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## **Train-The-Trainer**

# **Andragogy: The Art and Science of Adult Learning**

Sponsored by the Environmental Pollution Prevention Project



**WEFTEC'95  
Miami Beach, Florida**

# Section I

## Discovery Learning



**EP3 Train-The-Trainer Workshop  
WEFTEC'95  
Miami Beach, Florida**

# NORTHEAST TRAINING NEWS

A Monthly Newspaper for the Training Professional

## **"Discovery Learning" And Technical Material**

### Can The Two Be Matched?

Frederic H. Margolis

This article is about a revolution, a revolution that is going on right now. It's similar to the one that started about 30 years ago when management training curricula switched from an information-based (pedagogical) approach to a "discovery-learning" (or andragogical) approach. This time, the revolution is taking place in the training programs for people engaged in high technology and professional areas: computer science, accounting, insurance, real estate law, medical science, and so forth.

Traditionally, the training programs in these areas have focused primarily on a straightforward conveying of information. The approach seemed logical because the people working in high technology and the professions have a very simple need, the need to stay current with their fields. Their abilities depend on their knowledge of their subjects. Accountants can't issue reports on financial statements unless they know recently-issued principles of accounting. Accurate tax services cannot be offered if new tax laws aren't understood. Hence, both learners and instructors expect the training to consist of a simple process of acquiring information.

But simply teaching the prescribed knowledge is not sufficient. If you are involved in information-based training programs long enough, you begin to hear revealing comments from managers and participants:

"These people have learned the principles, but they don't know how to apply them."

- "This training program doesn't reflect the real world "
- "Some of the information was useful, but most of the session was over my head "
- "I knew most of that stuff before I came to the course "
- "Too many lectures and slides After a while, it all seemed the same "

Many trainers have realized that relying primarily on the process of conveying information is not as effective as they want Even slides, movies, and occasional discussions are limited in what they can do

## An Andragogical Revolution

The revolution started when some organizations started using job-related "discovery learning" approaches in their training programs I was asked to be a consultant to such a company which developed over 75 professional and high technology courses The subsequent six years of helping them develop their courses taught me a lot about the andragogical approach

The first problem I encountered was explaining the differences between information-based and "discovery learning" approaches "Discovery learning" is the essence of andragogy and, while most people by now understand what that means, perhaps a review of the definition is in order Andragogy has been called "the art and science of helping adults to learn." It stresses mutuality and respect between instructor and learner, as opposed to the authoritarian, formal climate cultivated by pedagogy-the science of teaching children

It is not easy to explain all the differences between andragogy and pedagogy and there is much room for misinterpretation, so my initial job was to develop a checklist for determining the degree to which a program is information-based or andragogically based

- 1 Are participants given presentations, films, or readings followed by a series of problems or cases to which they apply that information?
- 2 Are participants given problems or situations to analyze or solve followed by the information needed to analyze or solve the problems?

6 Then the instructor summarizes the guidelines for accepting mortgage applications, relates some of his/her personal experience, and answers questions

It's not really important if the groups agree with what your institution decided  
What's important is their learning the process of thoughtful analysis

**Writer** Great! The participants will like doing that, and it will help them in the areas they need the most help Now that we decided that, what's the next step?

**Consultant** Well, it has to be written in much more detail The instructions to the training must be explicit and clear

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- 3 Are problems or cases designed primarily to help participants understand the concepts?
- 4 Are problems or cases designed primarily to help participants do their work more effectively?
- 5 Is 50 percent or more of the training time used by participants to read, listen to presentations, watch films or slides?
- 6 Is 70 percent or more of the training time used by participants to actively engage in problem-solving, analysis, or decision-making usually with the help of other students?
- 7 Is the primary job of the instructor to present information, discuss questions, or pose reinforcing questions to the class?
- 8 Is the primary job of the instructor to help, consult, advise, and pose problems to be analyzed (both individually and in small groups) and then manage an interactive discussion?

There could be more questions, but by now you've gotten the point

An andragogical approach

- Emphasizes the skills of analysis and decision-making through a series of questions
- Establishes a learning approach rather than a teaching approach by a series of planned structured activities enabling the learner to acquire the appropriate knowledge
- Is a practical job-based approach which keeps the learners constantly aware of the value of the training program to them and their work

## Applying Andragogy

If you want to use the checklist on your own programs, the odd-numbered questions tend to get "yes" answers when the program is information-based. The even-numbered questions tend to get "yes" answers when the program is more andragogical.

If your answers are mixed, review the questions again. Perhaps you missed a subtle issue. If your answers are still mixed, then you may have a little of both in your programs. You are on the road to revolution yourself.

Once you have understood differences between information-based programs and "discovery learning," the next step is to work with technically knowledgeable people to write the courses. When I first started working with technical people, my responsibility was to help them (1) select the content, (2) sequence the content, (3) select methods which emphasized discovery learning, and (4) write the course so they or others could teach it.

Here are some other issues we confronted:

**Motivation** We started with the idea that most professionals are motivated to work and motivated to learn. The motivation to work is stimulated by having interesting work to do, progressing in the profession, financial reward, and appreciation and recognition from supervisors and clients.

The motivation to learn is closely tied to the motivation to do better work. Training courses must tap into this aspiration. Courses that are seen by learners as closely tied to work skills are considered relevant. Those which do not appear to be related to work content or processes may be seen by trainees as peripheral of "academic."

Inappropriate, boring, or seemingly peripheral training programs can actually reduce or temporarily extinguish the motivation that participants bring with them to the course. So competently designed training programs build on the existing motivation through careful selection of content and methods.

**Selecting the Content** Different methods of carrying out a need diagnosis can be used, depending on the type of course, experience of the learners, and how frequently the course is to be offered.

Regardless of the diagnosis method, however, you must use the technical experts in the process because they are the ones who know what the trainees have to learn. On the other hand, the need diagnosis method should only identify what the learners need to know for their present job or work they will be doing in the near future. Anything else is going to undermine motivation.

You will find that most technical people have difficulty in limiting the content of a course. They want to include "everything." The best way to deal with this impulse is to use challenging questions.

- Why do the trainees have to know that?
- If they know this, how will it help them on their jobs?
- If they don't know this, how will it affect their work?

**Selection of Methods** The general labels that trainers use for interactive methods don't always work for technical experts. Merely using the words "case," "discussion," or "question and answer session" does not convey to the technical people any picture of the learning that will take place. The challenge is to create specific activities that will obviously help participants improve the skills of analysis and decision-making they need.

I tried to meet the challenge by developing a series of specific activities or tasks for each course using a standard format:

1. A brief introduction and explanation,
2. Detailed specific instructions for the participants to follow,
3. The participants' active engagement in these activities — whether small group discussion, question and answer sessions, or whatever, followed by
4. A sharing or synthesis by the participants, and
5. A summary of presentation by the instructor based (not on prepared texts but) on some of the comments produced in the activity. This can also incorporate examples, presentation of principles, or practical experiences.

Each activity selected should be checked against the following criteria. What is the degree the structured activity

- Achieves the intended learning goals
- Is job-related
- Requires investigation, analysis, creativity, or decision-making

- Is challenging
- Requires new thought or synthesis and not simple regurgitation
- Is seen by participants as useful and will help them develop technically and professionally

## Resources Needed

In the process of discovery learning, the central person is the course writer. This person must have competence in the technical aspects of the course as well as competence in andragogical methodology.

The writer's technical competence is supplemented by a consultant who is technically expert in the content area. The technical expert assists in deciding on the content and final approval of the technical aspects.

The writer's methodological competence is supplemented by a consultant who is experienced in andragogical methodology. This person helps determine the sequences of methods to accomplish the learning goals, and is responsible for checking the methodological approach.

Usually, instructors for high content courses are technically competent people who lack experience in teaching an andragogical course. The course, then, must be written with great detail and attention given to managing the discovery learning process as well as outlining the content that has to be learned. And no matter how explicit the course design is, there must be an instructor-training course emphasizing the skills of presenting and managing the five-step activity format mentioned above, as well as the skills of facilitating group discussion.

Just because the content of a training program is very technical or dense does not mean you have to rule out the excitement and effectiveness of discovery learning. In our project, we developed 75 courses, of which a few were

- Computer Modeling
- Making Computer Hardware/Software Choice
- Advanced Statistical Samplings

- Corporate Reorganizations and Business Acquisitions
- Auditing Hospitals and Medical Services
- The Principles of Escrow

When the training director of this program was asked why his company switched from an information-based to an andragogical approach, he answered, "It works. Knowledge increases and is better retained when information is applied to job-related situations. We also found the skills of analysis, problem-solving, and decision-making were improved when participants actively engaged in job-related problems. Most important, confidence and ability increased when participants successfully demonstrated professional competence in job-related situations in the training course."

