Doc 4.1. TREE training methodologies

This guide sets out the four-step method of teaching, which guides the structure of a lesson; and provides an overview of ten basic instructional techniques, including when and how they are best applied.

The four-step method

Training programs following the TREE Methodology are necessarily informal and addressed to adult learners. The four-step method of teaching is a helpful guide to developing a lesson plan. The four steps are:

1. Introduction – This prepares the trainees for the activity.   The trainer's task is to get the attention of the learners and focus them on the activity. This would include reviewing the past lessons and relating them to the coming task. The trainer should state the objective of the lesson, reinforce expected learning behaviors and explain how their progress will be assessed.

2. Presentation – The trainer then presents the content, using one or a mix of three techniques

- Through lectures

- Through demonstration, and

- Through discussion sessions

The trainer will use additional techniques to ensure the learners understand the material being presented. This may include

- Questioning techniques

- Black/white board techniques

- Brainstorming techniques

- Visual or audio aids.

3. Clarification – The trainer uses a number of techniques to determine if the students have understood the material and are able to apply it. This may include:

- Tests

- Exercises

- Project completion

4. Closing – The lesson ends with a summary where the trainer reviews the key points and relates it to past and future activities as part of the overall learning objective.

Ten instructional techniques

TraiNER-oriented techniques	Cross-cutting techniques	TraiNEE-centered techniques
1. Lecture – to impart information to learners, usually orally/visually.	4. Questioning techniques - set of methods used by trainers and trainees when asking questions	7. Exercise or Project making – allowing the trainees to practice their skills by making projects related to their lessons
2. Demonstration – to supplement spoken and theoretical presentation of information with hands on and experiential learning.	5. Board techniques Trainers and trainees can use a blackboard to help organize the information and allow the most important points to be highlighted.	8. Field visits – to increase trainees' knowledge on the product or service through observation on actual practices
3. Discussion – reinforces understanding and encourages trainees to understand and solve problems.	6. Brainstorming techniques - group discussion to produce ideas or solve problems through exchange of ideas	9. Case study – to augment the learning process of the trainees through observation of those working in the field and by role plays to practice key elements of the intended occupation.
		10. Role playing method - dramatization of what may happen in real life to allow trainees to practice dealing face to face with real life situation

Technique No.1 – Lecture Method

Definition

A lecture is a one way channel of communication between the trainer and trainees. It allows the trainer to transfer a lot of new information quickly, but allows a great degree of participation especially if the lecture is coupled with two-way questioning process between the trainer and the trainees.

Usefulness

The purpose of a lecture is to impart basic theories on the subject matter, on the identification of tools and equipment, and on safety points on the job. Lectures require a great deal of preparation. It needs time and various teaching aids as support. The lecture session can be structured in relation to the blocks or tasks required in the training syllabus.

Process

1. Introduction - The trainer explains the aim of the lecture.

2. Presentation - The information is presented or given by the trainer.

3. Clarification - The trainer asks for questions especially if some points remain unclear.

4. Closure - The trainer summarizes the main points of the lecture.

Preparing for lecture

1. Prepare lecture and visual support and do not read off your notes while doing the lecture

2. If you have handouts, do not distribute them before the lecture as trainees will read and not listen! Encourage them to take notes. Distribute the handouts after the lecture.

3. Lectures can be combined with other approaches, such as discussions, exercises or workshops or brainstorming.

4. Be sure that the trainees are properly seated and that you are visible to all of them without any obstructions

Tips in giving a lecture

Even a well prepared lecture can seem disorganized if the trainer's techniques of delivery are deficient or the trainer ignores the reaction of the trainees. So here are some guidelines:

1. Make the lecture participatory by asking questions and inviting trainees to respond. _Master the questioning technique._

2. Make use of the blackboard as much as possible to emphasize important points. _Master the blackboard technique_.

3. Write your notes in such a way that they can be referred to but not so structured that you must read from them extensively.

4. Face the class as much as possible. In particular, try to avoid talking into the blackboard.

5. Make sure you look at all the trainees and not just at those near the front or middle of the room.

6. Use your voice and body effectively, varying the tone and pitch of your speech and moving around. This can give important clues to the students about which points are particularly important. Maintain eye contact with the students, both to monitor their understanding and to convey your own feelings.

