

Engineering Science Institute for Training (Esi)

Riyadh, Saudi Arabia

Policy and Procedure

On

“Type of Training Courses”

Document No.: Esi/P&P/0502/Rev. 02

There are numerous methods and materials with the most effective training techniques are available to prepare and equip the trainers to conduct better training sessions. Among the many choices are available, but Esi is adopting the best and most suitable techniques for the training courses as per their technicality and scope.

Since Esi is an ISO 9001:2015 certified institute, therefore, all its policies and procedures are as per the International Standards. For this Policy of “**Type of Training Courses**”, Esi close look at each of the myriad techniques and assess their advantages and disadvantages in consideration to the followings:

- a. What are the required training goals for the upcoming training course?
 - New skills.
 - New techniques for old skills.
 - Better workplace behavior.
 - A safer workplace.
 - A fair and equal workplace free of discrimination and harassment.
- b. Who are to be trained?
 - Fresh Graduates.
 - On-Job Employees.

- Upper Management.
- c. What is the training budget?
- d. What is the duration of the course?
- e. What training resources and materials are available?

If the answers to these questions begin the narrowing process for the training choices. Now let's examine those training methods, their pros and cons, and where they best fit in a training program.

The Choices

Even with the many technological advances in the training industry, traditional formats remain viable and effective.

1. Classroom or Instructor-Led Training

Instructor-led training remains one of the most popular training techniques for trainers. There are many types including but not limited to the followings:

- a. **Blackboard or Whiteboard:** This may be the most "old-fashioned" method, but it can still be effective, especially if the trainees to write on the board or ask for feedback that the trainees to write on the board.
- b. **Overhead Projector:** This method is increasingly being replaced with PowerPoint presentations, which are less manually demanding, but overheads do allow you to write on them and customize presentations easily on the spot.
- c. **Video Portion:** Lectures can be broken up with video portions that explain sections of the training topic or that present case studies for discussion.
- d. **PowerPoint® Presentation:** Presentation software is used to create customized group training sessions that are led by an instructor. Training materials are provided on CDROM and displayed on a large screen for any number of trainees. The Trainees can also use the programs individually, which allows for easy make-up sessions for trainees who miss the group session. This method is one of the most popular lecture methods and can be combined with handouts and other interactive methods [See page 37 for PowerPoint presentation tips.]

Advantages

- Instructor-led classroom training is an efficient method for presenting a large body of material to large or small groups of trainees.
- It is a personal, face-to-face type of training as opposed to computer-based training and other methods – described in the subsequent section of this policy.
- It ensures that everyone gets the same information at the same time.
- It is cost-effective.

Disadvantages

- Sometimes it is not interactive.
- The success of the training depends on the effectiveness of the lecturer.
- Scheduling classroom sessions for large numbers of trainees can be difficult— especially when trainees are at multiple locations.

2. Interactive Methods

There are many ways that you can break up training sessions and keep trainees attentive and involved, including:

- Quizzes:** For long, complicated training, stop periodically to administer brief quizzes on information presented to that point. You can also begin sessions with a prequiz and let participants know there will also be a follow-up quiz. Trainees will stay engaged in order to improve their prequiz scores on the final quiz. Further motivate participants by offering awards to the highest scorers or the most improved scores.
- Small Group Discussions:** Break the participants down into small groups and give them case studies or work situations to discuss or solve. This is a good way for knowledgeable veteran trainees to pass on their experience to newer candidate.
- Case Studies:** Adults tend to bring a problem-oriented way of thinking to workplace training. Case studies are an excellent way to capitalize on this type of adult learning. By analyzing real job-related situations, trainees can learn how to handle similar

