Chapter 2

Why Adults Learn

In This Chapter

- Examining the basic principles of adult learning
- ▶ Identifying a trainer's responsibility to ensure adults learn
- ▶ Identifying types of learning
- ▶ Defining training roles

hink back to the past 60 days. What is one thing you learned?

Before reading ahead, try to recall what you learned and why you learned it. Perhaps you learned to play racquetball because you always wanted to learn to play the game. Perhaps you had a flat tire on the way home, and you had to learn to change the tire because you had to do it. You didn't want to, but you had no choice.

If you're like most adults, you learn to do most things as an adult because you want to learn it or you need to learn it.

This chapter explores adult learning theory, how people learn, and how trainers can assist participants to learn in the classroom.

Adult Learning Theory

Trainers are most successful when they understand conditions under which adults learn best. Therefore, it is important to understand the difference between why adults learn and how adults are traditionally taught.

The traditional style of teaching is based on a didactic model, a synonym for lecturing. Generally this model is teacher-led and content-centered. Another word used is *pedagogy* which literally means the art of teaching children.

In the introduction to this chapter, you discovered that most adults learn things because they want to or need to. Children do, too. However, children's formal learning is usually led by someone else and is based on their learning specific tasks to prepare them to learn additional, more complicated tasks.

For example, you learned to count to 100 in kindergarten, so that you could learn to add and subtract in first grade, so that you could learn to multiply and divide in third grade, so that you could learn algebra in eighth grade, so that you could learn trigonometry in high school, so that you could learn calculus in college.

Most people have experienced the pedagogical model of learning. It has dominated education for centuries and assumes the following:

- ✓ The instructor is the expert. Because the learner has little experience it is up to the instructor to impart wisdom.
- ✓ The instructor is responsible for all aspects of the learning process, including what, how, and when the learners learn.
- ✓ Learning is content-centered. Objectives establish goals and a logical sequence of material is presented to the learners.
- Motivation is external, and learners learn because they must reach the next level of understanding, pass a test, or acquire certification.

Does this sound familiar? It should. Unless you had an atypical learning situation, it is most likely how you were taught starting in kindergarten and through college. Some schools are changing however. Although the lecture method is still used, it is frequently enhanced with other learning methods. This suggests that someone has identified a better method for teaching.

Who is Malcolm Knowles?

Malcolm Knowles is considered the father of adult learning theory. Because pedagogy is defined as the art and science of teaching children, European adult educators coined the word *andragogy* to identify the growing body of knowledge about adult learning. It was Dr. Knowles' highly readable book, *The Adult Learner: A Neglected Species*, published in 1973, that took the topic from theoretical to practical. Table 2-1 compares the differences between andragogy and pedagogy. Trainers and adult educators began to implement practical applications based on Dr. Knowles' six assumptions.

The following list summarizes Malcolm Knowles' six assumptions and adds a practical application from a trainer's perspective. Although there is some duplication of ideas, I have presented all six assumptions to you as Knowles identified them. Many authors distill the six to five, four, and even three.

- ✓ Adults have a need to know why they should learn something before investing time in a learning event. Trainers must ensure that the learners know the purpose for training as early as possible.
- Adults enter any learning situation with an image of themselves as self-directing, responsible grown-ups. Trainers must help adults identify their needs and direct their own learning experience.

- Adults come to a learning opportunity with a wealth of experience and a great deal to contribute. Trainers are successful when they identify ways to build on and make use of adults' hard-earned experience.
- ✓ Adults have a strong readiness to learn those things that help them cope with daily life effectively. Training that relates directly to situations adults face is viewed as relevant.
- ✓ Adults are willing to devote energy to learning those things that they believe help them perform a task or solve a problem. Trainers who determine needs and interests and develop content in response to these needs are most helpful to adult learners.
- Adults are more responsive to internal motivators such as increased selfesteem than external motivators such as higher salaries. Trainers can ensure that this internal motivation is not blocked by barriers such as a poor self-concept or time constraints by creating a safe learning climate.