7. Do not be afraid to repeat or rephrase something, especially if it is an important aspect of the course. Some trainees' attention may have been distracted for any of a number of reasons, and sometimes an idea does not register until the third or fourth time it is stated.

8. Speak slowly and allow pauses so that students can catch up with note taking or pose questions. Avoid using terms that the trainees have not yet seen; introduce or define new words as such.

9. Be alert to the nonverbal reactions of the trainees, such as rustling, frowns, and puzzled expressions or whispering. These indicate that trainees might not be absorbing the information.

10. Mistakes are inevitable. Just make sure you explain your errors to the students, make your corrections, and then proceed.

11. Remember that interjections such as "um" or "ah" or "okay" or "like" or "you know" can become annoying and distracting. Brief silent pauses are usually better.

12. Similarly, be careful not to overuse words such as "clear" or "easy" or "obvious" or "trivial," especially in lower level courses, even if they seem extremely well justified.

13. Think about the extent to which these will help the trainees master the material; they can be useful to the best trainees in the class, but for the weaker trainees they are generally useless at best and demoralizing or aggravating at worst.

14. At the end of class, try to point out where the class is now and what comes next. This can provide a useful link to the next class period(s).

15. Relax, be friendly, and try to give an air of self-confidence.

Helpful teaching aids

There is a need to introduce a variety of (appropriate) visual aids into a class other than using the blackboard. The most widely used visual aids besides the blackboard are:

1. Flip charts

2. Manila papers

3. Overhead transparencies

4. Videotapes

Few of us can follow all these suggestions all the time. One way to improve your lecturing style is to ask someone to view you in a regular or synthesized class session and provide feedback. Another method is to make a tape of such a real or simulated class session and view it later yourself.

Technique No. 2 – Demonstration Method

Definition

Demonstration is the process of showing the trainees how a particular task should de done. It is a teaching method that makes use of man's natural instinct to imitate. It is a method in which showing rather than telling plays the most important part.

Usefulness

Demonstration technique is the most effective method in presenting lesson relating to skills development in TREE training programs. It can also be used to teach mental skills such as in measuring using tapes or rulers, reading a weighing scale, and in emphasizing key points on quality of work and products.

Demonstrations are usually presented only to small groups. Individual differences, rates of learning absorption, and physical difficulties in showing and evaluating the technique limit its use to such small groups.

Process

1. Introduction - Establish and clarify the exact objectives of the demonstration. Explain exactly what the demonstration is all about and how it relates to what the trainees know, have done, and need to know, before doing the first step of the demonstration.

2. Presentation - Involves the following three major activities

    a. Showing. Showing to the participants the how to or methods and standards of workmanship for performing a manipulative or mental skill.

    b. Explaining. Explaining to the participants what is the task all about and why is it being done.

    c. Practice. Letting participants learn to perform the operation by applying or doing the task themselves.

3. Clarification - Encourage trainees to ask questions. The trainer should also ask questions as necessary

4. Closure - Repeat the demonstration later for slow learners who cannot catch up with the rest of the group.

Preparing for Demonstration

The following points are important during preparation, presentation and application of the demonstration technique:

1. Have all tools, equipment, materials, and training aids ready before the demonstration begins.

2. Restrict the length and content of the demonstration into one short and digestible learning activity. Refer to the blocks or tasks on the training syllabus.

3. Establish and clarify the exact objectives of the lesson.

4. Be sure that trainees are physically comfortable.

5. Arrange equipment and trainees so that everyone can see and hear clearly every step of the demonstration.

Conducting a Demonstration

1. Explain exactly the Objective of the demonstration, what the demonstration is all about and how it relates to what the trainees know, have done, and need to know, before doing the first step of the demonstration.

2. Arrange the tasks in sequential order so that trainees could view it from the same point as the trainer performs the operation.

3. Perform the demonstration in the exact manner in which you want the trainees to perform. Do it slowly and clearly for the trainees to catch every key point and important detail.

4. Pause at intervals during the demonstration and ask questions to determine whether the learners are following and getting it carefully.

5. Talk in language suited to the backgrounds of the trainees. Explain new and unfamiliar words. Compare and cite things that the trainees may already know.

