



# BUILDING DESIGN FOR HOMELAND SECURITY

## UNIT XIII

## TRAIN-THE-TRAINER

TIME: 1 Hour

### OBJECTIVES

At the end of this session, participants will be able to accomplish the following:

1. Discuss basic adult learning principles as they apply to participants in *Building Design for Homeland Security*.
2. Explain the key functions of instructional delivery as they apply to *Building Design for Homeland Security*.
3. Describe the key steps of instructional preparation as they apply to *Building Design for Homeland Security*.

### OBJECTIVES

This unit covers the following topics:

1. Learning styles and preferences, characteristics of adult learners, adult learning assumptions (experience, motivation, active participation, and variety)
2. Adult training methodologies used in *Building Design for Homeland Security*
3. Steps for instructional preparation, preparing the environment, preparing yourself, and expecting the unexpected

### INSTRUCTIONAL METHOD

The instructor introduces the unit and the unit references. The first part of the unit discussion addresses adult learning principles and preferences. If time allows, participants complete a brief self-assessment of their own adult learning styles and preferences; otherwise, the instructor refers to the inventory and suggests completion later. The instructor describes instructional methodologies that enhance learning for different styles and preferences, and engages participants in discussion about their own best learning environments and methods. The topic of the discussion is transitioned to the specific methodologies used in the *Building Design for Homeland Security Course*, and how they have been designed to reach the full spectrum of adult learning styles. Time allowing, the instructor provides additional tips for successfully employing the course's instructional methods.

Course preparation is the next topic of discussion. The instructor facilitates plenary group discussion about what is required of instructors to prepare to conduct the course. The instructor refers participants to the list of logistical details that must be completed to ensure the success of the training, and briefly reviews the

## TRAIN-THE-TRAINER

requirements. The unit is concluded with a question-and-answer session to address any participant concerns or confusion.

### SUPPLIES AND EQUIPMENT

The following are required for this unit:

- Chart paper, easel, and markers
- Course Instructor Guide
- Handout: "Preparing to Train Adults" (one per participant)
- Post-It® notes and highlighters
- Unit visuals in PowerPoint format, computer, LCD projector, and screen

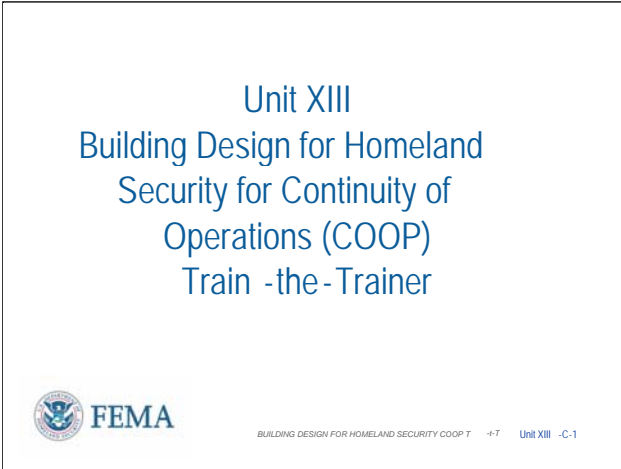
### SUGGESTED TIME PLAN

The following time plan is suggested for this unit:


<i>Topic</i>	<i>Time (Minutes)</i>
Introduction.....	3
Adult Learning Principles.....	15
Instructional Delivery.....	15
Course Preparation.....	15
Expecting the Unexpected.....	12
<b>Total Time.....</b>	<b>60</b>

## Introduction

TIME: 3 Minutes




Unit XIII  
Building Design for Homeland  
Security for Continuity of  
Operations (COOP)  
Train -the- Trainer


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### Best of Both Worlds




Subject Matter  
Expert AND  
Trainer


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### Unit XIII Objectives



- Discuss basic adult learning principles
- Explain the key functions of instructional delivery
- Describe key steps of instructional preparation

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## Introduction

Technical courses require thorough knowledge of the subject.

- Most of you are subject matter experts; may not have as much experience as trainers.

The purpose of this unit is to briefly touch on some basic principles of adult education and how to apply to teaching this course material.

- Another purpose is to discuss logistical details of conducting this course.


### **Unit XIII Objectives**

1. Discuss basic adult learning principles as they apply to participants in *Building Design for Homeland Security*.
2. Explain the key functions of instructional delivery as they apply to *Building Design for Homeland Security*.
3. Describe the key steps of instructional preparation as they apply to *Building Design for Homeland Security*.


## Adult Learning Principles

TIME: 15 Minutes

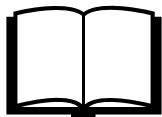
### Adult Learning Styles



- Auditory
- Visual
- Kinesthetic




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*Refer participants to “Preparing to Train Adults” in Unit XIII of their Student Manual.*

*If time allows (approximately 15 minutes) have them complete this inventory in class.*

### Auditory Learners



- Listen to every word
- Remember what they hear
- Prefer face-to-face



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## Adult Learning Principles

### **Adult Learning Styles**

If you want your training to make an impact, it needs to capture your learner’s attention and interest.

To increase the chances that your information is well received and absorbed, you should try to match how you deliver the information as closely as possible to the learning styles of your audience.

The best way to understand learning styles is to understand your own preferences.

- If you want to know your own learning style, complete the Learning Preference Inventory on page 27 of “Preparing to Train Adults.”

### **Auditory Learners**

Auditory learners will listen to every word you say and will not write much.

- They learn best by hearing, seeing, and saying words.
- Written handouts are more meaningful to them if they are read out loud.
- They are good speakers and easily remember what they hear.

They prefer face-to-face or phone communication, so if you are trying to conduct pre-course work with them, you may have more difficulty interacting with them via e-mail or memos.

Mnemonic devices work well to reach auditory learners.

- These devices are words that link to other information (i.e., Every Good Boy Deserves Fudge for musical notes).

**DISCUSSION QUESTION**




*Ask the adjacent question and solicit participant response.*


**DISCUSSION QUESTION**

*For the auditory learners in the class, are there any other “tricks” you use to help you learn or remember?*

**Visual Learners**



- Take a lot of notes
- Think in pictures and images
- Can see connections and patterns easily



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**Visual Learners**

Visual learners take a lot of notes and will try to capture everything in writing.

They think in pictures and images and are skilled at seeing connections and patterns in what is presented.

The visuals in your course materials, i.e., PowerPoint visuals, pictures, maps, videos, and graphs will appeal to your visual learners.

**DISCUSSION QUESTION**



*Ask the adjacent question and solicit participant response.*

**DISCUSSION QUESTION**

*For the visual learners in the class, what else helps you learn or remember?*

### Kinesthetic Learners



- Learn best by touching and doing
- Can work in busy, noisy surroundings without getting distracted
- Like games, role-plays, and exercises



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### Kinesthetic Learners

Kinesthetic learners are hands-on learners.

- They learn best by touching and doing.
- They like games, role-plays, and exercises.
- They can work in busy, noisy surroundings without getting distracted.

#### DISCUSSION QUESTION

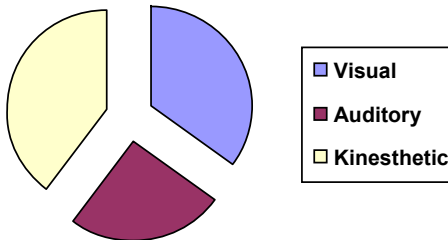


*Ask the adjacent question and solicit participant response.*

#### DISCUSSION QUESTION

*What other suggestions do the kinesthetic learners in the class have for helping hands-on learners?*

### Typical Learners in a Class




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### Typical Learners in a Class


There is an average percentage of each type of learner in a typical class:

- Visual Learners: 30-40%
- Auditory Learners: 20-30%
- Kinesthetic Learners: 30-50%

**To Work with the Mix ...**



- Use all styles
- Switch styles
- Use easel charts
- Have highlighters
- Ensure light for notes



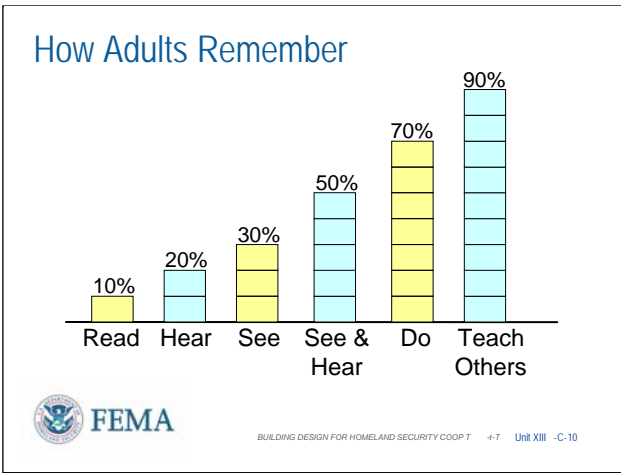
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***To Work with the Mix...***

Be careful to use all styles so you do not become biased towards overusing your own style.