Table 2-1 Andragogical and Pedagogical Training: A Comparison		
Andragogy	Pedagogy	
Learners are called "participants" or "learners."	Learners are called "students."	
Independent learning style.	Dependent learning style.	
Objectives are flexible.	Objectives are predetermined and inflexible.	
It is assumed that the learners have experience to contribute.	It is assumed that the learners are inexperienced and/or uninformed.	
Active training methods are used.	Passive training methods, such as lecture, are used.	
Learners influence timing and pace in a learner-centered approach.	Trainer controls timing and pace.	
Participant involvement is vital to success.	Participants contribute little to the experience.	
Learning is real-life problem-centered.	Learning is content-centered.	
Participants are seen as primary resources for ideas and examples.	Trainer is seen as the primary resource who provides ideas and examples.	

Applying adult learning theory to training

I don't know whether Malcolm Knowles had this in mind when he presented his adult learning theory to the world, but it seems that he is talking about responsibility. Furthermore, whether you're the trainer or the learner you have responsibility to ensure that the training is successful, that learning occurs, and that change takes place.

If you're the trainer

- Create a learning environment that is safe.
- ✓ Be organized, have well-defined objectives, and establish a clear direction for your session based on the participants' needs. Be so well organized that it is easy to be flexible when the participants' needs are different from what you anticipated.
- Ensure that your content is meaningful and transferable to the learners' world.
- ✓ Treat your learners with respect, understanding, and genuine concern.
- ✓ Invite learners to share their knowledge and experiences.

If you're the learner

- ✓ Be an active learner, participating in the interactive exercises.
- ▶ Be critical of poorly defined sessions, an unprepared trainer, or processes that prevent your learning; provide constructive feedback to the trainer.
- ✓ Ensure your personal success by encouraging feedback from the trainer.



Delivering constructive feedback is a key action expected of all professional trainers. Learners have a right to receive feedback from their trainers.

- Recognize that you're responsible for your own learning, so ensure that all your questions are answered.
- ✓ Contribute to your own success by clearly identifying a learning plan for yourself; then do your part to achieve your objectives.

Trainers beware! Note that I encourage learners to be critical of you if you're not prepared or the session doesn't meet their needs. Why? Professional trainers profess to build on the foundation of adult learning theory. If something is not working, step back, determine why, and fix it. If you're not doing that, you're not practicing good adult learning principles. You may need another trainer to guide you.

How Do People Learn?

The adult learning theory presented in the previous section provides a foundation of principles of adult learning. However, there are additional considerations to enhance results when training adults. In the following sections, I examine them.

Bloom's Taxonomy

In the early '60s, Benjamin Bloom and a university committee identified three learning domains: cognitive, psychomotor, and affective. Because the project was completed by university folks, the terms may seem a bit abstract.

Trainers typically use knowledge (cognitive), skills (psychomotor), and attitude (affective) to describe the three categories of learning. In addition, trainers frequently refer to these three learning categories as the KSAs. You may think of these as the ultimate goals of the training process — what your learner acquires as a result of training.

Bloom's group further expanded on the domains. They created a hierarchical ordering of the cognitive and affective learning outcomes. Their work subdivided each domain, starting from the simplest behavior to the most complex: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. Each of these levels builds on the earlier one. For example, knowledge must occur prior to comprehension; comprehension must occur before application. Each level of learning identified the desired specific, observable, and measurable result.

This work is known as *Bloom's Taxonomy*. The divisions are not absolutes, and other systems and hierarchies have been developed since then. Bloom's Taxonomy, however, is easily understood and may be the most widely applied. The following table explains what it means.

Behavioral Levels	Skills	Examples
Knowledge	Define, list, name, recall, repeat knowledge or information	Can name six levels of Bloom's Taxonomy
Comprehension	Translate, describe, explain information in one's own words	Can compare and explain Bloom's six levels
Application	Apply, demonstrate, use knowledge in new situations	Can apply Bloom's theory to write learning objectives
Analysis	Analyze, compare, question, break knowledge into parts	Can compare and contrast aspects of Bloom's model
Synthesis	Arrange, create, plan, prepare a new whole from parts	Can design a new learning model
Evaluation	Appraise, assess, judge, score information based on knowledge	Can evaluate and defend the benefits of Bloom's Taxonomy

It is interesting to note that although the committee actually identified three domains of learning, they applied the six levels to only the cognitive and affective learning domains. They

did not elaborate on psychomotor (skills). Their explanation for this was that they had little experience teaching manual skills at the college level.