6. Encourage trainees to ask questions anytime during the demonstration.

7. Stress safety rules and precautions (key points) at each step where they apply.

8. Have trainees re-state the key steps and key points as soon as the demonstration is completed.

9. Let the trainees perform the operations themselves. Check their performance in accordance with the work standards. Correct, wrong habits immediately.

10. Repeat the demonstration later for slow learners who cannot catch up with the rest of the group.

Technique No. 3 – Discussion Method

Definition

Discussion is a multi-channel communication under the trainer's guidance. Knowledge, ideas, and opinions are freely exchanged among the participants. The purpose of a discussion is to solicit and involve the participants in content transmittal.

Usefulness

In TREE training programs the discussion method is best used in the enterprise and entrepreneurship component especially when the trainees are preparing the transition enterprise plans or TEP. Subject matters such as business strategies, marketing, generating capital, business forecasting and business organizing needs active participation of the members of the group.

Process

1. Introduction - The issue or topic, objectives and instructions for the discussions are explained by the trainer to the group. In most instances the issues are presented into motive questions.

2. Discussion – Discussion method can be approached in two ways:

   • As a whole class wherein everybody is involved – In this case the trainer acts as the facilitator

   • In small groups where the class are divided and assigned several topics – In this case the trainer assigns some trainees to act as the facilitator.

3. Clarification – At the end of the discussion, the trainer, or group facilitators presents the results of their discussions. Clarifying questions are then asked and answered.

4. Closing - The ideas produced during the discussions are summarized by the group.

Conducting discussion technique

1. Allow trainees to freely discuss the subject matter. Give every trainee an opportunity to speak and participate.

2. To identify the issues for discussion, the trainer can relate an earlier experience or insight of the group. Hence, the discussion may be conducted after a case study of a sample enterprise project, or after a lecture.

3. Keep the objective of the discussion in mind. Stop the flow of discussion if it digresses from the objective.

4. trainer must clarify comments, rephrasing in the training context.

5. To summarize, trainer may need to write main points on the board.

Technique No. 4 – Questioning Techniques

Learning as a Two-way process

Classroom training is a basically an interactive activity. Learning is a product of a two-way process - inputs from the trainer and absorption by the trainees. Most of the impact is realized through the process of questions that are posed by the trainer to the trainees, or by the trainees to the trainer. In both ways, the trainer must possess the proper techniques so that the classroom can be a theatre of dynamism and effectiveness.

trainers asking questions

1. **Ask open-ended, not just close-ended questions -** A close-ended question structures the response for the trainees and can be answered by one word, often "yes" or "no", or by a very brief phrase. On the other hand an open-ended question leaves the form of the answer to the trainees and therefore elicits much more thinking or information.

2. **Ask *probing* questions –** Questions such as "do you agree?", "do you believe?" are example of proving questions from the trainer. The intent of probing questions is to draw the trainees' attention to things that may be only implied but where personal reasons and experience are necessary in re-enforcing the learning process.

3. **Promote a *discussion* among the students -** The previous tips usually involve communication between two people, typically the trainer and one trainee, with the rest of the class simply listening. It may be that the trainer will want to involve the majority of students in trying to answer some questions, for example, where there is considerable difference of opinion about the answer. Then the trainer may point the questions directly to specific trainees, especially those who are not participating.

4. **Ask for questions -** If you want the trainees to ask questions, give them opportunities to do so. Pause after making an important point or explaining a topic, or say "Any questions?" or "Are you with me?" or "Do you want me to say more?" However, such statements must be more than rhetorical or used as a technique for you to get your thoughts together before going to the next point. Give the trainees time to formulate their questions before you move

on. Also, look at the trainees to make sure you do not miss someone with his or her hands raised up.

Trainees asking questions

1. **Answer questions -** If you want your Trainees to ask questions, then you should reinforce them when they do by answering their questions. Therefore we suggest that you rarely postpone answering a question or ignore student questions, which is what we do if you do *not* call upon a trainee who has his hand up.

