
Training of Trainers

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American International Health Alliance
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Purpose of the Workshop

To introduce participants to a range of issues and strategies for training others; also, to practice some of those strategies.

Objectives

By the end of today's workshop, participants will feel prepared to conduct training in their home institutions. They will understand the need for training; be aware of the complex relationship between trainer, learners, and material; know and be able to employ some specific training methods.

Methods

This workshop will involve as much participant interaction as possible. In each of the five units, Julie will introduce concepts, provide written and group exercises, and facilitate individual and group presentations. "Additional Resources" are provided at the end of each unit so that participants can read about the issues and concepts in more depth than we will be able to cover in the workshop.

Workshop Outline

Unit 1: Introductions, Expectations, Planning

Unit 2: Learners, Trainers, Material: The Relationships Between Them

Unit 3: Barriers and Paradigm Shifting

Unit 4: Training Paradigms, Methods, and Aids

Unit 5: Outcomes, Assessment, Evaluation

"We are what we repeatedly do. Excellence, then, is not an act, but a habit."

Aristotle

Unit 1: Introductions, Expectations, Planning

Workshop Activity

Introduce another person in today's group to the whole group. Do this in the following way:

- Choose a partner whom you do not know.
- Ask this person the following questions:
 - Your name, your home country
 - Your medical institution, your title
 - Your experience with training or teaching others
 - Your experience learning or being trained
 - Your goals and objectives for today's workshop
 - One unusual characteristic about yourself.

Introductions are one way to begin training when it occurs in groups. Introductions can reduce nervousness, increase group cohesion, and "break the ice" -- overcome the cold stiffness that often occurs at the beginning of a new activity.

Expectations can also be established through group introductions. Good training happens when the expectations, goals, and objectives of participants (both learners and trainers) are compatible.

Workshop Activity

Jot down quick answers to the following questions:

What similarities in the expectations did you hear in the introductions?

What differences in the expectations did you hear?

What could account for those differences?

What strategies could we employ in today's workshop to address these differences?

This last question leads to the idea of **planning**. Good training has been planned in advance so that it meets the needs of the participants. Although the answers to the questions above may seem to be too last-minute to be of any real use in today's workshop, they are not useless. These answers will help me modify and emphasize different aspects of what I had planned to do. Even last-minute plans can be helpful.

Good trainers must be **flexible, reactive, and pro-active**. By building in a planning activity at the beginning of our workshop today, I am attempting to practice and illustrate these three attributes.

Other ideas for planning, including **needs assessment, audience assessment**, and **Pike's Six P's**, can be found in the "Additional Resources" section after this unit.

Unit 2: Learners, Trainers, Material: Relationships Between Them

Workshop Activity

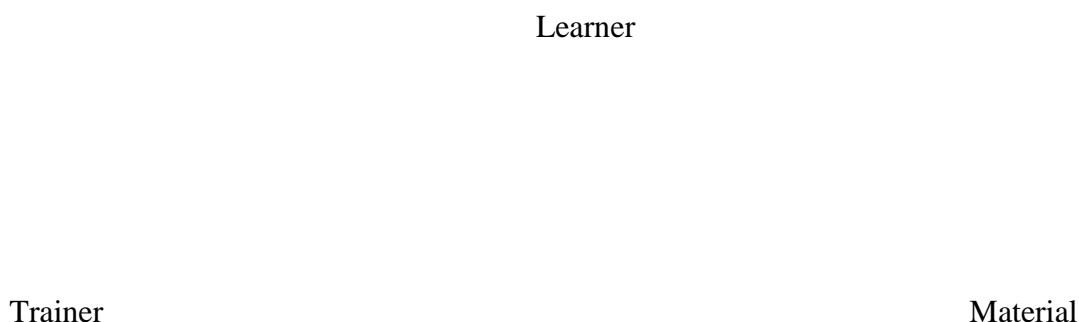
- People learn in a variety of ways. Think back on your experiences as a learner. Please check all of the boxes for the ways that *you* learn best:
 - Discussions
 - Group Exercises
 - Video tapes
 - Reading Material
 - Hands-on activities
 - Projects
 - One-on-one conversations
 - Classroom environment
 - Cassette tapes
 - Computer programs
 - Lectures
 - Practice
 - Problem Solving
 - Taking tests and reviewing the answers
 - Using music
 - Drawing, charting, graphing
 - Other

- People teach others in a variety of ways, too. What kind of trainer are you? Write down a few ideas below.