## Discovery Learning in Action

This transcript is an excerpt of a consultation between a technical writer and a training consultant. They are designing a course for mortgage analysts employed at a financial institution who make decisions on home mortgage applications. Note how the consultant focuses on practical, job-skill exercises and tries to cast the material in the five-step format outlined in the accompanying article.

**Writer:** This is a very important course. The way to get ahead here is to know how to analyze mortgage requests.

**Consultant:** What does a good analysis entail?

**Writer:** It involves getting the appropriate information, checking it, applying a debt/income formula, then deciding. We have to tell the participants to apply the formula and how to decide what mortgages should be approved. In the past we have had our mortgage manager lecture for two hours using some excellent slides. He explained the whole procedure.

**Consultant:** Why aren't you continuing to use that program?

**Writer:** Well, the participants seemed to understand, but when they got back on the job they had trouble making the right decisions.

**Consultant** Let's see if we can figure out some other ways to help them learn  
You said that there are four steps in the mortgage process

- 1 Getting the appropriate information
2. Checking it
- 3 Applying a debt/income formula, and
- 4 Making decisions

Do they know what information to gather?

**Writer** Yes All they have to do is fill out the form They don't have any problems with this part

**Consultant** Good Then, we don't have to work on that issue and we can concentrate on the more important ones Do they have any problem in checking the accuracy of the information?

**Writer** No The procedure manual is clear, and there is no problem following it

**Consultant** What about applying the formula?

**Writer** The actual applying is not a problem, but they need to be told how to do it

**Consultant** Tell me about the formula

**Writer** It's simple for new loans All they need to do is determine all income and all debts Then, see that the annual debts are not more than 34 percent of the annual income

**Consultant** Do they have any problem applying the formula?

**Writer** Not in applying it But they often do not always include all income or all debts We have to be sure they know what they must include

**Consultant** One way to do that is to ask the participants to list all the different kinds of income and debts that usually appear on a mortgage application That might be better than lecturing them

**Writer** No, that's not quite right. It's not just knowing about income and debts it's analyzing the applications

**Consultant** I see So, we might give them some filled-out applications and ask them to list all the income and all the debts indicated The first being straightforward and another having some hidden income or debts

**Writer** That's good. It's what they have to do as part of their job

**Consultant** Let's be more specific. How does this activity sound?

1 Brief introduction explaining the problems and importance of accurately identifying income and debts

2 Hand out an application which is simple and straightforward

3 Ask participants to list all income and all debts on a form we will provide Groups of three might be best, giving them the opportunity to help each other

4 When they are through, one group can read their income list and other groups can agree or add to the list Then, another group reads its lists of debts, etc When the reporting is complete, the instructor can comment, add, or correct, if necessary

5 Then hand out a more complicated application involving child support, alimony, income from a partnership, gifts from an estate, and a condominium fee

6 Ask the same groups to repeat the procedure of analysis, listing, and reporting In this situation, there will probably be some disagreement as to the amount of income or debts The groups should be allowed to fully examine the issues before the instructor comments What do you think?

**Writer** I like it It offers the participants a chance to examine the issues and it actually gives them practice in doing the analysis

**Consultant** Now let's look at the issue of decision-making Is it largely mechanical or is there room for judgment?

**Writer** Ninety-five percent of the applications are clear-cut and mechanical It's the five percent that cause the problems These are the cases that just barely meet

the requirements or in some cases don't meet them, but have mitigating circumstances, such as other non-income producing equity

**Consultant** What are the usual problems?

**Writer** Three things

1. The mortgage analysts apply the formula too rigidly,
2. They don't take into consideration discretionary income, or
3. They don't consider future problems. For example, if an applicant just barely has enough income to make the monthly payments and is buying a very old house, we have to consider the probable extra expense of repairs

**Consultant** Are the criteria clear?

**Writer** There are some guidelines, but at our institution it's still a judgment call. The manager used to include several examples in his lecture

**Consultant** Here is another idea. Perhaps you could identify two or three real applications that fell into that five percent area. We could use them to help the participants gain insight into the problems

**Writer** Good idea. Using real situations will increase their interest

**Consultant** Perhaps this sequence might work

1. Introduction and explanation of the formula and how to apply it with an explanation of the professional judgment that is required in special situations
2. Hand out two applications, both of which are difficult decisions
3. Groups of three or four analyze them and decide whether to accept them for a home mortgage or not, and then explain the reasons for their decisions
4. Each group repeats their decision -- one case at a time -- and the reasons for that decision. When all groups have reported, then
5. The instructor shares what the institution had decided and why

# **Section II**

## **Training Adults Effectively**



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# METHODS AND MEDIA

The number and variety of teaching methods and media that are available today can be overwhelming. You can significantly increase the motivation, learning and mastery of skills by wisely choosing appropriate methods and media.

The key is to be able to choose those methods and media that will most effectively help you to reach your goal. If you try to teach or improve skills by using the "lecture" format, very little actual learning will occur

Below is a simple guide that describes various methods and media that you should take advantage of in your training. It will help you to choose those methods that will be most effective for your purposes

## Lecture

The "lecture" format (standing up in front of the class and talking or reading to it) is the most frequently used method of training

When used alone, it is also one of the least effective ways to teach

However, used in conjunction with visual aids, and some structured interaction with the class, it is a practical way to present "concepts", "knowledge", or "information"

It is generally not a good way to teach skills

During the lecture, don't hesitate to call on people to add to the knowledge you are giving out Never say something in a lecture that you could draw from the group itself. For example, don't tell the group that the two most common types of accidents in the kitchen are burns and cuts, when you can ask your trainees to tell the class what they are

Encouraging as much participation as possible in defining the problem, and finding the solutions, will start your trainees thinking, and improve their attentiveness

Be sure to make your lectures simple, clear and concise as possible. Limit your material to 5 (or 7 maximum) points. Draw on examples that are familiar and relevant to your employees in order to illustrate your points.

## **Demonstration**

A presentation that shows how to use a procedure or perform an act. It is often followed by a practice session in which trainee does activity under supervision of trainer.

A demonstration is often the most practical and straightforward way to teach a particular task, procedure or skill.

Trainees are highly active and have a high interest level. Provides practice, gives instant feedback. Uses actual item and shows steps in logical sequence.

To be effective, it is important to break each task, skill or procedure into clear, concise, logical steps. This requires some thought and organization ahead of time.

Good for manual skills training. Is expensive and time consuming.

Don't find yourself like the instructor who said, "Oh, I forgot to tell you yesterday that you must turn the red lever to the right. No, I mean to the left, every time you want to shut off the machine. Well, not every time, but whenever the machine is hot."

## **Buzz Groups**

Buzz groups are discussions in which the trainer does not participate. The larger audience is divided into groups of 5 to 7 members for a limited time – 5 to 10 minutes – each group is given a task, or series of tasks, and each member contributes his/her ideas.

The advantages of buzz groups are

- It promotes nearly total participation on everyone's part
- Good for developing questions for a speaker or panel to generate information
- It promotes team building

## Steps

### 1 *Prepare the task.*

Choose a topic that is relevant and somewhat controversial. It is important to limit the subject matter and make it specific.

The task should relate to objectives of the class.

It could be a case study which describes a difficult situation. The case study should be written down and passed out to the group.

### 2 *State the rules*

Give careful instructions and be certain the group understands what is expected of it, and what its objectives are,

### 3 *Appoint a secretary or spokesperson.*

Instruct the groups to appoint someone who will record what the group decides, and present it to the larger group

### 4 *Set a time limit*

Limit the buzz groups to 5–10 minutes. The discipline of problem solving with an allotted time forces the group to focus on the task.

### 5 *Discuss the results*

Discuss the results of all the groups, why one group came up with different solutions, how they feel about each other's solutions

## Role Play

Several individuals or a small group act out a real-life situation in front of a larger group. The individuals make up their parts as they act – there are no scripts. Role play helps understand human behavior and to improve attitudes. It allows players to explore solutions without dangers of on-the-job trial and error.

The "Problem Solver" role play is one of the most effective formats for training. In this format, one or more people are told to act out a character which creates a problem for the other person, who is playing the role of "Problem Solver".

In role play, your function is to set the stage.

### Steps

*1. Choose a typical problem which might occur in your department*

The problem should be fairly simple and give the student a good deal of latitude in solving the problem.

*2. Explain carefully to the person playing the problem what the role entails*

Do not tell them what to say, but rather, tell them the mood they are in, and the problems they have been through. You may wish to send the problem solver out of the room while you are explaining the problem to the problem role player and the rest of the group.

*3. Do not give the problem solver extensive instructions*

In most instances, they are going to play themselves.

*4. Instruct the group to be quiet and observe the role play carefully*

*5. After the role play is completed, ask the problem solver how it went*

Then ask the group. Finally, give your own comments.