Three types of learning: KSAs

Trainers address three types of learning: knowledge (K), skills (S), and influencing attitude (A). Trainers frequently shorten this to the KSA acronym. (If you want the research to support this, it is called *Bloom's Taxonomy*.)

Knowledge (Bloom called this *cognitive*) involves the development of intellectual skills. Examples of knowledge include understanding the principles of accounting, knowing the stages of childhood, understanding how interest rates affect the economy, or knowing how to get a book published.

Skills (Bloom called this *psychomotor*) refers to physical movement, coordination, and the use of the motor-skills area. Examples of skills you may learn include the ability to use a digital camera, operate a backhoe, supervise staff, listen effectively, or kick a soccer ball.

Attitude (Bloom called this *affective*) refers to how you deal with things emotionally, such as feelings, motivation, and enthusiasm. Although attitude is not "taught," training may affect it. Trainers cannot change attitudes, but they frequently have the opportunity to influence attitudes.



Trainers sometimes discuss whether it is the learner's skill or will that prevents topnotch performance following a training session. This refers to the fact that an employee may have learned the skill but is unwilling to use it. Therefore, the real reason an employee may not be using what was learned may not be skill-based at all. It may be that the employee won't use the skill that was learned.

Knowing that there are three types of learning means that you need to use different methods to address each. I discuss this in more depth in Chapter 5 when I address design.

Other considerations for learning

How do you gain information? Hear? See? Do you also touch? Smell and taste, too? You bet you do! We all gain information through our five senses. The highest percent of information usually comes through seeing and hearing.



Many people have theories about how humans learn best. David Kolb, for example, presents four learning styles: the converger, the diverger, the assimilator, and the accommodator. Another theory was developed by W. E. (Ned) Herrmann. His research shows brain specialization in four quadrants and that each quadrant has its own preferred way of learning. Ned's daughter Ann Herrmann-Nehdi continues to enhance her father's work.

Still a third theory, *Neurolinguistic Programming (NLP)*, proposes that everyone takes information in through three modalities: visual, auditory, and kinesthetic. Most people use a combination of all three modalities. Preferred learning styles determine how your participants assimilate, sort, retain, retrieve, and reproduce new information.

Visual learners, for example, prefer pictures, diagrams, and other visuals. They probably need to "see it" to "know it." They may have artistic ability and a strong sense of color. They may have difficulty following directions or learning from lectures. They may overreact to noise or misinterpret words.

How can you create a learning environment that is conducive for the visual learner? Consider these.

- ✓ Provide written directions when possible.
- Enhance presentations with visuals, graphics, illustrations, diagrams, props, or flowcharts.
- ✓ Create a colorful classroom with neon sticky-back notes, posters, colorful and coordinated markers, crayons, and participant materials.
- ✓ Provide paper (colorful) and markers for doodling and taking notes.
- ✓ Help participants visualize a process using films, demonstrations, or role plays to "show" how.
- ightharpoonup Color code participant materials or use icons to help them find their way.

Auditory learners, on the other hand, prefer to get information by listening. They need to "hear it" to "know it." They may have difficulty following written directions or any activity that includes reading.

How can you create a learning environment that is conducive for the auditory learner? Consider these.

- Provide spoken directions, when possible.
- ✓ Use discussions, tapes, debates, panels, interviews, and other verbal methods for transferring knowledge.
- ✓ Plan for buzz groups, small group discussion, teach-backs, and presentations that allow participants to talk through the information.
- $\ensuremath{\boldsymbol{\varkappa}}$ Avoid subtle body language or facial expression to make a point.
- ✓ Create learning activities in which learners repeat the information.

Finally, kinesthetic learners prefer hands-on learning. They need to "do it" to "know it." They assemble things without reading directions and usually have good spatial perception. They learn best when they are actively involved.