2. **Answer trainees' questions *adequately* -** It is not enough that you respond to the trainees' questions, but you must answer the question to their satisfaction as best as you can. Your answer should be concise and to the point, and you should ask the trainees if you have answered the question. This fosters both accurate communication of content and says "Your question is important and I will take the time necessary to answer it if I can." If, after two or three attempts, you still have not answered satisfactorily, and other trainees cannot help answer it, then it is appropriate to suggest getting together after class.

3. **Listen to the question, or to any trainees' comments -**The way you listen to a question or comment also communicates your attitude toward the trainees. Look at the trainees when they are talking; show that you are following by nodding, etc.; check whether you really understand what they are asking. Do not put down the trainees by avoiding their questions or insulting them.

4. **Admit when you do not know an answer -** If you do not know the answer to a question, say so. Although one of the roles of a trainer is that of "expert" and "information source," admitting that you do not know the answer to a question will probably not damage the trainees' confidence in you. In fact, giving them clues about how certain you are of your answers is likely to increase their confidence in you, for example: "The experts agree that....," "as I recall they found....," "I'll have to look that up....," etc. On the other hand, if you try to fake it, there is a good chance the trainees will find you out and your credibility will be seriously damaged. Assume responsibility for finding the answer to questions you do not know and report back to the entire class.

Process techniques

1. **Wait, pauses and silence are *not inappropriate* class behaviors -** The discomfort many, if not most, trainers feel when a pause leads to an extended silence probably stems from a cultural norm for social conversation where the silence is taken to mean that there is some inadequacy in the communication. This discomfort often is especially acute for new trainers who lack self-confidence. If such a trainer were to tape record his class, he might find that these pauses actually last only a few seconds, very often less than five, not the "eternity" it seemed during the wait. In the classroom, constant talking is neither required nor desirable.

2. **Wait, Give the trainees' time to think -** The basic reason for pausing after asking a question is to give the trainees time to think about possible answers. If the question is worthwhile (and more than rhetorical), even at the memory level, it deserves a wait. Questions at higher levels require considerable time-minutes-for trainees to think before they can adequately answer.

Technique No. 5– Board Techniques

Use of the blackboard

Experience has indicated that the quality of a trainer's performance is often reflected very quickly by the use of the blackboard (or whiteboard). Why is the board so important? Many trainees learn better when they can see as well as hear the material. The oard can help organize the presentation and allow the most important points to be highlighted.

Effective board-work allows trainees to see how a lesson is concretized and/or a problem is solved.

Process and tips in using the board

1. Begin by erasing the blackboard completely. When erasing the board do it vertically from right to left. Material left from the previous class can be distracting. Also, if some stray chalk marks are left unerased, they can often change or confuse the meaning of things you write on the blackboard; therefore it is important to be thorough when erasing.

2. Begin writing at the top of one blackboard panel, move down, and proceed to the next panel. Skipping around the blackboard, placing expressions haphazardly here and there, is discouraged. Explain what you are doing when writing. Organize your work in the same way that you would like your trainees to organize their notes. Scattered comments on the board not only make your presentation hard to follow, but they almost guarantee that trainees' notes will be confusing and filled with errors.

3. Right handed persons will probably be unable to use the extreme left hand panel effectively. In any case, try not to stand in front of the material you are writing.

4. If there are more than two rows of trainees, avoid writing to the very bottom of the blackboard because trainees in the back will not be able to see. Keep the desk at the front clear of large objects that might block the trainees' views.

5. Don't use an eraser to simplify complicated expression because this can easily interfere with trainees' opportunities to take notes. Similarly, if a mistake is made in the middle of a problem and it requires major changes, it is better simply to cross out the wrong part and to redo the problem elsewhere on the board. A different color of chalk might be helpful. Remember that it will take trainees time to make corrections in their notes.

6. Draw diagrams or pictures if appropriate, and define in writing any abstract figures.

7. Explain what you are doing and why you are doing it. Trainee's notes usually consist almost entirely of what you write on the board; they rarely write down what is said but not written down.

8. Highlight important results that you want the trainees to memorize by drawing boxes around them.

9. All writing must be clear and legible, with a height of at least two inches recommended. However, do not write so large that you run out of space after a couple of lines. Avoid putting too many irrelevant marks on the board. Trainees often view everything you write on the board as important, and extraneous material merely confuses them.