*6. Repeat the role play using different actors if time permits*

*7. Give the rules for behavior or suggestions as to how the situation could be handled.*

You may even take the role of the problem solver as an example

### *8. Variation*

The role play just described will tend to give people practice in the right way of handling a situation. Some people also use role play to show how not to handle a situation. In this case, you would give extensive instructions to both participants, telling the problem solver to make as many mistakes as possible. Following this role play, you can ask the group to list all the mistakes that were made by the problem solver.

## **Additional Methods And Techniques For Adult Learning**

### **Correspondence Course**

A type of individual learning where the communication between the learner and source of instruction takes place by mail. The learner proceeds through a sequence of assignments, each of which concludes with an examination. The examination is returned to the school where it is evaluated and returned to the student. The learner proceeds through the course at his/her own rate.

### **On-the-Job**

One individual who possesses a skill teaches it to another. On-the-job training, as the name implies, takes place in the workplace. Simple operations are taught first. As the learner acquires these skills, more advanced operations are taught. Four steps are followed:

- Prepare the learner for instruction.
- Present the operation to the learner.
- Have the learner perform each part of the operation as it is taught.
- Follow up on the training, make corrections and reinforce.

## **Brainstorming**

Participants spontaneously present ideas on a given topic. No idea is dismissed or criticized – everything offered is written down. Quantity, not quality, is sought. After the listing, the group clarifies, categorizes, and/or discusses each item. Gives everyone an opportunity to participate.

## **Case Study**

A detailed account of a real or hypothetical occurrence that trainees might encounter on the job. Following discussion of the case, trainees are often asked to produce a plan of action to solve the problem.

## **Field Trips or Tour**

A group visits a place of educational interest for direct observation and study. Provides first-hand knowledge, stimulates interest, illustrates results, and relates theoretical study to practical problems.

## **Panel Discussion**

A small group of resource persons with special knowledge of a subject having an orderly conversation on an assigned topic in front of an audience. Establishes informal contact with the audience and stimulates audience interest and discussions through frequent changes of speaker and viewpoint. A skilled moderator is needed to keep discussions going.

## **Programmed Instruction**

Involves a self-instructional format, using print and/or other media. Progresses from simple to more complex levels of instruction. Requires active involvement of learners. Provides immediate feedback. Learner works at own pace.

## **Simulation (Gaming)**

A structured experience in the form of a game that has the characteristics of a real-life situation. May make a task simpler to understand. Allows trainees to make decisions or take action in a "safe" environment.

### **Workshop**

Permits extensive study of a specific topic. Participants must be willing to work independently and in groups in which they may improve their proficiency, develop new operating procedures, or solve problems

### **Conference**

A close-knit group who work together in a formal manner. They give serious consideration to problems and their specific solutions

### **Seminar**

A recognized expert leads a discussion among a group of trainees who are engaged in a specialized course of study. A seminar may be for one day or longer

### **Symposium**

A series of prepared lectures given by two to five resource people with each speaker presenting one aspect of the topic in usually less than 25 minutes

### **Committee**

A small group of trainees selected to fulfill a function or perform a task that cannot be done by either the entire group or one individual. The committee may plan an activity, advise the group, study a particular problem, promote an event, or evaluate a particular activity

## Training Methods Usage Matrix

Method	Manual Skills	Job Function Knowledge	Sup/Mgmt Skills	Attitude/ Behav. Chg
Lecture		X		
Demonstration	X	X	X	X
Buzz Groups		X	X	X
Role Play		X	X	X
Correspondence Course	X	X	X	
On-The-Job	X			
Brainstorming		X	X	X
Case Study		X	X	X
Field Trip or Tour	X	X	X	
Panel Discussion		X	X	
Programmed Instruction		X	X	
Simulation (Gaming)		X	X	
Workshop	X	X	X	X
Conference		X	X	X
Seminar		X	X	
Symposium		X	X	X
Committee		X	X	X

# Case Study

The case study is a detailed account of an event or a series of related events that may be presented to an audience orally in written form on film or in a combination of these forms

## The Case Study May Be Used

- 1 To present in detail to a group a problem with which the group is concerned
- 2 To present and study the solution of a problem similar to one confronting the group
- 3 To teach the problem solving process

## Some Advantages

- 1 Gives a detailed accounting of the case under study
- 2 Helps the learner to see various alternative solutions to the problem
- 3 Helps people develop analytical and problem solving skills

## Some Limitations

- 1 Some individuals may not see the relevance of the case being studied to their own situation or the group's problem
- 2 A considerable amount of time and thought is often required to develop the study
- 3 Some group members are stimulated to overparticipation while others may assume a non-participatory role

## Physical Requirements

- 1 Physical requirements vary with the type of presentation. If the case is presented through dramatic acting a stage area is required. If visual aids are required in a presentation the room should be suitable for this kind of presentation. If the case study is a written one a large table and chairs may be all that is necessary.

## Procedure

- 1 Materials are put into the hands of the participants in advance if the case study is in written form and to be read before the meeting.
- 2 Appropriate techniques to use during the presentation and discussion are selected and parts rehearsed if necessary.
- 3 The chairman or moderator introduces the topic, explains what the case study is, and the responsibility of each individual. He then guides the discussion and other activities.

## Similar Methods and Techniques

- 1 Written materials, film, the dramatic skit and speech may be used to present the case to the group. Group discussion is used to carry out the second part of the case study.

# Role Playing

In role playing some members act out a real life situation in front of the group. There is no script, no set dialogue, and they make up their parts as they go along. The group then discusses the implications of the performance to the situation or problem under consideration.

## Role Playing May Be Used

- 1 To examine a delicate problem in human relations
- 2 To explore possible solutions to an emotion laden problem
- 3 To provide insight into attitudes differing sharply from those of the participants

## Some Advantages

- 1 A dramatic way of presenting a problem and stimulating discussion
- 2 It can provide clues to possible solutions and explore them without the dangers inherent in a real life trial and error approach
- 3 It gives the players a chance to assume the personality of another human being—to think and act like him

## Some Limitations

- 1 Some people may be too self-conscious or too self-centered to act successfully in role playing. Others may be shy and fear being made ridiculous before the group.
- 2 Role playing before large audiences is less effective because of the psychological effect of the large group upon the players.

## Physical Requirements

- 1 A room large enough to provide seating so that all members of the group may see the action. No stage or platform is necessary with groups of 30 or less. Costumes or elaborate props are not necessary.

## Procedures

- 1 The problem or situation is clearly defined by the group before role playing begins, and the scene is set by the group leader with the assistance of the group.
- 2 Players should be selected just before role playing begins and not warned in advance, although a brief warm-up period may be necessary to throw off self-consciousness and get in the spirit.
- 3 The leader should allow the action to proceed only so long as it is contributing to understanding (usually five to ten minutes).
- 4 After discussion a second set of actors may be chosen and the scene replayed.

## Similar Methods and Techniques

- 1 Role playing is staged in about the same manner as the dramatic skit. The primary difference is that in the skit parts are assigned in advance and it is rehearsed before presentation before the group. In role playing there is no advance preparation and all is spontaneous. Role playing dealing with problems of a social nature is sometimes called a sociodrama.

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# Brainstorming

Brainstorming is a technique where creative thinking takes precedence over the practical. The idea is to get out before the group all ideas possible with no thought to how practical the ideas might be. The participants are urged to be as free wheeling and uninhibited as possible.

## Brainstorming May be Used

- 1 To get as many new and novel ideas as possible before the group for evaluative discussion
- 2 To encourage practical-minded individuals to think beyond their day to day problems and to think quantitatively instead of qualitatively
- 3 To move out on a problem when the more conventional techniques have failed to come up with a solution
- 4 To develop creative thinking

## Some Advantages

- 1 Many people are thrilled at the freedom of expression inherent in brainstorming
- 2 Solutions to previously insoluble problems can be discovered
- 3 All members of the group can be encouraged to participate

## Some Limitations

- 1 Many individuals have difficulty getting away from practicalities
- 2 Many of the suggestions made may not be worth anything
- 3 In the evaluation session it is necessary to criticize the ideas of fellow members

## Physical Requirements

- 1 A meeting room with a chalkboard or other surface on which the ideas produced can be written hurriedly and preserved for the follow-up discussion period
- 2 A conference table or semicircle arrangement to expedite discussion following the brainstorming

## Procedure

- 1 The chairman explains the procedure to be used and a recorder is selected to list the suggestions
- 2 As ideas are thrown out they are recorded in public view
- 3 The ideas are discussed to determine if any have practical application to the problem at hand

## Similar Methods and Techniques

- 1 Brainstorming is different from any other group technique although principles of group discussion and buzz sessions are much in evidence

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# Leading Group Discussions

Some techniques for conducting successful discussions follow

- **Set ground rules**

Try to adhere to the amount of time allotted for each discussion

Encourage everyone to participate

Discourage interruptions to the speaker

Monitor the discussion and the speakers

End the discussion when the allotted time has passed.

