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### HISTORICAL ROOTS OF ADULT LEARNING PRINCIPLES

Since the 1970s, adult learning theory has offered a framework for educators and trainers whose job it is to train adults. Malcolm S. Knowles (1973) was among the first proponents of this approach. In his book, *The Adult Learner: A Neglected Species*, he resurrected the word “andragogy” a term popular in German education circles in the early 1800s, and used it to label his attempt to create a unified theory of adult learning. Knowles’ contentions were based on four assumptions:

1. As they mature, adults tend to prefer self-direction. The role of the instructor is to engage in a process of inquiry, analysis, and decision-making with adult learners, rather than to transmit knowledge.
2. Adults’ experiences are a rich resource for learning. Active participation in planned experiences—such as discussions or problem solving exercises, an analysis of those experiences, and their application to work or life situations—should be the core methodology for training adults. Adults learn and retain information more easily if they can relate it to their reservoir of past experiences.
3. Adults are aware of specific learning needs generated by real-life events such as marriage, divorce, parenting, taking a new job, losing a job, and so on. Adult learners’ needs and interests are the starting points and serve as guideposts for training activities.
4. Adults are competency-based learners, meaning that they want to learn a skill or acquire knowledge that they can apply pragmatically to their immediate circumstances. Life or work-related situations present a more appropriate framework for adult learning than academic or theoretical approaches.

Robert W. Pike (1989), an internationally recognized expert in human resources development and author of the book *Creative Training Techniques*, has conducted thousands of adult training seminars. His principles of adult learning, referred to as “Pike’s Laws of Adult Learning,” have built upon the original philosophy to provide similar guidance for trainers:

**Law 1: Adults are babies with big bodies.** It is accepted that babies enjoy learning through experience, because every exploration is a new experience. As children grow, educators traditionally reduce the amount of learning through experience to the point that few courses in secondary and higher education devote significant time to experiential education. It is now recognized that adult learning is enhanced by hands-on experience that involves adults in the learning process. In addition, adults bring a wealth of experience that must be acknowledged and respected in the training setting.

**Law 2: People do not argue with their own data.** Succinctly put, people are more likely to believe something fervently if they arrive at the idea themselves. Thus, when training adults, presenting structured activities that generate the students' ideas, concepts, or techniques will facilitate learning more effectively than simply giving adults information to remember.

**Law 3: Learning is directly proportional to the amount of fun you are having.** Humor is an important tool for coping with stress and anxiety, and can be effective in promoting a comfortable learning environment. If you are involved in the learning process and understand how it will enable you to do your job or other chosen task better, you can experience the sheer joy of learning.

**Law 4: Learning has not taken place until behavior has changed.** It is not *what you know*, but *what you do* that counts. The ability to apply new material is a good measure of whether learning has taken place. Experiences that provide an opportunity for successfully practicing a new skill will increase the likelihood of retention and on-the-job application.

## ADULT LEARNING AND THE ULTIMATE EDUCATOR

### DESIGN AND DELIVER TRAINING FIRMLY GROUNDED ON PRINCIPLES OF ADULT LEARNING

For more than two decades, adult learning theory has served as the framework for training adults. The idea that adults as learners require different educational strategies than children was first voiced fifty years ago when Irving Lorge (1947), writing about effective methods in adult education, suggested that to reach the adult learner, you have to teach to what adults want. He stated that adults have “wants” in the following four areas:

1. To gain something.
2. To be something.
3. To do something.
4. To save something.

Eduard Lindeman, also writing in the 1940s, proposed that adults learn best when they are actively involved in determining what, how, and when they learn. Since the 1970s, several authors and training experts have expanded upon the original concepts presented as adult learning theory.

Ultimate instruction, as used here, means helping adults to learn and involves far more than lecturing or presenting information. It involves instructing for results—powerful, highly effective instruction that results in applicable learning for adult participants. The material presented here is intended as a guide for both new and experienced trainers and educators. The reader is encouraged to adapt these ideas and techniques freely and to modify them as necessary to compliment his or her unique style of instruction. You, too, can become an ultimate educator.

## KEY DIFFERENCES BETWEEN ADULTS AND CHILDREN AS LEARNERS

Adults differ from children as learners. An adult has assumed responsibility for himself/herself and others. Adults differ specifically in self-concept, experience, readiness to learn, time perspective, and orientation to learning. Traditional teaching applied to children is “jug and mug” with the big jug (the teacher) filling up the little mugs (the students). Students are asked to pay attention and have few opportunities to make use of their own experience (Klatt 1999).