- Switch styles so that you are explaining concepts in words, using visuals, and practicing concepts through games, role-plays, and other activities.
- Track main points by using easel charts for the visual learners.
- Put highlighters on the table for the kinesthetic learners.
- Make sure there is enough light in the room for the note takers.

Watch your participants and, if you seem to be losing them, you may need to vary your style to get them re-engaged.



***How Adults Remember***

Adult learners are much more oriented to learning by sight than by hearing.


Learning by doing is the most effective for adults.

It is helpful to place written information in the hands of the participants to support areas of discussion.

**Physiological Characteristics**



- Loss of vision
- Loss of hearing
- Fatigue
- Loss of motion
- Special needs




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**Physiological Characteristics**


Remember the possible physiological characteristics which may affect learning.

- Large font size should be used on projections, charts, and handouts.
- Hearing may also be a problem, so minimize background noise, check volume on recordings, and concentrate on good voice projection.
- Do not hesitate to use a microphone if one is available.
- Sensory impairment, such as poor vision or hearing loss, can restrict sensory input.
- Stress can impair memory.

**Audience Analysis**



- Analyze your audience
- Adjust delivery to meet learners' needs



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**Audience Analysis**

**DISCUSSION QUESTION**



*Ask the adjacent question and solicit participant response.*

**DISCUSSION QUESTION**

*How can you gather information about your audience?*

*Suggested responses:*

- *Review the roster*
- *Pre-course questionnaire*
- *In-class introductions*



The information obtained will enable you to match your delivery as closely as possible to the learner's needs to make last-minute adjustments, as needed, to how you teach *Building Design for Homeland Security*.

## Instructional Delivery

TIME: 15 Minutes

Now What?

Determine **BEST METHODOLOGY** to use

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## Instructional Delivery

Based on your audience analysis information, and given what you know about how adults learn, you can determine the best methodology for engaging your audience as well as which methodologies may be more difficult.

*Building Design for Homeland Security* has well-defined methodologies that should be carefully followed.

However, depending on your audience, one class may be more likely to ask questions and participate in discussions, while another class may be primarily visual learners.

If the class is experienced and mostly kinesthetic and oral learners, they will jump right into the exercises... another group may be less enthusiastic and need more encouragement.

Training Methods

Lecture
Demonstration
Role-Play
Group Discussion / Brainstorming
Case Study / Small Group Activity
Simulation / Exercise
Games

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## Training Methods

These are different methodologies designed to fulfill specific learning objectives and to appeal to different types of learners.

**DISCUSSION QUESTION**



*Ask the adjacent question and solicit participant response.*

**DISCUSSION QUESTIONS**

*Which ones are used in Building Design for Homeland Security?*

*Suggested responses:*

- *Lecture*
- *Group Discussion*
- *Case Study*
- *Small Group Activity*
- *Role Play*

**Presenting Information**

Speak clearly
Pay attention to vocabulary
Maintain comfortable stance
Maintain appearance

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**Presenting Information**

**Watch Your Body Language**

- Use natural gestures to emphasize key points.
- Avoid distracting gestures (e.g., jingling change in your pocket).
- You want your body language to appear positive and open.

**Maintain Eye Contact**

- Position your body to face the majority of the audience.
- Move from behind the podium and walk toward the audience.
- Don't read from your notes and lose eye contact all together.

**Tone, Inflection, and Pace**

- Vary your inflection to emphasize important words and messages.

- Speak more slowly than you would in normal conversation.
- Set your pace according to the audience's familiarity with the topic.
- For the first time you teach a section or topic, estimate how much time you need and then add 25 percent.
- Always end sessions and breaks on time.

### **Speak in Clear Sentences**

- Vary your rate of speed to avoid sounding monotonous.
- Articulate sounds for clear pronunciation.
- Avoid um's and uh's – if you feel you are about to say "um," take a breath.
- Also watch the classic "you know."

### **Pay Attention to Vocabulary**

- Be clear – match the language to the understanding level of your audience.
- Be colorful – use imagery to create a vivid picture of your information.
- Be concrete – avoid language that is vague or too general.
- Be concise – use short sentences that are easy to understand.
- Be correct – use consistent terminology and avoid slang.
- Do not use acronyms.
- Avoid heavy statistics.
- Use "you" a lot to build rapport with the audience.

### **Maintain a Comfortable Stance**

- Don't block the audience's view.
- If using handouts only and everyone is

seated, also sit and face the audience.

- Move about the audience.

### **Avoid**

- Moving around too much
- Rocking
- Slouching
- Overdoing or exaggerating anything

### **Think About your Appearance**


- Wear clothes appropriate for your audience.
- When selecting colors and patterns, remember:
  - Cool/pastel colors have a calming effect.
  - Earth-tone colors communicate sincerity and genuineness.
  - Red denotes power.
  - Navy/dark blue denotes authority.
  - Avoid other bright colors or loud patterns.

## Course Preparation

TIME: 15 Minutes

Preparing for Training: Course Materials


- Obtain Course CD from Eric Letvin (Visuals, Instructor Guide, Student Manuals)
- Print Instructor Guide(s) and Student Manuals in color
- Make copies of Student References CD and FEMA 452 Risk Management Database CD
- Obtain copies of FEMA 426 and FEMA 452 from Mila Kennett



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Preparing for Training: Preparation

<p style="text-align: center; font-weight: bold; margin: 0;">Instructor Preparation</p> <ul style="list-style-type: none"> <li>▪ Study Instructor Guide</li> <li>▪ Send pre-course information to participants</li> <li>▪ Form participant teams</li> </ul>
<p style="text-align: center; font-weight: bold; margin: 0;">Participant Preparation</p> <ul style="list-style-type: none"> <li>▪ Download, print, and read case study from: <a href="http://www.fema.gov/plan/prevent/rms/rmsp155.shtm">http://www.fema.gov/plan/prevent/rms/rmsp155.shtm</a></li> <li>▪ Bring laptop to download FEMA 452 Risk Assessment Database</li> </ul>



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*The adjacent information is an excerpt from Your Guide to FEMA.*

*Even if participants received the document in DFTO training, it is important enough to review.*

## Course Preparation

### Course Materials

If you plan to conduct the complete course, the first step is to get the current materials.

- The slide lists the current procedure.
- Eventually all of the materials will be available on the FEMA website.

### Preparation

Participants are notified to bring a laptop computer (for which they have software loading rights) if they wish to download the FEMA 452 Risk Assessment Database with instructor assistance and participate in an orientation to the screens.

- The case study is located in an appendix to the Student Manual.

If the course will be conducted at a site other than EMI, the lead instructor coordinates with the point of contact for that offering to ensure that registered participants are informed by e-mail or letter to read the appropriate case study.

### Participant Teams

Prior to the course offering, the lead instructor refers to the roster of enrolled participants (name, organization, job title, phone, and e-mail) to compose preliminary teams who will work together on the case study activities throughout the course.

- Ideally, teams have five to eight members, with seven being optimal.

Teams are intended to reflect the general participant profile in terms of organization, subdivision of that organization, current job, past experience, and other education/training.

- Ideally, no team includes two people from the same office, doing the same job with the same skills.

The intent is to intersperse security personnel, architects, engineers, planners, facility managers, etc., among the teams to obtain a broad range of perspectives during the case study activities.

Participant teams are refined after the participant introductions in Unit One.

### Preparing for Training



- Coordinate with other instructors
- Prepare agenda
- Ensure adequate publications
- Collect course supplies



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### ***Preparing for Training***

#### **Coordination and Agenda**

- Decide who will conduct units.
- Prepare the agenda in cooperation with the course sponsor.

#### **Course Materials**

Make sure you have adequate copies of the course materials:

- Course Instructor Guide (IG), one per instructor
- Course Student Manual (SM), one per participant
- FEMA 426, *Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings*
- FEMA 430, *Primer for Incorporating Building Security Components in Architectural Design*, one per instructor and one per participant
- FEMA 452 Databases CD, one per

instructor and one per participant

- FEMA 452, *Risk Assessment: A How-To Guide to Mitigate Potential Terrorist Attacks Against Buildings*, one per instructor and one per participant
- PowerPoint visuals (loaded on computer and backup CD)
- Student Reference CD, one per instructor and one per participant

### **Supplies**

- Easel with paper pad refill, one per participant activity team
- Highlighter, one per participant
- Markers for use with easel pad, one package of various colors
- Name plate, one per instructor and participant
- Pen or pencil, one per participant
- Post-It® notes, smallest size available, one pad per participant
- Risk Matrix poster, one per table group
- Tablet, one per participant
- White board markers for use by participants to record case study activities information on the Risk Matrix poster, one per table group
- White board markers for use with slide acetates, as required if an Elmo projector is not available, one package of various colors

### Preparing for Training: Training Site



- Have course materials and supplies present
- Check classroom set-up
- Check equipment and visuals
- Check temperature and lighting



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### **Training Site**

- Check all boxes of materials to ensure no surprises.
- Make sure the room is set up in table groups.
- Load the visuals on the desktop.
- Find out how to control the temperature and lights.

