
UNIT 5: MAXIMIZE LEARNING

In this unit you will learn about:

- **How People Learn.** The three primary learning styles and activities that address them.
- **Creating a Positive Learning Environment.** What adults need to facilitate learning and how to address these factors.
- **Techniques That Maximize Learning.** The four critical elements of learning: motivation, reinforcement, retention, and transfer.
- **Why Instructors Need to Evaluate.** To see if knowledge is being transferred and to assess whether the training is meeting learners' physical, emotional, and intellectual needs.
- **Formal and Informal Ways to Evaluate.** The various types of evaluation that an instructor will use.
- **Guidelines for Asking and Answering Questions.** Why we ask questions, the kinds of questions that can be asked, how to ask a question, and how to answer a question.
- **Guidelines for When and How to Give Feedback.** What needs to be corrected and how to correct it.

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UNIT OVERVIEW

In Unit 2 the roles of effective instructors are discussed. One of the roles – probably the most important one – is trainer. Another role that is discussed is evaluator.

This unit looks at some of the things a trainer needs to know to be an effective instructor:

- How people learn
- How to create a positive learning environment
- Techniques that maximize learning
- Why trainers need to evaluate
- Formal and informal ways of evaluating
- Some guidelines for asking and answering questions
- Some guidelines for giving feedback

EXERCISE: POSITIVE LEARNING EXPERIENCES

Purpose: To identify positive learning experiences

Instructions: Work in pairs. Remember positive learning experiences and generate a list of the things that made that experience positive.

HOW PEOPLE LEARN

We each have a way that we like to learn. Learning styles are generally grouped into three primary types:

- Auditory
- Visual
- Tactile or kinesthetic

However, no one only learns one way. We may have a preferred style, but we also use parts of the other styles as well.

HOW PEOPLE LEARN (CONTINUED)

AUDITORY LEARNERS

Auditory learners learn through listening:

- Lectures
- Discussions
- Talking things through
- Listening to what others have to say

The instructor's tone of voice, pitch, and speed help them interpret and remember what they hear.

Written information may have little meaning until it is heard so auditory learners often benefit from reading text aloud and using a tape recorder.

VISUAL LEARNERS

Visual learners learn through seeing:

- Pictures
- Demonstrations
- Diagrams
- Illustrated text books
- PowerPoint slides
- Videos
- Flip charts
- Handouts

HOW PEOPLE LEARN (CONTINUED)

The instructor's body language and facial expressions help visual learners understand the content. They like to sit up front so nothing is in the way between them and the instructor.

They remember something by seeing it in their minds.

Visual learners like to take detailed notes to absorb the information.

TACTILE LEARNERS

Tactile learners learn by doing, moving, and touching. They find it hard to sit still for very long.

Hands-on activities and games are great for tactile learners. They want to actively explore the physical world around them.

LEARNING STYLES AND TEACHING

To really grasp a new piece of information or a new skill, we need to:

- Hear it (a verbal description)
- See it (a demonstration)
- Say it (repeat it back)
- Do it (a practical exercise)
- Teach it to others (explain it to a friend or family member)

The *CERT Basic Training* material, especially the Instructor Guide, provides content and guidance to assure that the first four learning modes are incorporated into the delivery of each unit.

HOW PEOPLE LEARN (CONTINUED)

LEARNING STYLES AND INSTRUCTORS

Just like their learners, instructors have a preferred learning style. That learning style will affect the way they like to teach.

- An instructor who is a visual learner will incorporate more graphic elements in a lesson.
- One who is an auditory learner will be more comfortable lecturing.
- One who is a tactile learner will want to get right to the activities.

Each instructor will need to stretch himself or herself to incorporate the elements that are less comfortable. Remember that addressing all learning styles will increase each participant's retention of the material. The *CERT Basic Training* Instructor Guide is written to include elements for all learning styles.

CREATE A POSITIVE LEARNING ENVIRONMENT

Knowing about and teaching for multiple learning styles are one way to maximize learning. In addition, instructors need to understand how adults learn best.