- **Establish a nonthreatening environment**

Encourage open, relaxed communication. Keep the discussion on a positive, constructive note. There are no wrong responses. If a response is not the answer you are seeking, ask the group for additional answers. When the correct answer is offered, substantiate and support that answer.

- **Ask for volunteers to respond to questions**

Don't demand — invite and encourage participation. If necessary, call on individuals who will not be intimidated by being singled out. You may be able to encourage participation from shy or quiet individuals by engaging them in conversation during a break.

- **Encourage participants to be concise and specific**

Ask them to provide support for their answers

- **Encourage responses from personal experiences**

The participants' personal experiences are important elements of the learning process. Actual experiences help to relate the material to on-the-job applications.

- **Keep the discussion on topic**

If a participant's response is clearly off the subject under discussion, redirect the discussion by asking a question that ties it back to the subject. Or acknowledge the point and recommend that it be brought up again at another more pertinent time in the discussion.

- **Summarize what has been said**

When it is time to move on to another topic or question, summarize what has been said. This provides a valuable reinforcement of key points and smoothes the transition between topics

# **Improving Your Facilitation Skills**

## **(No Matter How Good They Are)**

by Mary Fillmore, Director  
Changing Work, Chestnut Hill, Mass

Even the very best facilitator can improve. It is important to keep trying different styles and techniques not only to maintain one's effectiveness in groups, but also to avoid becoming bored with the way "I've always done it." Here are some ideas to keep you moving toward excellence.

### **Pay close attention to written evaluations.**

If all you are getting back is euphoric praise, change your evaluation so that you receive specific input about points you can improve. Look for patterns in what people are saying, and pay close attention to the one or two people who were dissatisfied in some way. They probably represent a broader range of people than you would like to think.

### **Invite a peer to critique you.**

Ask someone you respect as a facilitator to drop in for an hour or to watch you. Clue the person in about areas where you feel you may be weak, or parts of your curriculum which you think may be fuzzy or unsuccessful. If you are facilitating with someone else, ask them for the same services.

### **Develop alternative examples and anecdotes.**

For all of your major points, develop new stories to tell or examples you can use for illustration. Polish them carefully, and try them with different audiences. See which ones work best. An observer can help you to decide, and/or you can ask the audience specifically whether the point was clear.

### **Watch yourself for signs of boredom.**

If you are bored, the audience probably is, too. Try changing the order of your material, the room arrangement, or the techniques you are using (try role play instead of debate, for example). Ask the group for more input and examples from their experience. Move around the room more.

### **Use an audiotape for an hour.**

Virtually everyone has characteristic speech patterns which become monotonous after a relatively short time. Listen to an hour of your own talking and try to hear the patterns. You may, for example, usually raise your voice toward the end of a sentence, or use a particular kind of opening ("Now, to take the next point..."). Once you can hear the patterns, you can break them, and you will be much easier to listen to. Likewise, find the verbal tics (habitually used words or phrases) and purge them systematically.

### **Make it your goal to reach every single participant.**

No matter how quiet or shy someone is, make it your goal to engage them and make it possible for them to participate comfortably and actively. The difference between outstanding and good facilitators is often their ability to

capture the attention and contributions of the people who too often stay mum. Ask yourself what you did to draw out every person present, and what other steps you could take to involve them.

**Watch a videotape of yourself.**

The first time you see it, turn the sound off, and watch your body language. Do you look calm or frenetic? Composed, or ready to fly away? Do you seem rooted to the ground, or tentative and unsteady? Make sure you are conveying the impression you want to. If you are not, practice and re-tape. When you listen to sound as well as watching yourself, pay attention to the substance of what you said, the pattern of your voice, and verbal tics (see above).

**Redo your visual aids.**

Almost all visual aids can do with simplification. Reduce the number of words on your slides, overheads or flipcharts, and add illustrations wherever you can.

**Interview participants who may be honest with you.**

While it is never easy to find someone who will give real feedback, call several people who have been in groups you have facilitated, and ask if they would spend half an hour with you discussing the session. Explain that your purpose is to improve your performance, which you can only do if you know how you are coming across as a facilitator. Ask specifically about the most boring parts of the day, the tone, the time allotment to different topics, what was missing, other ways you could have handled different people or situations which arose, and so on.

**Set your own criteria, and evaluate yourself.**

You probably know better than anyone where your weak points lie. Set some criteria for improvement, and look at yourself in that mirror at the end of each session. You'd be surprised how much better you can do.

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## **Preventing Audience Boredom**

Everyone has been in classes where they were bored -- because of the subject, because of the everlasting rhythm of the instructor's voice, because of lack of sleep the night before. While there is no way to keep every single person fully engaged at every moment, one of the facilitator's main jobs is to see to it that the participants are engaged most of the time. How?

### **Tailored information that you know is relevant**

By careful advance work, you can ensure that the material you are presenting is relevant to the audience's situation. Use examples which are drawn on their experiences, and which apply directly to the dilemmas they have discussed with you. Throw out any material which would be off track before you start, so they don't tune out.

### **A reason to listen**

If you've done your homework, your audience will see immediately why they should listen and tune in. They will know how the course is going to solve problems they face, or at least tell them how to approach difficult situations. People can be very patient with a training situation if they are convinced it will be helpful to them, but until they reach that point, their attitude is "show me." You need to win them over as early as possible.

### **Examples and anecdotes**

Nothing engages most people as much as a good story. It must be to the point and say exactly what you want it to (which real life often does not). Polish your examples and anecdotes so that your timing is as good as a comedian's. Don't be afraid to talk about times when things went wrong, or when you tried to do things the way you are recommending, and it didn't work out. People often remember anecdotes and tell them to others long after they have forgotten whatever was on the overhead. Beware, however, confidentiality issues, "Oh yes, that must have been when Joe was chief. He did a terrible job," is not the reaction you want.

Think about every major point you want to make, and come up with at least one cogent example or anecdote for each one.

### **Participatory exercises**

With a few brilliant exceptions among the world population, most people cannot lecture well enough to prevent boring an audience at times -- even if the subject is fascinating. Adults don't respond well to being talked at. Any participatory exercise will perk things up. In addition to designing participation in from the first, be flexible enough to respond if you see

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people nodding off Break them into pairs to discuss some aspect of what you are saying, and get them to report back, or ask them to come up with as many reasons as they can why what you are saying is dead wrong  
Controversy always picks things up

### **Varied activities through the training period**

Look at your training design from the standpoint of varied activities, not just substance and how to cover it. If you have a 15 minute presentation followed by a small group exercise, then another presentation and another small group exercise, people may tire of it. Try to introduce different methods, or different angles on the same questions. If people have been interacting in twos and threes, try putting them in groups of seven, or letting them work individually in writing for a while

### **Physical movement: yours and theirs**

The first thing to do if you see people's eyes wandering away is to move closer to them, and use more vigorous gestures Most people become much more alert if someone approaches them physically Try moving around more, not only in the front of the room, but into the center of the U if you are using one, or around the edges of the room A team can make good use of the physical space with one person at the front while the other circulates

### **Diverse voices and opinions**

Simply hearing different vocal tones prevents boredom, which is one of the great advantages of team facilitation In addition, asking for input from the participants has the benefit of varying what others are hearing and looking at Different opinions (voices in the metaphorical sense) also stimulate people and make them want to listen more closely, especially if everyone feels that the field is open and they will be allowed to contribute

### **Humor**

Humor can make an enormous difference in maintaining interest -- as long as it is tasteful (i e avoids slurs) and in some way relates to your subject

### **Breaks**

When you've tried everything else and people are still yawning, take a break, and see if you can get a clue by talking with someone about what's wrong

### **Physical arrangement of the room**

Classic classroom arrangement is a killer Try anything else Many facilitators prefer the open U, which allows you a lot of contact with people, so you can keep track of how they are feeling

**Maintain your own interest. If you are bored, they will be, too.**

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# **Section III**

## **Making Coursework Interesting**



**EP3 Train-The-Trainer Workshop  
WEFTEC'95  
Miami Beach, Florida**

# **MAKING THE COURSE RELEVANT AND INTERESTING**

## **Before**

**Survey participants**  
**Plan for student needs**  
**Consider what they already know**  
**Assess their work situations**

## **After**

**Ask for feedback**  
**Find ways to work-in other's ideas**  
**Incorporate ideas from group**

# TRAINING FACT SHEET: "PREPARING FOR TRAINING"

## Preparing Your Materials

When you prepare handouts, either to include in advance materials, or to give people after your course is finished, think first about your purpose

- Do you want to remind people of what you said?
- Do you want to tantalize them with what you are about to say?
- Do you want to give them clear instructions about an exercise or case study?
- Do you want them to read the material later as an amplification of what they learned?
- Do you want them to find more detail about what they already know, or just reinforce it?
- Will the materials be used for reference?
- Would you like participants to distribute the materials to others?