- situations. They can also see how various elements of a job work together to create problems as well as solutions.
- d. **Active Summaries:** Create small groups and have them choose a leader. Ask them to summarize the lecture's major points and have each team leader present the summaries to the class. Read aloud a prewritten summary and compare this with participants' impressions.
 - e. **Q & A Sessions:** Informal question-and-answer sessions are most effective with small groups and for updating skills rather than teaching new skills. For example, some changes in departmental procedure might easily be handled by a short explanation by the supervisor, followed by a question-and-answer period and a discussion period.
 - f. **Question Cards:** During the lecture, ask participants to write questions on the subject matter. Collect them and conduct a quiz/review session.
 - g. **Role-playing:** By assuming roles and acting out situations that might occur in the workplace, trainees learn how to handle various situations before they face them on the job. Role-playing is an excellent training technique for many interpersonal skills, such as customer service, interviewing and supervising.
 - h. **Participant Control:** Pick items they want to know more about. Call on a participant to identify his or her choice. Cover that topic and move on to the next participant.
 - i. **Demonstrations:** Whenever possible, bring tools or equipment that are part of the training topic and demonstrate the steps being taught or the processes being adopted.
 - j. **Other Activities:**
 - i. Create a personal action plan
 - ii. Raise arguments to issues in the lecture
 - iii. Paraphrase important or complex points in the lecture

Advantages

- Interactive sessions keep trainees engaged in the training, which makes them more receptive to the new information.

- They make training more fun and enjoyable.
- They provide ways for veteran trainees to pass on knowledge and experience to newer candidates.
- They can provide in-session feedback to trainers on how well trainees are learning.

Disadvantages

- Interactive sessions can take longer because activities, such as taking quizzes or breaking into small groups, are time-consuming.
- Some methods, such as participant control, can be less structured, and trainers will need to make sure that all necessary information is covered.

3. Hands-On Training

Experiential, or hands-on, training, offers several effective training techniques including:

- a. **Cross-training:** This method allows trainees to experience other jobs, which not only enhances trainees' skills but also gives companies the benefit of having the trainees who can perform more than one job. Cross-training also gives trainees a better appreciation of what others do and how they fit in with the work to achieve their goals.
- b. **Demonstrations:** Demonstrations are attention-grabbers. These are excellent ways to train to use new equipment or to teach the steps in a new process. Combined with the opportunity for questions and answers, this is a powerful, engaging form of training.

Advantages

- Hands-on methods are effective in training new procedures and equipment.
- They are immediately applicable to trainees' jobs.
- They allow trainers to determine whether a trainee has learned the new skill.

Disadvantages

They are not good for large groups if you do not have enough equipment or machines for everyone to use.

4. Computer-Based Training (CBT)

Computer-based training is becoming increasingly prevalent as technology becomes more widespread and easy to use. Though traditional forms of training are not likely to be replaced completely by technological solutions, they will most likely be enhanced by them. Human interaction will always remain a key component of workplace training.

Nonetheless, it is a good idea to look more closely at what training technologies have to offer and how they might be used to supplement existing training programs or used when developing new ones. Computer-based training formats vary from the simplest text-only programs to highly sophisticated multimedia programs to virtual reality. Consider the following types:

- a. **Text-only:** The simplest computer-based training programs offer self-paced training in a text-only format. These programs are similar to print-based, individualized training modules with the addition, in most cases, of interactive features. While simple in format, these programs can be highly effective and present complicated information and concepts in a comprehensible and easily accessible way.
- b. **CD-ROM:** A wide variety of off-the-shelf training programs covering a broad range of workplace topics are available on CD-ROM. Programs can also be created by training consultants for the specific needs of the particular organization or individual departments.
- c. **Multimedia:** These training materials are an advanced form of computer-based training. They are much more sophisticated than the original text-only programs. In addition to text, they provide stimulating graphics, audio, animation, and/or video. Multimedia tends to be more provocative and challenging and therefore, more stimulating to the adult mind. Although costs are higher than text-only software, the benefits in terms of trainees' learning may well be worth it. Multimedia training materials are typically found in DVD format.
- d. **Virtual Reality:** Virtual Reality is three-dimensional and interactive, immersing the trainee in a learning experience. Most Virtual Reality training programs take the form

of simulation, which is a highly effective form of training. It is hands-on experience without the risks of actual performance. Flight simulators, for example, have been used successfully for years to train airline and military pilots in critical flying skills, as well as to prepare them for emergency situations in a safe and forgiving environment.