There are three sets of factors that need to be accommodated to create a positive learning environment:

- Physical factors
- Emotional factors
- Intellectual factors

PHYSICAL FACTORS

Adults need to be physically comfortable or they can't focus on learning.

CREATE A POSITIVE LEARNING ENVIRONMENT (CONTINUED)

The following factors help create a physically comfortable learning environment:

- The room is not too hot or too cold.
- The room is set up so people can see and can hear the instructor.
- Lighting and amplification allow for people with reduced vision and hearing.
- Allowances are made for fatigue: there are frequent activities so participants don't have to sit too long; you take regular breaks.

Expectations for performance take into account reduced flexibility, reduced reaction times, time of day (evening may not be the best time to be sharp).

EMOTIONAL FACTORS

Adults also have to be comfortable emotionally. Adults have definite emotional needs:

- To be treated like adults (They want to be peers with the instructor.)
- To direct their own learning whenever possible (Adults are self-motivated. They are at the training because they chose to be, not because someone told them to come.)
- To know they are doing it right (or at least that they are trying hard)
- To feel accepted as they are (Adults come in all forms and styles. They all have a place with CERT.)
- To see a reason for the training (Adults want to know how the training is going to make a difference for them or their families.)

CREATE A POSITIVE LEARNING ENVIRONMENT (CONTINUED)

An instructor can respond to emotional needs by:

- Being a learning resource, a coach
- Explaining the benefits of the training (WIIFM: What's In It For Me), then letting participants explore as much as possible (to discover the benefits for themselves)
- Respecting them (not talking down to them)
- Teaching to their level (not above or below)
- Not embarrassing them
- Providing meaningful reinforcement and opportunities for peer feedback (This is also a powerful reinforcement.)
- Making learning non-threatening (This goes along with teaching to their level.)
- Making the learning realistic and problem centered; using scenarios and "what if" situations that are familiar and that they might or do encounter

INTELLECTUAL FACTORS

In addition to needing to be physically and emotionally comfortable, adults have intellectual needs:

- They have lived full lives and they want to share their experiences.
- They want to connect new information to what they already know.
- They want to be active participants in the learning.
- They want to learn things the way they like to learn (through hearing or seeing or doing).

CREATE A POSITIVE LEARNING ENVIRONMENT (CONTINUED)

An instructor can respond to intellectual needs by:

- Using the learners' life experiences to introduce new concepts through questions and discussion
- Building bridges between old information and new information with analogies, examples, and job aids (The Participant Manual provides a reference to help with retention.)
- Making the learning active. Include practical hands-on exercises, not just lecture and slides.
- Using a variety of methods when teaching to reach all the learning styles (e.g., lecture, discussion, roleplay, demonstrations, activities, games)

TECHNIQUES THAT MAXIMIZE LEARNING

We've talked in this unit about learning styles and factors that affect adult learning. But when it comes right down to it, the bottom line is that adults basically need what kids need:

- Motivation
- Reinforcement
- To be told something more than once

TECHNIQUES THAT MAXIMIZE LEARNING (CONTINUED)

MOTIVATION

Motivation is critical, especially at the beginning of the training. Adults need to know how the training will benefit them. If they don't understand this, they won't learn. In order to motivate participants, instructors need to take every opportunity to:

- Establish a rapport
- Create an open, friendly training atmosphere
- Keep stress low
- Challenge participants but not frustrate them

REINFORCEMENT

Throughout the training, instructors need to encourage and reinforce. The instructor must reward good behavior – however small – positively and frequently. Rewards don't have to be physical. Simply saying “good job” means a lot to an adult learner.

REPETITION

Repetition is a cornerstone of learning. People need to hear something at least three times before they learn it.

That's why the process for teaching a skill is to:

- #1, explain it (description)
- #2, show it (demonstration)
- #3, have the learners do it (practice)

The very best approach would be to add a fourth step: Have the learners do it and say what they are doing while they do it.

TECHNIQUES THAT MAXIMIZE LEARNING (CONTINUED)

EXERCISE: POWER OUTAGE

Purpose: This exercise allows you to apply what you have learned about adults and learning.

Instructions: Follow the steps below.

