that an appropriate design or data format will be utilized in the evaluation process. The only thing that can be obtained from any evaluation—no matter how sophisticated—is information. If it is clear that your purpose is to justify a point of view or an action, you will have an easier time planning an effective evaluation design than if you proceed to evaluate first and then try to manipulate the data. Similarly, it is much easier to plan an evaluation that will generate information to be used in making decisions if you know what decisions are to be made and how the data will be utilized in that process. It is important to know the types of information that will be useful; from whom; the quantity, quality, and accuracy of the data needed; and the best way to compile the data for effective review in order not to generate misleading data that will hinder the decision-making process.

PREDESIGN ISSUES

All information must be interpreted. One can strive for objectivity, but numbers have no meaning in and of themselves. One does not have an objective measure simply because one is working with numbers; there is inherent subjectivity in predetermining decisions or actions that will follow from the information. Once one has decided the reason for evaluation, what information is needed, and how it will be interpreted, a number of methodological questions remain:

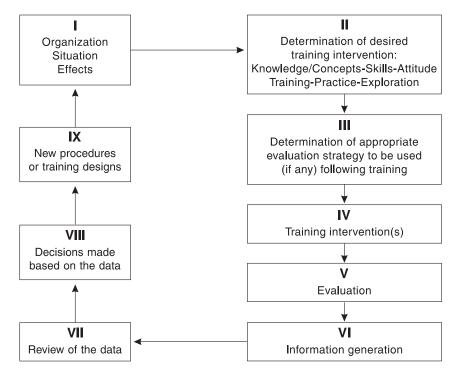
- For *whom* is the data being generated? Who will be involved in the decisionmaking process?
- By *whom* should the data be generated? Who has the necessary skills, credibility, access, and objectivity?
- *From whom* should the data be obtained? How many sources are needed to generate the quantity and quality of data needed?
- *When* should the evaluation take place? How many samples will be needed? Over what period? How often will data be collected?
- *How* should data be collected (e.g., interviews, paper-and-pencil questionnaires, surveys, tests, observations, error rates, etc.)?
- *Where* should the evaluation (observations, interviews, etc.) take place (e.g., a private room, on-the-job settings, the lunch room)?
- What *resources* (e.g., time, money, access, personnel, materials) are needed or available to support the evaluation?
- Who should *prepare* the data and in what format?
- Who should provide *feedback* of the data? How? When? In what format?
- Who should *distribute* the data? How should the data be stored and for how long? Who should have access to it? What about confidentiality?
- Will there be a *commitment* to use the data for the original purpose?

Unless HRD professionals are willing and able to address these issues prior to training, any attempt to evaluate training effects is impaired. We need to be able to guide our clients through an extensive process based on a thorough discussion of each of these considerations before we will have a sound basis on which to design useful evaluation projects.

Ideally, the evaluation procedure should appear as illustrated on the following page (Cooke & Bates, 1989):

As importance increases, measurement becomes more difficult. Any design that purports to include level IV data *must* control for complex dependent and independent variables. This concept is shown in another way in the following table, which lists four basic criteria of training success in the order of ease of measurement, along with methods of evaluation (Mayo & DuBois, 1987).

Although most organizations that sponsor training seek improvement in meeting operational objectives, with the expectation that it will have some direct effect on profitability or another indicator of business success, as we have stated previously, it is virtually impossible to track such effect. However, training can be shown to improve operational results through the intermediate step of bettering performance as a result of learning that occurs during the training. Another factor in measuring the success of a training program is acceptance by trainees, who probably learn best when they feel that



In developing a model for planning and evaluation, it might be helpful to review the following diagram.

HARD	Production figures Trend data analysis			IV
	Turnover rate comparisons Accident rates Absenteeism			
	Behavioral indicators of concept/skill enhancement	Control-group data	111	
COMPLEXITY Objectivity of Criteria	Self/other self-report	Control-group data	11	
	 Trainees' and trainers' self-reports 	Retention scores on performance		
	Test scores or accuracy on discrete tasks	tasks		
	 Observations in the training session 	Test/retest scores		
SOFT	Immediately following training		Later 6 months to	

Category	Ease of Measurement	How Measured	Importance
Acceptance by trainees	1	Questionnaires; interviews	4
Gain in skill or knowledge	2	Tests; checklists	3
Improvement in job performance	3	Ratings by supervisors	2
Better results or operations	4	Judgments; records	1

the training is appropriate and efficient. Thus, the four criteria can be said to be interrelated.

The questions to be answered in the rest of this section are when to evaluate, what to evaluate, and how to evaluate.

WHEN TO EVALUATE

The evaluation of a training program by the trainers themselves is an ongoing process. Time should be taken between sessions to engage in "clinicking," to discuss what worked, what did not work, the reactions of participants, and what might be improved or changed. Immediately following the completion of the training program, a systematic evaluation of the design, content, and presentation of the program should be conducted.

In general, feedback and evaluation for assessment of satisfaction and perceptions of learning by the participants should be conducted at the end of the training event, while it is still fresh in the participants' minds. When participants leave the site, the memory of the event begins to fade or distort, and the necessity of completing and returning any evaluation forms begins to lose its urgency. However, assessment of improvement in job performance cannot be made until later, often weeks or months after the conclusion of the training. Still later comes the time for assessing improvement in meeting operational objectives.

In many types of skills training, it is deemed necessary to use pretests and posttests to measure the trainee's progress. Although this may be necessary, it raises an important issue. One of the basic assumptions in the field of human resource development is that training is conducted in a "safe" environment, that some of the primary norms established in the training group are experimentation, risk taking, and support. It should be all right to make errors in training. Learning from one's mistakes and retrying is one of the basic ways in which people learn. In "tests," however, it is not all right to make mistakes. Combining assessment with training makes the training different. The key is to separate the two by at least a break and to let the trainees know clearly which is which. A pretest for a skills-training program could be conducted the day before the training begins. If it must be conducted the same day, the pretesting can be done first, followed by a break (preferably with refreshments). Then the training component can begin, with a full introduction to separate it in structure from the pretest. If possible, it also is a good idea to have different personnel administer the tests from those who conduct the training. After the training program has formally ended, the posttesting can be done (preferably a day later and with different staff members conducting it). It is imperative to tell the people who will be tested ahead of time if their scores are going on the record.

Pretest and posttest designs are most often needed in skills training. If needed, they can be used with knowledge/concepts training. It is beneficial to the trainees if they can score their own tests. This allows them to see what is being assessed and where their scores are coming from. It also can be a learning experience.

WHEN NOT TO EVALUATE

Some people assume that an evaluation should be conducted in every training situation. This is not true, and it is important to know when not to evaluate. There are six conditions under which it is inadvisable to conduct an evaluation. They are as follows:

- 1. When a study that will provide useful information cannot be designed. The planning phase is the time to determine whether or not a worthwhile evaluation can be formulated. There are instances in which the best design that can be developed is inadequate. For example, if one cannot identify what the training is trying to accomplish, one has little chance of designing an adequate evaluation of it. Similarly, if one cannot devise reasonably reliable and valid measures of what the course produces, one has little chance of designing a worthwhile evaluation. Some writers on the subject have said that when it is impossible to devise an adequate measure, a number of less-adequate measures should be devised. We agree with Mayo and DuBois (1987) and Cooke and Bates (1989), who state that this approach leads only to confusion (in addition to the ethical implications), and the alternative of not conducting an evaluation is preferable.
- 2. When an adequate design for the evaluation cannot be implemented. There are situations in which an adequate design can be formulated, but implementation is neither feasible nor possible. An example of this is when the learning objectives require further on-the-job training after completion of the training program, but the trainees will be geographically dispersed. This probably would make evaluation too difficult and expensive, and it is further complicated by the fact that the trainees' job experiences may differ widely and their on-the-job training may be more or less effective at their various locations.
- 3. When the resulting information will be inaccurate or misleading. Inadequate design or poor implementation of an adequate evaluation plan can result in misleading information. For example, this situation will exist if the person or team responsible for evaluation is unable to ensure that a representative sample of trainees is selected as the source of evaluation data. If the course has

experienced substantial attrition but only trainees who have completed the course are to be included in the evaluation, the data will be skewed. Similarly, if only former trainees whose jobs make them readily available are included in the evaluation, one cannot be sure that they constitute a representative sample of those who completed the training.

- 4. When the cost of the evaluation is greater than the potential benefit. This condition may be due to the high cost of conducting the evaluation or it may be because of the limited value of the information provided. There are numerous instances in which a simple, straightforward description of what the training has accomplished is all that is needed. In such instances, it serves no useful purpose to conduct an elaborate evaluation. Another instance occurs when a training program is changing rapidly because of technological advances. Under such circumstances, the evaluation may not be relevant to the program as it exists when the assessment is completed.
- 5. When the sponsor of the evaluation is strongly motivated to prove or to disprove something. The person or team responsible for the evaluation should be objective. This person or team must conduct a study that will provide reliable information. Such a course of action is difficult for a sponsor who has strong preconceived ideas concerning what the evaluation should find. It is not unusual for the continuation of a program to rest on the outcome of an evaluation project. This makes it especially important for the evaluation design to be sound, the implementation of the design to be as nearly flawless as possible, and the sponsor of the evaluation to be willing to accept the findings. If the prospective sponsor cannot accept the outcome, regardless of what it is, it is better not to conduct an evaluation.
- 6. When no action will be taken on the basis of the findings. There are situations in which information has value for its own sake, without respect to whether it evokes action. This is not the case with information provided by evaluation projects. The indicated action may be to continue as before. This is valuable information; it is not necessary that something be changed if the evaluation shows that the training program is accomplishing exactly what it set out to accomplish. More often than not, however, even the very best of programs can be improved; and there should be a desire on the part of those in control of a program to improve it. However, if the sponsor of the evaluation study, and those in control of the course are unwilling to make the changes, an evaluation should not be conducted.

WHAT TO ASSESS

The assessment should relate to the objectives of the workshop: what worked, what did not, what was useful, what was not, and so on. It is best to incorporate a method of

soliciting feedback in the presentation design. One can determine what the guidelines will be, who will solicit the feedback, and how much time will be allotted to participants to complete the form or critique. (The form or the facilitators can call attention to important items and can request specific examples of each item.)

In general, program participants can be assessed in terms of the following five major classes of information:

 The initial status of those who attended the program (i.e., who attended and how proficient they already were with respect to what they were supposed to learn). Demographic data such as age, sex, educational background, and work history usually can be gathered in a few minutes by means of a questionnaire. Such information is useful for determining later whether the program works better for some people than for others. One cannot assess only the level of proficiency that participants have by the end of the program, because if some participants already were proficient in the areas covered in the program, the results would be misleading. It also might be a waste of time and money to include them in the training.

This is not to say that there always should be a pretraining assessment (although there should be some initial screening of participants in any training program to be sure that the goals of the program design are suited to them); the posttraining evaluation form can ask how much previous acquaintance the participants have had with the subject matter of the program.