10. Don't rely on the blackboard for all your teaching, use other visual aids especially if the topics are of repetitive in nature.

Technique No. 6 - Brainstorming

Definition

Brainstorming is a method used to generate ideas. Psychologists say that the human brain is composed of two "parts", the left brain and the right brain. The left brain is used for reasoning, and the right brain is used for innovation and creativity. This skill can only be mastered by developing a open mind and by constant practice.

Usefulness

In TREE training programs brainstorming is suitable in the enterprise and entrepreneurship development component. The trainees have the opportunity to think and provide solutions to the problems of production, marketing, capital generation, and business strategies as required in their TEP.

In brainstorming, the trainees learn by building on their experiences. They learn to choose from alternative solutions. Brainstorming produces a high degree of participation. It makes the session livelier and stimulates creative thinking. Brainstorming is one of the basic and most fundamental skills that a trainer should learn and master.

Process

1. Introduction - Present a problem or question.

2. Presentation - Ask the group to call out as many ideas and solutions as possible. A basic rule at this stage is that no one should censor or criticize ideas, however crazy they might seem. Creativity is stimulated by encouraging a free flow of ideas. The trainer acts as recorder, writing the answers on the board, without judging, censoring or criticizing.

3. Analysis – After the generation of ideas, the trainer and trainees analyze the ideas generated and place them into categories. Redundant idea and non-relevant ideas are weeded out until useful and reasonable ones remain.

4. Closing - Decisions or consensus are then made out of the results. If there is a need to be more specific, a second brainstorming can be resorted to.

The Law in Brainstorming

GENERATE IDEAS, DO NOT SHOOT DOWN! LIST, DO NOT DEBATE!

The objective of brainstorming is to make the trainees alert and participate. It is important to activate the brain and make it work first before making use of its faculty to rationalize. The trainees would love to contribute their views when they know that their ideas are being accepted. Once ideas are killed, the trainees will tend to argue, or to keep their ideas by themselves. By then their brains stop to function. They would not generate quality ideas. Therefore the session cannot produce better results.

Technique No. 7 – Exercise Method

Definition

Exercise is the process of testing or practicing the new skills or knowledge learned – especially after a demonstration or lecture. The trainees are asked to undertake particular tasks, or make sample projects that test or demonstrate their understanding of the subject-matter. Exercises are usually made in groups in order to apply peer pressures and re-enforcement of the learning process.

Usefulness

Workshop exercise is used to help the trainer to find out how much the trainees have absorbed the lecture or demonstration. In TREE training programs this is realized through the making of projects related to a product, or performing some tasks related to services that are subject of the training program.

Process

1. Introduction - The topic, objectives and the process of the exercise are presented by the trainer

2. Exercise - The trainees are asked to perform the tasks, or prepare the project required in the training program

3. Presentation – The output of the trainees are presented with accompanying explanations on lessons learned

4. Clarification - A synthesizing session (second lecture) is done by the trainer to clarify unclear issues or affirm the performance of the trainees.

Tips in conducting exercise technique

1. If possible assign the trainees in groups. A group exercise helps to reinforce the knowledge through peer activity since the level of absorption of knowledge varies from person to person.

2. If individual exercise is necessary, the trainer must be sure that the assigned task or project is directly related to the trainee's interest or future plans after the training.

3. Make the trainees/participants the owners of their outputs.

4. Be sure that the assigned tasks or projects are not a waste of time and resources.

5. Always summarize results of exercises and relate them to the overall training objectives.

Technique No.8 – Field Visits

Definition

Field visits are out-of-the classroom activities designed to expose the trainees to real work situations. Field visits are usually made in the middle of training. The trainees, together with the trainer observe actual jobs, products or services being made and done in factories, shops, farms, etc. to gain actual experiences that are otherwise learned only vicariously through the lectures and demonstrations in the classroom.

Usefulness

Field visit is an important facet of adult learning. TREE training programs consider this as one of the most productive training techniques - exposure to the actual work environment. This is the principal basis for apprenticeship and other on-the-job extension training methods applied by successful training systems and institutions. In fact, exposures in field visits provide the trainees with the opportunity to imagine themselves in the world of work.