Given our preferences for teaching others by using the modes that are most comfortable to us, the relationships between trainers and learners could become unproductive.

Add to the mix the material that trainers are conveying to their learners, and you have a classical **rhetorical situation** that needs to be negotiated in order to be productive. (See more about Aristotle and classical rhetoric in the “Additional Resources section.”)

The triangle and arrows below indicate the interactive nature of training:



Keep in mind that both learners and trainers have to adapt their styles to one another. Trainers have more responsibility in this matter, of course, because they are the knowledge experts. Therefore, trainers should be **competent** (know what you're talking about!), **concerned** about the learners (listen well to their questions and answers), and **flexible** (adjust to your learners' needs, knowledge, and attitudes about you and your material).

Discussion: Change, Visionaries, Functionaries

The idea of flexibility implies change, and often change is the reason behind training: some new method or system or machine has been introduced into an institution or organization, and people must be trained to perform or understand or operate it.

In the case of the LRC project, you Information Coordinators are charged with disseminating the expertise you have gained by training others in your institutions to use the LRC resources. You are functioning as **Change Agents** in your institution. (See "Additional Resources" for more information on this idea.)

Often, trainers who are change agents must practice what is called "**tough training**." Such trainers are pro-active rather than reactive; rather than always waiting to be told what to do, such trainers should be sufficiently aware of their organizations' needs -- sometimes before these needs become evident to others in the institution -- in order to come forward with realistic training plans that will improve performance (Rae 1995).

Such trainers must become actively involved in deciding training needs and requirements: who should be trained, when, in which specific areas, where, and so on. The goal of "tough" trainers is to be "**visionaries**" rather than "**functionaries**" in their institutions.

Visionaries can see needs and address them without being told. They have people skills as well as technical skills, and they have a view toward the future as well as the past. Visionaries imagine and develop innovative ways of incorporating information technology into their institutions. Ideally, visionaries have the power to implement their vision.

Functionaries, on the other hand, fulfill their roles as disseminators of information rather than generators of new knowledge. They have technical skills and function well in their prescribed roles, but they have not been given the authority to go beyond these roles.

The distinction between visionaries and functionaries has implications for training. The role of a functionary is to communicate information to those who do not understand (subordinates) and then report on this process to those in authority (superiors). This role does not allow for broad-based, knowledge-generating communication or training.

The role of the visionary, on the other hand, centers on communication in its epistemological sense, as a way of making new knowledge. Visionaries create new knowledge, new ways of using the technology, new understanding of the place of change in their institutions. All of these characteristics increase the chance that training will be retained and will improve the organization.

As visionaries, “tough” trainers can make a greater, longer-lasting impact on their institutions. In terms of the LRC project, Information Coordinators who are visionaries and who design and implement training that changes the behavior of the learners will go a long way toward ensuring the sustainability of their LRCs.

Workshop Activity

“The best way to have a good idea is to have lots of ideas.” Linus Pauling

“Ideas are like rabbits. You get a couple, learn how to handle them, and pretty soon you have a dozen.” John Steinbeck

In the space below and on the back of this page, brainstorm as many ideas as you can for becoming a “tough trainer” who is a visionary at your institution. ⇒

Time for a Coffee Break!

Unit 3: Barriers and Paradigm Shifting

Workshop Activity

“But how can I be a visionary?” I can hear you asking, “What about **Barriers**? It is impossible for me to become a visionary or a “tough trainer” at my institution.”

Please make a short list of the barriers you have experienced or can imagine experiencing in your role as trainer.

How similar is this list to the person sitting next to you? After discussing the similarities and differences, please share them with the whole group.