There will nearly always be some people in a course who want to pursue the subject further, and you may want to provide them with a bibliography or list of groups and people they might consult. In designing the materials, try to put yourself in the position of the trainee. What would you want to know? How much would you already be likely to know? How much background would you need? If possible, talk to some people like those who will be participating, and get their opinions.

Once you have drafted the materials, get other people's comments about them – particularly those who know little or nothing about the subject. They are most likely to pick up on anything obscure or inconsistent, unless you are dealing with a highly technical area. Expect that you will need to revise your draft at least once.

In considering audiovisual aids, be sure that they are merely aids, rather than ends in themselves. An overhead projector, showing the outline of what you are doing, can be useful in an extremely large group. But it means a darker room where people are much more likely to nod off. If your purpose is to maintain a good connection with the group, any visual aid is likely to dilute your contact with them. On the other hand, a video or film can be most helpful in changing pace, especially in a course that lasts several days. If you decide to use any audiovisual aids, know the equipment backwards and forwards, or who the technician will be, and have phone numbers you can call if something goes wrong – despite the fact that you will have run the whole operation through at least once on the equipment you will use.

## Preparing Your Space

You will probably be more comfortable and effective if you can select the room and arrange the seating to suit the group. Be sure that you see the space in advance and have a clear picture in mind of how you will use it. Know who has the key to the room, if it will not be open, and specify the equipment you will need.

- Flipchart
- Fresh markers
- Paper for flipchart
- Paper/pens for participants
- AV equipment
- Tables or not
- Podium or table for notes
- Water
- Name tags

- Access to Xerox machine
- Pointers
- Tape or substitute

You may have your own peculiarities, but this is a good beginning list. Consider

- Space

Do you have a comfortable fit between space and the number of participants? The interaction will be very different if a few people are swallowed up in a cavernous space, or if they are crammed together. If you feel that the space is too big, use room dividers, if available, or keep the lights out in one end of the room. See if there are visual tricks you can play to make it seem smaller. On the other hand, if the room is tiny, clear everything out of it except the flipchart, a table for notes, and the chairs. If possible, leave the door open. Plan in advance for breakout space, if you need it.

- Chairs

If you have a choice, be sure the chairs are the most comfortable available, no matter how they look. The chairs will have more to do with how well people listen than almost anything else you do. Arrange them in a way that suits your purpose well. If you want the participants to talk with each other and connect well, give them an arrangement like a circle that will help them see and talk with each other. If you want all their attention on you and the flipchart, try a more conventional configuration. You may also want to vary the seating, especially if you are working with them more than a day.

- Tables

If participants have to take extensive notes, tables can make them less physically tired and enable them to spread out comfortably. The price is that tables divide people from each other, and can get in the way if you want the group to break down into smaller units other than pairs.

- Clocks

Try to set up the room so you can see the clock, but the participants can't. If there is no clock, bring some timepiece of your own with an analog dial. You can't glance at a digital display as quickly as you can an analog display.

- Orientation

If the room has a gorgeous view out the window, set up the room so you look at it, rather than the participants. They will have natural light coming in over their shoulders, and will be focused on you and one another, rather than the beauties of the great outdoors. If you have a choice between a blank wall and one that is cluttered up with doors or equipment, choose the less cluttered one. The less people have to be distracted by accoutrements, the better.

- AV Equipment

If you are using AV equipment, be sure that it is installed and in working order. Run through what you will have to do with it, if there is no technician, and double check the phone numbers for people who can repair it, if something does go wrong.

- Flipchart

Be sure that there is enough paper to meet your requirements, and then double that amount. Markers are usually old, so be sure you get some fresh ones. Prepare all the flipcharts you want to have ready in advance. If some of them will follow group discussions, when you expect to use up blank pages, consider putting the prepared flipcharts at the back of the pad, and tabbing them with paper and tape so a number or word indicates where each one is, or using paper clips for the same purpose. The flipchart should be used not only to keep the group clear about what will come next, but also to clarify and order their discussion so they can see how they are related to the course topics.

Be in the training room at least an hour before your session begins. Try to make the final arrangements and head problems off at the pass. A few participants will be there 15 minutes early, and you want to be ready when they come.

## Preparing Yourself

### *1 Recognize and build on your strengths as a trainer*

Ask others what you do well, and use your own good judgment. If you have a strong voice, be aware of how you use it. If you know the subject backwards and forwards, use that as a confidence builder. Write down some of the things you know and do well on index cards as reminders for the times when anxiety is building. Figure out how you can strengthen your strong suits still further – through practice or amplification, using them in new settings, or whatever

### *2 Identify and erode your fears and anxieties.*

Be very exact about what is bothering you. When you fantasize a disastrous scene in the training room, what is it? Is it yourself drying up, or getting no response from the group? Is it being attacked by a hostile participant? Be as specific as possible, and work with others on what you would actively do to change the situation if it arose. Role play if you need to, in order to give yourself more confidence

### *3 Diagnose and practice improving areas in which you are weak.*

Ask friends and observers whether you have verbal or non-verbal mannerisms which could distract an audience. Most of us say "Um" or "Uh," put questions at the end of our sentences when they are not appropriate, and have irritating fidgety or other non-verbal tics. Watching yourself in a mirror, or listening to yourself on a tape, you will soon find them just as irritating as others do, and will be more conscious of them. Think about what you will do instead. In the case of verbal mannerisms, reminding yourself before you begin to speak that you do have something important to say, and can say it clearly, may help. Non-verbal mannerisms usually have to be extirpated by replacing them with something else. If you play with a pencil, be aware of arranging your hands differently and perhaps keeping pencils away from the training room altogether

4 *Rehearse in front of a mirror, with friends, and especially with peers who are trying to learn the same skills.*

Ask an ally to attend your training session, so you can get feedback from a supportive peer. Tape what you say and listen to yourself. See if it makes sense, and how you sound. Get as many opinions of your performance as possible.

5 *Clear away false obstacles.*

Don't wreck your composure by having any concerns that are unnecessary. Try your clothes on a few days before the event and make sure you didn't spot that blouse or those trousers. Think about transportation in advance. What time will you have to leave home, and how, to get to where you're going in good time? Preparing your material well in advance, and knowing it thoroughly, can alleviate some (although probably not all!) of the anxiety every novice feels.

6 *Make sensible final preparations*

Get enough sleep the night before the session. Prepare flipcharts and other materials in advance, so you don't have to worry about them. Review your notes only as much as necessary; don't obsess. By the time the day itself comes, you know what you are going to know, and the rest has to wait. Remind yourself of your strengths and what you are trying to do. Remember why you wanted to teach the course in the first place. Finally, put it in proportion: none of the participants will die if the day doesn't go perfectly, and neither will you.

**Training Fact Sheet: "Preparing For Training" was prepared by:**

**Mary Dingee Fillmore (617) 969-4974**

## Visual Aids

This is a visual world. There is much evidence that people of all ages not only understand, but also retain what they see significantly longer than what they merely hear.

Everyone is aware of the power of pictures, words, sounds, and action when they are skillfully combined.

Visual aid materials have useful powers in communication. They compel attention, help an audience to understand ideas and items which are too complex for verbal explanation alone, and they can help overcome limitations of time, size, and distance.

Some examples of visual aids that you can use to make your lectures more effective are:

- Paper Flipcharts, Chalkboards and Magnetic Boards

Use to list major points, to list ideas generated from the class, and to summarize. If diagrams or words are applied before starting your presentation, tape sheets of blank paper over them and remove them at the appropriate times during your presentation.

- Graphic Techniques

Application of certain graphic techniques are important for preparing graphic materials to dramatize, explain problems, or demonstrate.

- Projected Materials

Overhead transparencies are particularly useful for addressing large groups. The screen becomes a large flipchart. You operate an overhead projector in the front of the room as you stand or sit beside it, facing the audience. You can point to details, write or draw symbols on the transparencies while they are projected on the screen.

35 mm slides can be handled and stored easily and are an adoptable medium for nearly all types of presentations. Slides are arranged in trays and with a remote-control attachment you can operate the projector from the front of the room. To use slides effectively, room illumination must be markedly reduced.

- Recorded Materials

Audio recordings Use a tape recorder to judge the "audio" part of your speech. Your inflection, the number of pauses, the "ahs," and other speech mannerisms become immediately evident.

Videotapes, carefully chosen for relevance to your subject matter, are often a graphic and interesting way to stimulate thinking about a problem, to impart knowledge, or to change attitudes. To be effective it must be followed by a group discussion during which you analyze the particular situation.

Videotapes can also be very effectively used to see and hear yourself as you give a speech, to be able to study your body movements, facial expressions, and the manner in which you use your visual materials can be a constructive revelation.