1. Follow along as the instructor reads the scenario:

What if you have a power outage 30 minutes after you started the unit on fire safety? You decide to wait for the power to come back on.

2. Answer these questions:

- What physical factors do you need to think about?

- How might you make this situation work for you? Think about emotional and intellectual needs.

- What if the power comes back on after an hour? You don't have time to teach the whole unit. You know you will have to reteach the lesson but you don't want the evening to be a complete waste. What can you do to make sure that participants remember the key points that you have covered so far? Remember all three learning styles.

Instructors should be prepared to adapt to different learning situations as they arise. Instructors should keep the physical, emotional, and intellectual needs, as well as the different learning styles, of adult learners in mind.

WHY YOU NEED TO EVALUATE

Your job as a trainer is to transfer knowledge: to get what you have in your head into someone else's head.

Many trainers think that they have done a wonderful job because they have told the class everything they know. "I said it, therefore you know it."

But effective instructors take it much further. They use a variety of training methods to help transfer the knowledge:

- Interactive lecture (lecture with discussion questions)
- Demonstrations
- Roleplays
- Exercises

We use a variety of training methods to appeal to all the learning styles (auditory, visual, tactile).

Effective instructors also know that periodically they have to assess whether what they have been saying has been learned.

This is the responsibility of effective instructors. They need to know that:

1. They said it in ways that the learners could understand
2. The learners "got it"

Finding out if learners "got it" is the process called evaluation. Because only if they learned it and can apply it will they be valuable CERT members.

In addition to making sure that participants have learned, there are other things that CERT trainers want to evaluate too:

- Physical needs: Is it too cold in here? Is it time for a break?
- Emotional needs: Does the chart make sense? Are people uncertain or frustrated?
- Intellectual needs: Do we need to practice this more?

WAYS TO EVALUATE

There are a number of ways to evaluate progress.

- Instructors can find out if people have learned by:
 - Asking questions
 - Listening to questions asked
 - Testing
 - Observing hands-on exercises
 - Observing body language

FORMAL EVALUATION

Some evaluation is formal. The final exam is a formal evaluation as is the Unit 9 exercise in the *CERT Basic Training* course.

INFORMAL EVALUATION

Some evaluation is informal.

- Watching body language is a good way to evaluate both whether learning has happened and how people are feeling.
- Questions are another great way to evaluate. Each unit of the *CERT Basic Training* course has questions at the beginning of the unit that review what was learned in the previous unit. Some questions are built into the Instructor Guide, but instructors should add their own, too.
- Observation of practice activities is one of the best ways to see how much learning is happening.

GUIDELINES FOR ASKING AND ANSWERING QUESTIONS

WHY WE ASK QUESTIONS

There are lots of reasons to ask questions. Evaluation is only one of the reasons. Ask questions to:

- Get people involved and interested
- Stimulate discussion
- Channel thinking (use questions as a discovery process, allow participants to facilitate and guide the training)

KINDS OF QUESTIONS TO ASK

There are several kinds of questions.

#1. Open and Closed Questions

Closed Questions:

- A closed question is typically only answered by yes or no, true or false. A closed question can also be answered by a very limited response, such as “Who was the first President of the United States?” Answer: George Washington.
- Instructors may use closed questions to:
 - Test knowledge
 - Receive quick answers
 - Maintain control of the class
 - Take a break
 - Force a choice between a correct and incorrect response (e.g., “When I’m getting ready to use a fire extinguisher, do I AIM first?” “No, you PULL first.”)

GUIDELINES FOR ASKING AND ANSWERING QUESTIONS (CONTINUED)

Open Questions:

- An open question tends to start with what, why, how, or describe.
- An open question asks the respondents to think and reflect. It typically requires a longer answer. There is typically not one correct answer to an open question.
- An example of an open question is “What do you think about the video we just watched?”
- An instructor may use open questions to:
 - Generate discussion
 - Find out how the class is feeling
 - Get people to open up
 - Get the class to think about what they’ve learned

#2. Questions to Different Audiences

An instructor can direct a question to different audiences.