### Preparing Yourself



*What would you do to prepare yourself to teach Building Design for Homeland Security?*



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### **Preparing Yourself**

What would you do to prepare yourself to teach Building Design for Homeland Security?

- Review agenda
- Plan transitions
- Walk through course materials
- Accept nervousness as an energizer

### Preparing Yourself



**Practice**  
**Practice**  
**Practice**



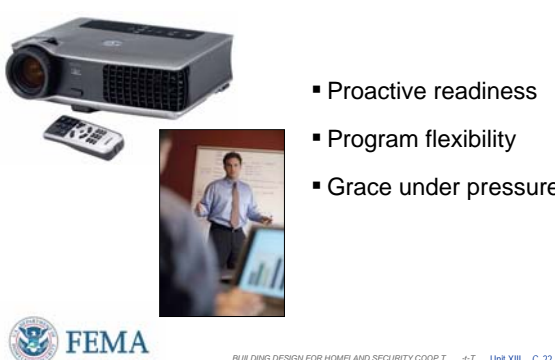
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## Expecting the Unexpected

TIME: 12 Minutes

Expecting the Unexpected



- Proactive readiness
- Program flexibility
- Grace under pressure

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## Expecting the Unexpected

*What Could Happen?*



Ask participants what questions they have before you conclude the unit.

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# Preparing To Train Adults

## Instructional Skills



Prepared for:

Federal Emergency Management Agency  
Emergency Management Institute

Revised January 2007

# Contents

## **General Information**

**1** This section identifies the purpose, objectives, and contents of this reading packet.

## **How Adults Learn**

**2** Adults differ in interests, intelligence, life experiences, ability to concentrate, ability to remember, sense of well-being, imagination, and self-confidence. This section provides a basis for understanding adult learning by describing the unique physical, emotional, and intellectual characteristics of adult learners.

## **Adult Learning: Strategies for Success**

**11** By following the strategies presented in this section, you will increase the likelihood of motivating adult participants and ensuring that learning occurs.

## **Learners as Individuals**

**19** Every time you train, you will be faced with the different learning styles and preferences of the participants. This section will prepare you to identify learners' preferences and take steps to accommodate their differing needs. It includes a discussion about how to handle events that fail to show respect for individual learners.

### **Job Aids and Self Inventories**

- 10**    **Adult Learning Characteristics (Job Aid #1)**
- 18**    **Instructor Effectiveness Inventory**
- 24**    **Accommodating Individual Learners (Job Aid #2)**
- 27**    **Learning Preference Inventory**
- 35**    **Strategies for Addressing Insensitive Events (Job Aid #3)**
- 36**    **Reading Assessment**

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# General Information

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## Purpose

The purpose of this reading packet is to teach you how to apply adult learning principles when instructing courses. It takes into consideration the unique characteristics including the learning styles and cultural backgrounds of your participants. As an instructor, you have probably asked yourself some or all of the following questions about adult learners:

- Can participants learn equally well?
- What motivates participants to learn?
- How do I know when learning has occurred?
- What instructional methods can I use to help participants learn the best?
- How can I accommodate the different learning styles and preferences of the participants when instructing?

The reading materials will address these questions. You will read about adult learning characteristics, adult learning principles, and learning styles and preferences. You will have several opportunities to practice applying the information presented by completing a series of practical exercises.

## Objectives

After reading this packet, you will be able to:

- Discuss key adult learning characteristics.
- Explain the differences between training and learning.
- Use the principles of adult learning when instructing.
- Identify your own learning style.
- Accommodate different learning preferences when instructing.

## Contents

***How Adults Learn*** provides a basis for understanding adult learning by describing the physical, emotional, and intellectual characteristics of adult learners.

***Adult Learning: Strategies for Success*** explains how to design and deliver effective training by following adult learning principles. These principles address the different physical, emotional, and intellectual characteristics that affect how adults learn.

***Learners as Individuals*** summarizes the different learning preferences of adult learners and provides guidelines for accommodating learning preferences during training. While reading this section, you will complete the Learning Preferences Inventory that allows you to identify your own unique learning style.

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# How Adults Learn

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## Overview

Adults differ in interests, intelligence, life experiences, ability to concentrate, ability to remember, imagination, and sense of well being and self-confidence. Each of these factors influences how well and how fast a person learns and what you, as an instructor, must do to train adults effectively. This section provides a basis for understanding adult learning by describing the unique physical, emotional, and intellectual characteristics of adult learners. It also presents the differences between training and learning, and it prepares you for identifying when successful learning has occurred.

## Highlights

When you complete this section, you will be able to:

- Describe the characteristics of adult learners.
- Explain the differences between training and learning.

## Contents

- 3** Exercise: Self-Assessment of Adult Learning
- 4** Adult Learning Characteristics
- 8** Training is Different from Learning
- 9** Exercise: Has Learning Occurred?
- 10** Job Aid #1: Adult Learning Characteristics

# Exercise: Self-Assessment of Adult Learning

**Instructions:** This short exercise will help you assess your current understanding of adult learning.

**True or False:**

- |   |                          |      |                          |       |
|---|--------------------------|------|--------------------------|-------|
| • Adults can learn equally well at every age throughout their lifespan.   | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • The greatest amount of vision loss in adults occurs after the age of 60 years.  | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • All adults experience a decline in their physical and sensory abilities as they grow older.   | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Learning is an internal process that one's physical, emotional, and intellectual framework will affect.   | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Adults engage in learning because they believe that it will help them cope with problems in later life. Their time perspective is one of postponed application. | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Adults benefit little from individualized attention and reinforcement.  | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Studies have shown that most adults have a higher level of retention in learning when they read information rather than hear information.                       | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Adults rely heavily on the vicarious experiences of their instructors and textbooks.  | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Most adults have preferred methods for learning new knowledge and skills.   | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Adults learn best when the learning environment is informal and unstructured.   | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Adults respond well to traditional, lecture-format learning.  | <input type="checkbox"/> | True | <input type="checkbox"/> | False |
| • Like children, adults progress through developmental stages that impact their readiness to learn.   | <input type="checkbox"/> | True | <input type="checkbox"/> | False |

**Answer Key: T, F, T, T, F, F, T, F, F, T, F, T**

Adult Learning Characteristics

Social science and practical experience tell us that the characteristics of adult learners fall into three distinct categories:

- Physical characteristics
- Emotional characteristics
- Intellectual characteristics

Let's examine the physical characteristics of adult learners first. Physical traits such as lifelong learning abilities and physiological changes due to aging directly impact an adult's learning experiences.

### Physical Characteristics

#### *Lifelong Learning*

Unfortunately, many people still believe “you can't teach an old dog new tricks.” This old adage is simply *not* true. Adults can learn throughout their lifespan, but they show a decline in the **rate** of learning with age. However, this decrease in the speed of learning occurs primarily in adults who get out of the practice of learning. Those who stay in practice can learn most things as well at 60 years of age as they could at 20, and they learn some things better.



#### *Physiological Changes*

Although adults can learn throughout their lifetime, they do experience a decline in their physical and sensory abilities as they grow older. Sometimes this affects their learning.



For example, all adults experience:

- **Vision Loss.** Beyond the age of 20 years, every person shows some decline in visual acuity. The greatest amount of vision loss occurs between the ages of 40 and 55 years.
- **Hearing Loss.** People reach their peak hearing performance before age 15, and then there is a consistent decline until age 65. Hearing loss in adults can have a marked influence on their level of self-confidence and can increase feelings of isolation.
- **Less Tolerance of Cold and Heat.** Adults show a lower tolerance for learning environments that are too warm or too cold.
- **Fatigue.** As adults get older, they tire more easily.



Not all physiological changes in adults are in the direction of decline. For example, although muscular strength, vigor, and speed of reaction tend to decline with age, other skills such as skill reliability and accuracy improve with practice.

In addition to the physical characteristics of adults that affect learning, there are emotional traits as well that help determine the success of adult learning experiences.

## Emotional Characteristics

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### *Independent Self-Concept*

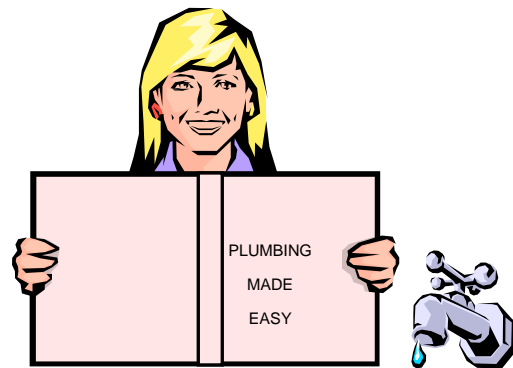
Adults see themselves as responsible, self-directing, and independent, and they want others to see them the same way. Adult learners tend to avoid, resist, and resent placement in situations where they are not treated like adults (e.g., being told what to do and what not to do, talked down to, embarrassed, punished, judged).

Often, adults fail to learn under conditions that are inconsistent with their feelings, thoughts, or actions.



