

# Facilitate the Best Learning Experiences

## Chapter Objectives

- To learn how to select the appropriate training method based on the learning objectives
- To learn how to select appropriate technical training methods
- To process adult learning activities using five steps
- To learn how to sequence and pace training methods

## Tools

- Best Learning Experiences
- Technical Training Methods to Promote Recall
- Technical Training Methods to Promote Application
- Select the Best Audiovisual Support
- Methods Variety Scale
- DIF: How Much Practice and Training?

**Chapter Questions**

- What methods can you use to help adults remember what they learned in training?
- What training method creates the best learning experience?
- What are the most effective training techniques for technical training topics?
- What media work best to deliver training?
- How can adults get the most from any learning experience?
- How are training methods paced to maintain attention and improve retention?
- How much practice is needed to learn and retain a new skill?

## What Methods Can You Use to Help Adults Remember What They Learned in Training?

For your training to be effective, consider using a variety of training methods that appeal to different learning styles. Most adults learn best when they are actively involved in their learning experiences. When learners discover concepts, rather than listen to them in a lecture or video, retention improves. When a variety of learning methods are logically sequenced, the learners' attention and retention improve. This chapter addresses these issues using tools and examples you can adapt for your training sessions.

## What Training Method Creates the Best Learning Experience?

Selecting the best training method is easy when you first identify the learning objective. Remember, learning objectives are written from the learner's point of view. For example, *by the end of this session, the new sales representatives will identify the features and benefits of our new product.* In order to reach this objective, sales representatives will need to remember product knowledge information. The most common training method to impart knowledge is to give a lecture. However, there are several other options that can also meet this objective, such as a demonstration, video, information search, interview, reading printed materials, and tests.

Tool 1.1 identifies the best technique or learning experience to achieve the learning objective. In the table, the name of the training technique is to the left. The middle column describes the technique from the learner's point of view. The right column tells what type of objective is best reached by using this technique. "K" indicates a knowledge objective, for learning facts, theories, or visual identification. "S" indicates an objective that teaches a mental or physical skill and includes analyzing or applying facts, principles, and concepts or performing a perceptual or motor skill. "A" stands for influencing the learner's attitudes, opinions, and motivations. Some techniques are best used to teach only one type of objective. Other techniques can be used effectively to teach more than one type of objective.



### Tool 1.1. Best Learning Experiences\*

Technique	Description (Written from the learners' perspective)	Best Use		
		K	S	A
Behavior Modeling	See a model or ideal enactment of desired behavior demonstrated by instructor or video	X		
Case Study or Scenario	Analyze and solve a problem, a case situation, or a scenario, alone and/or in a small group	X	X	X
Demonstration	Hear the instructor verbally explain and see the instructor perform a procedure or process	X		
Discussion	Discuss problems or issues, share ideas and opinions in a group		X	X
Field Trip or Observation	Experience or view actual situations for first-hand observation and study	X		
Film, Video, or Skit	View a one-way organized presentation	X		
Games, Exercises, Structured Experiences	Participate in planned activities, then discuss feelings, reactions, and application to real life	X	X	X
In-Basket Exercises	Review typical paperwork to sort, delay, discard, or act on immediately	X	X	X
Information Search	Search for information in source materials alone or in a group	X		
Inquiry-Oriented Discussion	Participate in a discussion during which the facilitator asks planned questions to encourage discovery learning	X		X
Interview	Question a resource person on behalf of the audience	X	X	
Jigsaw Learning or Teaching Learning Team	Concentrate on different information in study groups, where members re-form in groups to teach each other	X	X	X
Learning Tournament	Review material, then compete against other study groups in self-scoring test	X		

\*Special thanks to Melissa Smith, Senior Training Clinic Instructor, who helped create this chart.