- 2. The status of participants in regard to what they were supposed to learn during the program (e.g., knowledge, skills, particular techniques, enhanced motivation, or the acquisition of specific attitudes). It is important that something of value be gained by the participants. The question is: Did learning take place? This can be measured in terms of the participants' perceptions, the perceptions of others with whom they work, and by means of standardized measurement procedures. Participants also can be asked how they plan to use or have used the knowledge, skills, or awareness they acquired through the training.
- 3. *Information regarding the execution of the program* (i.e., the extent to which the designed program was carried out). Some slippage between the program design and the program as carried out always exists—often for perfectly good reasons—but it is important to find out what the discrepancies are for two reasons: (a) the program as implemented is what is being evaluated, and (b) feedback on needed changes in the design are useful for the designers. Aside from learning whether the training objectives were met, the sponsors of the program and the training staff may want to know whether the trainers were perceived by participants as doing their jobs well, what impact their personalities or styles had on the learning environment, and so on.
- 4. *Costs* (whether direct or indirect). Ultimately, it must be determined whether the expenditure of resources for a training program was justified. Some costs, such

as room and board, are fairly clear and easy to calculate, but costs in personnel time for preparation and attendance are not easy to compute. Clear guidelines must be devised to establish program costs. In relation to costs, it might be useful to know whether the facilities and materials met the needs of both the participants and the trainers.

5. *Supplemental information* (such as reactions of those involved, unanticipated learning, or unexpected side effects). Reactions of participants and of those who conducted the program furnish invaluable information about how the program was received and perceived. Participants undoubtedly learned some things that were not explicitly stated goals of the event; for example, company loyalty or morale may have been affected. Possible side effects from training programs include the development of an informal network within an organization or profession because of the intensity of the learning experience. The consequences could be positive in terms of closeness or negative in terms of participants' relationships with those who did not attend the program.

Another area that might be worthy of investigation is the future training needs of the participants. This information may be accessible only after some time has elapsed.

TYPES OF EVALUATION

There are several ways in which evaluation can be structured and several outcomes that can be measured. The following are the ways in which elements of the training can be assessed (Merwin, 1981):

- *Participant learning* can be evaluated by several means, which will be discussed later in this section.
- *Participant self-evaluation* can assess the participants' entry states, willingness to learn, and attitudes.
- *Participant evaluation* by the trainer allows the trainer(s) to assess the participants' entry states, willingness to learn, and attitudes.
- *Trainer evaluation by the participants* allows the participants to assess the effectiveness of the trainer(s).
- *Trainer self-evaluation* is the trainer's rating of his or her own presentation skills and effectiveness.
- *Content evaluation by the participants* is their assessment of the training design, sequencing and timing, topic, techniques used, information shared, materials, and so on.
- *Content evaluation by the trainer* allows the trainer to look closely at all elements of the program design.

- Participant evaluation of the facilities is the participants' appraisal of the environment, including the location; ventilation; temperature; distractions; accessibility to restrooms, meals, and other services; and related factors.
- *Trainer evaluation of the facilities* is the trainer's appraisal of the environment and how it furthered or detracted from helping to meet the training objectives.
- *Work statement/follow-up evaluation* is a method of retrieving information about the participants' transfer of learning to job performance.

These factors are assessed for two basic purposes: to improve the training program and to make decisions about the efficacy and direction of future training and the resources to be allocated to it. The former information usually is used by the training design and presentation staff; the latter usually is the prerogative of the sponsor of the training, which frequently is an organization.

FEEDBACK TO IMPROVE THE TRAINING

This type of assessment is designed to elicit information about the design, content, and presentation of the training program itself. The following list indicates the types of information that are solicited for this purpose.

Design Considerations

1. Goals, Preparation

- What was done or announced to get the group ready?
- Were the goals/objectives of the training stated?
- Were the goals explained? Was time allowed for questions?
- What expectations were created?
- Which goals seem to have been reached?
- Were expectations fulfilled?

2. Directions

- Were directions adequate?
- Were too many instructions given at one time?
- Was time allowed for questions?
- Were instructions followed immediately by action? Did activities intervene between the instructions and their execution?

3. Activities

- Were they used appropriately? Did they fit into what was happening?
- Were they well introduced? Were the instructions clear?
- Were they forced on an unwilling group?
- Was there too much dependence on them?
- Did the activities accomplish their goals?

4. Lecturettes

- Were the theories or lecturettes easily understandable?
- Was there an organized flow and clear overview?
- Were the lecturettes appropriate?
- Did the lecturettes include explanation, or was the presentation cut and dried?
- Were examples appropriate and clear?
- Was there a summary to pull things together?
- Was there a smooth transition into and out of each lecturette?
- Did the speaker accomplish the stated purpose?

5. Processing

- What techniques were used to facilitate processing?
- Were reactions solicited? How?
- Were questions helpful in focusing on specific areas of discussion?
- Was processing adequate? Were important areas covered? Was closure attained?
- Was processing done at appropriate times? Often enough?
- Was processing geared to back-home application of learnings?
- How was follow-through implemented?

6. Time Limits

- Were allotted time periods well-chosen?
- Were time limits stated? Were they clear?
- Were time limits enforced? Ignored? Flexible?
- Was time wasted? Could something have been done in a more efficient way?

7. Staging

- Was the facilitator well-positioned in the room? Visible?
- Were participants organized with a minimum of disruption?
- Was there enough room? Too much room?
- Was lighting adequate?
- Was the temperature of the room comfortable?
- Were the furnishings functional? Well-placed? Comfortable?
- Were audiovisual aids well-placed? Functioning? Operated competently?

8. Participants and Staff

- How were subgroups of previously acquainted participants handled or utilized in the larger group?
- To what degree did participants become better acquainted with one another? How was this facilitated?
- How were the various levels of experience and expertise among participants recognized or taken into account?
- How did the backgrounds and experience levels of the staff members affect the design?

9. Materials

- Was use made of available resources (people, materials, handouts, etc.)?
- Was the choice of materials appropriate to the design?
- Were the materials of adequate quality?
- Were the materials readily available and organized for distribution?
- Were posters visible? Readable?

10. Design and Atmosphere

- Did the design make sense in terms of the stated goals? The expectations of the participants? The time limits? The physical facilities? The familiarity of the participants with one another? The previous training experience of the participants? The available staff members? The number of participants? The materials available? The opportunity for follow-through?
- Did the sequence flow easily? Was there a continuity to the design? Did the progression make sense in terms of the final goal?
- Was the design too complex?

- Was there flexibility in executing the design? Were changes made? How?
- Was any deception involved in the design? How did participants feel about it?
- What atmosphere was created during the activities?

Style Considerations

1. Voice

- Was the facilitator's voice loud enough? Too loud?
- Was the speech pattern too fast? Too slow? Varied in rhythm and inflection?
- Were the words well-articulated?
- Was the tone of voice agreeable? Interesting?

2. Physical Presentation

- Did the facilitator make sufficient eye contact?
- Did the facilitator's facial expression convey interest? Enthusiasm? Tension? Boredom?
- Was the facilitator dressed neatly? Were the clothes distracting?
- Did the facilitator sit, stand, or move in a way that conveyed confidence? Enthusiasm? Nervousness? Boredom?
- Did the facilitator seem interested in what he or she was doing? In the participants?

3. Verbal Behavior

- Was the wording clear? Stated in the everyday language of the participants? Not too complex? Specific? Of appropriate length? Not too much at one time? Repetitive? Evaluative?
- Did the speaker use profanity or excessive jargon?
- Was the speaker able to speak without notes? Was the presentation fluent or did it seem to be memorized?

4. Interventions

- Was there a balance of seriousness and humor? Were they used appropriately?
- How were questions dealt with?
- How was cooperation solicited?
- How was conflict handled? How were resistance and disruptive behaviors handled?

- Were techniques and design components used appropriately?
- What kinds of interventions were used most (group centered, interpretive, expert, guiding, etc.)?
- Were interventions timely?

5. Co-Facilitation

- Was the staff introduced? Visible? Identifiable?
- Was there support among co-facilitators? Teamwork? Cooperation?
- Did the facilitators seem to be competent? Organized? Prepared?
- How were roles divided among facilitators? Did it help or hinder the design?
- Was the staff involved in the activities?
- Did the staff members express caring and sensitivity to the participants?
- How was control maintained?
- Did the staff exhibit flexibility?
- Did the facilitators personalize the presentation? Did they demonstrate presence? Contact? Genuineness?

Comments about trainers can be used constructively to encourage the training staff, to point out ways in which improvements in presentation can be made, or to indicate the need for changes in staff behavior. Again, such comments should be elicited only if the program administrators are prepared to take such steps. Other questions can relate to the enthusiasm with which the participant is willing to recommend the training to other people or to comparisons with other training programs with similar purposes.

Sample Evaluation Forms

By the end of a training session, many participants already are thinking about personal commitments or responsibilities. Because most of them are concerned about leaving on time, it is important to prepare an evaluation form that "looks" brief—preferably one page in length—to obtain their full response. The form also needs to gather data effectively. Samples of both trainer and participant evaluation forms follow.

ASSESSMENT TO DETERMINE RESULTS

An evaluation of training most often is geared to eliciting information about one of three basic *outcomes*: (a) acceptance (the degree to which the participants perceive the training to be of value), (b) effectiveness (whether learning has occurred and whether improved performance has resulted), and (c) the degree to which operational objectives have been met (i.e., whether the training was worth its cost).

Acceptance

Adult trainees generally are able to evaluate training directly. Often, the motive for attending the training originates with the individual participant, and the person can evaluate whether the training met a felt need. The situation is different when training is imposed on participants; in this case, their evaluation may contain factors that invalidate it.

A variety of information can be obtained from participants: overall acceptability of the program, specific pluses or minuses, suggestions for improvement, evaluation of specific phases, and ratings of the trainer. In general, such information is used by the training designers and facilitators for the purpose of *determining* how to improve the training, including the content, the methods of delivery, the staff, and even the physical setting. However, acceptability in terms of *perceived relevance* and/or satisfaction with the training can be used as data for *justification*. It is important to know beforehand which way the data will be used, so that the questions can be worded specifically in order to elicit the type of data that will be useful.

This does not mean that the *content* of the responses can be guided. The feedback must be collected in such a way that participants are motivated to tell the truth. This may require anonymity or confidentiality of responses. It also is helpful if the person collecting the data can assure the participants that the data will be studied and used to guide future decisions about training, improve the training program, etc.

The two techniques used most in determining acceptance are the interview and the questionnaire. These will be discussed later.

Effectiveness

Many training programs are evaluated to determine their effectiveness from a participant's point of view. Effectiveness can be measured in terms of several criteria of change resulting from the training, each of which must meet several requirements, as follows:

- It must be related to something of importance in the organization or work of the people to whom the training is directed.
- There must be variability from person to person, either in performance or in the time required to achieve a stated level of proficiency.
- It must employ units that can be expressed on a numerical scale.
- It must be reliable, yielding measurements for each individual trainee that remain more or less the same on different occasions.
- It must be able to reflect the effectiveness of training by varying with the amount or quality of instruction.