### *Self-Motivated*

In addition to having an independent self-concept, adults are also self-motivating. That is, adults *want* to learn when they have a *need* to do so. They want to know how the skill and/or knowledge will help them. Studies show that adults prepare themselves to learn by determining the benefits of learning, as well as the disadvantages of not learning.



### *Reinforcement*

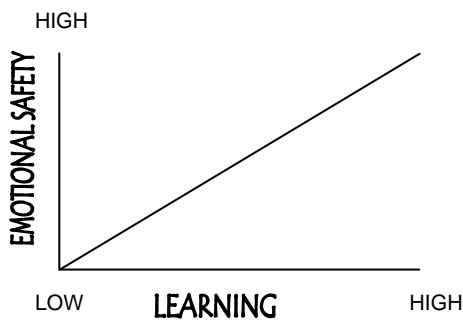
Although adult learners are self-directed, they do benefit from, and respond positively to, reinforcement from their instructors and peers.



### *Established Emotional Frameworks*

Another unique characteristic of adult learners is that they have established emotional frameworks that are part of their values, attitudes, and tendencies. Adult learning involves changing behaviors and possibly changing parts of this emotional framework. Change can be disorienting and anxiety provoking.

An adult's ability to change, and therefore to learn, is directly proportional to the degree of emotional safety he or she feels.



### *Immediate Application*

Adults tell children that most of their learning will become useful to them in later life. Therefore, their time perspective of learning is one of postponed application. Adults, on the other hand, engage in learning largely in response to current life problems, pressures, and needs.

They believe that learning will improve their ability to deal with issues they face now. Hence, their time perspective of learning is one of *immediate* application.

Finally, with physical and emotional characteristics, there also are intellectual traits that directly influence learning in adults.

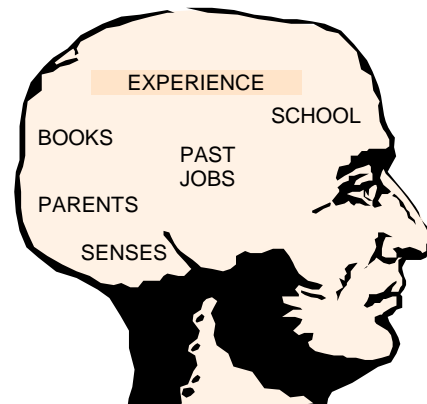
### **Intellectual Characteristics**

#### *Accumulated Experience*

Adults enter educational activities with more life experiences than children. Having lived longer, adults have accumulated a much greater volume of experiences from which to draw. Adults also have different kinds of experiences than children. Adults, therefore, are a rich resource for one another's learning. They enjoy sharing experiences with other learners, and they tend to be less dependent on their instructors and textbooks.

#### *Previous Learning*

In addition to having a greater amount of accumulated experience than children, adult learners also possess a large bank of previous learning that can be both an asset and a liability. Previous learning can be beneficial because adults learn best when they are able to link new knowledge and skills with what they have learned previously. The linkage allows the adult learners to draw upon existing knowledge and skills and decreases anxiety about learning new areas.








Previous learning, however, can also be a hindrance to learning. If the new knowledge and skills to be acquired contradict the learner's existing knowledge and skills, then the learner:

- May dismiss or reject the new knowledge and skills and stick with what he or she knows and can do.
- May experience interference from the existing knowledge and skills as he or she tries to learn the new knowledge and skills. In this case, the adult learner needs to “unlearn” previous learning before acquiring the new knowledge or skill.

### Active Learning

Another intellectual trait of adults that impacts learning is their need to participate actively in the instructional process. Adults learn by reading, listening, and watching, but they learn better when they are active participants in the learning process.

Studies show that 3 days after learning new information, adults retain<sup>1</sup>:

- 10% of What They Read 
- 20% of What They Hear 
- 30% of What They See 
- 50% of What They See and Hear 
- 70% of What They Say 
- 90% of What They Say as They Do It

Studies also show that adults have unique learning preferences, as the next section describes.

### Learning Preferences

Most adults have preferred methods for learning new knowledge and skills. Adult learners respond better when the presentation of new material utilizes a variety of instructional methods. This appeals to their different senses.



The section that begins on page 20 covers learning preferences in detail.

**Adult learners respond better when the new material utilizes a variety of instructional methods.**

<sup>1</sup>Sharon Fisher, *Adult Learning*, Amherst, MA: Human Resource Development Press, Inc., 1988.



# Training is Different from Learning

Too often, educators and trainers make the mistake of believing that successful learning has occurred simply because they have communicated certain information or demonstrated skills to their participants. Training, however, does not always result in learning. There are specific criteria you can use to determine whether learning has actually occurred.

## Training Versus Learning

The term *training* applies to any manner of imparting information or skills that others may learn. In comparison, *learning* is the acquisition and mastery of such knowledge or skills. In other words, learning is an end product of successful training.

*As an instructor, it is your job to eliminate barriers to learning so that learning will be observable, applicable, and verifiable.*

## Training ≠ Learning

Training does not always result in learning for many reasons, including:

- During training, learners can become inattentive, thus failing to acquire and master the knowledge and skills necessary for learning.
- The instructor's style and techniques do not match the learners' preferences.

- The knowledge and skills being taught may be too complex for the audience, who may become bored, confused, or frustrated.
- The learners see no direct value in learning the material.
- Training may be all theory and no practice.

*Learning is an end product of successful training.*

To prove that learning has occurred, you should use the following criteria:

- There is an **observable** change in behavior. Both the learner and the instructor observe a change in behavior.
- The learner applies the knowledge and skills in practice exercises.
- Valid and reliable testing verifies the acquisition and mastery of knowledge and skills.

As an instructor, it is your job to eliminate barriers to learning so that learning will be observable, applicable, and verifiable.

LEARNING MUST BE: <input checked="" type="checkbox"/> OBSERVABLE <input checked="" type="checkbox"/> APPLICABLE <input checked="" type="checkbox"/> VERIFIABLE
---

## TRAIN-THE-TRAINER

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### Exercise: Has Learning Occurred?

Instructions: Read each of the following learning situations and determine whether or not learning has really taken place. Explain (in the appropriate space) how you know that learning has or has not occurred.

#### Learning Situation #1:

A group views a video about blast effects.

Has learning occurred?      Yes \_\_\_\_\_      No \_\_\_\_\_

If yes, explain how you know learning has occurred. If no, explain how you know that learning has not occurred.

---

---

#### Learning Situation #2:

In training, Bill Baker encounters the Threat-Vulnerability Matrix for the first time. From the lecture he becomes familiar with the matrix, but in a practical exercise, he cannot determine the risk rating for each asset-threat/hazard pair.

Has learning occurred?      Yes \_\_\_\_\_      No \_\_\_\_\_

If yes, explain how you know learning has occurred. If no, explain how you know that learning has not occurred.

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*Answer Key: #1-No, there was not an observable change in behavior because the learner did not practice applying the knowledge from the video. #2-No, the learner was unable to apply the new knowledge during a practical exercise.*

---

# Job Aid #1:

## Adult Learning Characteristics

The following summarizes the characteristics of adult learners. Use this checklist as a guide when preparing training presentations.

- Adults, when older, may not be able to hear or see as well as they could when they were younger.
- Adults are less inclined to be impulsive; they require time to think through problems.
- Adults see themselves as capable of self-direction.
- Adults need to have a part in determining what they learn.
- Adults must want to learn before learning takes place.
- Adults have values, attitudes, and tendencies that influence their willingness to learn.
- Adults need individual attention and reinforcement to achieve personal goals.
- Adults possess a large volume of previous learning that influences learning.
- Adults learn by doing.
- Adults may not respond well to lectures.
- Adults must have training methods adapted to their needs.
- Adults prefer a variety of training methods.
- Adults learn best in an informal environment.
- Adults need to transfer new learning to their situations.
- Adults learn by sharing experiences.
- Adults stimulate each other.
- Adults want practical knowledge and skills.
- Adults prefer specific usable information rather than theoretical information.
- Adults have other responsibilities that may distract them or call them away from class.

# Adult Learning: Strategies for Success

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## Overview

The unique adult learning characteristics you read about in the previous section point out the need for some specific strategies to use when designing and delivering training to adults. By following the strategies this section introduces, you will increase the likelihood of motivating adult participants and ensuring that learning occurs.

## Highlights

When you complete this section, you will be able to use specific strategies effectively for addressing adult learning characteristics when training.

## Contents

- 12** Exercise: How Adult Learning Characteristics Impact Training
- 13** Training Strategies That Address Adult Learning Characteristics
- 17** Exercise: Applying Training Strategies to Past Experiences
- 18** Instructor Effectiveness Inventory

---

## Exercise: How Adult Learning Characteristics Impact Training

**Instructions:** For training to be successful, you must understand how adult learning characteristics impact the way you plan and deliver your training. Review the adult learning characteristics in the left-hand column, and, for each characteristic, select the most appropriate training strategy from the right-hand column. When you finish this matching exercise, check your answers against the answer key on bottom of this page.