*The Art of Great Training Delivery*. Copyright © 2006 by Jean Barbazette. Reproduced by permission of Pfeiffer, an Imprint of Wiley. [www.pfeiffer.com](http://www.pfeiffer.com)



### Tool 1.1. Best Learning Experiences\*, Cont'd

Technique	Description (Written from the learners' perspective)	Best Use		
		K	S	A
Lecture	Listen to a one-way presentation of information	X		
Practice or Return Demonstration	Repeat performance of a skill under supervision of instructor, and then again without supervision		X	
Printed Resources	Use charts, posters, laminated job aids, cards, and handouts for reference or as a resource	X		X
Role Playing or Skill Practice	Dramatize a problem or situation, then follow with discussion		X	X
Self-Assessment or Inventory	Examine own values, skills, style, etc., through experiences, surveys, and activities	X		X
Simulations	Experience a situation as nearly real as possible, followed by discussion		X	X
Study Groups	Read material individually, then clarify content in small groups	X		X
Task Force Project	Generate plans in groups that can be used in the actual work situation to solve a real problem	X	X	X
Teaching Project	Teach new information or skills to one another	X	X	
Tests	Answer questions or complete activities that test comprehension, recall, application, etc., of the learning material	X	X	
Writing Tasks	Reflects on own understanding of and response to training, usually descriptive — either planning to use skills or describing an event.	X	X	X

\*Special thanks to Melissa Smith, Senior Training Clinic Instructor, who helped create this chart.

*The Art of Great Training Delivery*. Copyright © 2006 by Jean Barbazette. Reproduced by permission of Pfeiffer, an Imprint of Wiley. [www.pfeiffer.com](http://www.pfeiffer.com)

To continue with the example of the sales representatives, after learning features and benefits of a new product, additional objectives can develop further learning. For example, *sales representatives will match product benefits to five different types of customers*. Since this objective requires skill application, look for training techniques that have an “X” in the “S” column. The best learning experiences might involve a case study, a small group discussion about different types of customers, and matching benefits to each customer’s needs. A role play or simulation of a customer interview will also help meet this objective.

Following are two additional training situations. After you read through each situation and the suggested learning objectives, categorize each learning objective as a knowledge, skill, or attitude objective using Tool 1.1, and then identify at least three training techniques that would help these learners meet their objectives.

### **Situation One**

An experienced cashier, Pamela, has been moved from hardware to children’s shoes in a very large department store. From previous training sessions, you remember Pamela as an eager learner who by now is familiar with store policies and cashiering procedures. She is used to dealing with home repair enthusiasts and decorators (adults). Now she must deal with different customers and different merchandise.

Your learning objectives for Pamela’s first week in children’s shoes are for her to:

1. Learn the new merchandise so she can make appropriate recommendations; and
2. Develop different strategies to deal with children and their parents.

### **Suggested Answers**

The first objective is for Pamela to acquire new knowledge about the new merchandise. Pamela can achieve this objective by observing existing employees, doing an information search to learn how the stock is organized, or reviewing printed resources and catalogs that describe the merchandise. The second objective is a skill based on an attitude of helping children and their parents find the right shoes. Case studies, discussions, and role play or skill practice can help

Pamela reach this objective since each of these methods addresses both skills and attitudes.

## Situation Two

You are assigned to train the new Auxiliary volunteers at your hospital. During a previous class for the new volunteers, the only element not “covered” was responding to medical questions and handling sensitive or confidential information. You need to include this information in your next class. Your objectives are to:

1. Distinguish sensitive and confidential information from information that can be discussed openly; and
2. Practice responding to questions about sensitive or confidential information.

## Suggested Answers

Distinguishing sensitive and confidential information from information that can be discussed openly is a knowledge objective. If you selected information search, case study, inquiry-oriented discussion, or interview, these techniques are good choices to reach this objective and let the learner discover the information. While giving a brief lecture might reach this objective, it could be the most boring alternative. The second objective requires skill to respond to “medical” questions. Responding to sensitive or confidential information is a skill that is guided by a gentle and caring attitude when speaking to patients or their family members. A combination of case studies, interviews, role plays, and tests can help the volunteers reach this objective.

So far the examples and objectives are about teaching “soft” skills, for which Tool 1.1 is well-suited. Tool 1.1 is also useful in selecting the best learning experiences for teaching technical topics. Tool 1.2 and Tool 1.3 are also helpful for selecting techniques to teach technical topics.

## What Are the Most Effective Training Techniques for Technical Training Topics?

Whatever technical information is taught, it can be taught for two purposes, either to *recall* the information or to *apply* the information. The learning objective

can tell you whether or not you need to train someone so he or she merely remembers something or knows how to use and apply the information. Tool 1.2 shows five types of information involved in teaching technical topics so employees can recall facts, concepts, processes, procedures, and guidelines.<sup>1</sup> Tool 1.3 shows how to teach technical topics so the employee can use or apply this type of information. Here are some definitions and suggested examples:

*Facts* are individual statements. For example: What is your password? Or which color of a five-part form goes to the customer? What is the part number for this product? What does error message 51 mean? Who is the vice president of operations? The reason you want the learner to remember this type of information/these facts is usually to do something with the information. The least effective training method is memorization. If knowing factual information is important, make sure participants practice using the facts during the training. This type of training can include “look-up” exercises or practice using job aids.