How can you create a learning environment that is conducive for the kinesthetic learner? Consider these.

- ✓ Provide physically active learning opportunities.
- ✓ Engage them in experiential, hands-on learning activities.
- ✓ Provide things for them to touch and "play with" such as Play Doh, tactile toys, koosh balls, and crayons.
- ✓ Take frequent breaks or allow informal movement during the session that doesn't disturb other participants.
- ✓ Build in activities such as making models, role playing, scavenger hunts, relay races, and other active review and practice methods.
- ✓ Use computers to reinforce learning.
- Find ways other than testing to express knowledge and skills, such as demonstrations.

You usually encounter all of these learning styles in a training session at one time.

So what does a trainer do? It is not usually possible to address all the learning preferences all the time in a group. Do what all good trainers do.

- ✓ Accept that people learn in different ways.
- ✓ Use different methods that facilitate learning for different preferences.
- And finally, when designing or delivering training, strive to create a variety of approaches that utilize techniques and activities from all learning preferences.

Helping Adults Learn in the Classroom

You may have a difficult time finding practical advice to ensure that the training room — your workplace — maximizes adult learning. However, in 25 years of experience in classrooms, I've discovered practical tips for applying Malcolm Knowles' principles to ensure that participants learn. I've grouped them in four categories for you.

- ✓ Create a safe haven for learning.
- Create a comfortable environment.
- ✓ Encourage participation.
- ✓ Facilitate more than you lecture.

In the following sections, I examine each of these and help you decide how you can address them.

Create a safe haven for learning

It would be great if everything you did as a trainer went just the way it is supposed to, but it won't. Trust me. Some learners may arrive thinking that training is punishment. Others may arrive with memories of past learning experiences in mind, such as failing tests. Yet others may arrive bringing their daily burdens with them. You can create a safe haven for everyone by using some of these ideas.

- ✓ Be prepared early enough so that you can greet participants at the door, welcome them, learn their names, and allow time for them to tell you something that's important to them.
- ✓ Share the objectives of the training early, prior to the session, if possible.
- ✓ Let participants know how they stand to benefit from the information.
- ✓ Demonstrate your respect for each individual.
- ✓ Ensure confidentiality "what's said in the room, stays in the room."
- Add something whimsical to pique curiosity and add a smile. This may be crayons, clay, koosh balls, or manipulative toys.
- ✓ Use names and sincere reinforcement to build rapport.



I like to use table tents (card stock folded in half length-wise) on which participants write their names. Some trainers prefer to use name badges. Whatever your choice, be sure that you can read them. For example, ask participants to write their first names large enough so that everyone can read them from across the room. If you use preprinted table tents, ensure that the type size is bold and can be read from 40 feet. Also, if water glasses are placed on the tables, bunch them up in one spot so that participants take them as they need them. Otherwise, there will be one sitting in front of each table tent, and you will be unable to read the names.

Create a comfortable environment

I prefer to arrive in a training room early enough to make it mine so that I can welcome the learners in as my guests. As a trainer, be sensitive to the mood of the room — created by both the physical aspects as well as each participant's demeanor. To create a comfortable environment consider these before your next training session.

✓ Turn the lights on bright. There is nothing more depressing to me than walking into a ballroom where the lights have been left on romantic dim from the party the night before.



Ask for a room with natural light. Even on a sunless day, natural light is more pleasant than any artificial lighting.

- ✓ Learn how to adjust the thermostat for the most comfortable level for most of the participants. Remember you never please all of them all the time. Do your best.
- ✓ Ensure that the environment "looks" comfortable. Hide empty boxes. Chairs should be straight. Place materials neatly and uniformly at each seat. This order tells the learners that you care and went to the trouble of getting ready for them.
- Ensure that you and your visuals can be seen and heard by all learners. Go ahead try it out. Sit in their seats. Will all participants be able to see your visuals and hear you?
- ✓ Arrange to have the most comfortable chairs available.
- Arrange the tables to be conducive to learning. Chapter 7 provides a number of suggestions.
- Ensure that everyone has adequate personal space.
- ✓ Have extra supplies, pens, and paper available.
- Have coffee, tea, and water waiting in the morning.
- ✓ Plan for ample breaks.