The following chart identifies some key differences between children and adults as learners:

### CHILD AND ADULT LEARNING CHARACTERISTICS

CHILDREN	ADULTS
Rely on others to decide what is important to be learned.	Decide for themselves what is important to be learned.
Accept the information being presented at face value.	Need to validate the information based on their beliefs and values.
Expect what they are learning to be useful in their long-term future.	Expect what they are learning to be immediately useful.
Have little or no experience upon which to draw, are relatively “blank slates.”	Have substantial experience upon which to draw. May have fixed viewpoints.
Little ability to serve as a knowledgeable resource to teacher or fellow classmates.	Significant ability to serve as a knowledgeable resource to the trainer and fellow learners.

## INSTRUCTION BASED ON FIVE BASIC PRINCIPLES OF ADULT LEARNING

Leadership

Experience

Appeal

Respect

Novel Styles

Often, peoples’ expectations about the role of an instructor and beliefs about how adults learn are derived from personal experience in a college lecture hall or a job training program or from studying classical learning theories. However, learning in adult human beings seems to be a more complex phenomenon than some of the classical theories suggest. Three principles that provide the foundation for adult learning today can be summarized as follows:

1. The adult learner is primarily in charge of his or her own learning. Remember that instructors do not have the power to implant ideas or to transfer skills directly to the learner. They can only suggest and guide.
2. An instructor’s primary responsibility is to do a good job of managing the process through which adults learn.
3. The learners are encouraged to use their own judgment and decision-making capabilities.

Instructors are leaders, not dictators. They do have responsibility to make decisions, provide guidance, and be a resource for the students' learning. Although instructors often view themselves as the ultimate authority on the subject matter, it is still up to the learners to determine whether the ideas presented in the session should be incorporated into their work or personal lives. Despite the primary role of the learner, instruction is not a passive, laid-back, go-with-the-flow process for the instructor. As the facilitator and catalyst for participants' learning, the instructor makes it possible for learning to happen by designing and performing all the activities that the learning processes requires.

In their research on adult learning, Sullivan, Wircenski, Arnold, and Sarkees (1990) assert that the establishment of a positive learning climate hinges on understanding the characteristics of adult learners who will be participating in the instructional process. They report the dynamics of the instructional process are very much dependent on the instructor having a clear understanding of the participants. Sullivan et. al. cited applicable characteristics of relevance, motivation, participation, variety, positive feedback, personal concerns, and uniqueness.

***Principle 1: Leadership.*** The adult learner enters the training or educational environment with a deep need to be self-directing and to take a leadership role in his or her learning. The psychological definition of "adult" is one who has achieved a self-concept of being in charge of his or her own decisions and living with the consequences; this carries over into the instructional setting. Thus, instructors can help learners acquire new knowledge and develop new skills, but they cannot do the learning for learners.

Although adults may be completely self directing in most (if not all) aspects of their lives, some can fall back to their conditioning in school and college and put on their hats of dependency, fold their arms, sit back, and say "teach me" when they enter a program labeled "education" or "training." (This is especially true when adults enter a "training room" set up "classroom style.") To resolve the "dependency" problem, adult educators have developed strategies for helping adults make a quick transition from seeing themselves as *dependent learners* to becoming *self-directed learners*. Adult educators, in the development of a learning environment, define the process through which learning takes place. For example:

- C The instructor guides the learners in determining the relevance of the learning for their own lives and work; whereas,
- C The learners are encouraged to use their own leadership, judgment, and decision-making capabilities.

To reinforce the notion of learner responsibility in the instructional process, a variety of activities can be used to obtain information from participants regarding what they want to get out of the session and to ensure a match between instructor and participant objectives.

Information should be gathered from participants prior to the session to assess participants' skill levels, prior training, education, and professional experience and interest in, need for, and expectations for the session. This can be done through an application form, learning contracts, a mail (electronic or paper) survey of registered participants, or a brief telephone interview if the number of participants is small. This information can be used to organize instructional objectives, sequence content, and design-reinforcing activities.

During an introductory section, participants can be asked to write down their most important goal for the session, and then be asked to share their expectations. Students are asked to put their comments regarding goals on a wall chart labeled “expectations” or “learning goals.” Instructors can also ask participants to list the skills, experience, and positive characteristics they bring to the learning environment. This process honors participants, identifies participant resources for the group, and provides additional assessment data. The instructor can read goals from the sheet periodically throughout the session and indicate when a section is particularly designed to meet that learner’s need, thereby reinforcing learner investment in the session.