*Concepts* are usually stated as a classification or category, or as a general idea. For example, the concept of “preferred customers” implies someone with a good credit history and deserving of special treatment. The reason you want an employee to understand the concept or remember how a concept is defined is to help the employee make a decision or to follow a policy or guideline. Thus, a “preferred” customer may receive preferred delivery, better discounts, special pricing terms, and so forth. Train employees to recognize concepts by using exercises to classify or categorize by matching criteria to a sample situation.

*Work processes and procedures* are defined as steps to take and why we take them. *Process* focuses on *how* something works. *Procedures* focus on *what steps* are taken. Seventy-five percent or more of technical training involves teaching processes and procedures, for example, how to process a claim, place a telephone order, change engine oil, replace a valve, complete a repair, draw blood, or write a report. You want an employee to recall or use a process or procedure so he or she can complete the process or procedure correctly.

---

<sup>1</sup>The five types of information are based on work done by Ruth Clark, described in *Developing Technical Training*. Reading, MA: Addison-Wesley, 1989.

On the recall level, the employee would list the steps and explain why they are taken. That's important during the training process and in high-risk situations. On the use/application level, the employee would do the steps (usually in a return demonstration). For example, during software training, it's easier to teach the content through the process. Often by doing it (following the steps), the learner can "discover" why it is done that way. For this type of training, first, teach the learner the steps to print a report, rather than lecture on how the report will be used and why the steps are done that way. This information can be expanded on later. Many technical processes are concerned with teaching "functionality." Can they do it? You don't have to know how an automobile is made to drive it safely.

*Guidelines* are policies, common practices, or principles that guide the use of processes and procedures or the application of facts or concepts. For example, who gets credit, which customers pay before pumping their own gas, who is entitled to a refund, which part can be replaced under a warranty, which loans are funded or denied, which returned merchandise is accepted, what merchandise is shipped by surface carrier or air. The reason you want employees to be able to state criteria or guidelines is usually because they will have to explain the criteria or guidelines to a customer. On the use/application level, employees must be able to apply guidelines/criteria to individual situations. The best methods to teach employees to recall and apply principles are to provide situations, case studies, or examples and to ask the learners to make the decisions.

## What Media Work Best to Deliver Training?

Use the table in Tool 1.4 to identify the best audiovisual support to achieve the learning objective. "K" stands for a knowledge objective, for learning facts, theories, or visual identification. "S" stands for an objective that teaches mental or physical skill and includes analyzing or applying facts, principles, and concepts or performing a perceptual or motor skill. "A" stands for influencing attitudes, opinions, and motivations of learners. Some support media are best used to teach only one type of objective. Other media can be used effectively to teach more than one type of objective.



### Tool 1.2. Technical Training Methods to Promote Recall\*

	Objective Is Recall	Training Methods
<b>Facts</b> Unique, literal information Ex: PIN number, date, part number	Remember Identify	Job aid, online help Memorization Mnemonic cues
<b>Concepts</b> A classification or category of things with shared features, a mental image, a general idea, elements of a class Ex: computer, car, good credit, empathy, who is eligible for a refund	State the definition State the criteria List the guidelines	Analogies Define Give examples Demonstration Answer questions
<b>Procedures</b> Steps to take Ex: Put gas in a car; connect to the intranet, how to draw blood	List the steps Tell how to do the task	Memorize steps Tell sequence of steps
<b>Processes</b> Why steps are taken Ex: How to store a cell telephone number; the process for ordering office supplies, how blood circulates	Explain why steps are taken Describe how a process works	Describe Answer questions
<b>Guidelines</b> Policies, common practices, or principles that guide the use of processes and procedures or the application of facts and concept Ex: Create the next part number in a sequence	State the guideline	Job aid Look-up exercise

\*Special thanks to Linda Ernst, Senior Training Clinic Instructor, who contributed to the creation of this table.