# **Section IV**

## **Handling Troublemakers**



**EP3 Train-The-Trainer Workshop  
WEFTEC'95  
Miami Beach, Florida**

Every trainer eventually runs into an audience determined to resist. Here's how to recognize volatile situations, cope with their challenge and reassert control.

## **Participant Hostility: Why It Comes With The Territory**

by Carl E. Pickhardt

A trainer is always a target. Even when training within the organization to which you belong, your leadership position temporarily separates you from the group with which you are working. Every group makes a participant/leader distinction: the participants are we and the trainer or trainers are they. As an outsider trainer, this distinction is even more strongly felt. "You are a stranger, you are not one of us."

Participants do, however, assign you two roles as a trainer. You are an authority coming in to exert training control, and you are an expert coming in to enable the development of skills and understanding participants do not already possess, or possess in lesser degree than yourself. Having given you these two roles, participants have now identified you as a target, and some will feel impelled to move to destroy your effectiveness and legitimacy in each area.

Why? Because in all organizations there is always a certain amount of free-floating dissatisfaction, anxiety, frustration and anger which accrues from the daily pressures of organizational life — people feeling pushed, blocked and let down in their work relationships. There is a desire to express these negative feelings, but in a "safe" setting which will not jeopardize standing at work. The training situation can provide this outlet. The rules of social conduct which ordinarily govern work relationships are temporarily relaxed. The trainer becomes a safe authority target upon whom participants may displace frustrations with their superiors, someone they can with relative impunity challenge, criticize and punish. They may in addition compete with the trainer, elevating their own self-esteem by putting the "expert" down. Some may feel built-in resentment toward the trainer as well. It's easy for you to talk about our problems since you don't have to live with them." That the trainer is free from the toils of the participants' problems can serve as an irritant itself.

Trainers are in a real sense paid to be scapegoats — to provide opportunity and target for this pressure release. We must accept this reality and learn (and this does take experience) not to take participant hostility personally. Any time you are going to work with a group which you know in advance is operating under undue pressure, you can expect basic attacks on your two roles. They will attack your expertise ("You don't know so much," "I knew all this before," "I know more than you") And they will attack your authority ("You can't control me," "I'll do what I please," "I have more power than you")

## Hostility Expressed

They will come at you in a variety of ways

There is hostile withdrawal — participants who refuse you both verbal and nonverbal response. "If you can't reach us you will fail to teach us," they seem to say

There is hostile diversion — participants who initiate their own social interaction independent of that which you are orchestrating for the larger group. "If we can secede from your control, we can encourage others to do likewise," they seem to say

There is hostile attack — participants who directly challenge your authority, oppose your directions or criticize your message. "If we refuse to go along with you, that rejection will undermine your confidence and destroy your poise as a leader," they seem to say

Participants particularly resourceful with their hostility can use all of these in combination. For example, they first set up a diversion to invite your response. Then, as you move to recontrol that situation, they attack you from out of their support group. And finally, when you try to deal directly with their objection, they withdraw into stubborn silence and will not respond

## What Does It Mean?

When participant anger is expressed in any of these three ways, it is always a statement of protest. The participant, beneath the overlay of hostility, is indirectly saying: "I don't like being placed under your leadership. I don't like what you represent. I don't like what you are saying. I do not like what you are asking me to do."

Further, participants do not commit themselves to public protest unless they are trying to elicit a particular trainer response to their challenge. They may want to punish you, and indirectly those responsible for the training, until you defend or apologize for your presence. They may want to push you until you give up your agenda and give way to theirs. They may want to provoke you into a fight to allow them to vent frustrations hitherto suppressed and usually forbidden.

The choices of a trainer wishing to honor protest are to reflect back the concern you think that protest may be masking ("Would you like to talk about your dissatisfaction at being here today?"), to apologize, change the agenda or absorb the ventilation of grievances. The major problem in honoring participant hostility in these ways is that it does delay and divert you from fulfilling the training assignment. There is, however, one case where some diversion may have survival value for you as a trainer.

## When Hostility Triggers Fear

In all relationships anger is the great intimidator. For this reason one cannot adequately talk about the management of anger without including some discussion about the management of fear. It is an unpleasant reality of the trainer's life that on some occasions the expression of participant hostility will trigger within you some fear. This is normal. And although beginning trainers are most vulnerable to this response due to inexperience, even the most seasoned trainers are not entirely immune to this anxiety.

When, in response to participant hostility, you experience sufficient fear to distract you from your training focus, your first priority must be to accept that fear and move to reduce it as quickly as possible. Why? Because fear undercuts the three major self-supports upon which your leadership as a trainer depends: your confidence, concentration and momentum. You suddenly question if you can do the job, your mind wanders away from your training purpose into worry, and you lose the assertive and responsive momentum upon which the illusion of your training authority depends.

Like all teachers, trainers have three major needs when working with a group: to be liked, to be in control, to be effective. When these needs are frustrated the trainer can become afraid. The participant who attacks you can trigger your fear of rejection. ("They do not like me.") The participant who creates a diversion can trigger your fear of authority loss. ("I cannot control them.") The participant who withdraws beyond your reach can trigger your fear of failure. ("I am not being an effective trainer.") Training is risky. Potential anxieties are built in, and under pressure from participant hostility they may become actualized.

## Coping With Fear

The most efficient way to reduce trainer fear is to close the distance with the hostile participant. Although our instinct at these times is usually to move away (to flee) or to defensively attack (to fight), both of these responses only increase our own anxiety and communicate it to our attacker. Behaviorally, closing the distance means

- 1) physically moving closer to the hostile participant,
- 2) making direct eye contact;
- 3) courteously soliciting information about the nature of their protest,
- 4) Dialoguing in a positive and supportive way about their concerns

Even if the participant will not respond to these last two overtures, going through these active motions can still serve as an anxiety reducing function for you. The purpose of these four moves is to reduce your fear of the hostile participant by reasserting your initiative in the relationship, by gaining more information about them, by establishing through dialogue a working connection with them that you can manipulate. Having moved to regain self-control, you are then ready to consider your options for gaining control of participant hostility in a group.

## **Responding To Participant Hostility**

One way to conceptualize participant hostility is as a resistance to the training progression through which you are leading a group. In your choice of responses it is always well to consider that the harder you press against that participant resistance the more likelihood there is that the resistance will increase. This is an isometric principle. (Isometrics is the conditioning procedure where, by pushing hard against a fixed resistance, you increase the tension in the relationship.) This applies to managing interpersonal resistance. The harder you push against the resistant participants, the harder their resistance is likely to become, the more energy you are going to have to spend in maintaining that relationship, and the more fatiguing it will become to you over time. Trainers need to conserve their energies and should follow the path of least resistance whenever possible, particularly in response to participant hostility. The following five categories of trainer response begin with the lowest and move to the highest amount of trainer resistance applied to manage the situation.

**Option 1 Avoidance** There are three major strategies to be considered here. The first is to literally ignore the hostile action or remark and proceed with your program as though nothing untoward had occurred. Sometimes simply denying protesting participants the reinforcement of your response is sufficient to shut them down. A second set of strategies has to do with avoiding direct contact with the hostile participants while attending to their disruption. Here you solicit peer influence to shut them down. For example, you deliberately lapse into silence after the hostile outburst. If the majority of the participants want you to continue, they will move to quell their disruptive peer. A third set of strategies has to do with providing an indirect response to the participant. You appear to be avoiding the protest, but actually you are interpreting its intent and then responding to meet the underlying concern expressed. For example, a diversion builds in a group to your left, but you avoid looking at them.

However, because you interpret their protest as a restless desire for an intermission, you go on a few minutes and then, apparently independent of the protest, announce a break. Notice that with none of these strategies do you actively engage the resistance.

**Option 2 Acceptance** This strategy is a very direct one. When hostile participants push against you, move to find out the purpose of the protest and then give them their way – accept their resistance. Some people feel that a trainer sacrifices authority by "giving in" this way. However, allowing some latitude for participants to alter the content or conduct of the session to suit their needs can actually increase their sense of ownership involvement in the training. For example, a participant who is dissatisfied with a training agenda which puts his concern last may well be brought back into cooperation by altering the order of items to be addressed. Of course, acceptance of resistance is counterproductive when the participant's only intent is to disrupt the proceedings.

**Option 3 Adapt.** The strategy here is a manipulative one. What you want to do is to engage with the participants in such a way that you ultimately use the force of their resistance against them or for yourself. Thus when they protest and strongly disagree with what you are saying, you immediately switch sides and say, "You're right, that's a good point." Then you take their argument away from them, you begin arguing for them against the position you had previously taken. Having thus championed their argument you have defused their resistance. Sometimes this is sufficient for your purpose. At other times you may, now that you control the thrust of their argument, want to turn it back into the direction you were originally heading.