### ***Adult Learning Characteristic***

### ***Training Strategy***

\_\_\_\_\_ Adults can learn by reading, listening, and watching, but they learn best if they participate actively in the learning process.

\_\_\_\_\_ Most adults have preferred methods for learning new knowledge and skills.

\_\_\_\_\_ Adults engage in learning in order to help them cope with current issues and problems. They seek learning that they can apply immediately.

\_\_\_\_\_ Adults have a large bank of previous learning that can be both an asset and a liability to learning.

\_\_\_\_\_ Adults enter training with a large volume of life experiences from which to draw.

\_\_\_\_\_ Adults perceive themselves as independent and capable of self-direction. They desire others to see them the same way.

\_\_\_\_\_ All adult learners experience a decline in sensory abilities (e.g., hearing, vision, physical conditioning).

a. Plan your training so that you measure successful learning in terms of accuracy and reliability, rather than speed and volume.

b. Provide learners with opportunities to identify what they want and need to learn; to plan and to carry out their own learning activities; and to evaluate their own progress toward self-selected goals.

c. Plan training activities around your participants' issues and concerns about what they will be doing in their jobs.

d. Maximize learning by doing.

e. Provide job aids to assist in "unlearning" previous information that is interfering with new learning.

f. Match the instructional methods you select to your participants' learning preferences.

g. Use the learners' life experiences to introduce and discuss new concepts.



---

# Training Strategies That Address Adult Learning Characteristics

There are many specific strategies you can use in training to address the physical, emotional, and intellectual factors of adult learning that was covered previously. Using these strategies will enable you to maximize the participants' learning by:

- Creating an environment that optimizes learning.
- Making the learning applicable to adults' past learning and present situation.
- Actively involving the learners in the training process.

## **Strategies to Address Physical Characteristics**

---

### *Lifelong Learning*

To help adults learn well at any age, you should create a learning environment that meets the needs and abilities of your adult learners. Creating this environment involves:

- Developing your activities so that you measure successful learning in terms of accuracy and reliability rather than speed and volume.
- Providing learning exercises that require analysis and processing rather than impulsive, "quick-on-your-feet" responses.

### *The Reality*

We realize that learning conditions may be less than perfect when you are teaching. Recognizing the importance of the physical environment will allow you to do as much as is within your control, given your particular conditions.

### *Physiological Changes*

The following techniques will provide a learning environment that minimizes the extent to which learners' physical conditioning and health interfere with learning:

- Provide good lighting without glare.
- Provide sound amplification with good acoustics.
- Provide conditions that minimize fatigue and anxiety.
- Allow adult learners to take breaks.
- Provide healthful food during breaks.
- Use job aids and memory-enhancement devices to help learners retain information.

## Strategies to Address Emotional Characteristics

### *Independent Self-Concept*

In order to respect adults' independent self-concepts, you need to provide your learners with opportunities to identify what they want and need to learn; to plan and to carry out their own learning activities; and to evaluate their own progress toward self-selected goals.

Follow these strategies to accomplish this objective:

- Assume the role of “learning resource” rather than the more traditional role of teacher.
- Allow adult learners to direct their own learning as much as possible.
- Treat adult learners as adults. Avoid “talking down” to adult learners. Instead, use content and style appropriate to their developmental level.
- Avoid putting adult learners in situations where they will feel embarrassed.

<p><b>MY GOALS:</b></p> <p>I need to learn...</p> <p>I want to learn...</p> <p>.....</p>
--



### *Reinforcement*

Adults respond positively to reinforcement. So, as an instructor, you should:

- Respond to the verbal and nonverbal feelings that adult learners express.
- Provide meaningful reinforcement to adult learners. Learners must perceive the reinforcement as positive from their frames of reference.
- Provide opportunities for peer feedback and reinforcement. Reinforcement from other adult learners can be as powerful as the reinforcement that instructors provide.

### *Self-Motivated*

Adults are self-motivated learners. Follow these strategies to address this adult learning characteristic:

- Make sure that adult learners get an opportunity to explore why they need to learn the knowledge or skills the training will present.
- Make learning activities relevant to the participants' learning objectives.
- Explain the possible benefits to gain by learning the knowledge or skills to be presented.
- Provide opportunities to apply and try out new learning as part of training. Instructors can motivate adult learners by convincing them of benefits. However, to stay motivated, adult learners need a chance to see the benefits for themselves.

### *Immediate Time Perspective*

Adults engage in learning largely in response to current life problems, pressures, and needs. Therefore, you should:

- Plan your training activities around your learners' issues and concerns.
- Make the training problem-centered, not subject matter-centered.
- Emphasize your function as one of helping learners look at problems and try new approaches.
- Don't tell your learners what would be "good for them."

### *Established Emotional Frameworks*

Because adult learners have established values, attitudes, and tendencies, and because learning involves changing parts of this framework, you should:

- Provide a learning environment that is non-threatening.
- Avoid making adult learners change too many behaviors all at once. Have them learn one new behavior and master it before attempting to learn another new behavior.
- Allow adult learners to hang on to established values, attitudes, and tendencies, **unless** these get in the way of learning.

## Strategies to Address Intellectual Characteristics

### *Accumulated Experience*

To draw upon the adults' extensive life experiences, you should:

- Use instructional techniques that tap the learners' experience, such as group discussion, case studies, role playing, demonstrations, group interviews, and skill practice exercises.
- Use your learners' life experiences to introduce and discuss new concepts.

### *Previous Learning*

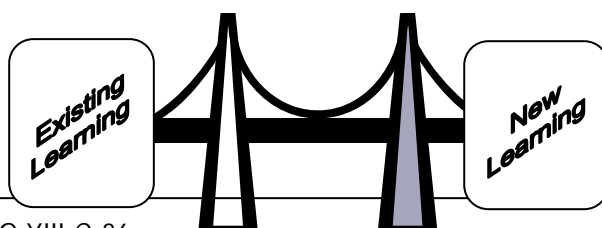
Help your learners build bridges between existing learning and new learning by:

- Using analogies and common examples when instructing.
- Allowing learners to explore what they know about an area before providing instruction.
- Giving learners credit for what they know or are able to do.
- Using learners who have mastered areas to assist other learners.
- Providing job aids or helping learners develop their own job aids to assist in "unlearning" previous learning that is interfering with new learning.

### *Active Learning*

Involve your adult learners in the learning process. Some suggested strategies are:

- Pair lectures or reading assignments with activities such as discussions, exercises, practice activities, role plays, and job simulations.
- Maximize "learning by doing."



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## Exercise: Applying Training Strategies to Past Experiences

The purpose of this exercise is to help you validate the training strategies that this section just discussed by applying them to your own past experiences as an adult learner. Follow the instructions below to complete this exercise.

1. Think of one training session you attended in the past that was **ineffective** for you as an adult learner. Jot down the ineffective elements in the appropriate space below. Write the strategies that were used during the training across from each element.

### ***INEFFECTIVE TRAINING***

#### **Ineffective Elements**

#### **Strategies Ignored**

_____	_____
_____	_____
_____	_____
_____	_____

2. Think of one training session you attended in the past that was **effective** for you as an adult learner. Jot down the effective elements in the appropriate space below. Write the strategies that were used during the training across from each element.

### ***EFFECTIVE TRAINING***

#### **Effective Elements**

#### **Strategies Used**

_____	_____
_____	_____
_____	_____
_____	_____

# Instructor Effectiveness Inventory

**Instructions:** Evaluate yourself as an instructor by answering the following questions in preparation for an effective training session. Answering “no” to any of these questions indicates a need to adjust your training strategy to meet the needs of your learners. **If you have never instructed, just read this job aid; do not check the boxes.**

<b>DO YOU AS AN INSTRUCTOR:</b>	<b>YES</b>	<b>NO</b>
Provide a learning environment that minimizes the extent to which the learners’ physical conditioning and health interfere with learning?	<input type="checkbox"/>	<input type="checkbox"/>
Provide breaks for learners?	<input type="checkbox"/>	<input type="checkbox"/>
Use job aids and other memory-enhancement devices?	<input type="checkbox"/>	<input type="checkbox"/>
Allow your learners to identify what they want and need to learn?	<input type="checkbox"/>	<input type="checkbox"/>
Allow your learners to set their own goals?	<input type="checkbox"/>	<input type="checkbox"/>
Relate the material to the learners’ goals?	<input type="checkbox"/>	<input type="checkbox"/>
Treat learners like adults?	<input type="checkbox"/>	<input type="checkbox"/>
Focus on “real world” problems?	<input type="checkbox"/>	<input type="checkbox"/>
Repeatedly reinforce skills and knowledge through various learning methods and participant practice?	<input type="checkbox"/>	<input type="checkbox"/>
Provide a learning environment that is non-threatening?	<input type="checkbox"/>	<input type="checkbox"/>
Provide meaningful reinforcement to learners?	<input type="checkbox"/>	<input type="checkbox"/>
Provide learning activities that relate to the learners’ experience?	<input type="checkbox"/>	<input type="checkbox"/>
Involve participants in the learning process and minimize passive learning?	<input type="checkbox"/>	<input type="checkbox"/>
Allow for useful debate and exchange of ideas?	<input type="checkbox"/>	<input type="checkbox"/>
Identify and accommodate for participants’ learning preferences?	<input type="checkbox"/>	<input type="checkbox"/>
Use a variety of instructional methods?	<input type="checkbox"/>	<input type="checkbox"/>
Inform your learners of what you expect of them at the end of training?	<input type="checkbox"/>	<input type="checkbox"/>

---

# Learners as Individuals

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## Overview

Each time you lead a training course, you will face the different learning styles and preferences of your participants. Some participants may learn better through visual stimulation, while others may better acquire knowledge through auditory means. Some participants may prefer to learn with background sound, such as classical music, while others need complete silence to concentrate. Some participants will prefer to study with others, while some may be more productive working on their own. This section will prepare you to identify your learners' preferences and will take steps to accommodate their different learning styles.