*The Art of Great Training Delivery*. Copyright © 2006 by Jean Barbazette. Reproduced by permission of Pfeiffer, an Imprint of Wiley. [www.pfeiffer.com](http://www.pfeiffer.com)



### Tool 1.3. Technical Training Methods to Promote Application\*

	Objective Is Use/Application	Training Methods
<b>Facts</b> Unique, literal information Ex: PIN number, date, part number	Explain Use as part of a procedure, process, concept, or principle	Practice
<b>Concepts</b> A classification or category of things with shared features, a mental image, a general idea, elements of a class Ex: computer, car, good credit, empathy, who is eligible for a refund	Classify examples Categorize examples Apply a concept or policy Match criteria to a situation	Discrimination exercises to identify non-examples Classification activities
<b>Procedures</b> Steps to take Ex: Put gas in a car; connect to the intranet	Do the steps	Sequence steps Demonstrate use Practice
<b>Processes</b> Why steps are taken Ex: How to store a cell telephone number; the process for ordering office supplies	Solve a problem Relate cause and effect	Practice decisions Simulations Troubleshooting exercises Read flow charts Case studies
<b>Guidelines</b> Policies, common practices, or principles that guide the use of processes and procedures or the application of facts and concepts Ex: Create the next part number in a sequence	Apply the guideline Make a decision	Case study Role play Discrimination exercise Practice decisions

\*Special thanks to Linda Ernst, Senior Training Clinic Instructor, who contributed to the creation of this table.

*The Art of Great Training Delivery*. Copyright © 2006 by Jean Barbazette. Reproduced by permission of Pfeiffer, an Imprint of Wiley. [www.pfeiffer.com](http://www.pfeiffer.com)



### Tool 1.4. Select the Best Audiovisual Support\*

Audiovisual Instructional Medium	Best Use		
	K	S	A
Audio recording	X	X	
Cartoons			X
Drawings and illustrations	X	X	
Exhibits	X		
Flip charts, whiteboards, and chalkboards	X		
Models and mock-ups	X	X	
Music			X
Overhead projection, electronic slides	X		
Photos	X		
Printed material	X	X	
Real objects	X	X	
Simulators	X	X	
Toys			X
Video, film, and TV	X	X	X

\*Special thanks to Melissa Smith, Senior Training Clinic Instructor, who helped create this table.

*The Art of Great Training Delivery*. Copyright © 2006 by Jean Barbazette. Reproduced by permission of Pfeiffer, an Imprint of Wiley. [www.pfeiffer.com](http://www.pfeiffer.com)

## How Can Adults Get the Most from Any Learning Experience?

Many trainers are familiar with an experiential learning model that takes learners through a series of steps to process a learning activity such as a simulation. This type of debriefing discussion is helpful and appropriate for any type of learning activity. Here is a general description of what takes place during the five steps of adult learning.<sup>2</sup> The successful trainer or facilitator guides adult learners through these five steps to gain the most from any learning activity used to achieve the learning objective. These five steps are similar to many experiential learning models.

### 1. Trainer Sets Up the Learning Activity by Telling What, Why, and How

Set up the learning activity so the participants understand *what* they are going to do (for example, read a case study and individually prepare answers for a discussion) and why they are doing it (learn about how to give a performance review). Adult learners become motivated when they understand the benefit to them of learning something new or the importance of the objective for themselves. To understand *how* the objective will be met, give directions and ground rules regarding how the learning activity is to be conducted. The set-up of a learning activity can include such things as:

- Tell participants the purpose of the learning activity and why they are going to learn from the activity without giving away what is to be “discovered.”
- Explain what the participants are going to do.
- Review the written directions and answer questions about the activity.
- Divide participants into small groups or explain the amount of time to prepare individually for a group activity.

---

<sup>2</sup>Adapted from *Instant Case Studies* by Jean Barbazette © 2001. San Francisco: Pfeiffer. Used with permission.

- Assign small group roles such as recorder, reporter, or small group discussion leader.
- Give other ground rules.

## **2. Learners Participate in a Learning Activity**

For a learning activity to be successful, involve learners as much as possible. Consider how learning from a learning activity will appeal to different learning styles. This step might include individual reading of a case study, reading background information for a simulation, or other preparation, such as following the written directions given at the beginning of the activity or reading questions to be answered as the class watches a video or, following the learners' discussion, asking a reporter from each small group to share each group's answers.