Advantages

- Computer-based training programs are easy to use.
- They can often be customized or custom designed.
- They are good for helping trainees to develop and practice new skills.
- They are useful for refresher training. They are applicable to self-directed learning.
- They can be cost-effective because the same equipment and program can be used by large numbers of trainees.
- They are flexible because trainees can learn at their own pace and at a time that is convenient for them. Computer-based programs are available 24 hours a day, 7 days a week. Convenient for the on-job employees to take the CBT training courses.
- Some programs are interactive, requiring trainees to answer questions, make choices and experience the consequences of those choices. This interaction generally results in greater comprehension and retention.
- They are uniform, which makes it possible to standardize training.
- They are measurable. When computers are used for training, it is possible to track what each trainee has learned right on the computer. Most programs have post-tests to determine whether the trainee has understood the training. Test scores give trainers statistics for training evaluations.

Disadvantages

- These programs require trainees to be computer literate.
- They require trainees to have computer access.

- There is little or no interaction with a trainer.
- These programs are not effective at teaching “soft-skills,” such as customer service, sales, or sensitivity training.
- They are not the best choice for new or one-time training. Trainers need live interaction to ensure new skills or concepts are being communicated. Trainees need to be able to ask questions and receive feedback.
- Some poorly designed programs are “boring” and result in trainees having a poor retention rate of the material as well as a low finish rate.

5. Online or E-Learning

In addition to computer-based training, many companies with employees in a variety of locations across the country are relying on other technologies to deliver training. According to the American Society for Training & Development (ASTD) “State of the Industry” report, companies are using a record level of e-learning and ASTD predicts that number will continue to rise. This method is becoming more and more popular as access to the Web becomes more widely available. Some examples include:

- Web-based Training:** This method puts computer-based training modules onto the Web, which companies can then make available to their trainees either on the company’s intranet or on a section of the vendor’s website that is set up for your company. There are many courses available on the Internet in many different topic areas. These courses provide a hands-on, interactive way for trainees to work through training presentations that are similar to CD-ROM or PowerPoint, on their own. Training materials are standardized because all trainees will use the same program. Materials are also easy to update, so your training is always in step with your industry. Web-based training programs are also often linked with software called Learning Management System (LMS) that makes trainees’ progress trackable, which makes recordkeeping very easy for the training administrator.
- Tele or Video Training:** These methods allow the trainer to be in one location and trainees to be scattered in several locations. Participants are networked into the central location and can usually ask questions of the trainer via the telephone or by a webchat feature. Lectures and demonstrations can be effective using this method.

- c. **Web Trainings or Webinars:** This method contains audio and visual components. Participants dial in to receive live audio training and also follow visual material that appears on their computer screens. These presentations are similar to CD-ROM or PowerPoint presentations and sometimes offer minimal online interactivity. Q & A sessions may also be held at the end of sessions.

Advantages

- Online or e-learning programs are effective for training across multiple locations.
- They save the trainees or company (corporate training) money on travel and accommodation expenses.
- They can be a less expensive way to get training from professionals.
- They are good for self-directed learning.
- They offer trainers a growing array of choices for matching training programs to trainees' knowledge and skill levels.

Disadvantages

- These programs require trainees to be computer literate.
- They are usually generic and not customized to the trainees or company's needs.
- Trainees may be too intimidated by the technology or the remoteness of the trainer to ask questions.
- Lack of computer terminals or insufficient online time may restrict or preclude access to training.
- Inadequate or outdated hardware devices (e.g., sound cards, graphics accelerators, and local area networks) can cause programs to malfunction.
- The Internet servers may not have enough bandwidth to receive the materials.
- Self-instruction offers limited opportunities to receive context-specific expert advice or timely response to questions

***** Nothing Follows *****