Process

Field visits are better organized so that they become effective. In most cases the following are the required activities:

1. The class identifies issues and problems that they want to be exposed in.
2. The class identifies and agrees on the area, company, or shop to be visited.
3. The trainer communicates to the target area, company, or shop to be visited and make the necessary requests, schedules, and arrangements.
4. The trainer pays a visit to the target site to explain in details objectives of the field visit, the things that the trainees would want to see, and the people that the trainees would want to talk to.
5. During the visit, the trainer introduces the class to the hosts and explains the purpose of the visit.
6. An official of the host is assigned to guide, explain and answer questions from the trainees
7. The trainees takes notes of their observations and experience
8. After the field visit a summary session is done where the notes and experiences are discussed in the class.

Technique No. 9 - Case Study Method

Definition

A case study is a description of a situation that the trainees need to examine and understand. A "case" is an actual event, person, activity, operation, or other real happenings or simulated examples that are capsulated into a story of interest. Trainees are asked to analyze the facts of the case and diagnose the issues and problems set out in the case study. Usually, there are no common conclusions reach or agreed during case studies. Each trainee are allowed to make their own conclusions and learning from the case.

Usefulness

In TREE training programs case study method is more appropriate in the enterprise development component. The trainer may present to the trainees a story of an appropriate enterprise and have it discussed in the class as a case. The class may also invite a real entrepreneur to tell his/her story regarding the operation of his/her enterprise. This is called a "live case" study. This will help the class in the preparation of their TEP.

Process

Case study method goes through the following process:

1. Introduction of the case or story- The trainer presents the case as a story material. If a live case study will be used, the entrepreneur must be agreed upon by the trainees in order to raise more interest. The objective of the case study is presented and the outcome expected is discussed by the trainer

2. Identification of facts and issues - The trainer asks the trainees about the facts of the story and issues raised in the story. This is a re-statement of facts and issues leading to the analysis

3. Discussion and analysis – The problems are identified and the trainees are asked to discuss the pros and cons. They are also asked to provide their own opinions or solutions.

4. Closing – Usually the discussions are left without summary for the trainees to ponder and apply to future events. For cases, however, that needs immediate clarification, the trainer may facilitate a group session to summarize and synthesize the issues and solutions.

Tips in conducting Case Study Method

1. Prepare and distribute the hand-outs of the case before the session.

2. Provide individual help to trainees or groups of trainees who are having difficulty in identifying and analyzing the issues and problems

3. Close the session with a lecture related to the issues and to the trainees' enterprise plan projects.

Technique No. 10 - Role Playing Method

Definition

A role play is a dramatization of what may happen in real life. Trainees are asked to act out roles in a given situation. The objective is to allow trainees to practice dealing face to face with real life situation. The dramatization event is then discussed in an open forum to bring out how situations could have been solved differently. In role play, participants practice near-to-life situations in a protected training environment and receive advice or constructive criticism from colleagues and the trainer. This helps the trainees to learn finer points through practice and obtain guidelines on how to react appropriately in real life situations.

Usefulness

In TREE training programs role playing is an appropriate method in enterprise and entrepreneurship development, especially in business organizing. Trainees may be asked to prepare their business organizational structure. In this instance the trainees should be asked to examine their interest and capabilities in relation to the duties and roles identified in their planned business organization. Role play helps to give the trainees confidence in facing actual situations. The players have to solve the problem immediately and make a decision. However, the trainer should be on guard for some participants that may be carried away in acting their roles, and make the exercise like a farce and something not to be taken seriously.

Process

1. Preparation - Planning is very important. The trainer must make a description of the situation and each of the roles trainees are expected to act out. The business organization in the TEP is a good guide.

2. Introduction - The trainer explains the objectives of the role play and selects volunteer players. The non-players are assigned as observers. Volunteers have to prepare themselves in their roles.

3. Presentation - The volunteers play the game for a set time.

4. Closing - The trainees write the results of their role play and link them with the objectives of the lesson. Then the trainees describe their views on what they did well and what could be done differently in the future.

Tips on Role Play technique

1. Role plays can easily be run if you plan beforehand

2. A time limit must be set and a trainee assigned to keep track of the time.

3. Always be positive when criticizing the player.

4. It will be more helpful if the role playing will closer to the requirements of the TEP.