*The ultimate educator remains alert to the first principle of adult learning: Adults enter the learning environment with a deep need to be self-directing and take a leadership role in his or her learning.*

**Principle 2: Experience.** The word “experience” holds two meanings for the ultimate educator. Experience is the accumulated knowledge an individual arrives with at the session, as well as an individual’s active participation in events or activities during the session.

Adults bring to a learning situation a background of experience that is a rich resource for themselves and for others. In adult education, there is a greater emphasis on the use of experiential learning techniques (discussion methods, case studies, problem-solving exercises) that tap into the accumulated knowledge and skills of the learners and techniques such as simulation exercises and field experiences that provide learners with experiences from which they can learn by analyzing them. A rich, adult-focused instructional approach takes into account the experiences and knowledge that adults bring to the session. It then expands upon and refines this prior knowledge by connecting it to new learning, making the instruction relevant to important issues and tasks in the adults’ lives.

In discussing what all learners have in common, Robert F. Mager (1992) stated that the more you know about participants, the better you can tailor instruction to meet their needs. He provided the following list of key points concerning experience:

- C Everyone comes to the learning situation with a lifetime of experience, regardless of age.
- C The lifetime experiences of each learner are different from those of others.
- C Lifetime experiences also includes misconceptions, biases, prejudices, and preferences. In other words, some of what people think they know is actually wrong.

It is also important to recognize that the experience that adults possess is significantly different in quality from that of youths:

- C Few youths have had the experience of being full-time workers, spouses, parents, voting citizens, organizational leaders, or other adult roles. Accordingly, adults have a different perspective on experience: it is their chief source of self-identity.
- C To youths, experience is something that happens to them, whereas adults define themselves in terms of their unique experiences.

C An adult's experience is who he or she is. So if an adult's experience is not respected and valued, it cannot be used as a resource for learning. Adults experience this omission as a rejection of their experience and as a rejection of them as persons, which negatively affects learning.

Few individuals prefer to just sit back and listen to a teacher or trainer go on and on about the topic. The effective instructor keeps this point in mind and designs learning experiences that actively involve adults with various levels of experience in the instructional process. This entails practice activities such as discussion, hands-on work, or projects for each of the concepts that the instructor wants the participants to master.

Concentration is also an important issue. Humans can only consciously think about one thing at a time. It is essential to provide learning environments that help learners concentrate on their learning tasks. Contents, formats, and sequences must be interesting to compete with other attention-demanding thoughts and environmental intrusions (McLagen 1978).

Boud, Keogh, and Walker (1985) found that adults have a broader base of experience to which new ideas and skills can be attached; furthermore, a broader experience base allows adults to incorporate new ideas and skills with much richer and fuller meaning than do youths. The more clearly defined the relationship between the old and the new (through discussion and reflection), the deeper and more permanent the learning will be. For example:

C On-the-job training, small group discussions, case study work, or even computer-based training all embrace the concept that participation helps increase involvement in the learning process and retention of the knowledge.

Information that goes into the participant's memory will likely be remembered if learners practice remembering the information soon after they process it. Therefore, it is important to provide opportunities in the session for review and remembering by means of activities like written summaries, application exercises, and discussions (Zemke and Zemke 1995).

Studies show that over a period of three days, learning retention is as follows:

C 10% of what you read.

C 20% of what you hear.

C 30% of what you see.

C 50% of what you see and hear.

C 70% of what you say.

C 90% of what you say as you do (e.g., orally work out a problem) (Pike 1989).

*The ultimate educator knows that experience is a rich resource for adult learning and therefore actively involves adults in the learning process.*

**Principle 3: Appeal.** Appeal is the power of attracting or arousing interest. Adult learners are motivated to learn when they have a need to know. They want to know how the instruction will help them and often ask themselves the following questions:

- C What's in it for me?
- C Why do I need this information?
- C How will I benefit from it?
- C How can I make use of it in a practical, real way?
- C How will it help me be a better person or professional?

Training and development expert Robert F. Mager (1992) brings this point home with his first two rules of training:

- C Rule #1: Training is appropriate only when two conditions are present:
  - There is something that one or more people do not know how to do.
  - They need to be able to do it.
- C Rule #2: If they already know how, more training won't help.

Adult orientation to learning is centered on life or work. Therefore, the appropriate frameworks for organizing adult learning are life and/or work-related situations, not academic or theoretical subjects. Meaningful learning can be intrinsically motivating.

The key to using adult's "natural" motivation to learn is tapping into their most teachable moments: those points in their lives when they believe they need to learn something new or different (Zemke & Zemke 1995).