## Contents

<b>20</b>	Learning Styles and Preferences
<b>24</b>	Job Aid #2: Accommodating Individual Learners
<b>27</b>	Learning Preference Inventory
<b>35</b>	Job Aid #3: Strategies for Addressing Insensitive Events

## Highlights

When you complete this section, you will be able to:

- Identify your own learning style.
- Identify others' learning preferences and strategize ways to accommodate them when instructing.

# Learning Styles and Preferences

Most adults have preferred methods for learning new knowledge and skills. Adult learners respond better when an instructor presents new material through a variety of instructional methods. This appeals to their different senses. Adult learners may have preferences about any or all of the following factors.

## Physical Factors

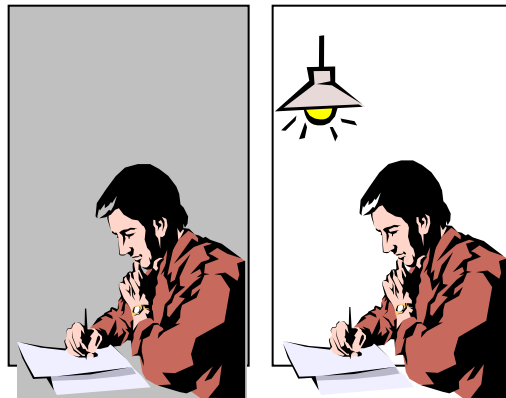
Learners have different preferences regarding their physical environment, including:

- **Noise Level:** Some learners can block out surrounding noises and function effectively despite noisy distractions. Other learners can adjust only to selected sounds and require that nearly all noisy distractions be eliminated. Still others prefer specific background sounds while studying.

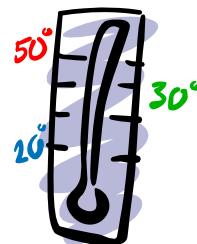


- **Lighting:** Room illumination also appears to affect the learning process. Some learners can function with ease only when the learning setting is well lit. However, other

learners may consider that same degree of lighting to be excessive. If the lighting is incorrect for the learner, it can reduce concentration by over stimulating the learner or by lulling the learner to sleep.

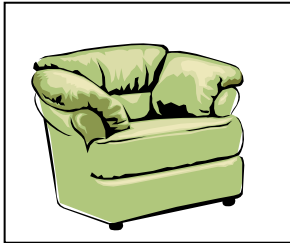


- **Room Temperature:** Room temperature is another environmental factor that can affect one's ability to learn. Some learners require a warm environment before they can study, while other learners may find the amount of warmth that relaxes certain learners actually makes them uncomfortable. Some learners function best in a cool room, while other learners are not at their best unless they are in a warm setting.

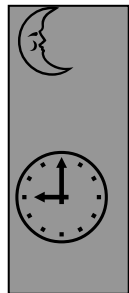
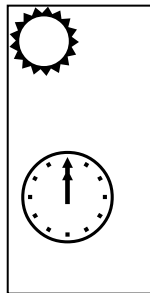
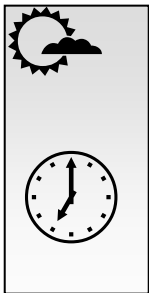




- **Room Setting:** The structure of the room setting can also affect one's ability to learn. Some learners prefer an informal setting such as a lounge area or their own living room. Other learners concentrate best when they are studying at a desk in a more formal setting.



- **Time of Day:** The final preference area in the physical dimension is the time of day. Each of us develops our own internal clock, making us more alert at certain times of the day. Therefore, some learners concentrate and learn best in the morning. Other learners are most productive in the afternoon or evening.



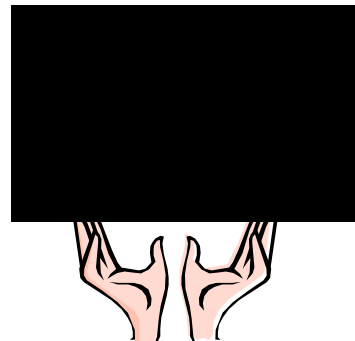
Besides having preferences about their physical learning environment, adults also have a variety of emotional needs that impact their ability to learn.

Emotional Factors

- **Social Needs:** Individuals have different social needs when learning. Learning can occur when learners work alone, with someone else, or with a small group. The learning task may influence this preference. For example, your learners may prefer to work alone when learning theoretical material, but prefer to work with someone else when applying the theory to a real problem. Even though your learners will probably engage in learning both alone and with others, they may prefer one arrangement over the other.



- **Motivation:** In addition to having different social preferences, adults also have unique motivational needs. Motivation is a necessary ingredient for learning.



Extrinsic motivation may come from external sources such as clients and fellow employees. Motivation can also be intrinsic, or in other words, come from inside ourselves. Learners usually need a combination of extrinsic and intrinsic motivation. However, individual learners may have a strong preference for one source of motivation above the other.

When motivation is extrinsic, we depend on receiving external reinforcement. External reinforcement may include anything we like or want. The same external reinforcement may not work for everyone.



Intrinsic motivation is another way of saying self-motivation. When we are intrinsically motivated, we are not looking for some external source of reinforcement. Rather, we are reinforcing ourselves. An example of internal reinforcement is feeling good about one's self after mastering a new skill: "I conducted that training course even more smoothly than the last one!"

Adults also differ in intellectual factors known as learning styles, which describe how they acquire and retain information. Some adults learn best by *hearing* information, others by *seeing* information, and still others by *touching* and *doing*.

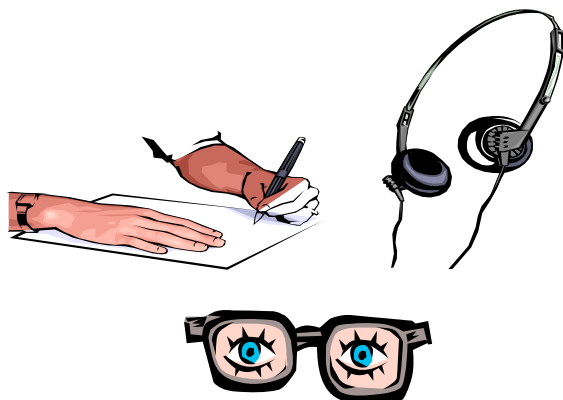
### Intellectual Factors

Adults have different learning styles, including:

- **Auditory:** Some adults may be auditory learners. Auditory learners are those who can easily differentiate among sounds and can reproduce symbols, letters, or words by hearing them. Learners who favor auditory learning must be able to remember what they just heard.

*Some adults learn best by hearing information, others by seeing information, and still others by touching and doing.*

While auditory learning can enhance learning for some people, it can also frustrate learning for others. Some learners prefer to read words rather than hear them spoken. Reading allows the learner to set the pace and review passages with ease.



- **Visual:** Adults can also be visual learners who learn best by seeing an image or conjuring up an image in their mind. These learners prefer instructional materials that include many maps, pictures, symbols, graphs, and lists.



All learning is ultimately kinesthetic. Learners' preferences relate to the timing of the kinesthetic experience and the amount of kinesthetic experiences needed. Strong kinesthetic learners need practice exercises early in the learning process.

Other learners prefer to engage in kinesthetic experiences only after they have mastered new learning through auditory or visual means.

*All learning is ultimately kinesthetic.*

- **Kinesthetic:** Finally, adults who are kinesthetic learners learn best through their tactile sense or through experience—in other words, by touching or doing. For example, kinesthetic learners find it easier to remember things that they have written down over things that they have heard. A kinesthetic learner is the one who underlines in bold or takes notes while reading.



As instructors, you must be able to identify the unique learning styles and preferences of your participants and accommodate these differences with a variety of instructional techniques, methods, and media. The following job aid summarizes individual learning styles and suggests strategies for accommodating your learners' styles.



## Job Aid #2:

# Accommodating Individual Learners

This table summarizes individual learning preferences and provides strategies for accommodating your learners' unique learning styles, whenever it is possible to do so.