Learning with style: Seven things trainers do

by Ann Herrmann-Nehdi

It has been widely established that people have preferred learning styles and teaching styles, so what is a trainer to do in response?

Expect difference! Research has shown that men and women, different age groups, different brain dominance styles, and different personalities all learn differently! If you design and train knowing that your learners all process information differently, you won't be caught off guard and will be better equipped from the start to respond to those differing styles.

Do some research about your learners to better know in advance how diverse they may be. Look for data on occupations, age, gender, culture, and anything you can learn about their background. Look for ways to make links in your content to the different interests and backgrounds you're working

with. Brain research has shown that the more the context fits with your learning, the better your learners will remember what you have taught.

✓ **Do not follow the Golden Rule.** Most kids grew up being told to "do to others as you want them to do to you." Why ignore the Golden Rule? The way you like to learn may be opposite from the way your learners like to learn. It is easy to assume that everyone will find your approach as interesting as you do. Think of the times you were frustrated with the style of an instructor or trainer! Don't let that happen to your learners!

Look for new ideas by observing other trainers doing similar content, how do they approach it? Ask your group about they way they prefer to learn; get them involved. Try cofacilitating and designing with a partner who does things differently.

Remember to be a learner yourself! How easy it is to forget what it is like to be a participant. Putting yourself into learning situations will provide you with a very good reminder. Be willing to experiment, attend programs and stay current with new approaches and techniques you can learn by observing others in action. It is very easy to get stuck in a "rut" and teach a program you know well the same way every time.

Sign up for conferences (check out www.vnulearning.com/about-trg.htm or www.astd.org) and go to a wide variety of sessions, network with others in the training profession and attend as many learning experiences as you can.

✓ Give learners enough time to learn. It is very important to provide time for application and practice in different formats. Brain studies have shown that in order for learning to "stick" in memory many learners need "mental rehearsal," time to apply and practice. If you have a learner who is learning outside of his preferred style, this time is even more critical. Too often, in today's hurried world, people eliminate or shorten the time needed to apply, practice, and "rehearse" mentally what has been learned.

Provide context-specific practice to allow learners to take in the learning in own formats and contexts. Be sure to allow for questions and clarification after the practice.

Watch your reactions — both verbal and nonverbal. Gestures, tone, facial expressions, and eye contact are all taken in by your audience, often at a subconscious level. You may be inadvertently reacting in a negative way to a learner with a style you find uncomfortable.

Videotape yourself and observe your verbal and nonverbal reactions — especially to learners whom you may find irritating or

different and/or get feedback from others. It may be necessary to practice changing your expression, tone, or gestures.

✓ Don't load your questions. Many questions are preloaded with the answer and may be only suited to a specific type of learner. Ask questions in varied ways and give enough time for answers. Questions provide a great opportunity for learners to participate.

Think of as many ways as you can to ask questions. Observe other trainers. Have a partner capture the type of questions you typically ask and look for variety the next time you train. Be aware that leaving a five-second pause after the question provides a much greater opportunity for your learners to process and respond more effectively. You may also find ways to draw in other learners who are not as quick to offer an answer.

Multiple ways of training equals multiple learning options. Too often, trainers train with only one approach — it may be comfortable, what you're used to, or just what you have had available. Examples may include PowerPoint slides with text bullets, lectures, games, discussion, and so on. To honor different learning styles it is essential to use different delivery approaches. Experiment with different ways to get across your learning messages.

Use a whole-brain approach: For the Left Brain: lecture, theories, data, case studies, problem-solving activities, and debate for logical learners; Use outlines, structured quizzes, reference material, step-by-step practice, and detailed study for structured learners. For the Right Brain: collaborative activities, role play, presentations, writing, and music for interpersonal learners. For holistic learners try visualization, games, creative activities, props, metaphors and visuals, conceptual models, and brainstorming.