Sample Trainer Evaluation

		Evaluation I	•
(1)	Did the participants listen attentively? If no, explain:	Yes	
(1)	Did participants arrive and return from breaks on time? If no, give		
(2)	details:		
(3)	Did participants participate willingly in activities? If no, give examples:		
(4)	Did participants have an acceptable attitude to facilitate		
	learning? If no, explain:		
(5)	Were participants willing to ask questions and give feedback? If		
(0)	no, give details:	·	
(6)	Did you allow time for questions and feedback? If no, explain:		
(7)			
(7)	Do you believe you explained and clarified your information thoroughly? If no, explain:	·	
(8)	Do you believe you kept the seminar moving and on course? If no,	. <u></u> .	
	explain:		
(9)	Do you believe you demonstrated a thorough knowledge of the		
	topic? If no, explain:		
(10)			
(10)	Do you believe you spoke clearly and distinctly? If no explain:		
(11)	Did you state the workshop objectives? If no, explain:		
(12)	Do you believe you fulfilled each objective? If no, state the	·	
	objective(s) not fulfilled and explain why:		
(13)	Do you believe the course content was organized and well		
	prepared? If no, explain:		
(14)	Were the facilities adequate? If no, explain:		
(14)		·	
(15)	General comments:		

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Sample Participant Evaluation 1

		Yes	Evaluation No
(1)	Was it your choice to attend this workshop?		
(2)	Did you listen attentively to the information presented?		
()	If you responded NO to question 2, explain:		
(3)	Did you arrive on time and return from breaks punctually? If you responded NO, explain:		
(4)	Did you participate willingly in the workshop activities? If you responded NO, explain:		
(5)	Did you have an acceptable attitude that facilitated learning? If NO, explain:		
(6)	Did the seminar leader allow time for questions? If you answered NO, did you ask the leader questions?: Yes No		
(7)	Did the seminar leader explain and clarify his or her information? If NO, did you ask the leader to clarify or explain further? Yes No		
(8)	Did the seminar leader speak clearly and distinctly? If NO, explain:		
(9)	Did the seminar leader keep the training session moving and on course? If NO, explain:		
(10)	Did the instructor demonstrate a thorough knowledge of the topic? If NO, explain:		
(11)	Was the following objective covered in this seminar? (Objective #1) If NO, explain:		
(12)	Was the following objective covered in this seminar? (Objective #2) If NO, explain:		
(13)	Was the following objective covered in this seminar? (Objective #3) If NO, explain:		
(14)	Was the following objective covered in this seminar? (Objective #4) If NO, explain:		
(15)	Was the course content clearly organized and well prepared? If NO, explain:		
(16)	Were the facilities adequate? If NO, explain:		
(17)	Rate this workshop. Please circle one:PoorFairGoodVery GoodExcellent		
	Sample Dertisinant Evoluction 2		

Sample Participant Evaluation 2

Reprinted from *Effective Evaluation Strategies and Techniques: A Key to Successful Training*, by Sandra Merwin (1981), San Diego, CA: Pfeiffer & Company. Used with permission of the author.

	Name ``	Date Your Job Titl Trainer	e				
Pleas	e respond to each item. Your written commen might we add or delete from the course to inc	ts are helpfu	l and we	elcome.			
Pleas	e respond below (left to right): disagree strong	gly, disagree,	uncerta	ain, agre	e, agree	e strongl	y.
	How do you feel about:		$\left(\begin{array}{c} \bullet & \bullet \\ \hline \end{array} \right)$	$\left(\begin{array}{c} \bullet & \bullet \\ \hline \end{array} \right)$	$\left(\begin{array}{c} \bullet & \bullet \\ \hline \end{array} \right)$	$\left(\begin{array}{c} \bullet & \bullet \\ \hline \end{array} \right)$	$(\bullet \bullet)$
1.	The course content is useful for my job. Comment:						
2.	The instructor shows strong technical knowle of the subject. Comment:	-					
3.	The course topics were sequenced logically. Comment:						
4.	The course's objectives were explained clear Comment:	-					
5.	The trainer's presentation was well paced and clear.						
6.	The visual instructional aids helped me to lea	arn.					
7.	The course handouts are useful reference m for me.						

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8.	The problems presented for me to solve were useful learning experiences.	
9.	The time allocation of the course was adequate for me.	
10.	The trainer answered my questions thoroughly.	
11.	The trainer gave me adequate individual help with my problems.	
12.	The training facilities were adequate and comfortable.	

The basic aim of effectiveness testing is to determine the degree to which learning objectives have been met. For many organizations, the ultimate objective is improvement in operations, but for the trainees, the ultimate objective is increased competence or proficiency, often accompanied by personal satisfaction. Because only an extensive, expensive evaluation could truly track improvement in organizational operations resulting from a training program, expectations should be established prior to the training program about what the evaluation will measure. There are two ways to go in this regard. Subjective measures of the trainees' perceptions of improvement in their work along with the perceptions of their subordinates, peers, and supervisors may be justification enough for some organizations. If a more objective analysis is required, it must measure demonstrated increases in the performance of the trainees resulting from the training. These improvements then can be linked to organizational benefits by inference and reasonable connection, but it would be a complex and time-consuming task to measure all organizational factors that could impact the operations defined and to ascertain how and how much the training is a part of these. It is a better idea to work with management to determine what behavioral improvements are expected of the

trainees and to formulate the training objectives so that improvements can be measured afterward in these terms.

Some performance standards are limited to two categories: successful or unsuccessful (e.g., in skills training in which the trainees are expected to perform all procedures perfectly, resulting in a pass-fail criterion). If the trainee's output varies in quality, as is the case with manual skills, scales can be developed to assess the product. With complex skills such as sales, a reasonably objective standard may be found that relates directly to the utility of the training.

The simplest way to measure proficiency in some type of skill is to compare results with objectives to see if a new skill has been developed or an old skill enhanced. Most evaluation in this area is not truly scientific, but it should answer three basic questions:

- 1. Has the required performance level been achieved?
- 2. Has it been demonstrated that behavioral change has occurred (or that skill has been increased or enhanced)?
- 3. Can the training be said to have been cost effective?

In devising a study, one must determine answers to the following questions as a minimum:

- 1. What variables are appropriate reflections of the training?
- 2. What is the stability of the changes achieved through training?
- 3. What is the importance of these changes in the "real world?"

Subjective methods for determining effectiveness are the same as those used in evaluating acceptance: interviews and questionnaires. Either of these can range from simple to elaborate. There are four types of objective measures that can be used to develop evidence that learning has occurred: checklists, product evaluations, performance measures, and printed tests. An additional method, rating scales, can be used to measure improved performance on the job. All these are described later.

Operational Objectives and Costs

The third type of evaluation involves "the bottom line," that is, the degree to which the sponsoring organization has received benefits from the training. Costs for a four- or five-day program in a large corporation easily could be \$100,000 plus the salaries of personnel who are involved in the program (Wolf & Burke, 1982). Even for smaller or less affluent organizations, the cost is significant. Expenditures of that magnitude require some systematic evaluation of results.

As we have said previously, it is virtually impossible to actually, statistically link training outcomes to results such as increased sales volume, increased productivity, or reduced turnover. For example, even though sales may increase as a result of training salespeople, it may only be an example of "the Hawthorne effect" in operation; that is, the salespeople may be doing better because they received special attention or were singled out for training. It may be easier to infer that improved customer relations are

related to a recent training program on customerrelations skills. The key to meeting organizational objectives is to ascertain what feasibly can be measured as a result of the training, to develop training objectives that can reasonably be expected to support organizational objectives, and then to measure the degree to which the training objectives have been met. This may require extensive dialog and mutual education on the part of training personnel and those who request the training, but the end result will be a solution that both can live with and, more importantly, work with.

Sources of Data

There are many factors that can influence enhanced performance, increased productivity, and other on-the-job improvements, in addition to training. In evaluating the success of a training program, it is important to check for the existence of these factors. For example, changes in a person's home life can affect job performance, as can changes in the person's health and fitness. A change in the marketplace outside the organization can affect sales or customer satisfaction. With regard to management training, if a particular occurrence is infrequent and is not under the control of a manager, it is not a good measure of managerial success. If accidents have been infrequent and seem to occur by chance or as the effect of unusual combinations of circumstances, they are not a good criterion. On the other hand, if accidents have been frequent and the training emphasizes accident prevention, reduction in their occurrence may be an appropriate criterion. No set of criteria can be prescribed without an intensive study of the situations that the training is designed to improve.

Another important source of information comes from trainees' reports of their success in meeting goals established during the training. In some training courses, the participants are asked to describe difficulties that have resisted solution thus far. Then, with the help of the trainer and the other participants, trainees use principles learned in the training program to develop plans for solving the problems. Their later reports of their successes can indicate whether their training has been effective.

In studies of the "bottom line," considerable ingenuity is needed to explore all pertinent criteria and to select those that best indicate important gains resulting from training.

Measuring the Cost Effectiveness of Training

Training may be effective but still very expensive in relation to results. When a training program is conducted in business or industry, the trainers may be required to compare the dollar gain from improvements in job performance with the dollar cost of the program, which may include the following elements:

- training design expenses;
- trainer salaries, travel expenses, etc.;
- equipment, supplies, and space;

- time spent by the participants away from their jobs; and
- participant travel expenses.

Although training costs are not easy to assess, dollar gains in operations are even more difficult to determine. Nevertheless, some judgment of "cost effectiveness" is essential and, as far as possible, should be based on observable facts. It is of great importance to administrators to be reasonably sure that the type and amount of training they have selected are good choices in terms of both usefulness and cost.

EVALUATION PROCEDURES

The system of evaluation should be planned as soon as the objectives of the training are stated and the content of the program is developed. Once the purpose of the evaluation and the uses that will be made of it have been determined, one can select the methodology.

METHODS OF DATA COLLECTION

We discuss a variety of data-collection methods—including the interview—in detail in the previous section of this volume, as these methods relate to training-needs assessment. We suggest that the reader also refer to that discussion. Aside from the interview and physical tests of skill, the other methods of data collection discussed here all are forms of instrumentation, which we describe in detail in Training Technologies Volume 22. Specifically, the reader is referred to the following discussions in that volume:

- A Model of Instrumentation; Technical Considerations (Psychometric Rigor); Primary Use; and Other Considerations.
- A Developmental Sequence; Definition; Scaling (Summative Scale, Rating Scales, Forced-Choice Scales, Sociometric Ratings, Meanings of Numbers); Developing Group Norms; and Generating Content Within the Group Itself (for the subsections that define various types of instruments).
- The entire discussion of Designing and Conducting Organizational Surveys (Define the Objectives, Identify the Population To Be Studied, Select the Survey Sample, Construct the Instrument, Pretest the Instrument, Prepare the Final Draft, Administer the Instrument, Code the Responses, Tabulate the Results, Prepare the Report).
- The entire discussion of Research Uses of Instrumentation in Human Resource Development (The Reliability Problem, The Validity Problem, Pretest and Posttest Problems, Transparency/Social Desirability Problems, Management Problems, Human Problems, A Sample Research Design).
- The References and Bibliography (for additional resources on survey feedback, measures of work, statistical methods, organizational research, diagnostic studies, instrument design, attitude measurement, assessment and evaluation methods, etc.).

This section will not repeat what we have said in Volume 22, but will summarize the techniques for data collection for evaluation purposes and will offer suggestions specific to evaluation.

The Interview

Feedback can be solicited in written or verbal form. When the number of trainees is small—twenty or fewer—it should be feasible to interview the entire group within a time span of one day to a week. If more trainees are involved, the interviews may be spread over a longer period or only a sample (determined so as to minimize bias) of the trainees may be interviewed. One of the benefits of the interview is that anything may be brought up, even if the conversation is basically limited to a set of topics. Any pertinent topic can be explored. A skilled interviewer can obtain insightful evaluations that otherwise might not be obtained, even through nonverbal communication such as gestures, tone of voice, and phrasing.