Compare what our group has mentioned to the following list of **barriers to learning**:

- Learners' attitudes
- Administrators' attitudes
- Learners' knowledge level
- Learners' skill level
- Learners' memory
- Learners' past bad experiences
- Learners' comfort with new ideas and concepts
- Administrators' comfort with new ideas and concepts

Now compare what our group has mentioned to the following list of **barriers to training**:

- Trainer appears unprepared.
- Trainer handles questions improperly or incompletely.
- Trainer is unfamiliar with knowable information.
- Trainer does not involve all participants.
- Trainer does not cover the objectives promised.
- Trainer does not relate the material to real life.

What can you, as a visionary trainer, do to avoid, control, or minimize these two lists of barriers?

“God grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to know the difference.” Dr. Reinhold Niebuhr (1932)

Workshop Activity

Using the Tinker Toys provided, please take ten minutes to build the tallest tower that you can build.

What are the paradigms (or frameworks or set of guiding and constraining assumptions we have about the task) that you used to construct the tower?

Time for Lunch!

Unit 4: Training Paradigms, Methods, and Aids

Discussion: Training Paradigms and Methods

Paradigms (the frameworks or sets of guiding and constraining assumptions that we all have about a task) shape the training methods that trainers use to train. When paradigms are challenged, changed, and expanded, the training methods you use can expand, too.

It is good to have a repertoire of training paradigms and methods available because learner knowledge, attitudes, and needs vary. Below are a number of paradigms and methods:

Paradigm: Use familiar methods for training.

Method: Lecture

Advantages	Disadvantages
Lecturer is in full control of material.	Effectiveness depends upon lecturer skill.
Lecturer is in full control of time.	Lectures can become repetitious and “canned.”
Material is covered in a logical order.	Learners are passive.
Lecturing is “safe” for trainer and learner.	Lecturers receive little concrete feedback.
Lecturers are easy to replace.	Learners retain a small percentage of what they hear.

(Rae 1995)

Workshop Activity

In the space below, list some other familiar paradigms or training methods. How have they become familiar to you?

Paradigm: “What I hear, I forget; what I see, I remember; what I do, I understand.” Confucius

Below is another way to state the assumptions behind this paradigm. Do you believe these numbers?

Human beings retain 10% of what we read,
 20% of what we hear,
 30% of what we see,
 50% of what we see and hear,
 70% of what we say,
 90% of what we say and do. (Pike 1992, 61)

Method: Small Group Learning

Advantages	Disadvantages
Cost effective way to meet common training needs.	All participants may not have similar motivation to learn.
“Two heads are better than one.”	“Too many cooks spoil the broth.”
Builds community through work toward a common goal	Interpersonal difficulties can derail a group’s efforts.
Other people are present with whom problems can be discussed, experiences exchanged, and ideas supported.	Different learning styles, speeds, and abilities in a heterogeneous group impede a group’s learning.

Method: One-on-One Tutorials

Advantages	Disadvantages
Personal and immediate	Time-consuming for both trainer and learner
Learner-driven and customized	Limited in their ability to diffuse information widely

Method: Peer Training

Most people have heard the adage, “You don’t really learn a subject until you have to teach it.” The act of training someone else to perform a task increases the trainer’s own ability to perform that task. Research on a major United States Army project confirmed this observation: each trainee in one of the Army’s field wireman courses performed first as a learner and then as an instructor. Not only did each trainee teach after achieving the required 100 percent performance criterion, but peer training was the sole instructional method used in the course (Weingarten, Hungerland, and Brennan, 1972).

Paradigm: All learning is problem-solving.

Method: Case Studies

Use a real problem situation as the example for learners. When selecting the case, you can choose to describe the problem fully or merely to outline the problem so that the learners identify and ask appropriate questions. The most important thing, however, is to allow the learners to solve the problem themselves. Then discuss the real solution to the problem. This follow-up discussion allows the learners to understand the reasons for the solution and compare those reasons and assumptions to their own.

LRC Example: Hospital administrators would like to use a database to keep track of patient records. Here are ten sample patient records. How would you construct a database that is searchable by doctor name, patient name, date of birth, and date of admittance?

Method: Role Playing

When learners take on the roles of people in actual situations, they have an excellent opportunity for personal involvement and practical experience.