Sometimes, adults enter the learning environment with little interest or motivation. Many genuinely want to improve their job performance or to learn new knowledge and skills in order to move up the career ladder. Their motivation can diminish if the instructor fails to direct and encourage this or other interests and motivations.

Trainers can help learners develop an early and appropriate "mental set" for learning programs by overviewing the course objectives, describing upcoming activities, and helping them see the future advantages of the instruction to them and their work (McLagen 1978). Introductory exercises early in the session can help establish the mental set. For example, an exercise titled "hopes and fears" allows participants the opportunity to express their learning goals and concerns. In this exercise, participants are instructed to write down on tear sheets their hopes (goals and desires) and fears (concerns and specific issues about the instructional session), individually or in small groups. The instructor then uses this information to ensure that instructional objectives are on the mark and that the instructor is sensitive to individual participants.

Motivation can be improved and channeled by the instructor who provides clear instructional goals and learning activities that encourage and support strong learner interest. To best capitalize

on this high level of learner interest, the instructor should explore ways by which the needs of each learner can be incorporated into the training sessions. This would include:

- C The use of challenging and exciting learning experiences.
- C Learning activities that are self-paced and tailored to individual rates of learning.

**FIVE WAYS TO SQUELCH MOTIVATION**

- C Have little personal contact.
- C Get participants in a passive mood and keep them there.
- C Assume the class will apply what is taught; do not bother with examples.
- C Be alert to criticize.
- C Make them feel stupid for asking questions in class (Pike 1992).

Studies show that part of an adult's preparation to learn is determining the benefits of the learning, as well as the disadvantages of not learning. Allen Tough (1972) found that adults would expend considerable time and energy exploring the benefits of learning something, and what the costs would be of not learning it before they would be willing to invest time and energy in learning it.

*Therefore, a key principle in adult learning is that the ultimate educator needs to develop an appeal, a "need to know" in the learners—to make a case for the value in their life performance of learning what is offered. At the minimum, this case should be made through testimony from the experience of the instructor or a successful practitioner; at the maximum, by providing real or simulated experiences through which the learners experience the benefits of knowing and the costs of not knowing.*

**Principle 4: Respect.** The word respect here is defined as "esteem." The instructor of adults must show deferential regard for the learner by acknowledging an adult learner's experience and creating a climate in the learning setting that conveys respect.

People are more open to learning if they feel respected. If they feel that they are being talked down to, patronized, or otherwise denigrated, their energy is diverted from learning to dealing with these feelings. The following suggestions are offered as ways in which the instructor can help foster a comfortable, productive learning climate through the attitude that he or she projects:

- C Show respect for the learner's individuality and experience.
- C Be sensitive to the language you use so that learners are not inadvertently offended.
- C Be open to different perspectives.

- C Adopt a caring attitude and show it.
- C Treat the learners as individuals rather than as a group of people who are all alike.
- C Support all learner comments by acknowledging the “rightness” that is in each comment and each person.
- C Take the learning process seriously because it is serious and important (McLagen 1978).

Establish a learning climate of:

- C Mutual respect.
- C Collaboration rather than competition.
- C Support rather than judgment.
- C Mutual trust.
- C Fun.

Adult learners respond to reinforcements. Although adult learners are usually self-directed, they do need to receive reinforcement. Most people are like dry sponges waiting for a drop of appreciation. Instructors should take every opportunity to demonstrate appreciation in the classroom.

Sullivan, Wircenski, Arnold, and Sarkees (1990) write that the need for positive feedback is a characteristic of the adult learner. Like most learners, adults prefer to know how their efforts measure up when compared with the objectives of the instructional program. Adults have a tendency to “vote with their feet”; that is, if they find the program to be a negative experience, they will find some reason to drop out of the program before its completion.

*The ultimate educator honors adult learners’ individuality and experience and creates a safe, respectful, and participant-centered environment for learning to take place.*

**Principle 5: Novel Styles.** The last principle refers to individual or novel styles that characterize learners. Novel styles are defined as different, unique learning styles and preferences. Generally, most adults prefer to be treated as individuals who are unique and have particular differences. The instructor must keep in mind that although adults have common characteristics as learners, adults also have individual differences and most adults have preferred methods for learning. Adult learners respond better when new material is presented through a variety of instructional methods, appealing to their different learning preferences.

No matter how well planned a program is, individual differences among participants often make it necessary to make some adjustments during the program. Flexibility can be incorporated into programs, but such flexibility must be grounded in an understanding of how learners may differ. When developing an instructional program, the instructor must take into consideration the novel styles of learning that each adult brings to the session. The following section discusses a variety of approaches to learning style.