The flip side is that interviews take resources, the primary one being time. A private room is needed, and in some cases there are travel costs. It is essential that each interview be planned in advance so that the information obtained represents the full range of the trainee's thoughts and feelings.

Scheduling the Interview

The interviewer's purpose is to discover whether the program has met its stated goals and objectives and the goals and objectives of the participants; whether the participants have experienced success in using their acquired skills or insights; what is good about the program design and presentation; and what might be improved. The interview should be conducted at a time when the details of the training are still clear in the participants' minds. To determine acceptance and some types of effectiveness, interviews may be conducted immediately following the training program. To determine on-the-job improvements, it is best if the interviews are conducted after participants have had some opportunity to notice gains that may have resulted from the training. If the training objective has been to modify a number of behaviors (e.g., managerial or sales skills), it may be a few months before valid judgments can be made.

It requires approximately thirty minutes to conduct an interview to evaluate a complex course. Interviews should be scheduled with time allowed in between (at least fifteen minutes) for overruns and for the interviewer to make notes. Interviewees who arrive on time should not be kept waiting. Those who arrive early should be greeted by someone and asked to wait where there is comfortable seating. If possible, they should be told how long they will need to wait.

The Site

The room in which the interview will be conducted should be quiet and well lighted, but light (sunlight from windows or artificial light) should not shine directly into the

interviewee's face; this may seem too much like an interrogation. Furniture and decorations should be pleasing but not too distracting. There should be no other visual or auditory distractions such as people looking in, noises from outside the room, telephones, etc. Some interviewers prefer to work at a table so that the interviewee can lean on it and the interviewer can take notes easily. What should be avoided is a setup that suggests a superior-subordinate relationship.

Soliciting Verbal Feedback

The interviewer must have a checklist of topics, although he or she should feel free to vary the order in which topics are considered and to explore some topics in depth when it appears that important information can be acquired. It is this flexibility that gives the interview technique its greatest power. Although the list of topics will guide the discussion, the interviewee should not feel pushed, coerced, or cut off. The interviewer should not appear to be in a hurry; only in a relaxed atmosphere can detailed information be elicited.

Many interviewers open with a general statement of purpose, followed by an invitation to talk freely and a description of how the information will be recorded and used. As long as the person being interviewed does not wander too far from the topic, there is no need for the interviewer to interrupt. If the person hesitates or begins to digress, the interviewer may ask a question or make a reflective statement to subtly direct the process. Of course, leading questions (which suggest an answer) must be avoided, as should questions that can be answered "yes" or "no," with no explanations or details. Questions that begin with "what" (e.g., "What did you discover during the training?" or "What skills did you learn that you have used since the training?") generally elicit usable information.

It is extremely important that the interviewer be prepared to receive all feedback nondefensively. The following guidelines may help:

- 1. *Listening encourages feedback*. Explaining cuts off feedback. The more the interviewer talks, the more reactions from the participants are shut off; fewer comments are received, and less learned about the effects of the design on the participants. The objective is to receive accurate information from as many participants as possible in order to assure that the feedback is representative of all participants.
- 2. *Being open encourages feedback*. Not responding to feedback does not imply that one accepts it or considers it to be true. The feedback session is a type of survey from which the surveyor may choose to accept and act on any percentage of what is said.
- 3. *Some comments encourage feedback*. It can be helpful to do the following things as long as they are done in a *nondefensive* manner.

- Solicit both positive and negative reactions.
- Solicit specific feedback on some aspects of the training.
- Ask for clarification of points.
- Check individual reactions with others. Ask for more input on a particular item.
- Record comments as they are received.

Special attention must be given to the ways in which the interview is to be recorded and summarized. A tape recorder provides accurate data, but transcribing it is very inefficient, and the use of such a device may make the interviewee more reticent. A better approach is for the interviewer to take notes at the time and to dictate or write a detailed summary immediately afterward.

Before concluding the discussion, the interviewer should refer to the checklist to be sure that all points have been covered. At the conclusion, the person being interviewed should be thanked and informed that his or her opinions are important and will be considered in making further decisions about the training.

Interviewing by Telephone

If valid data are to be obtained by means of a telephone interview, it is extremely important that the person being called is willing to talk at the time of the call. If not, the call should be rescheduled. Generally, a telephone interview should be limited to ten or fifteen minutes, and allowances must be made for the interviewee to be inhibited or interrupted by his or her environment. If the telephone interview is the most feasible means of obtaining information (because the trainees are at distant points, for instance), it should be considered a "poll" that covers essential points, with a chance for added comments at the end.

The Questionnaire

Another good way to determine acceptance by trainees is administering a questionnaire. Questionnaires and interviews accomplish much of the same objectives. Compared with the interview, the questionnaire is less expensive to administer, easier to summarize, and more responsive to systematic planning. Because a questionnaire requires the development of a set format, the effort expended in preparation tends to be greater than it would be for a series of interviews. In addition, an interviewer can ask follow-up questions; the topics on a questionnaire are not so easily explored in depth.

In developing such an instrument, points to be considered include the following (Mayo & DuBois, 1987):

- 1. What information can the respondents be expected to have?
- 2. How pertinent is this information to the inquiry?

- 3. How is this information to be summarized?
- 4. What are the applications of the summary?

A *free-response questionnaire* consists of a set of questions that the respondent can answer with phrases or sentences chosen at will. It has the advantage that it evokes a wide range of responses, some of which might not be covered in a more structured questionnaire. On the other hand, summarizing a free-response questionnaire can be time consuming because the answers tend to be diverse. Thus, the best uses of this type of questionnaire may be with a small group or in supplementing a structured instrument.

In a structured questionnaire, each item should relate to a single topic that is defined carefully.

Selecting the Questions

The wording of each question is important, because it can affect the participant's response. A question should not contain words or concepts that the participant may not know. Participants cannot be expected to answer questions such as "Was the trainer knowledgeable about the topic?" or "Were training technologies selected adequately?" Neither should a question make assumptions about the participants' backgrounds or attitudes. It should not imply what the desired answer is. Care also should be taken that each question is really only one question and does not have more than one assumption or question embedded in it. An example of this is the question "How did the training help you to meet your objectives?" The first question actually is "Did the training help you to meet your objectives?"; the second question is "How?" Similarly, the question "Would you recommend this training to a friend, coworker, or supervisor?" is really three questions.

Actual questions may be closed ended (i.e., they can be answered with "yes" or "no") or open ended (they require elaboration or explanation). A closed-ended question might be "Did you enjoy the training program?" An open-ended question would be "Why did you enjoy or not enjoy the training program?" The purpose of the questionnaire will determine which type is chosen, but, in general, the latter is preferable because it elicits more information. Another option is to ask the respondent to rate an item, followed by a request for comments to explain the rating.

Many questionnaires contain such scales. The response may be in terms of degrees ranging from low to high or from negative to positive. Numbers can be assigned to the degrees, and responses tabulated according to the numbers. A typical format is the summative (or Likert) scale, in which rankings are assigned in response to a statement. These rankings generally are on a five-point scale ranging from "strongly agree" to "strongly disagree." Another format is the rating scale (semantic differential), in which things are rated on a series of bipolar scales such as sweet/sour, good/bad, strong/weak, or active/passive. With forced-choice scales, the respondent must choose between two alternatives, even though neither of them may seem particularly appealing. It often is possible to develop descriptions of the behavior indicated by the different degrees: such

"behaviorally oriented" scales are preferable to instruments in which degrees are defined with numbers or single words. For a more detailed description of the use of ranking and rating scales, see Training Technologies Volume 22.

One problem in using scales for evaluation is that some people tend to rate things in terms of extremes (high or low), while other people tend to avoid these extremes at all times (e.g., on a five-point scale, such a person will assign a ranking of 2 to 4 but never 1 or 5). Furthermore, such answers often are generated quickly and may be basically emotional responses without a great deal of thought. Valuable information can be obtained by use of such scales, but the statistical validity may be in question.

In a questionnaire designed to evaluate the various aspects of acceptance, each question should be related to possible actions that would be taken in response to the answer. Unless one is prepared to modify a course or the methods of its delivery, detailed evaluation of specific parts of the training is not appropriate.

Ratings

There are two types of ratings for assessment. In the type I rating, the same skills are assessed at two points in time, once before training and again after training. Observations then are compared to determine the improvement that might have resulted from training. Other explanations of the gain, such as greater experience on the job, can be ruled out through the use of an appropriate experimental design, but this is complicated. Thus, although the use of the type I rating scale is desirable from a strictly scientific point of view, its use entails considerable effort, especially if an attempt is made to achieve a high degree of certainty in the result.

The type II rating attempts to assess improvement directly. It assumes that the rater is familiar with the trainee's performance before the training and can judge changes in it.

In the development of the scale for either type of rating, the first step is to list and define the characteristics to be rated. These should cover the range of behavior in which improvement as a result of the training can be anticipated.

The second step is to establish the degrees of change in each characteristic. Although there is no fixed number of such degrees, too many are difficult to relate to actual behavior, and too few result in loss of discrimination. Many investigators have found five to be a good compromise (Mayo & DuBois, 1987). In a type I scale, each degree should be a description of behavior. In a type II scale, change in each characteristic can be described by a series of phrases, such as "worse," "no change," "some improvement," "much improvement," and "very much improvement."

For performance ratings to be valid, they must be established by qualified people who are knowledgeable about the work of those being rated. Generally, immediate supervisors are the best source of information. In some special situations, such as shift work in which the supervisors do not rotate, two or more foremen can rate the same workers. When this happens, rater-to-rater consistency (reliability) can be studied.

Occasionally attempts are made to have the performance of sales personnel assessed by customers and the performance of managers assessed by subordinates. Such

ratings, as well as evaluations made by the trainees themselves, have potential use in the study of training, but biases must be taken into account. Respondents, including participants, may not have open minds regarding the topic of the training or regarding particular individuals. Some respondents may not have the background or experience necessary to evaluate results (or the training program). Also, participants may not be immediately able to assess the practical implications of the training and to evaluate its effectiveness before taking some time to test it personally.

The Checklist

A checklist usually is an enumeration of the components of a skill, an inventory of what the participant should know after training. Such evaluative measures are used only in situations where job proficiency must be tested. In the case of a machine operator, for example, it might cover identification of the sources from which the operator receives information, the significance of the types of information, and appropriate reactions to single-input sources or combinations of input sources. The more complex the skills, the more useful checklists become. They are important in evaluating knowledge in many occupations.

When properly constructed, a checklist covers not only components but also their interrelationships. The examiner may also require demonstrations when feasible, substituting verbal descriptions when overt demonstration is not practical.

Product Evaluation

Occasionally, the purpose of training is to develop proficiency in making some product that can be evaluated both for quality and for quantity produced in an interval of time. Word processing, for example, can be evaluated in terms of words entered correctly per minute. Measurement for quality can contain a scoring penalty for each error.

Performance Measures

Performance measures often are useful in industrial training to measure skills. The trainee can be asked to perform one or more tasks that duplicate or closely approximate work in the operational situation. In some cases, simulation can be used. Often evaluation is in terms of ratings by skilled observers. These ratings can be global (covering the entire task), or different phases and aspects of the work can be rated independently. Here one is concerned with criterion-related validity, which exists when test behavior and job behavior overlap and are nearly identical.