LRC Example: One person plays the role of a medical student; another person plays the role of this student's professor. The professor would like the medical student to find six medical journal articles about epilepsy for a conference paper the professor is preparing. How would the student use the LRC facilities to find these articles? What should the professor do to advise this student?

Workshop Activity

How many of the paradigms or methods above are familiar to you?

How many are new?

As you make the move from familiar paradigms to new ones, what do you think can be gained?

What is lost?

Does the gain outweigh the cost?

Training Aids

Training aids are tools that help to illustrate or speed the learning process. They also serve as a follow-up reference for participants to help them remember and apply what they've learned once they return to their work assignments.

Handouts

From detailed reference manuals to bullet-pointed copies of the presentation, handouts support the presentation, stimulate the mental involvement of participants, and provide a post-session refresher or reference. The depth and objectives of the session will determine the complexity and detail of handouts.

For most situations, include an outline of the course, examples of any overhead transparencies or slides, space for notes and/or worksheets to practice the skills or issues being discussed.

Glossary of Terms

Key terms, acronyms, and jargon specific to the area or topic being discussed are vital resources. Encourage participants to add to the glossary when they struggle with terms used during the training session (such as "Visionary" and "Functionary," for example).

Reading List / Bibliography / Resource List

Are there additional resources to which a participant can turn to learn more about the topic?
The material used in the content of the program was gathered from where?

Visual Aids

Films, videotapes, computer graphics and programs, overhead projectors with transparencies, posters, flip charts, etc., all have advantages and disadvantages. Keep in mind that simple is often better.

The Objects Themselves

Learners learn best when they are able to practice their skills using the actual equipment. Everett Rogers calls this “Trialability,” and the more opportunities the learners have for trying the equipment, the more likely they will be able to use it fully. (See “Additional Resources” for a discussion of the five factors that Rogers says influence learning.)

The Trainers Themselves

Although trainers can get nervous when contemplating this fact (as I am well aware!), they are themselves one of the most powerful and visible aids. Learners are seeking knowledge, advice, guidance, and skills in an area that they will soon be practicing on their own. Learners naturally assume that their trainer is skilled, experienced, and effective.

Consequently, there will be some role modeling – consciously or unconsciously – and trainers should try to model the behaviors they would like their learners to imitate.

Computer-Based Instruction

Some people think that this technique is a substitute for human training rather than an aid to training. As a substitute, it has the following advantages and disadvantages:

Advantages	Disadvantages
Learners can go at their own pace.	Learners can feel isolated from other human beings (no face-to-face contact).
Learning can take place at any time the computer is available.	Access to equipment, software and hardware compatibility, and infrastructure can vary.
Training costs can be minimized.	Initial investment in hardware and software can be prohibitively expensive (high set-up costs).

As an aid to training, computer-based instruction can be an effective supplement that reinforces the trainers’ objectives and increases the learners’ retention of the material.

Unit 5: Assessment, Evaluation, Outcomes

“We don’t really learn anything from our experience. We only learn from reflecting on our experience.” Robert Sinclair

“The key to learning is problem solving.
A problem is a question or a series of questions to be answered.
Learning doesn’t occur until the learners (not the trainers) answer the question or solve the problem.” Doug Smith

“Learning has not taken place until behavior has changed.” Robert W. Pike

Workshop Activity

Which of the quotations above make the most sense to you? What do they have in common?

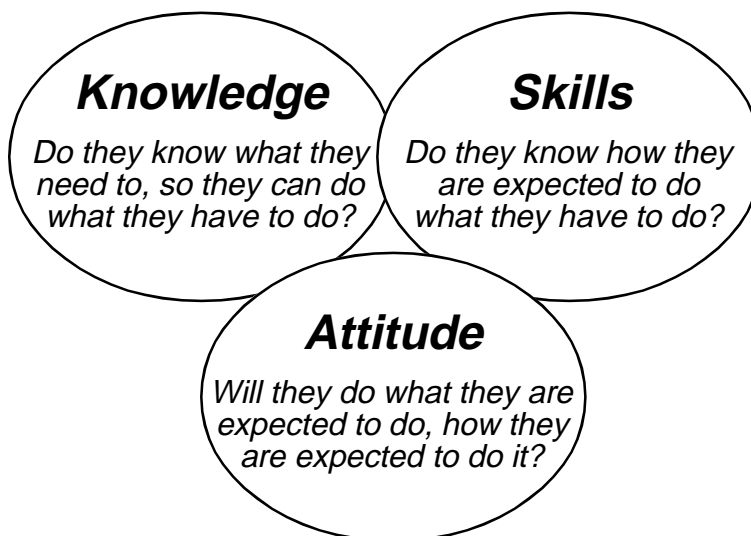
Discussion: What are the outcomes of training?