## **3. Learners Share and Interpret Their Reactions**

This step is essential to help conclude the small group discussions and gives learners the opportunity to identify what happened in different small groups. Ask the group additional questions to help learners analyze the discussion and then develop individual and group reactions to the activity. Have learners share their reactions by identifying what happened to them and to others and ways in which their behavior affected others during the small group discussion. Sample facilitator processing questions include:

- "What made it easy or difficult to find a solution to this problem?"
- "What helped or hindered the progress of the discussion?"
- "Let's summarize the key points from the case study."

Sometimes, it is appropriate to have participants write down their reactions to the learning activity so that others do not influence their thinking before they share reactions to a learning activity. In this way, the reactions come from the learners, not from the facilitator.

Sharing reactions is the beginning step of reaching a conclusion. If participants do not take this step, it is difficult to end the activity and move on, as there may be unfinished business that spills over into later activities.

#### 4. Learners Identify Concepts

This is the “So what did I learn from the activity?” step. If this step is left out, then learning will be incomplete. Up to this point, participants have been actively learning from a specific situation, and they may not be able to generalize their learning to similar situations outside the classroom. Questions that help learners develop concepts, include:

- “What did you learn about how to conduct an interview, discipline a subordinate, teach a new job, etc., from this learning activity?”
- “What is appropriate behavior for a new supervisor?”

When concepts are fleshed out from a discussion of the learning activity, adult learners are ready to apply these concepts to future situations. Ask questions to elicit concepts from the learners, rather than tell them the concepts they should have found.

#### 5. Learners Apply Concepts to Their Own Situations

This is the “So what now?” step in the adult learning process. Ask participants how they can use and apply the new information they have learned. Ask questions such as:

- “How will you use this skill the next time a subordinate asks you for a favor?”
- “What are some situations in which you would be more effective if you used this technique?”

If this step is left out, learners may not see the relationship between the learning activity and their own jobs or situations. This step stresses practical application and helps learners find the personal benefits from the learning activity.

To effectively facilitate a case study discussion, ask the learners questions about the learning activity, rather than suggesting applications. Following are some facilitator processing questions to elicit discovery learning using Steps 3, 4, and 5.

## Facilitator Processing Questions<sup>3</sup>

### Questions for Step 3: Learners Share and Interpret Their Reactions

- What happened when you tried out that function/step as part of the case?
- What surprised you?
- What part was easy? Difficult? What made it easy? Difficult?
- What did you notice/observe? How was that significant?
- How was that positive/negative?
- What struck you most about that?
- How do these pieces fit together?

### Questions for Step 4: Learners Identify Concepts

- How does this relate to other parts of the process?
- What might we conclude from that?
- What did you learn/relearn?
- What processes/steps are similar to this one?
- What else is this step/process like?
- What does that suggest to you about \_\_\_\_\_ in general?
- What's important to remember about this step/function?
- What other options/ways do you have for completing this step/function?
- How can you integrate this step into the larger process?
- What other functions are impacted by this step?

### Questions for Step 5: Learners Apply Concepts to Their Own Situations

- How can you use what you have learned?
- What is the value of this step/function?

---

<sup>3</sup>Adapted from J. William Pfeiffer, *UA Training Technologies 7: Presentation & Evaluation Skills in Human Resource Development*, pages 66–68. Used with permission of Pfeiffer.

- What would be the consequence of doing/not doing this step?
- How does what you have learned fit with your experience?

After considering how to process an adult learning activity using the five steps above, next consider how to pace a variety of training activities for maximum attention and retention.

## How Are Training Methods Paced to Maintain Attention and Improve Retention?

Tool 1.5 is the Methods Variety Scale, which is used to vary the pace of training methods to extend the attention span of learners. The scale is based on the assumption that most adults have an attention span of about fifteen minutes. A recent study<sup>4</sup> ties attention disorders to the number of hours a preschool child watches television. If learners born after 1960 have watched an average 4+<sup>5</sup> hours a day of television, could their attention span be closer to seven minutes, since that is the programming time between commercial messages? Could learners raised in the United Kingdom watching the British Broadcasting Corporation (BBC) have an attention span closer to twenty minutes, since that is the typical length of programming? Here is a tool to help capture and extend the learners' attention. Here's how to read the scale.

The vertical axis shows what the learner does on a scale of 0 to 10. 0 is a low level of activity and requires little interaction with others. Most of the terms are self-evident; however, the difference between a lecture and a participative lecture is that in the latter the learners answer a few questions in the large group during a participative lecture, which increases learner involvement. A *return demonstration* is also called "practice" and usually follows a demonstration by the trainer (which is the same rating as watching a lecture or a film/video). A *structured experience* is also sometimes called a simulation.