**Option 4 Stand fast** This strategy is at once a very simple, but a very energy-expensive response to make. What you are doing is standing fast in your intent to do what the participant is protesting. You will not give way. You will not discuss. You will not negotiate. Perhaps the training was designed to include an evening session, and several participants are vociferously complaining. You simply stand there and let their resistance wash over you and wear itself out. Then you proceed with the program as contracted. Withstanding this onslaught of negative emotions can be abusive to the trainer, which is why providing a firm resistance against which the hostile participants can level their protest is an energy-costly option.

**Option 5 Push back.** This is the most energy-costly response to participant protest. They push against you. You push back. When two resistances push against each other, of course, you have created the social formula for conflict. What you hope to gain by resisting is to overcome the participants' resistance, persuading them to back off. The problem with pushing back, however, is that if the participant doesn't back off you have just created a fight. In almost all cases, that is a no-win situation for the trainer. If you "win" the fight, participants tend to array against you out of sympathy for their defeated peer. If you "lose," then participants tend to have reduced respect for your training authority.

Pushing back is always a gamble. As a bluff it can pay off if the protest subsides and there is no conflict. Sometimes the stakes are even great enough where fighting back with a hostile participant can be worthwhile for the trainer. For example, you may have a participant so forcefully hostile that others are both intimidated from cooperating with you and afraid to stand up to and stop their peer. At this point, if the program is to be salvaged, you are the only person there to beat this opposition down, restore order and reestablish the training framework. Obviously, pushing back is the option of last resort when dealing with a hostile participant.

## **Surviving Hostility**

When encountering participant protest, the most critical concern for a trainer is to maintain your "cool" — the capacity to calculate and choose wisely under pressure. Fear provoke impulsive responses, not reasoned choice. The five management options just described are available to us only so long as we retain our power of reason. Thus the key to trainer control of a hostile situation is keeping fear down and all management alternatives open.

As trainers we need to accept the inevitability of participant hostility. We need to learn to deal with our fear when upon occasion it becomes aroused in a hostile situation. We need to keep our cool in order to preserve our power of management choice. We need to know and use the full repertoire of these choices. And we must not take participant hostility personally. It comes with the job.

## **How To Make Participants Angry**

**And how to cool them down and turn their energy to your own objectives**

**Participant hostility truly comes with the territory. There are ways, however, in which a trainer can create hostility over and above that which is already built in**

**You can discount what participants say, or laugh at or make light of a remark made in seriousness. You can not listen to what participants say or ignore the implications of what they have said after they have said it. You can interrupt them and press on with your remarks or directions. You can put them down, using humor – particularly sarcasm – to make them look foolish in front of their peers. You can even side with one participant against another, thus publicly endorsing a "winner" and, more importantly, a "loser" in an argument.**

## **Value Offending**

**Here you advance ideas which you know to be counter to the dominant values of the group. You can directly argue with or criticize values which are widely shared. You can offend participant taste by the way you dress, address people (title avoidance, discourtesy), or by the language you use (slang, perjoratives, expletives). Many times you can be set up in advance to offend, as when you are training on a set of value sensitive issues such as affirmative action, sexism or racism.**

## **Violation Of Expectations**

**Participants expect to be meeting within a specified time frame, start late and keep them overtime. They expect coffee and there is none. They expect a certain topic or agenda and you present a significantly different program. (Sometimes you can be set up for this by a contracting agent who asks you to deal with one set of issues, but tells the participants something else "in order to get them there.") You can begin a program by soliciting participant input and then proceed to ignore the issues they expected you to address.**

Sometimes you can be trapped by a "Don't you agree?" question — asked by the people you are ostensibly working for with the clear expectation that you will endorse the statement enclosed in their question. If you disagree, you violate that expectation, and they can become very angry indeed.

## **Reduction Of Freedom**

By restricting freedoms for choice which they have already or are expecting to exercise you also arouse participant anger. You can prohibit smoking. You can force them to group separately from their friends after they have already seated themselves by social preference. You can force them to talk when they want to be silent, be silent when they want to talk, share when they want to be private, work on task exercises they dislike. Often you can be set up for this anger by a manager who schedules training sessions over lunch, after hours or on weekends.

## **Prevention Of Participant Hostility**

In all of these ways, you can by your own choice — and sometimes by the choice of others — be a contributing factor to the very hostility you seek to avoid. If, through no choice of your own, you have reason to anticipate a hostile group, there are some preventative strategies through which you as a trainer can move to reduce the level of that hostility

1. **Personalize the session.** One way to reduce participant hostility is to give up some ownership in the session itself. People tend to be supportive of what they help create. Therefore, either prior to or at the outset of the session, give them an opportunity for input into the agenda. Then be sure you act on their input. You can powerfully reduce hostility if you can actually involve some of the participants, providing they are willing, in training leadership roles, serving as group leaders, giving directions, making short presentations. Participants are normally reluctant to attack peers volunteering for such leadership duty. You can also personalize the meeting space. For example, have participants create some personal statements on newsprint and then post their production on the surrounding walls

**2 Personalize your presence** For participants, the safety of a trainer as a target for hostility is largely based on a "stranger" identity. Since they do not know you personally, since they have no caring connection with you, they have little reservation in attacking this unknown expert and authority. Conversely, the more participants come to positively know you as a person, the less comfortable they tend to feel attacking you. Therefore, help the people you are working with get to know you for your own protection.

It is always useful to self-share, to present to the group information about yourself that characterizes your individuality. In addition, you can prospect relationships in advance of the session. Prospecting is the act of informally meeting and socializing with as many participants as possible before the session begins. This not only gives you information about the needs and expectations they bring to the session, it introduces you to them so that when you first stand up in front of the group you are a known, not an unknown, person. Finally, you can use ally relationships. Here you get to know three to five participants well enough through prospecting so that throughout the course of your training interaction with the group you make public references to your relationship with them — what they earlier said, what you and they discussed. Hostile participants are usually reluctant to attack a trainer who is socially allied to their peers in what apparently is a positive and familiar way.

**3 Purge anger** There are three kinds of initiatives you can take to elicit the early expression of hostility in order to get it out and over with. You can make a sympathetic statement: "I feel that many of you are upset at being here today, and if I were you I would be too." You can make a humorous statement: "Anyone want to testify about how happy they are to be here today?" You can make an attack statement: "You're all here today because you've been doing things wrong and I'm here to get you to do things correctly. Right?"

Lancing and bleeding off the anger early can make for easier progress later on if, having invited the protest, you are willing to commit sufficient time and energy to listen to, legitimize and accept it. The choice of invitation — sympathetic, humorous, attack — is a matter of which approach best fits your style as a trainer.

4 **Bridge building.** If you sense the hostility building after the session gets underway, pinpoint the participants leading the protest. At a break (which you may want to take early) initiate some positive social interaction with these individuals to gain information about their objections and, more importantly, give them an opportunity to positively know and connect with you. Another device, if you don't want to stop and deal with a hostile objection at that moment, but do want to allay further protest, is to table the complaint for later consideration, even emphasizing your commitment to do so by noting it down on your chalkboard or easelpad. In that case, be sure you do address the issue later

5 **Rewards** Two rewards, second in potency only to money (stipends paid to participants for attending) are time (early release) and food (refreshments) Greeting people upon arrival with donuts and coffee and then announcing your intention to amend the schedule so they will get out half an hour early are enormously effective devices in influencing a positive disposition to a training session which participants do not want but are directed to attend For many participants, handouts of written materials and tokens of attendance (special folders, pens, etc.) are also effective - C P

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# **Section V**

## **Conducting An Interactive Workshop**



**EP3 Train-The-Trainer Workshop  
WEFTEC'95  
Miami Beach, Florida**

# LEADER'S GUIDE FOR CONDUCTING AN INTERACTIVE POLLUTION PREVENTION ORIENTATION WORKSHOP

by Deborah Hanlon and Jeuli Bartenstein U S EPA

## General Information

### Purpose

The purpose of a Pollution Prevention Orientation Workshop is to help people understand the concept and philosophy of pollution prevention and to adopt a prevention approach to environmental decision making. Therefore, the fundamental goal of this type of training is simply to help people begin to *think pollution prevention*.

The attached curriculum outlines **one example** of a framework for a course to introduce this concept using the **participatory** methodology as taught by the EPA Institute. Although there is a lot to learn and know about pollution prevention, **Keep It Simple** when designing a workshop. Try to introduce no more than four or five key topics that you feel comfortable in teaching.

The goal of a pollution prevention orientation training program is to introduce the concept and to help people begin to think pollution prevention. Conducting creative and interesting workshops is one way to accomplish this goal.

### Duration and timing

Because the needs of the audience may vary enormously, enough material has been provided to allow the instructor to select and tailor the information to the level of the group. A three hour session is sufficient. A room large enough to hold the participants in a U format with tables and additional break-out space is the best setting.