Checklists, product evaluations, performance measures, and printed tests can be used as tests of the trainee's learning (i.e., of the effectiveness of the training program), but more often they are used as (and almost always perceived by the trainees as) tests of the trainees' abilities or suitability for a particular job.

The Printed Test

When a printed test is composed of items that measure aspects of on-the-job proficiency, it has criterion-related validity. Scores on such tests can be related to the presence or absence of a specific course of training and to variations in the training, such as whether the sessions are consecutive or separated by intervals of time, whether one or another specific training aid is used, whether small or large amounts of feedback are provided, and so forth. In addition, proficiency tests can be used to determine which people are most likely to profit from training as well as to diagnose the specific training that would benefit particular individuals.

Any achievement test must have a clearly stated goal. The most useful ones have limited objectives, such as those that cover a single course or a single phase of a training program. They are useful in determining the effectiveness of training as well as identifying individuals who have best profited from training and who presumably will be effective members of the target occupation.

Developing a Test

The plan for an achievement test to be used in training evaluation should meet four specific requirements:

- 1. *The general scope of the test should be stated*. The test should cover a defined area of training, and it should be developed with the specific situation in mind; unless they are tied directly to the training topic (i.e., by the author of the theory or technique), instruments from outside sources seldom are suitable.
- 2. *The degree of coverage of the training should be described.* When the duration of the training is short, it may be possible to test all the topics covered. When the duration is longer and the training has covered many topics, a percentage of those topics should be sampled in the test. Sometimes it is possible to plan two or three test forms that reflect knowledge of a given area, using a different sample of topics in each form.
- 3. A scenario for handling all aspects of the testing procedure should be prepared. It should include sources of questions; who is to write them; how they are to be critiqued, edited, and worked into test format; whether or not the items are to have preliminary tryout; how and to whom the test is to be administered; scoring procedures; and how the results are to be interpreted and used.
- 4. A decision must be made about how to handle trainee access to the test after it has been administered. A test can provide important feedback information; but if it is to be used for testing participants in successive training programs, there may be good reason to keep it confidential. This issue must be addressed in the specific context, and alternative methods of providing useful feedback must be provided if it is determined that the trainees should not have access to their tests.

Test Format

Some trainers develop their own written tests in essay or short form. Such tests are motivating, can provide excellent feedback to trainees, and are important guides to the trainer. Because they are relatively easy to construct and are not difficult to evaluate when the group is small, they are useful tools. However, they are subjective; standardization and grading are difficult, so this type of test ordinarily is not used in situations in which the training is criterion referenced.

There are several types of objective tests: true/false, multiple choice, matching, and completion (fill in the blanks). All these have their place and can be used in combination. There are many books available on test construction; for the sake of brevity, we will discuss one type in detail here. Although the multiple choice, objective test is much more difficult to develop than the essay or short-answer test, it has several advantages:

- The multiple-choice test item is versatile. It can be constructed so as to tap almost any kind of knowledge as well as most types of inductive and deductive reasoning. Answering it can require almost any mental process, from simple rote memory to concrete application of a principle to abstract levels of generalization or inference.
- Any area of knowledge can be covered efficiently. Completing a multiplechoice test requires comparatively little time.
- Scoring is completely objective. The test scorer need not know the subject matter. In many large testing programs, various types of reading devices, scoring machines, and computers have completely replaced the human scorer.
- The item format lends itself to sophisticated analysis. Because each item can have a separate score, it can be related to other items, to the total score on the test, to a criterion such as success on the job, or to the same item on a different occasion.
- Counts can be obtained of the number of individuals choosing each of the wrong answers. This is important information in improving the test for future use (and perhaps in improving the training).

Constructing Test Items

In theory, at least, every item should have a stated purpose directly related to a minor or major objective of the training. In some training, the acquisition of nomenclature is essential, so that corresponding items may involve only rote memory. Other items may require the detection of relationships among concepts or the application of principles to new situations. Every effort must be made to make test performance represent the attainment of the training goals. There are eight basic steps in test construction, as follows:

- 1. Determining the scope of the test and what it is to measure.
- 2. Selecting the type of test to be used.
- 3. Writing the test items.
- 4. Deciding the length of the test.
- 5. Making the final selection of test items, editing them, and determining their order.
- 6. Writing the directions for taking the test.
- 7. Creating the scoring device.
- 8. Testing the test.

The following table presents some guidelines for constructing and using the various types of tests.

Туре	Do	Do Not
True/False	Use good grammar; use short, clear sentences.	Use tricks; have obvious patterns; use negatives; have questions linked together.
Multiple Choice	Give four or five alternatives; make most alternatives plausible; give consistent choices	Have obvious patterns; use "none" or "all of the above."
Matching	Use five to ten items; give more answers than questions; have everything relevant.	
Completion	Place blanks near the end of items; require a single idea per blank.	Have statements copied directly; have blanks at the beginning of an item; omit verbs; use many blanks; give clues by the length of the blanks.

The core of the multiple-choice item is the "stem," the statement of the situation or problem, which is followed by several choices, one of which is correct. The stem should be a crystal clear, self-explanatory statement, leading naturally to each of the options. All of the misleading or "decoy" choices should be plausible but wrong answers, enticing those who do not know or cannot work out the correct solution to make an erroneous response. On the other hand, the correct answer should be the only choice possible for the individual who possesses the knowledge or the ability called for by the item. Each option should be a grammatically correct completion of the stem, thus avoiding one source of extraneous cues. When in later analysis an incorrect option is found not to be attractive, the normal procedure is to replace it with another decoy that probably will be more enticing. Options that no one chooses reduce item efficiency in that they use the respondent's time to no avail.

Using a Pretest-Posttest Design

In some situations, the content of a training program can be covered adequately by a set of twenty or twenty-five items offering five choices each. Considerable information can be gleaned by administering such a test twice, once prior to the training and again after its completion. (See our discussion of the timing and staging of such testing under "When To Evaluate.")

In some cases, it is a good idea to develop *two* questions about every topic so that one question can appear on the pretest and the other on the posttest. To construct such tests, review the program content and assemble forty or fifty questions about it. The most commonly used types of questions are multiple choice, completion (fill in the blank), true/false, and matching. Many trainers prefer a combination of question types. For example, on a forty-question test, thirty questions may be true/false; six questions may be multiple choice; and four questions may be of the fill-in-the-blank type. After all questions are developed, choose half the questions for each category and from each type by random sampling; the first half of the questions will be the pretest and the corresponding half of the questions will be the posttest. If clearly stated, a pretest or posttest with twenty or twenty-five questions need take no longer than ten minutes to complete.

A disadvantage of using the same questions for the pretest and posttest is that one may be testing the participants' memory skills (i.e., how well they remember the questions from the first test) rather than what they have learned in the training. An alternative, although a costly one, is to use a randomized-control design. A control group *with the same characteristics as the training group* is given the pre and posttests without the benefit of training. By comparing the control group's tests with the participants' tests it is possible to identify changes in the participants scores that can be attributed reasonably to the training.

Tabulating Test Scores

Equations are used to tabulate the index of learning for pre- and posttest scores. The result of using these equations will be a measurement of participant learning. The key that follows explains the symbols used in each equation.

KEY

Symbol Definition

i = the participant the participant's pretest score X_i = the participant's posttest score y_i = d_i = the difference y_i - x_i for the i th person d = the average of the d_i computed the total number of participants n = S = a standard statistical scale factor (standard error of the mean) t = index of learning

The following equations are used to tabulate test scores (Merwin, 1981):

1.
$$\overline{d} = \frac{d_1 + d_2 + d_3 \dots + d_n}{n}$$
2.
$$\sqrt{\frac{\sum_{i=1}^{n} (d_i - d)^2}{\sum_{i=1}^{n} (n - 1)}} = S$$
3.
$$\overline{d/S} = t$$

To provide a simple example, suppose that four people attend the training and obtain test scores as shown in the first two columns of the table that follows. Construct the third column of the table by subtracting each person's pretest score from his or her posttest score. (This number is the d_{i} .) Next, square each difference to produce a column analogous to the fourth column in the table. Finally, total columns 3 and 4. This provides the basic information for computing the index of learning, *t*.

Person	Column 1 Pretest	Column 2 Posttest	Column 3 Difference d _i	Column 4 d ² _i
Ann	10	15	5	25
Bill	15	14	-1	1
Cindy	5	20	15	225
Dan	3	10	7	49
Totals			26	300

The \overline{d} , or average of the d_i 's computed, is simply the total of column 3 divided by the total number of participants. In this case:

$$\overline{d} = \frac{d_1 + d_2 + d_3 \dots + d_n}{n}$$

$$\overline{d} = \frac{5 + (-1) + 15 + 7}{4}$$

$$\overline{d} = \frac{26}{4}$$

$$\overline{d} = -6.5$$

The steps in calculating S are:

$$S = \sqrt{\frac{\sum_{i=1}^{n} (d_i - d)^2}{n(n-1)}}$$

$$S = \sqrt{\frac{d_1^2 + d_2^2 + \ldots + d_n^2 - (d_1 + d_2 + \ldots + d_n)^2 / n}{n(n-1)}}$$

$$S = \sqrt{\frac{300 - (26)^2 / 4}{4(3)}}$$

$$S = \sqrt{\frac{300 - 169}{12}} \sqrt{10.92 = 3.3}$$

$$t = d / S = 6.5 / 3.3 = 1.97$$

The index of learning then is t = 1.97.

S always is larger than or equal to zero. It will be zero only if all differences are identical. A negative value for S indicates a computational error. The following illustration divides the score into four ranges and provides an interpretation for each range.

0	1.5	2	2.5	3 Score
Interpretation	0 to 1.5	Chance; little or no ev	vidence of learning	
	1.5 to 2	Some evidence of lea	rning	
	2 to 3	Strong evidence of lea	arning	
	Over 3	Very strong evidence	of learning	

In addition to tabulating scores, the evaluator can compare each individual's responses to each item at the two points in time (pretest and posttest). There are four patterns of response (Mayo & DuBois, 1987):

- 1. *RR*, which stands for "right-right" and indicates that the item is answered correctly both prior to and after training;
- 2. *WW*, which stands for "wrong-wrong," indicating that the item is answered incorrectly prior to and again after training;

- 3. *RW*, which means that the item is answered correctly prior to training and incorrectly after training; and
- 4. *WR*, meaning that the item is answered incorrectly before training and correctly after training.

The four response patterns are tabulated for each item. The tabulations are important primarily for modifying the training. Items that are predominantly RR and WW indicate no gain, and the training might be modified by reducing the focus on RR items and increasing or improving it on WW items.

In any multiple-choice test, it can be anticipated that a certain number of correct answers will result from chance. In a test in which each item presents five choices, respondents who answer with no knowledge at all would be expected to answer 20 percent of the items correctly. If 20 percent or fewer of the responses to an item are RW, that item probably should be considered as WW.

In revising the test, the designers should examine all items to see whether or not they indicate gain in some aspect of the training program, as signaled by a change from incorrect to correct (WR). Other items—RR, RW, or WW—should be considered for rewriting or replacement. Changes should be made in the test or in the training so that the proportion of WR responses is likely to increase. It is to be noted, however, that response variability is such that some items will be difficult to classify.