<b><i>IF YOUR LEARNERS PREFER:</i></b>	<b><i>THEN:</i></b>
<p><b><i>PHYSICAL FACTORS</i></b></p> <ul style="list-style-type: none"> <li>• Background noise while studying</li> </ul>	<ul style="list-style-type: none"> <li>• Play soft music during your instruction.</li> <li>• Encourage your learners to study in open places like lounges, rather than quiet libraries.</li> </ul>
<ul style="list-style-type: none"> <li>• A quiet learning setting</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage your learners to use ear plugs or a special audiotape with “white noise” when studying. (White noise is nonspecific noise that can block out other noise.)</li> <li>• Arrange for periods of quiet time.</li> </ul>
<ul style="list-style-type: none"> <li>• A brightly lit learning setting</li> </ul>	<ul style="list-style-type: none"> <li>• Select learning environments with a lot of windows or other sources of direct light.</li> </ul>
<ul style="list-style-type: none"> <li>• A darker learning setting</li> </ul>	<ul style="list-style-type: none"> <li>• Select darker learning environments without a lot of windows or direct light.</li> <li>• Encourage these learners to move away from the windows and other sources of direct light.</li> <li>• Encourage these learners to wear tinted glasses to cut down on the amount of light or glare.</li> </ul>
<ul style="list-style-type: none"> <li>• A warm learning climate</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage learners to sit near the heating source and bring extra clothing.</li> </ul>

## Job Aid #2: Accommodating Individual Learners (Continued)

<b>IF YOUR LEARNERS PREFER:</b>	<b>THEN:</b>
<p><b>PHYSICAL FACTORS</b> (Continued)</p> <ul style="list-style-type: none"> <li>• A cool learning climate</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage learners to move away from the heating source and wear cool clothing.</li> <li>• Adjust the room temperature by opening windows, lowering the thermostat setting, or bringing in fans.</li> </ul>
<ul style="list-style-type: none"> <li>• Studying in the morning</li> </ul>	<ul style="list-style-type: none"> <li>• Arrange your lesson plans so that:                             <ul style="list-style-type: none"> <li>- You cover the more difficult areas in the morning when learners have the most energy.</li> <li>- Learners work on the easiest areas in the afternoon.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Studying in the afternoon</li> </ul>	<ul style="list-style-type: none"> <li>• Arrange your lesson plans so that:                             <ul style="list-style-type: none"> <li>- Learners work on the easiest areas in the morning.</li> <li>- You save the more difficult areas for the afternoon when learners have the most energy.</li> </ul> </li> </ul>
<p><b>EMOTIONAL FACTORS</b></p> <ul style="list-style-type: none"> <li>• Learning alone</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare a lot of individualized learning activities for your group.</li> </ul>

## Job Aid #2: Accommodating Individual Learners (Continued)

<b><i>IF YOUR LEARNERS PREFER:</i></b>	<b><i>THEN:</i></b>
<b><i>EMOTIONAL FACTORS</i></b> <i>(Continued)</i> <ul style="list-style-type: none"> <li>• Learning with others</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare a lot of group activities for your learners.</li> </ul>
<ul style="list-style-type: none"> <li>• Extrinsic motivation</li> </ul>	<ul style="list-style-type: none"> <li>• Provide a lot of individualized attention and positive reinforcement to your learners.</li> <li>• Have peers provide feedback to one another.</li> </ul>
<ul style="list-style-type: none"> <li>• Intrinsic motivation</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to provide reinforcement, but to a lesser degree than with extrinsically motivated learners.</li> </ul>
<b><i>INTELLECTUAL FACTORS</i></b> <ul style="list-style-type: none"> <li>• Auditory learning</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage learners to talk through steps in an activity.</li> <li>• Encourage oral reporting.</li> <li>• Use tape-recorded instruction and other audio equipment.</li> </ul>
<ul style="list-style-type: none"> <li>• Visual learning</li> </ul>	<ul style="list-style-type: none"> <li>• Provide visual directions and demonstrations.</li> <li>• Use maps, graphs, charts, and other visual aids.</li> </ul>
<ul style="list-style-type: none"> <li>• Kinesthetic learning</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage your learners to take notes while they read, listen, or watch.</li> <li>• Employ role-playing and simulation exercises.</li> <li>• Let learners assist you in creating learning aids.</li> </ul>

# Learning Preference Inventory

**Instructions:** Read each statement below. Indicate your level of disagreement or agreement with each statement by circling a number to the right of the statement.

Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
1	2	3	4	5

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. When I read, I like to have a lot of light.   | 1 | 2 | 3 | 4 | 5 |
| 2. I learn well by hearing how to do something; i.e., from a tape, a record, or a lecture. | 1 | 2 | 3 | 4 | 5 |
| 3. I would rather study in a library than in a lounge.                                     | 1 | 2 | 3 | 4 | 5 |
| 4. I find it difficult to study when there is music in the background.                     | 1 | 2 | 3 | 4 | 5 |
| 5. I feel that I am self-motivated.  | 1 | 2 | 3 | 4 | 5 |
| 6. I work or study well in the evening.  | 1 | 2 | 3 | 4 | 5 |
| 7. I have trouble concentrating when I am working or studying with other people.           | 1 | 2 | 3 | 4 | 5 |
| 8. I like to draw or use diagrams when I learn.  | 1 | 2 | 3 | 4 | 5 |



**Learning Preference Inventory** (Continued)

	Strongly Disagree 1	Disagree 2	Neither Disagree Nor Agree 3	Agree 4	Strongly Agree 5
9. I am comfortable at times when those around me say it's too warm.	1	2	3	4	5
10. I like my family or friends to know that I do a good job at work.	1	2	3	4	5
11. I enjoy learning new things about my work.	1	2	3	4	5
12. It's difficult for me to concentrate when I am cold.	1	2	3	4	5
13. Noise and background conversations and/or music really bother me when I have to concentrate.	1	2	3	4	5
14. I work or study well in the afternoon.	1	2	3	4	5
15. I prefer to work or study alone.	1	2	3	4	5
16. I have trouble studying when I sit on a soft chair or couch or lie on the floor.	1	2	3	4	5
17. When I work, I like to turn on all the lights.	1	2	3	4	5
18. I like my instructors or supervisors to recognize my efforts.	1	2	3	4	5
19. I learn well by trying to do things myself, with my own hands.	1	2	3	4	5

TRAIN-THE-TRAINER

**Learning Preference Inventory** (Continued)

	Strongly Disagree 1	Disagree 2	Neither Disagree Nor Agree 3	Agree 4	Strongly Agree 5
20. I concentrate best when I am sitting up at a desk.	1	2	3	4	5
21. I would rather be warm than cold.	1	2	3	4	5
22. I prefer working in bright light.	1	2	3	4	5
23. The things that I remember best are the things that I hear.	1	2	3	4	5
24. I learn best by <i>doing</i> on the job.	1	2	3	4	5
25. I get a lot of satisfaction from doing the best I can.	1	2	3	4	5
26. I work better when I know that my work will be checked.	1	2	3	4	5
27. I learn well by seeing how to do something; i.e., looking at a diagram or picture, or watching someone else do it.	1	2	3	4	5
28. I get less done when I work with someone else.	1	2	3	4	5
29. I work or study well in the morning.	1	2	3	4	5
30. I find it difficult to block out noise when I am trying to work.	1	2	3	4	5

# Scoring Your Learning Preference Inventory

**Instructions:** Take your scores from the Learning Preference Inventory and enter each item score where indicated on this score sheet. Add the item scores under each category to get an idea of your learning preferences.

## Physical Preferences: Learning Setting

<u>Noise Level</u>	<u>Item #</u>	<u>Score</u>
	4	_____
	13	_____
	30	_____
	Total Score	_____

- Total scores of **10 or more** indicate that noises bother you when you are trying to learn.
- Total scores of **9 or less** indicate that noises do *not* bother you when you are trying to learn

<u>Lighting</u>	<u>Item #</u>	<u>Score</u>
	1	_____
	17	_____
	22	_____
	Total Score	_____

- Total scores of **10 or more** indicate that you prefer to learn in bright lighting.
- Total scores of **9 or less** indicate that you do *not* prefer to learn in bright lighting.

Physical Preferences: Learning Setting (Continued)

<u>Temperature</u>	<u>Item #</u>	<u>Score</u>
	9	_____
	12	_____
	21	_____
	Total Score	_____

- Total scores of **10 or more** indicate that you prefer to learn in warmer temperatures.
- Total scores of **9 or less** indicate that you prefer to learn in cooler temperatures.

<u>Structure</u>	<u>Item #</u>	<u>Score</u>
	3	_____
	16	_____
	20	_____
	Total Score	_____

- Total scores of **10 or more** indicate that you prefer a **formal** learning setting.
- Total scores of **9 or less** indicate that you prefer an **informal** learning setting.