The horizontal axis of the Methods Variety Scale is divided into hours by solid lines and dotted lines for every fifteen-minute portion of class time. Plot

---

<sup>4</sup>Dr. Dimitri Christakis, "Early Television Exposure and Subsequent Attentional Problems in Children." *Pediatrics*, 113(4), April 2004.

<sup>5</sup>Wendy Josephson. "How Children Process Television," Issue Brief Series. Studio City, CA: Mediascope Press, 1997.

the level of learner participation during the session and check whether you have changed the pace at least every fifteen minutes. Also, check to be sure that the learners' level of activity is at least over the level of "5" once an hour or more. If you do not do these two things, then learner attention and retention can still be brought higher by increasing the variety of learning activities as well as bringing the level of participation over "5" at least once an hour. For full-day workshops, try getting the level of participation over "5" at least twice an hour after lunch, when some participants would prefer to take a nap.

Many software training sessions enhance retention by using this scale. In particular, the developers limit themselves to demonstration (level 2) and a return demonstration (level 9). When using software training, you can improve on this by using learner practice and two or three return demonstrations afterward. Instead of using only the first two steps in the five steps of the adult learning model, try having large-group or small-group instruction for the learners to share and interpret their reactions to what they have been practicing. Then ask them the concept they have discovered while practicing with the software, and finally ask them how they can apply what they have learned in their own work. Breaking up practice sessions by using a variety of methods can avoid overloading participants with too much information in a compressed period of time.

Tool 1.5 is a copy of the Methods Variety Scale for you to use to check the pace of learning activities so attention and retention can improve.

*Instructions:* Plot each learner's level of participation. Does activity vary every fifteen minutes? Is the learner's participation over the level of 5 at least once an hour?



## How Much Practice Is Needed to Retain a New Skill?<sup>6</sup>

The purpose of the decision tree analysis in Tool 1.6 is for you to decide how much training and practice is appropriate for participants to learn a new task, based on the task's difficulty, importance, and frequency with which the task will be regularly done.

Of course, it is more *difficult* to learn how to do a task than to do a task once learned. "Difficulty" in this context refers to once the task is learned, not the difficulty of learning it. Some factors that make a task difficult to do once it is learned include complexity, the number of steps, the requirement to complete steps in a specific sequence, degree of physical dexterity needed, the requirement for uniform performance of the task, environmental factors, degree of physical or professional risk, and the length of time to complete the task. Also consider the difficulty for the typical performer. Assess the level of difficulty of learning the task from one learner's point of view. Remember also that an individual's attitude toward doing the task successfully can make the task seem harder.

Tasks have relative *importance* to managers, supervisors, and employees. Perceived importance and organizational importance of doing a task in a standard manner are both worth considering. To what degree will the task outcome change based on irregular performance? Are there consequences for poor performance? Ask whether or not it is important to do this task in a prescribed, standard manner.

Will the task be repeated *frequently* enough so the employee will not forget how to do the task once learned, or is lots of practice necessary to build initial and permanent retention?

Once you have identified the *difficulty*, *importance*, and *frequency* of a task, use Tool 1.6 to decide how much training is usually sufficient to learn and retain it and what type of reinforcement is appropriate. A few examples are given below, with a rationale for each recommendation.

---

<sup>6</sup>Based on a tool from Army School of Instructional Technology, UK Royal Army Education Corps, Pamphlet No. 2, "Job Analysis for Training?" Army Code No. 70670.

If a participant is to learn to do cardiopulmonary resuscitation (CPR), the task is very difficult, since CPR is performed under “life and death” circumstances, and it is physically demanding to do for more than a few minutes. CPR must be performed in a standardized manner and is infrequently performed even by healthcare practitioners in hospital emergency rooms. The recommendation is to provide *advanced training*, which means that learners must be trained to a high standard of retention, accomplished by reinforcement training, resources, references, or job aids. This explains why CPR certification must be renewed annually and why learners are given a job aid to carry with them as a reminder of the process learned in class.

An example of a task learned by most new employees during orientation to a new job is to complete a time card or account for their hours worked on a daily or weekly basis. Most systems (punch cards, software programs) are not difficult to complete. It is important to complete the task in a standardized manner, since most systems only accept data in a predetermined manner. This task will be completed very frequently (daily or weekly). The recommendation is to use demonstration because formal training is not required, and the skill can be acquired on the job through practice. There is also the added motivation to report hours correctly to receive one’s paycheck on time.