Another concern is changes in the mean score from pretest to posttest. Statistical methods exist to evaluate the reliability of the difference between two means. More important is determining the degree to which the increase in mean score represents improvement in the "real-life" skill. If the test items are realistic and constitute an adequate sample of the skill or knowledge, a good estimate can be obtained of the usefulness of the training.

Follow-Up/Implementation Forms

Many evaluations call for post-training information regarding the way in which trainees actually have used or implemented their learnings. The follow-up form usually is a type of questionnaire that refers to a series of statements of intent called a "work-statement form."

Ideally, the work-statement form is introduced at the end of the training event, after the trainer has summarized the learnings. It may contain a brief outline of the topics presented in the workshop. This stimulates the participants to consider the entire content, not just the last thought-provoking ideas in the program. The form asks the participants to state when, where, and how they plan to apply the knowledge or skills they have gained. We present here an example of a very simple work-statement form.

		Work Statement					
Describe sit it. Be specif		ch you plan to apply this material and tell when and ho	w you plan to apply				
	COURSE OUTLINE	IMPLEMENTATION GOALS	Do Not Write in This Column				
I.		Situation:					
		My plan to apply:	_				
II.		Situation:	С				
		My plan to apply:	_				
III.		Situation:	С				
		My plan to apply:	В				
IV.		Situation:	C				
		My plan to apply:	-				
Please add	Please address the attached envelope to yourself; it will be returned to you in three to four weeks.						

A $9\frac{1}{2}$ -by- $4\frac{1}{2}$ inch envelope should be distributed with the form. When participants have completed their forms, they are asked to address their envelopes to themselves and to place their work statements in their envelopes. They are told that their work statements will be mailed to them in three to four weeks. (Obviously, if all participants work in the same location, the forms can be distributed rather than mailed.)

In three to four weeks, the work statements are sent to the participants with followup instructions (see the sample that follows) and a return envelope (a return envelope increases the probability that the participants will return the forms). If necessary, another followup evaluation can be conducted in six months.

Another optional follow-up is one completed by the participant's supervisor. With the participant's permission, a copy of the work-statement form is sent to the participant's supervisor immediately following the training program. In three to four weeks, another copy of the work-statement form and the supervisor's follow-up form are sent. The advantage of this approach is retaining the supervisor's support during the initial implementation process. The disadvantage is that the supervisor may become

Follow-Up Instructions

Please review the course content. Then review what you had planned to apply.

You may now place check marks in the third column of the work statement. If you were able to apply your plan successfully, check the "A" space. If you were partially able to apply your plan and are still working on the implementation, check "B." If you were not able to successfully apply your plan, check "C" and explain what obstacles stopped your application.

Obstacles that stopped successful application:

Please feel free to make any additional comments about the workshop or yourself in the space provided below:

critical of the participant during that period, for a variety of reasons. This method seems to work best in organizations in which the training is systemic and the supervisors are expected to support it. The question of whether or not to use this option should be answered by the participant, who would have to be comfortable with the supervisor's involvement.

A less threatening option is to inform the supervisor that the participant is attempting to apply new knowledge and skills gained in the training and to ask for the supervisor's support during the implementation period.

USING THE DATA

The information gathered from any type of training-evaluation methodology must be analyzed and summarized before an overall judgment can be made of the program's worth. The subject of data analysis is too complex to be covered in this volume; helpful

Supervisor's Follow-Up Form

was a participant in a workshop dealing with During the last three to four weeks, he or she has attempted to implement the ideas or skills listed on the enclosed sheet, labeled Work Statement. Please review what he or she has written. Did you observe any change? You should place check marks in the third column of the Work Statement. If you were able to note a change, any change, please check "A." If you were able to note some effort to change, check "B." If you were not able to note a change or an effort to change, check "C."
Were you able to offer your support to this person as he or she attempted to implement actions?
YesNo
Please fee free to add any additional comments:

guidelines are found in Training Technologies Volume 22 and in Downie and Heath (1970), Fitz-Gibbon and Morris (1978), Hinkle (1979), Morris and Fitz-Gibbon (1978), Patton (1980), Phillips (1983), and Wolfe (1979).

The first step is to examine the data carefully for consistency. If the data are inconsistent, they probably are inaccurate. Items that obviously are insufficient or invalid should be eliminated, but no data should be discarded because the evaluator disagrees with it.

Much of the data from evaluation of training is content; for it to be translated into numbers for statistical purposes would be a complex and questionable task. However, if the evaluation effort were designed so that, for example, ratings or percentages were obtained, the results could be tabulated. A next step might be to crosstabulate items that have some important relation to one another. For example, to determine whether managers might be more satisfied with a particular training program than other employees, one would crosstabulate by managerial status, as shown in the example.

Satisfaction with Training									
Completely	Completely Very Mostly Slightly Not at all Total								
61(82)	18(25)	10(13)	7(10)	4(5)	100(135)				

	Satisfaction with Training % (N)						
Status	Completely Very Mostly		Mostly	Slightly	Not at all Total		otal
Nonmngr.	75(15)	20(4)	5(1)	0(0)	0(0)	100	(20)
Foreman	70(24)	15(5)	10(4)	5(2)	0(0)	100	(35)
Suprvsr.	60(24)	15(6)	10(4)	10(4)	5(2)	100	(40)
Manager	50(15)	25(8)	10(3)	10(3)	5(1)	100	(30)
Executv.	40(4)	20(2)	10(1)	10(1)	20(2)	100	(10)
Overall	61(82)	18(25)	10(13)	7(10)	4(5)	100	(135)

Sample Tabulation of Satisfaction with Training Program

Obviously, there must be a reason for setting up cross-tabulations. It is easy to do by computer, but then one must determine what to do with the data. Phillips (1983) states that the use of statistics in evaluation has three primary purposes:

- 1. They enable large amounts of information to be summarized. One can show the tendency, or average, by presenting the mean (which is usually enough), the median, and the mode (these two may well be extraneous). One also can show dispersion, or variance. The most useful measure of dispersion is the standard deviation.
- 2. They can indicate the relationship between two or more items, which may be important. Relationships among items, or "correlation," is expressed in terms of a coefficient. A positive correlation between two items means that as one increases, the other increases. If one item decreases as the other increases, the correlation is negative and the coefficient is expressed as a negative number.
- 3. They allow comparison of the differences in performance between two groups. They enable an indication of degree of confidence to be placed on conclusions about differences in groups of data.

The problem with statistics is that they can be used inappropriately. One may become carried away with the analysis and generate unnecessary or confusing statistics. One may manipulate the data to present inaccurate statistics. Those who would take on the task of conducting complex evaluations of HRD programs (especially in relation to effects) should first obtain an education in this complex topic.

In that vein, although we have stated that it is a difficult and complex task to relate the financial or other benefits of a training program to the costs of that program, the reality is that in many cases it must be done. The most comprehensive description of the process of which we are aware is found in Chapter 10, "Measuring the Return on HRD," in *Handbook of Training Evaluation and Measurement Methods* (Phillips, 1983). Other resources in the References and Bibliography section of this volume may be valuable as well.

Preparing a Report

Before preparing a final report of the evaluation effort, one should gather all relevant information and write a summary or overview. The objective of this is to organize one's ideas and the data, not to communicate results. This summary can be reviewed in light of the stated needs of the evaluation sponsor or organization and the resources of the surveyors before the final report is attempted.

The summary paper should begin with about a page of description, highlighting what the data show and referring to the tabulations or tables. It is a good idea to review the data and the tables several times, looking for important omissions.

It should not be necessary to state that data about individuals should be treated confidentially. This expectation should be established from the beginning of the evaluation effort with trainers, participants, and sponsors alike.

In almost all circumstances, it is wise to present the data in the most simple form that will explain what is happening. Complicated analyses and unnecessary statistics will only confuse or irritate the readers and may make them suspicious of the writer's motives.

Then a second, more detailed, summary should be written, to allow as much opportunity as possible to pull it all together without missing important findings or interpretations.

The final report is based on the second summary but is tailored to the circumstances. As we have stated before, if it is clear that nothing will be done with the evaluation data, no evaluation should be conducted. So we are assuming at this point that there is a purpose in writing the report and that it can highlight information that will be useful to the readers. Thus, the exact form of the final report will depend on how it will be used. If the data are to be used by the training staff, data should be grouped by training considerations. If the data will be used by management for future decisions regarding training, more summary, charts, and recommendations usually are desirable. If further information (e.g., regarding application/implementation on the job or needs for follow-up) will be collected at some specified time in the future, this should be noted. The things to keep in mind are (a) who will be using the report and (b) the purpose for which it will be used.

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APPENDIX: INSTRUMENTS TO MEASURE TRAINER/LEARNER STYLES AND ORIENTATIONS

THE LEARNING-STYLE INVENTORY (TRAINER)¹

Ronne Toker Jacobs and Barbara Schneider Fuhrmann

Instructions: In order to determine your preferences in training, think of two previous training experiences in which you were involved and which you regard as positive. Then read each statement below and decide if it applies to the first experience. If so, place a check ($\sqrt{}$) next to the number in the first space provided. Leave the space blank if the statement does not apply. After responding to the thirty-six statements, go back and count the checks. If there are more than ten, circle those ten checks that are most significant. Then repeat this procedure with the second training experience in mind, again circling your ten most significant checks for that experience.

1st	2nd		
		1.	I employed frequent quizzes to keep the participants on course.
		2.	I presented most of the material in the workshop.
		3.	I had participants set their own goals.
		4.	I worked with participants.
		5.	I enjoyed having participants share their ideas with one another.
		6.	I designed all the learning experiences for the workshop.
		7.	I had participants critique one another.
		8.	I allowed participants to experiment with new ideas.
		9.	I encouraged participants to explore their curiosity and to work to satisfy themselves.
		10.	I suggested that the participants use available resources for their own purposes.
		11.	I frequently encouraged participants to continue working together, exploring alternatives and moving toward goals.
		12.	I felt good about telling the participants of the well-detailed plan and organization of the workshop.

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- _____ 13. I encouraged participants to create ways in which to accomplish their goals.
- _____ 14. I liked selecting all the materials we used.
- _____ 15. I accepted the participants idea and thoughts.
- _____ 16. I developed participants so that they could work on their own.
- _____ 17. I encouraged participants to adapt the workshop to meet their needs.
- _____ 18. I listened to what others had to say.
- _____ 19. I encouraged the participants to evaluate their progress.
- _____ 20. I worked patiently with others.
- _____ 21. I worked and talked with participants.
- _____ 22. I encouraged the participants to explore ideas beyond the workshop.
- _____ 23. The participants and I challenged one another's ideas.
- _____ 24. The participants learned from my well-executed demonstrations.
- _____ 25. I appreciated the participants' directing their own learning.
- <u>26.</u> I enjoyed thoroughly coordinating workshop and post-workshop activities.
- _____ 27. I told the participants precisely what to expect.
- _____ 28. I control the participants' discussions.
- _____ 29. I assumed full responsibility for the learning activities.
 - _____ 30. I was warm and open to the people with whom I worked.
- _____ 31. The participants relied on my expert knowledge of the material.
 - _____ 32. I alone decided how the participants would be evaluated.
- _____ 33. I encouraged the participants to design their own experience.
- _____ 34. The participant co-designed part of the workshop.
- _____ 35. I asked participants to develop new approaches or ideas.
 - _____ 36. I liked having the opportunity to work with the participants.