### Audience

Small workshops of 15-25 are better for discussion and discovery learning techniques. It is always important to know the audience and their level of knowledge. Gather as much information as possible about the audience prior to the workshop and determine their level of knowledge in introductions and through discussion during the workshop.

### Materials

There are a variety of pollution prevention materials that can be used for a creative and interesting orientation workshop. Most people will not read a lot after leaving the workshop so it is best (in the interest of pollution prevention) to show what is available and how to obtain materials. Once the participants are interested in the pollution prevention topic, they will search out additional information that may be of particular interest to them.

***Be prepared and make sure you have the workshop essentials***

- \*Overhead projector with extra bulbs
- \* Name plates
- \*35 mm projector with extra bulbs
- \* Masking tape
- \* Flip charts with paper

***Prepare essential flipcharts prior to the session.***

# Pollution Prevention Orientation Workshop

## *Instructor's Guide*

### **1. Instructors greeting and introduction:**

### **Instructor Notes**

*Welcome people to the course and make them feel comfortable as they come in to the room. Introduce yourself and set a tone of openness so that others will follow in their introductions.*

### **2. Purpose of Workshop:**

*Have a prepared flipchart with course objectives*

The purpose of this course is

- a To introduce pollution prevention concepts, philosophy and programs,
- b To explore problems and potential solutions/incentives for implementing pollution prevention activities, and
- c To provide tools and resources to implement pollution prevention in programs and activities where appropriate,

*Have a prepared flipchart with orientation agenda*

The following issues will be discussed and discovered in this interactive orientation workshop

- \* What is Pollution Prevention?
- \* Why it is important?
- \* What are some of the incentives and barriers to implementing prevention?
- \* How do we implement Pollution Prevention Programs?
- \* Resources and information

*Ask for additions to or clarifications of agenda*

*Confirm group expectations on what will happen in workshop*

### **3. Participant introductions:**

*Conduct an ice breaker. For example, have small groups describe something that they do which contributes to the generation of pollution, and name one or two things that they can do to prevent pollution.*

Examples \* I drive to work alone I could  
Carpool, metro \*I could change purchasing habits I could  
buy environmentally friendly products with less packaging

#### 4. What is pollution prevention? (clean production?)

##### Training objectives

a To ensure participants understand what pollution prevention is and is not and,

b To ensure that participants understand the difference between **prevention activities** and **pollution control and management activities**. End this session with a discussion on the benefits of preventing pollution as compared to managing or regulating pollution after it is generated or released into the environment

Make sure that you, as the instructor, have a clear grasp of the concept and definition as used by EPA and/or your own agency Use definitions from the Pollution Prevention Act and Agency memos etc

##### Training activity to help participants understand and identify with the concept of pollution prevention

##### Flip Chart

(define each word separately in own words)

*Ask participants to define prevention. Chart responses*

*Ask "What other things are associated with prevention? health, fire, crime etc (concept is important)*

*Show definition of prevention,*

**"activity that keeps something from happening anticipation of outcome" source: Webster's Dictionary**

*Ask participants to contribute words that might be used to define pollution ie waste, smog, contamination, degradation, wastewater etc Show overhead with definition of pollution as defined by EPA's Science Advisory Board*

**" Pollution is the undesirable change in the physical, chemical or biological characteristics of air, water or land that may or will harmfully effect human life or that of other desirable species, our industrial processes, living conditions or cultural assets, or that may or will waste or deteriorate raw material resources "**

*Ask participants to define pollution prevention in plain English (what it means to them)*

*Finally show EPA's formal definition of pollution prevention \**

## **Instructor Notes**

**"Pollution Prevention is considered by EPA to mean source reduction. Source reduction, as defined in the Pollution Prevention Act of 1990 states that "source reduction is any practice that reduces the amount of any hazardous substance, pollutant or contaminant entering a waste stream or released into the environment prior to recycling, treatment or disposal." Pollution Prevention applies to all forms of pollutants; air pollution, water pollution as well as hazardous and non-hazardous solid wastes and applies to all sectors of society including industry, government, agriculture, energy, transportation and consumers. source: EPA Pollution Prevention Policy Statement, 1990 Pollution Prevention Act 1990 \***

*Capture words or phrases from class contributions and circle those appropriate words that can be used in the EPA definition*

Make sure participants understand the environmental protection hierarchy that emphasizes prevention as first choice but also considers recycling, treatment, incineration and disposal of wastes and pollutants as important components in the overall strategy for environmental protection. Prevention simply will reduce the burden of costly treatment, recycling and disposal options in many cases. This will be illustrated in the **EPA Pollution Prevention slide show**

*Show EPA's or your own Pollution Prevention slide with prepared script of examples of pollution prevention techniques, technologies and programs. Take questions as they arise*

**Question audience** *What are some of the reasons we are now turning our attention to pollution prevention?*

### **5. Barriers and Incentives Discovery Exercise:**

**Training Objective:** To help participants think about the challenges of implementing pollution prevention options and to find some creative solutions to these problems. Students will discover the barriers to implementing pollution prevention in industry, as consumers and as EPA employees. Students then try to find solutions or incentives to the barriers they've identified.

*identify potential programs, solutions and incentives that will help to resolve/overcome these problems Report Out on solutions Allow discussion Ask participants for additional ideas on how each group could implement pollution prevention programs and what activities EPA could do to promote Pollution Prevention*

**Examples**

Programs/Incentives for industry

- Improve public relations
- Save money in long run
- Protect worker and community health
- Give tax incentives to upgrade
- Recognition programs
- Technical assistance and info dissemination

Incentives for consumers

- Provide education
- Make it easy
- Make it inexpensive etc

Incentives for EPA employees

- Employee award program
- Get top and middle management support
- Provide training on what to do etc

**6. How to do Pollution Prevention.**

**(Hands on exercise demonstrating that you don't need to be a Rocket Scientist to implement pollution prevention)**

Depending on audience you may want to discuss specific examples of pollution prevention accomplishments and a conduct a descriptive short lecture on how to establish a pollution prevention program \*

Discuss the essential components as identified in EPA's Facility Pollution Prevention Guide EPA# 600-R-92-088

i.e top management commitment, goals, periodic assessments, accounting practices, technology transfer and evaluation  
These elements are applicable to all sectors and programs

## **Discovery Training Activity.**

## **Instructor Notes**

*Divide class into groups of 3 or 4 to work on problems and present to class their solutions. Examples of exercises and problems are included in the guidebook, CREATIVE APPROACHES TO POLLUTION PREVENTION TRAINING (Examples include the Play Dough Fun Factory or Blitzfn exercises) The purpose of the case studies is to make the participants feel that they can implement a pollution prevention and that they have an important role to play in implementing the program*

*Report Out from each group*

*Discussion among groups on lessons learned*

## **7. Pollution Prevention Resources**

*End workshop by providing the participants with resources so that they may be able to find specific pollution prevention information pertaining to them*

Resources, where to go for more information

*Start by discussing the Pollution Prevention Clearinghouse,\* ORD and OPTS Studies on Pollution Prevention, State activities and resources*

**The Pollution Prevention Information Clearinghouse, developed by EPA's Office of Research and Development and the Office of Pollution Prevention and Toxics is a multi-media clearinghouse of technical policy legislative and financial information dedicated to promoting pollution prevention through efficient information transfer. The Clearinghouse is made up of three elements . A Hard copy repository in EPA Libraries**

**A computerized conduit to data bases and document ordering and A hotline (hand out brochures and fact sheets)**

*Refer to the Pollution Prevention Resources and Training Opportunities Manual which list State resources, education and training opportunities, case studies, videos and calendar of events*

*Discuss further needs*

## 8. Closing and Evaluation:

## Instructor Notes

*Close workshop by asking each participant to identify something that they learned from the workshop that they will be able to use in their own jobs or personal lives to further promote the concept of prevention. Open discussion, questions, evaluation of class*

(\*) Asterisk denotes that there are informational fact sheet summaries on this topic to use as handouts and for your own information. Available from the EPA and the EP3 Cleannghouse at (703) 351-4004

## Recommended Reading List for Pollution Prevention Instructors

- 1 A Whack On the Side of the Head, Von Oech, 1985
- 2 Hazardous Waste Minimization, Harry Freeman (ed ) 1990 McGraw Hill
- 3 Serious Reduction of Hazardous Waste, US Congress Office of Technology Assessment, 1986
- 4 The Age of Diminished Expectations, Paul Krugman, MIT Press 1987
- 5 Conceptual Blockbusting, Adams, 1986
- 6 EPA Pollution Prevention Facility Guide, 1992
- 7 Prosperity Without Pollution, Oldenberg, Hirschorn, 1990
- 8 Quality is Free, Philip Crosby, 1987
- 9 Instructor Training Workshop Manual, EPA Institute, 1988
- 10 UNEP Audit Manual