A final example is to create a script or lesson plan from a PowerPoint® show. For many people, it is a moderately difficult task to perform. This task includes modifying the slides after they are imported into a Word® document. To correctly export the slides, a standardized process is followed. If the learners will use this feature of PowerPoint frequently, basic training is recommended. That will ensure that the learners can demonstrate proficiency in performing this task at an achievement level required on the job. Notice that if this task is to be only moderately or infrequently performed, advanced training is recommended. That may mean providing a job aid as a reminder of the steps in this process.

Here are twenty adult learning principles to guide your facilitation of the best learning experiences. Each of these principles has implications for different types of training and will be referred to during the remaining chapters of this book.



### Tool 1.6. DIF: How Much Practice and Training?

How difficult is the task to do?	Very ⇒	Important that task be done in standardized manner?	Yes ⇒	How frequently will task be repeated?	Very ⇒ Moderate ⇒ Infrequent ⇒	Basic ⇒ Advanced ⇒ Advanced
		No ⇒	How frequently will task be repeated?	Very ⇒ Moderate ⇒ Infrequent ⇒	Basic ⇒ Basic ⇒ Demonstrate	
	Moderate ⇒	Important that task be done in standardized manner?	Yes ⇒	How frequently will task be repeated?	Very ⇒ Moderate ⇒ Infrequent ⇒	Basic ⇒ Advanced ⇒ Advanced
		No ⇒	How frequently will task be repeated?	Very ⇒ Moderate ⇒ Infrequent ⇒	Demonstrate ⇒ Demonstrate ⇒ Demonstrate	
	Not ⇒	Important that task be done in standardized manner?	Yes ⇒	How frequently will task be repeated?	Very ⇒ Moderate ⇒ Infrequent ⇒	Demonstrate ⇒ Demonstrate ⇒ Basic
		No ⇒	How frequently will task be repeated?	Very ⇒ Moderate ⇒ Infrequent ⇒	Demonstrate ⇒ Demonstrate ⇒ Demonstrate	

### DIF Practice Recommendation

Difficulty—Importance—Frequency

**Demonstrate:** Formal training not required. Skills can be acquired on the job through practice after a demonstration.

**Basic Training:** Learner must be able to demonstrate proficiency in performing task at achievement level required on the job.

**Advanced Training:** Learner must be trained to a high standard of retention. Accomplished by reinforcement training, resources, references or job aids.

## Adult Learning Principles

### Adult Motivation and Retention

1. Adults prefer to determine their *own* learning experiences.
2. Adults are motivated to learn when *THEY* identify they have a need to learn.
3. Adults are motivated by *societal or professional pressures* that require a particular learning need.
4. Adults can be motivated to learn when the *benefits* of a learning experience outweigh their resistance.
5. Adults use their knowledge from years of experience as a filter for new information and *don't change readily*.
6. Adults learn best from their own *experiences*.
7. An adult's experience is a filter that can function as a *catalyst or barrier* to learning something new.
8. Ninety percent of what adults learn and retain in long-term memory is tied to previous knowledge (Velcro learning<sup>7</sup>).
9. Adults like tangible *rewards and benefits* from training.
10. Adults retain learning that they *discover* and forget much of what they are told.

### Adult Methods of Training

11. Some adults like some lectures. All lectures won't be liked by all adults.
12. Adults like *small group discussion* and a variety of interaction with the instructor and other participants.
13. Adults enjoy *practical* problem solving. Adults want *practical* answers for today's problems.

---

<sup>7</sup>Ron Zemke, former editor for *Training* magazine, coined this term.

14. Practice is a part of the learning process, not the result of it.
15. Assess the learners' interest in your topic; don't assume interest.

### **Adult Learning Environment for the Physical and Virtual Classroom**

16. Adults hate to have their *time* wasted.
17. Adults like physical comfort.
18. Adults appreciate breaks, which convey *respect* to the learner.
19. Adults expect *assistance* with technical problems.
20. Adults become bored and will *multi-task* when participation isn't interesting or required.

Before deciding among many of the training methods defined in this chapter, first look at your own preferred training style by taking one of the three versions of the Trainer Style Inventory in the next chapter.