LEARNING-STYLE INVENTORY (Trainee)

Ronne Toker Jacobs and Barbara Schneider Fuhrmann

Instructions: In order to determine your preferences in training events, think of two previous training (learning) experiences in which you were involved and which you regard as positive. Then read each statement below and decide if it applies to the first experience. If so, place a check ($\sqrt{}$) next to the number in the first space provided. Leave the space blank if the statement does not apply. After responding to the thirty-six statements, go back and count the checks. If there are more than ten, circle those ten checks that are most significant. Then repeat this procedure with the second training (learning) experience in mind, again circling your ten most significant checks for the experience.

1st	2nd		
		1.	The trainer's frequent monitoring encouraged me to keep up with the workshop.
		2.	I appreciated the trainer's presenting most of the material in the course.
		3.	I achieved the goals I set.
		4.	I cooperated with other participants on the work.
		5.	I shared my ideas with other participants.
		6.	I appreciated the trainer's having designed all the learning experiences for the workshop.
		7.	I criticized others' ideas and pointed out areas they may not have discovered.
		8.	Being able to try out new ideas was important to me.
		9.	New ideas stimulated my curiosity, and I worked to satisfy myself.
		10.	I used available resources for my own purposes.
		11.	I frequently encouraged other participants to continue working, looking for alternatives and moving toward goals.
		12.	I felt good about the trainer's well-detailed plan and organization of the workshop.
		13.	I created ways to accomplish my goals.
		14.	I liked having the trainer assign all the materials we used.
		15.	I offered ideas and thoughts that were accepted.
		16.	I worked on my own.
		17.	I developed the work I wanted to do.

- _____ 18. I listened to what others had to say.
- _____ 19. I evaluated my own learning.
- _____ 20. I worked patiently with others.
- _____ 21. I worked and talked with other participants.
- _____ 22. I went beyond workshop expectations to satisfy my own curiosity.
- _____ 23. The other participants and I challenged one another's ideas.
- _____ 24. I learned from the trainer's well-executed demonstration.
- _____ 25. I appreciated the opportunity to direct my own learning.
- _____ 26. I liked the trainer's thorough coordination of the workshop and outof-class activities.
- _____ 27. I did exactly what was expected of me.
- _____ 28. I am glad that the trainer directed our discussions.
- _____ 29. I like the trainer's assuming full responsibility for assignments and learning tasks.
- _____ 30. I was warm and open to the people with whom I worked.
- _____ 31. I relied on the trainer's expert knowledge of the material.
- _____ 32. I am glad that the trainer alone decided how our work was to be evaluated.
- _____ 33. I designed my own experience.
- _____ 34. Workshop participants co-designed part of the workshop.
- _____ 35. I created a new approach or idea.
 - _____ 36. I liked having time to work with the other participants.

LEARNING-STYLE INVENTORY SCORING SHEET (Trainer)

Instructions: Check to see that you have circled no more than ten items in each column on the inventory. Total your responses (circles) for each item and transfer the total (0, 1, or 2) to the key below. Then total all your responses that fall in column D and write this number at the bottom of the column. Repeat this step for columns I and C.

D	I	С
1	3	4
2	8	5
6	9	7
12	10	11
14	13	15
24	16	18
26	17	20
27	19	21
28	22	23
29	25	30
31	33	34
32	35	36
TOTALS:		
D	١	C
(Dependence)	(Independence)	(Collaboration)

Your scores in these three columns indicate the relative importance of each of the three training-learning styles in the positive training experiences that you have recalled.

To determine your profile, write a capital "D" in the space below if you scored 6 or higher in the D column. If you scored 5 or lower in the D column, write a lowercase "d" in the space. Do the same for the next two columns, writing a capital "C" or "I" if you scored 6 or higher in either of those columns and a lower-case "c" or "i" if you scored 5 or lower in either of those columns.

LEARNING-STYLE INVENTORY SCORING SHEET (Trainee)

Instructions: Check to see that you have circled no more than ten items in each column on the inventory. Total your responses (circles) for each item and transfer the total (0, 1, or 2) to the key below. Then total all your responses that fall in column D and write this number at the bottom of the column. Repeat this step for columns I and C.

D	I	С
1	3	4
2	8	5
6	9	7
12	10	11
14	13	15
24	16	18
26	17	20
27	19	21
28	<u></u>	23
29	25	30
31	33	34
32	35	36
TOTALS:		
D	_ I	C
(Dependence)	(Independence)	(Collaboration)

Your scores in these three columns indicate the relative importance of each of three learning styles in the positive learning experiences that you have recalled. Most people have a preference for one or two stiles but are able to learn in all three styles, depending on the situation.

Your learning-style profile can be drawn by determining your primary and secondary styles. If you scored 6 or higher in the D column. write a capital "D" in the space below. If you scored 5 or lower in the D column, write a lower-case "d" in the space. Do the same for the next two columns, writing a capital "C" or "I" if you scored 6 or higher in either of those columns and a lower-case "c" or "i" if you scored 5 or lower in either of those columns.

There are eight possible profiles or combinations of learning styles: Dci, DCi, DCI, DcI, dcI, dCi, dCi, and dci. The Interpretation Sheet will explain these various combinations to you.



LEARNING-STYLE INVENTORY INTERPRETATION SHEET

In each profile, a capital letter refers to a dominant style (score of 7 or higher on the instrument) and a lower-ease letter refers to a nondominant style.

Profile Description

- Dci A person with this profile has had highly satisfying, traditional learning experiences in which the teacher/trainer assumed major, if not full, responsibility for the learning experience. This learner may be very willing to learn, but is likely to assume a low personal competence base; is most productive in a structured learning environment; and is likely to need a great deal of support to venture into collaborative and/or independent learning experiences.
- DCi A person with this profile accepts the teacher's/trainer's authority and expertise but also enjoys individual participation and values the contributions and potential expertise and experiences of colleagues. This learner probably is quite willing to learn and feels at least somewhat confident, but probably needs encouragement to work independently.
- DCI A person with this profile has had satisfying experiences in all three modes. This versatility makes him or her willing to learn in any style. The person is likely to feel highly competent as a learner, regardless of the style of the teacher/trainer.
- DcI A person with this profile has had success both in the traditional learning environment and on independent projects but may lack interpersonal skills or the ability to function effectively in a group. This learner needs support to work with others and to develop interpersonal competence and may be willing and feel competent only when the learning does not require interaction.
- dcI A person with this profile has had particularly satisfying independent training experiences, working on projects independently and using the teacher or trainer as a resource. This person is comfortable working alone and with infrequent contact with others.
- dCi A person with this profile particularly enjoys participation, interaction, and collaboration. Working in groups and actively contributing to the learning process are valued, and both willingness and perceived competence are high in collaborative situations. This learner may have difficulty in recognizing appropriate teacher/trainer expertise, in taking a back seat, and in designing and executing independent projects.

THE TRAINER TYPE INVENTORY (TTI)

Mardy Wheeler and Jeanie Marshall

Instructions: There are twelve sets of four words or phrases listed below. Rank order the words or phrases in each set by assigning a 4 to the word or phrase that most closely applies to or reflects your personal training style, a 3 to the word or phrase that next best applies to your training style, a 2 to the one that next applies to your training style, and a 1 to the word or phrase that is least descriptive of your training style. Be sure to assign a different rating number to each of the four choices in each set.

You may find it difficult to rank the items. Be assured that there are no right or wrong answers; the purpose of the inventory is to describe the style in which you train most often, not how effectively you train.

1.	2.	3.
a Subgroups	a Showing	a Symbols
b Lectures	b Perceiving	b Actions
c Readings	c Helping	c People
d Lectures-	d Hearing	d Instructions
discussions		
4.	5.	6.
a Small-group discussion	a Immediate personal feedback	a Expert
b Free expression	b Objective tests	b Scholar
c Little participation	c Subjective tests	c Advisor
d Time to think	d Personal	d Friend
7.	8.	9.
a Theory	a Coach	a Seeing
b Practical skills	b Listener	b Telling "how"
c Application to real life	c Director	c Finding "why"
d New ways of seeing things	d Interpreter	d Asking "what"

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10.	11.	12.
a Processing	a Lead them to understand it	a It's yours
b Generalizing	b Leave them to do it	b It's ours
c Doing	c Let them enjoy it	c It's mine
d Publishing	d Get them to think about it	d It's theirs

TRAINER TYPE INVENTORY SCORING SHEET

Instructions: Each word or phrase in each of the twelve sets on the TTI corresponds to one of four training styles, which will be described on the TTI Interpretation Sheet. To compute your scale scores for each type, transfer your numerical ranking for each item on the inventory to the appropriate space in the columns below. Then add up the numbers in each column and enter the totals in the spaces below the columns. The totals are your scores for the four training types.

L:	1a	D: 1b	 I:	1c	C:	1d
	2d	2a		2b		2c
	3c	3d		3a		3b
	4b	4c		4d		4a
	5a	5b		5c		5d
	6d	6a		6b		6c
	7c	7d		7a		7b
	8b	8c		8d		8a
	9a	9b		9c		9d
	10d	10a		10b		10c
	11c	11d		11a		11b
	12b	12c		12d		12a
Т	otal:	Total:	 т	otal:	Т	otal:

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TRAINER TYPE INVENTORY INTERPRETATION SHEET

Each of the four training styles identified by the TTI is characterized by a certain training approach, way of presenting content, and relationship between the trainer and the trainees. The following are the primary characteristics of the trainer for each of the four training types.

LISTENER (L)

- Creates an affective learning environment
- Trains the Concrete Experiencer most effectively
- Encourages learners to express personal needs freely
- Assures that everyone is heard
- Shows awareness of individual group members
- Reads nonverbal behavior
- Prefers that trainees talk more than the trainer
- Wants learners to be self-directed and autonomous
- Exposes own emotions and experiences
- Shows empathy
- Feels comfortable with all types of expression (words, gestures, hugs, music, art, etc.)
- Does not seem to worry about the training
- Stays in the "here-and-now"
- Is practical ("goes with the flow")
- Appears relaxed and unhurried

DIRECTOR (D)

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- Creates a perceptual learning environment
- Trains the Reflective Observer most effectively
- Takes charge
- Gives directions
- Prepares notes and outlines
- Appears self-confident

- Is well-organized
- Evaluates with objective criteria
- Is the final judge of what is learned
- Uses lectures
- Is conscientious (sticks to the announced agenda)
- Concentrates on a single item at a time
- Tells participants what to do
- Is conscious of time
- Develops contingency plans
- Provides examples
- Limits and controls participation

INTERPRETER (I)

- Creates a symbolic learning environment
- Trains the Abstract Conceptualizer most effectively
- Encourages learners to memorize and master terms and rules
- Makes connections (ties the past to the present is concerned with the flow of the training design)
- Integrates theories and events
- Separates self from learners, observes
- Shares ideas but not feelings
- Acknowledges others' interpretations as well as own
- Uses theory as a foundation
- Encourages generalizations
- Presents well-constructed interpretations
- Listens for thoughts; often overlooks emotions
- Wants trainees to have a thorough understanding of facts, terminology
- Uses case studies, lectures, readings
- Encourages learners to think independently
- Provides information based on objective data

COACH (C)

- Creates a behavioral learning environment
- Trains the Active Experimenter most effectively
- Allows learners to evaluate their own progress
- Involves trainees in activities, discussions
- Encourages experimentation with practical application
- Puts trainees in touch with one another
- Draws on the strengths of the group
- Uses trainees as resources
- Helps trainees to verbalize what they already know
- Acts as facilitator to make the experience more comfortable and meaningful
- Is clearly in charge
- Uses activities, projects, and problems based on real life
- Encourages active participation

THE LEARNING-MODEL INSTRUMENT

Kenneth L. Murrell

Instructions: For each statement choose the response that is more nearly true for you. Place an X on the blank that corresponds to that response.