Encourage participation

I believe that creating active and ample participation is the most important thing you can do to enhance learning. You find this thread running through the entire book. Here are a couple of thoughts to get you started.

- Use small break-out groups to overcome any reluctance to share ideas or concerns.
- ✓ Use participants' names as often as possible.
- ✓ Use body language to encourage participation; positive nods, smiles, eye contact all show that you're interested in others' ideas.
- ✓ Share something of yourself to begin a trusted exchange of ideas.
- ✓ Learn and apply techniques to get learners to open up. You discover numerous ideas later in this book.

Facilitate more than you lecture

There are few times when straight lecture is required. Perhaps when rules or laws must be imparted word for word, when safety is an issue, or when your learners have no knowledge of the subject. But for the most part facilitating experiential activities and discussions lead to the same end, enhancing learning for everyone.

- ✓ Create discussion. Not just between you and the learners, but among the learners.
- Get opinions and ideas out in the open before you deliver your message. You may be surprised at how much "training" the learners can do for you.
- Share personal experiences to build rapport and trust.
- ✓ Provide opportunities for participants to evaluate their own learning throughout the session.
- ✓ Create experiential learning activities in which the learners discover the learning on their own.

One Last Note: Who's Who and What's What

What is the difference between trainers, teachers, instructors, facilitators, and others? What distinguishes learners, participants, trainees, and students? How about the difference between training, educating, and instructing? And last, what's the difference between learning, knowledge, skills, and performance?

Who's who?

First, examine those who are delivering the training:

- ✓ Trainers: Title given to adults who are the learning catalysts so other adults may learn new skills and knowledge. Often, but not always, the skills and knowledge taught by trainers are required to enhance the learner's performance on the job.
- ✓ Facilitators: Title given adults who ensure learners' participation; sometimes interchangeable with trainers but more often used when little knowledge or skill is dispensed. Often used for describing a person who conducts team-building or strategic-planning sessions.
- ✓ Presenters: Title given adults who deliver speeches at conferences or to larger groups; minimal emphasis on two-way communication.
- ✓ **Instructors:** Title used for teachers in academia. May also be used for specific skill sets, such as tennis instructors or flight instructors.
- ✓ Teachers: Title most often given those who are instructing children; pedagogical.

How about those who are receiving the training?

- **✓ Learners:** A neutral term that can be used for anyone gaining information.
- ✓ Participants: A general term used by trainers to refer to anyone in a learning or intervention session; a learner.
- ✓ Trainees: Synonymous with participants; most recently has been replaced by "learners" or "participants."
- ✓ **Students:** Used for young children; pedagogical.



Avoid using the word "student" when discussing your participants. Learners or participants best define the adults whom you're training.

What's what?

The activity that occurs between the two *whos* in the preceding section may be called any of these.

- ✓ Training: The activity conducted by adults who are learning new skills.

 (Of course this can refer to animals as well!) Knowledge is generally put to immediate use. Hands-on practice is included.
- ✓ **Facilitating:** May be interchanged with the term "training." Usually refers to taking less of a leading role and being more of a catalyst.



- I was once given a great bit of advice that I pass on to you. To be the most successful trainer/facilitator, don't be a sage on stage, but be a guide on the side.
- ✓ **Instructing:** Allows participants to generalize beyond what has been taught. Minimal hands-on practice.
- Educating: Imparting knowledge generally in a broader context with delayed implementation. Very little hands-on practice.

The results of the activity just discussed may be called some of these:

- ✓ **Learning:** Gaining knowledge and skills to make change.
- **✓ Knowledge:** Gaining cognitive competence and information assimilation.
- **✓ Skill development:** Gaining psychomotor competence.
- Performance: Implementing the knowledge and skills that have been gained.

You may find other labels for these roles and what occurs, and as the profession grows and changes you're likely to find even more. What you call yourself is not nearly as important as the significant work you accomplish: Helping adults learn so they can improve their performance.

Again, why do adults learn? Because everyone wants or needs to learn. We are all trainers, all learners. Carl Rogers said, "The degree to which I can create relationships which facilitate the growth of others as separate persons is a measure of the growth I have achieved in myself."