The purpose of training is to change people’s behavior so that they can do something that they could not do before, can do something more effectively than they could before, or can do something more proficiently than they could before the training.

Assessing these outcomes can take many forms:

- Immediate assessment: progressive validation through testing during the training event.
- Immediate outcome: an end-of-the-course validation of the course by the participants in terms of how individual sessions and activities were rated.
- Intermediate outcome: an assessment of the retention and application of the learning at a stage some time following the end of the course, say three to six months.
- Ultimate outcome: a longer-term assessment after, perhaps, a year of retained learning and learner application, and the long term benefits to the organization.

One way to visualize these outcomes and assessments appears below:



If the answers are “Yes” to the questions above, then the training has been successful.

Workshop Activity

Below you will find five end-of-the-session questionnaires. What differences do you see between them? When would each be most useful?

1.

Please make a mark under the score which you feel is most relevant.									
		7	6	5	4	3	2	1	
Enjoyment	A lot								A little
Usefulness	A lot								A little
Content of Session	Good								Poor
Extent of Learning	A lot								A little

4.

Please make any comments which you feel are important or significant on any aspect of the session.

5.

Workshop Evaluation Checklist

1.	Content targeted to the experience level of the learners.	Yes	No
2.	Adequate time spent on difficult-to-learn tasks.	Yes	No
1.	Content reviewed at regular intervals.	Yes	No
2.	Exercises simulated the tasks.	Yes	No
3.	Activities built in to aid transfer to the job.	Yes	No
4.	One-third of time spent on Presentation of content.	Yes	No
5.	Two-thirds of time spent on Practice and Feedback.	Yes	No

Options for reinforcing outcomes

- Ask trainees to develop written action plans about how they are going to use their new skills.
- After each exercise, discussion, activity, etc., give trainees a few minutes to think about, "How does this apply to my job?"
- If possible, have trainees bring samples of their work to the training session and give them time to assess the work's quality in terms of the new skills being learned.
- Try to arrange for trainees' supervisors to attend the training sessions (not necessarily at the same time). If supervisors possess the same skills, they are more likely to support and encourage trainees to apply what they have learned.

- Ask supervisors to fill out questionnaires about their employees' job performance before and after the training. Also get trainees to fill out the same questionnaire before and after. When everyone is aware of and looking at job performance in this way, application of new skills is encouraged.
- Give supervisors a training session or briefing on how to coach, guide, and encourage the use of new skills back on the job.
- At the end of the training program, have a discussion about obstacles that could impede progress in applying the new skills. Brainstorm and discuss ways of overcoming the obstacles.
- Arrange for trainees to attend at the same time as other people from their department or work group so that they will have assistance and support back on the job.
- Structure the course in individual modules. After each module, have learners return to their jobs and apply what they have learned. Then return for the next module. Start each module by discussing progress, concerns, etc., from the last module.
- A few weeks or months after the training session, phone or send a memo to participants to find out what they have done regarding the course content. Collect the responses and send them out as a mini-report to everyone who attended.

Final Workshop Activity

Please provide me with feedback on this session before the end of the week by doing the following things:

1. Choose any of the evaluation forms above, or make up your own.
2. Provide as much detail as possible in your evaluation.
3. (This is important): Articulate the reasons why you chose this form for your feedback to me.
4. Return your evaluation form to me before or during Saturday's Workshop Wrap-Up.

Thank You

Your attention and participation have been a wonderful gift to me. I appreciate your good work to make this a successful workshop. Please visit me if you are ever in Minnesota!

Julie K. Daniels