- 1. When meeting people, I prefer
 - (a) to think and speculate on what they are like.
 - (b) to interact directly and to ask them questions.
- 2. When presented with a problem, I prefer
 - (a) to jump right in and work on a solution.
 - (b) to think through and evaluate possible ways to solve the problem.
- 3. I enjoy sports more when
 - (a) I am watching a good game.
 - (b) I am actively participating.
- 4. Before taking a vacation, I prefer
 - (a) to rush at the last minute and give little thought beforehand to what I will do while on vacation.
 - (b) to plan early and daydream about how I will spend my vacation.
- 5. When enrolled in courses, I prefer
 - (a) to plan how to do my homework before actually attacking the assignment.
 - (b) to immediately become involved in doing the assignment.
- 6. When I receive information that requires action, I prefer
 - (a) to take action immediately.
 - (b) to organize the information and determine what type of action would be most appropriate.
- 7. When presented with a number of alternatives for action, I prefer
 - (a) to determine how the alternatives relate to one another and analyze the consequences of each.
 - (b) to select the one that looks best and implement it.

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- 8. When I awake every morning, I prefer
 - (a) to expect to accomplish some worthwhile work without considering what the individual tasks may entail.
 - (b) to plan a schedule for the tasks I expect to do that day.
- 9. After a full day's work, I prefer
 - (a) to reflect back on what I accomplished and think of how to make time the next day for unfinished tasks.
 - (b) to relax with some type of recreation and not think about my job.
- 10. After choosing the above responses, I
 - (a) prefer to continue and complete this instrument.
 - (b) am curious about how my responses will be interpreted and would prefer some feedback before continuing with the instrument.
- 11. When I learn something, I am usually
 - (a) thinking about it.
 - (b) right in the middle of doing it.
- 12. I learn best when
 - (a) I am dealing with real-world issues.
 - (b) concepts are clear and well-organized.
- 13. In order to retain something I have learned, I must
 - (a) periodically review it in my mind.
 - (b) practice it or try to use the information.
- 14. In teaching others how to do something, I first
 - (a) demonstrate the task.
 - (b) explain the task.
- 15. My favorite way to learn to do something is
 - (a) reading a book or instructions or enrolling in a class.
 - (b) trying to do it and learning from my mistakes.
- 16. When I become emotionally involved with something, I usually
 - (a) let my feelings take the lead and then decide what to do.
 - (b) control my feelings and try to analyze the situation.
- 17. If I were meeting jointly with several experts on a subject, I would prefer
 - (a) to ask each of them for his or her opinion.
 - (b) to interact with them and share our ideas and feelings.

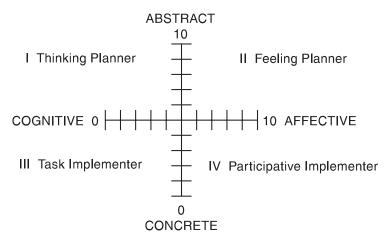
- 18. When I am asked to relate information to a group of people, I prefer
 - (a) not to have an outline, but to interact with them and become involved in an extemporaneous conversation.
 - (b) to prepare notes and know exactly what I am going to say.
- 19. Experience is
 - (a) a guide for building theories.
 - ____(b) the best teacher.
- 20. People learn easier when they are
 - ____(a) doing work on the job.
 - (b) in a class taught by an expert.

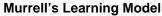
THE LEARNING-MODEL INSTRUMENT SCORING SHEET

Instructions: Transfer your responses by writing either "a" or "b" in the blank the corresponds to each item in the Learning Model Instrument.

Abstract/Concrete		Cognitive/Affective	
Column 1	Column 2	Column 3	Column 4
1	2	11	12
3	4	13	14
5	6	15	16
7	8	17	18
9	10	19	20
Total Circles			
Grand Totals			

Now circle every "a" in Column 1 and in Column 4. Then circle every "b" in Column 2 and in Column 3. Next, total the circles in each of the four columns. Then add the totals of Columns 1 and 2; plot this grand total on the vertical axis of the Learning Model and draw a horizontal line through the point. Now add the totals of Columns 3 and 4; plot that grand total on the horizontal axis of the model and draw a vertical line through the point. The intersection of these two lines indicates the domain of your preferred learning style.





THE LEARNING-MODEL INSTRUMENT INTERPRETATION SHEET

The cognitive-affective axis or continuum represents the range of ways in which people learn. Cognitive learning includes learning that is structured around either rote storing of knowledge or intellectual abilities and skills, or both. Affective learning includes learning from experience, from feelings about the experience, and from one's own emotions.

The concrete-abstract axis or continuum represents the range of ways in which people experience life. When people experience life abstractly, they detach themselves from the immediacy of the situation and theorize about it. If they experience life concretely, they respond to the situation directly with little subsequent contemplation.

The two axes divide the model into four parts or domains. Most people experience life and learn from it in all four domains but have a preference for a particular domain. Liberal-arts education has typically concentrated on abstract learning (domains I and II), whereas vocational and on-the-job training usually takes place in the lower quadrants, particularly domain III.

Occupations representative of the four styles include the following: domain I, philosopher or chief executive officer: domain II, poet or journalist: domain III, architect or engineer: domain IV, psychologist or personnel counselor.

Managerial jobs require an ability to learn in all four domains, and a manager's development depends on his or her ability to learn both cognitively affectively. Thus, management education and development demand the opportunity for the participants to learn how to learn in each domain.

TRAINING STYLE INVENTORY

Richard Brostrom

Instructions: For each of the following fifteen phrases printed in italics, rank the four statements given in the order that completes the phrase to your best satisfaction. Give your most favored statement a rank of 4; your next favored, 3; your next, 2; and your least favored statement, a rank of 1. Place your ranking for each statement on the line to the right of that statement.

1. In planning to conduct training, I am most likely to

c
b
a
d
h
f
e
a
b

2.

3.

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 to establish the learner's capacity to solve his or her own problems. 	c
 to facilitate certain insights on the part of the participants. 	d
4. Most of what people know	
 they have acquired through a systematic educational process. 	f
 they have learned by experience in trial-and-error fashion. 	e
 they have gained through a natural progression of self-discovery rather than some "teaching" process. 	i
 is a result of consciously pursuing their goals—solving problems as they go. 	j
5. Decisions on what to be covered in a training event	
 must be based on careful analysis of the task before-hand. 	a
 should be made as the learning process goes along and the learners show their innate interests and abilities. 	d
 should be mutually derived, by the learner and teacher. 	c
are based on what learners now know and must know at the conclusion of the event.	b
6. Good trainers start	
 by gaining proficiency in the methods and processes of training—how to teach—and then bringing in the content. 	f
 by recognizing that learners are highly motivated and capable of directing their own learning—if they have 	
the opportunity.	g
 by mastering the field themselves and becoming effective "models" for the learners. 	h
 by considering the end behaviors they are looking for and the most efficient ways of producing them in 	
learners.	e

7.	As a trainer, I am least successful in situations	
	 where learners are passive, untalkative, and expect the trainer to do all the work. 	d
	that are unstructured, with unclear learning objectives.	a
	• where there is no right answer.	b
	 when I am teaching abstractions, rather than concrete, specific ideas. 	c
8.	In a training event, I try to create	
	 the real world—problems and all—and develop capacities for dealing with it. 	g
	 a learning climate that facilitates self-discovery, expression, and interaction. 	h
	 a stimulating environment that attracts and holds the learners and moves them systematically toward the objective. 	e
	 an interesting array of resources of all kinds—books, materials, etc.—directed at the learners' needs. 	f
9.	Emotions in the learning process	
	 are utilized by the skillful trainer to accomplish the learning objective. 	a
	 have potential if the trainer can capture the learners' attention. 	b
	 will propel the learner in many directions, which the trainer may follow and support. 	d
	 provide energy that must be focused on problems or questions. 	с
10.	Teaching methods	
	 should be relatively flexible but present real challenges to the learner. 	g
	should be determined by the subject.	f
	must emphasize trial and feedback.	c
	 must allow freedom for the individual learner. 	h

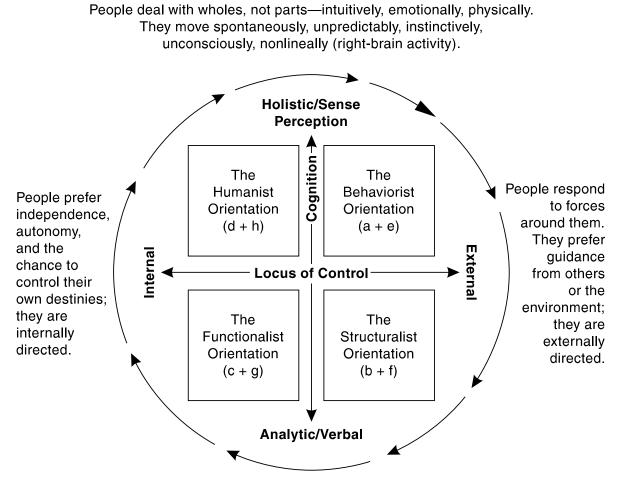
11. When learners are uninterested in a subject, it is probably because	
they do not see the benefit.	c
they are not ready to learn it.	d
the instructor has not adequately prepared the lesson.	b
 of poor planning. 	a
12. Learners are all different:	
 some will learn, but others may be better suited for another activity. 	h
the best approach is to teach the basics well and put learners on their own after that.	g
 with an effective training design, most tasks can be mastered by the majority of learners. 	e
 an experienced teacher, properly organized, can over- come most difficulties. 	f
13. Evaluation of instruction	
 is done by learners regardless of the instructor; the instructor should be a sounding board. 	d
 should be built into the system, so that learners continually receive feedback and adjust their performance accordingly. 	a
 is ultimately decided when the student encounters a problem and successfully resolves it. 	c
 should be based on pre-established learning objectives and done at the end of instruction to determine learning gains. 	b
14. Learners seem to have the most regard for a trainer who	
 taught them something, regardless of how painful. 	g
 guided them through experiences with well-directed feedback. 	e
 systematically led them step-by-step. 	f
 inspired them and indirectly influenced their lives. 	h

15. In the end, if learners have not learned,

the trainer has not taught.	b
they should repeat the experience.	a
 maybe it was not worth learning. 	c
 it may be unfortunate, but not everyone can succeed at all tasks. 	d

TRAINING STYLE INVENTORY SCORING AND INTERPRETATION SHEET

Instructions: Sum all the numbers that you placed in the "a" and "e" boxes in the Training Style Inventory. Place this total in the "a + e" box in the figure below. This is your behaviorist score. Do the same for the following totals: "b" and "f"; "c" and "g"; "d" and "h." Then study the interpretive material as it applies to your profile.



People's minds work rationally, intellectually, scientifically. Information is processed systematically, sequentially, for storage (memory) and retrieval (language) (left-brain activity).

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