Physical Preferences: Time of Day

	<u>Item #</u>	<u>Score</u>
<u>Morning Score</u>	29	_____
<u>Afternoon Score</u>	14	_____
<u>Evening Score</u>	6	_____
	Total Score	_____

- Total scores of **4 or 5** indicate a preference for learning at that time of day.
- You may have more than one time preference for learning, or time may not make a difference to you.

Emotional Preferences: Social Needs

<u>Alone or With Others</u>	<u>Item #</u>	<u>Score</u>
	7	_____
	15	_____
	28	_____
	Total Score	_____

- Total scores of **10 or more** indicate that you prefer to learn alone.
- Total scores of **9 or less** indicate that you prefer to learn with other people.

Emotional Preferences: Motivation

<u>Extrinsic Motivation</u>	<u>Item #</u>	<u>Score</u>
	10	_____
	18	_____
	26	_____
	Total Score	_____

- Total scores of **10 or more** indicate that external reinforcements may be important to you.
- Total scores of **9 or less** indicate that external reinforcements may *not* be very important to you.

<u>Intrinsic Motivation</u>	<u>Item #</u>	<u>Score</u>
	5	_____
	11	_____
	25	_____
	Total Score	_____

- Total scores of **10 or more** indicate that you seem to be self-motivated.
- Total scores of **9 or less** indicate that you may *not* be self-motivated.

Intellectual Preferences: Learning Styles

<u>Auditory Learning</u>	<u>Item #</u>	<u>Score</u>
	2	_____
	23	_____
	Auditory Total	_____

<u>Visual Learning</u>	<u>Item #</u>	<u>Score</u>
	8	_____
	27	_____
	Visual Total	_____

<u>Kinesthetic Learning</u>	<u>Item #</u>	<u>Score</u>
	19	_____
	24	_____
	Kinesthetic Total	_____

- In each area (auditory, visual, kinesthetic), total scores of 7 or more indicate a preference for that type of learning.
- You may prefer more than one type of learning, or types of learning may not make a difference to you.

## Job Aid #3: Strategies for Addressing Insensitive Events

Listed below are examples of events that may occur during training that add to personal biases and stereotypes and that fail to show respect for differences in people. Also included are possible strategies for responding appropriately to these events in the training room. It is critical that, as an instructor, you are aware of these events and that you are prepared to respond appropriately. Refer to this when preparing for training.

<b><i>POSSIBLE EVENT</i></b>	<b><i>STRATEGY</i></b>
Telling jokes about gender, ethnicity, or a profession.	<ul style="list-style-type: none"> <li>• Do <i>not</i> publicly denounce the person telling the joke.</li> <li>• As soon as the person has finished telling the joke, announce that these types of jokes are inappropriate and illegal and will not be tolerated.</li> </ul>
Praising or negatively reinforcing only some participants.	<ul style="list-style-type: none"> <li>• Be aware of your own biases, and concentrate on recognizing <i>all</i> participants equally.</li> <li>• Avoid negative reinforcement (e.g., punishing, sarcasm, putting down participants) altogether.</li> </ul>
Failing to prepare for a participant with special needs.	<ul style="list-style-type: none"> <li>• Apologize to the participant.</li> <li>• Ask the participant how you can be of assistance.</li> <li>• In the future, be aware of who your course participants are so you can prepare for those with special needs.</li> </ul>
Making sexual remarks.	<ul style="list-style-type: none"> <li>• Inform the offender(s) that making sexual remarks is illegal and will not be tolerated in the training room.</li> <li>• If a participant has been offended by the remarks, ask the offender to apologize.</li> </ul>



# Reading Assessment

**Instructions:** Place your answers to the following questions on the answer sheet on page 40. When you finish this assessment, check your answers against the answer key on page 42.

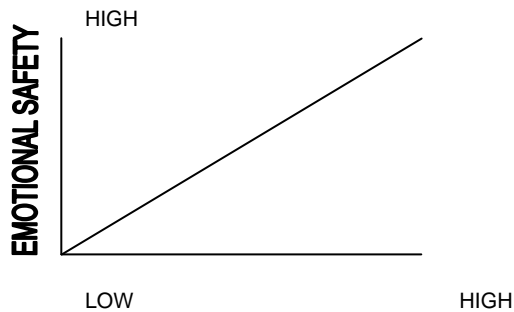
1. Which of the following combinations of training methods is **most** consistent with adult learning principles?
  - a. Lectures and reading assignments
  - b. Reading assignments, demonstrations, and tests
  - c. Reading assignments, group discussions, and practical exercises
  - d. Lectures and case studies

In questions 2 through 5, match the descriptions on the left with the correct learning style on the right.

- |    |  |                           |
|----|--|---------------------------|
| 2. | I get a lot of satisfaction from doing the best I can.   | a. Visual Learning        |
| 3. | I learn well by seeing how to do something.  | b. External reinforcement |
| 4. | I work better when I know my work will be checked.   | c. Internal reinforcement |
| 5. | I learn well from videos and lectures.   | d. Social needs           |
|    |  | e. Auditory learning      |
| 6. | John has felt unprepared in responding to questions from COOP facility managers about their mitigation options. In response, he has searched DOD and DHS websites for best practices. Which adult learning characteristic is being illustrated in this scenario? |                           |
|    | a. Active learning. Adults learn best when they are active participants in the learning process.   |                           |
|    | b. Immediate application. Adults engage in learning to help them deal with issues they face now.   |                           |
|    | c. Accumulated experience. Adults bring more life experiences to the learning environment than children.   |                           |
|    | d. Reinforcement. Adult learners benefit from, and respond to, reinforcement.  |                           |

1. Reading Assessment (cont'd)

7. Tom is conducting *Building Design for Homeland Security*. During his workshop, a participant cracks a joke about a particular ethnic group. What is the most appropriate way for Tom to handle this event?
- a. At the next break, take the person aside and tell him or her that these types of jokes are inappropriate and illegal.
  - b. As soon as the person has finished telling the joke, announce that these types of jokes are inappropriate and illegal and will not be tolerated.
  - c. Laugh now, but tell the person about your discomfort later in private.
  - d. Use the situation as an opportunity to discuss cultural sensitivity with the entire class.
8. With the Y axis labeled Emotional Safety, what should the X axis be labeled?



- a. Practice
- b. Number of instructors
- c. Learning
- d. Number of course participants

## 2. Reading Assessment (cont'd)

9. Select the method from which adults will retain the most information after 3 days.
  - a. Information they speak
  - b. Information they hear
  - c. Information they read
  - d. Information they see
  
10. You involve your participants in the learning process by combining reading assignments with job simulations. This is an example of which adult intellectual characteristic?
  - a. Accumulated experience
  - b. Active learning
  - c. Previous learning
  - d. Physiological changes
  
11. One can learn more effectively by:
  - a. Engaging in the class and in small group activities.
  - b. Listening to lecture and taking notes.
  - c. Working alone and asking the presenter questions.
  - d. Expecting to be entertained during training.
  
12. During the morning session, you notice that course participants seem very tired. After lunch, you decide to address the fact that they have a low energy level. What learning activity should you select?
  - a. Video
  - b. Lecture
  - c. Group exercise
  - d. Power Point presentation

### 3. Reading Assessment (cont'd)

13. A participant who draws diagrams and pictures to understand information, and who learns new skills best by watching others, is most likely a:
- a. Visual learner
  - b. Auditory learner
  - c. Social learner
  - d. Self motivated learner

For questions 15 through 20, review the adult learning characteristic on the left and determine the most appropriate training strategy from the right.

- |   |  |
|---|--|
| <p>14. Adults can learn by reading, listening, and watching, but they learn best if they participate actively in the learning process.</p>            | <p>a. Provide learners with opportunities to identify what they want and need to learn; to plan and to carry out their own learning activities; and to evaluate their own progress toward self-selected goals.</p> |
| <p>15. Most adults have preferred methods for learning new knowledge and skills.</p>  | <p>b. Plan training activities around your participants' issues and concerns.</p>  |
| <p>16. Adults engage in learning in order to help them cope with current issues and problems. They seek learning that they can apply immediately.</p> | <p>c. Maximize learning by doing.</p>  |
| <p>17. Adults have a large bank of previous learning that can be both an asset and a liability to learning.</p>                                       | <p>d. Provide job aids to assist in "unlearning" previous information that is interfering with new learning.</p>   |
| <p>18. Adults enter training with a large volume of life experiences from which to draw.</p>  | <p>e. Match the instructional methods you select to your participants' learning preferences.</p>   |
| <p>19. Adults perceive themselves as independent and capable of self-direction. They desire others to see them in the same way.</p>                   | <p>f. Use the learners' life experiences to introduce and discuss new concepts.</p>  |

# ***Reading Assessment***

## **ANSWER SHEET**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
18. \_\_\_\_\_
19. \_\_\_\_\_

TRAIN-THE-TRAINER

Reading Assessment

**ANSWER KEY**

1. c
2. c
3. a
4. b
5. e
6. b
7. b
8. c
9. a
10. b
11. a
12. c
13. a
14. c
15. e
16. b
17. d
18. f
19. a