- Direct a question to one person (maybe to tap into that person’s expertise)
- Direct a question to the whole group (good for starting discussions)
- Ask a rhetorical question (not intended to be answered but to stimulate thinking)

#3. Recall and Apply Questions

There are two kinds of evaluation questions that an instructor can ask:

- A recall question: Learners repeat back what they have learned.
- An apply question: Learners have to think about what they have learned and apply it to a new situation.
 - “What if” questions are apply questions. Apply questions will tell you the most about what a learner has learned.

GUIDELINES FOR ASKING AND ANSWERING QUESTIONS (CONTINUED)

HOW TO ASK A QUESTION

Indicators of good questions:

- Brief
- Easy to understand
- Asked with a friendly tone
- Allow people time to think about the answer

There are also some guidelines for how to ask questions to a group and how to ask questions to an individual.

To a group, you:

- Ask the question
- Plant yourself (to give people time to think)
- Call on someone

To an individual, you:

- Call on the person (to make sure they are listening)
- Ask the question
- Plant yourself (to give the person time to think)

GUIDELINES FOR ASKING AND ANSWERING QUESTIONS (CONTINUED)

HOW TO ANSWER A QUESTION

Questions asked by the participants can tell trainers where learners are having difficulties. Don't feel obligated to answer them yourself. Turn the question into a relay question and ask someone else to answer it.

In the classroom, be sure to repeat the question before answering it. Paraphrase any lengthy questions. This helps ensure that you understand the question (if you are wrong, the questioner will tell you) and that everyone in the room has heard it.

Acknowledge any questions that you cannot answer. Be sure to get back to the group as soon as possible.

Some learners may ask questions about everything. Their questions may appear to be habitual or an indication that the learner is not understanding a lot of the material. If their many questions are slowing down the entire group, you will note some frustration on the part of other participants.

When that is the case:

- Encourage others to participate more by recognizing their questions first.
- As a last resort, take the individual aside and ask if he or she could hold the questions until the breaks or after the session is over, at which time the trainer would quickly go through any questions the individual may have.

SOME GUIDELINES FOR GIVING FEEDBACK

Some opportunities for feedback in *CERT Basic Training* are:

- During hands-on activities and skills training
- To let participants know how well they met CERT requirements: correct attire, PPE, CERT kits
- During and at conclusion of class discussion

Instructors should give feedback:

- To correct information
- For behavior that can be changed
- To acknowledge correct answers or performance of a technique

SOME GUIDELINES FOR GIVING FEEDBACK (CONTINUED)

When giving feedback, instructors should:

- Compliment whenever possible, even when feedback is corrective (“I’m glad to see that you have long pants and a long-sleeved shirt. However, ...”)
- Be specific: Describe what needs to be corrected and how it needs to be corrected.

One place that instructors give feedback is when they check to see what participants have learned by asking questions.

EXERCISE: DEVELOP “WHAT IF” QUESTIONS

Purpose: Work in pairs to develop “what if” questions.

Instructions: Follow the steps below.

1. Develop an apply question for a unit of the *CERT Basic Training* course.
2. You have 5 minutes to work.

It would be a good idea to develop “what if” questions for all the units you instruct. If you have trouble developing these questions, ask other instructors for suggestions.

UNIT SUMMARY

This unit has examined some of the things a trainer needs to know to be an effective instructor:

- How people learn
 - The three learning styles: auditory, visual, and tactile
 - The best teaching approach is a combination of all three: hear it, see it, do it, teach it (say and do it).
- How to create a positive learning environment
 - Address physical needs, emotional needs, and intellectual needs.
- Techniques that maximize learning
 - Motivation
 - Reinforcement
 - Repetition

This unit also examined evaluation:

- Why instructors need to evaluate
 - To see if knowledge is being transferred
 - To assess whether the training is meeting learners' physical, emotional, and intellectual needs
- Formal and informal ways to evaluate
 - Tests and performance evaluations
 - Asking questions
 - Observation

UNIT SUMMARY (CONTINUED)

- Guidelines for asking and answering questions
 - Why we ask questions
 - The kinds of questions that can be asked
 - How to ask a question
 - How to answer a question
- Guidelines for when and how to give feedback
 - To change incorrect information and behavior