## LEARNING STYLE

Most adult learners have developed a preference for learning that is rooted in childhood learning patterns. To understand and address adult learners, it is important to understand differences in children's development and learning. As children develop, their ability to process information is affected by their own individual strengths and weaknesses and the environment in which they grow and learn. Individual differences in children's interests, aptitudes, abilities, and achievement can be quite pronounced. For example, some children have an especially strong auditory memory that enables them to remember what they hear with little effort, while others may be less skilled. This can be seen in differences in following verbal directions given by a teacher or coach, or in the ability to learn the words to a new song. Some children have an especially keen eye for noticing detail in pictures or a design in a pattern. This can be seen in differences in speed in recognizing letters of the alphabet or understanding principles of geometry. Some children are very talented artists from the first moment they are given crayons or other tools to draw, while others develop such a skill through structured learning opportunities at school and at home.

Behavioral characteristics can also affect learning in children. Children may have a short attention span or be easily distracted by sounds or movement around them, while others can stay with a task for a lengthy period of time, regardless of what might be going on around them. Some children appear more "emotionally mature," which can translate into greater patience, ability to cooperate, or a higher tolerance for frustration, while others become upset quickly if a task is frustrating. Some children have a "need to move" or be more active than is typical for their age group; others simply have more stamina, and so on.

In addition, stimulation and opportunity can affect ability and achievement. If a child is deprived of opportunities to move, explore, touch, grasp, and/or interact with sound and speech, long-term learning ability is diminished. Furthermore, without opportunities to use once learned skills, the ability to perform tasks is often lost and must be relearned.

It must be emphasized that adult learning theory is based in the notion that we are not "just teaching grown-up children." It must be recognized that a person's aptitudes and abilities are shaped by individual differences and early learning experiences and continue to be influenced by experience and training throughout adulthood. In fact, many adults seek jobs that consistently give them opportunities to display special talents and rely upon their preferred learning style.

### ADULT LEARNING STYLES

(Portions of the following section were excerpted with modification from National District Attorneys Advocacy Center, *Train the Trainers Workshop*, 1999.)

In adult learning theory, several approaches to learning style have been developed and are prominently used in training and educational programs. These include learning styles based on the senses that are involved in processing information; theories of intelligence, including emotional intelligence and "multiple intelligences"; and preferences for learning conditions, i.e., the environment in which learning takes place. In order to provide a framework for a discussion on adult learning style differences, each of these approaches is briefly discussed.

***Auditory, visual, and kinesthetic learners.*** Differing aptitudes, abilities, and experiences have caused individuals to develop a preference for sending and receiving information through one sense over another. Most often people prefer auditory or visual input; however, some people have a preference for kinesthetic learning, i.e. learning that involves movement. A preference for one type of learning over another may be seen in the following ways:

- C *Visual learners prefer, enjoy, or require:* Graphic illustrations such as bar graphs or crosstabs to explain data; color codes to highlight salient information; maps to find their way on the subway or while driving in a new city; written material to study new concepts; wall charts that display points to be remembered; written outlines; drawings or designs to illustrate overhead presentations; sitting “up close” in a presentation in order to see the presenter’s face, gestures, or visuals; taking notes during a lecture; instructors to repeat verbal directions.
- C *Auditory learners prefer, enjoy, or require:* A verbal presentation of new information, such as a lecture; group discussions to hear other points of view or practices; fast-paced verbal exchanges of ideas; a good joke or story that they can repeat for others; verbal cues or mnemonic devices to help them remember information; music at the beginning or during transitions in a training setting; words to accompany a cartoon; oral reports of working groups.
- C *Kinesthetic learners prefer, enjoy, or require:* Movement, such as rocking or shaking a leg during a lecture; hands-on experience to learn a task; gestures while making a point; role play exercises over discussion groups; shaking hands when meeting or greeting people; trying new things without a lengthy explanation of the activity; frequent breaks; regular opportunities to change seating or room arrangement; “just doing it” rather than talking about it.

While it is thought that people have developed a preference for or have greater skill in processing one type of input over others, most people simultaneously process information through multiple senses. In fact, the retention of learned material is enhanced if the learner is asked to process information using more than one sense. Presentations that are multisensory (using visual and auditory components) in combination with interactive activities will increase learning and retention for most adults.

## **THEORIES OF INTELLIGENCE**

(Portions of the following section were excerpted with modification from National District Attorneys Advocacy Center, *Train the Trainers Workshop*, 1999.)

Intelligence has long been considered a key factor in predicting and evaluating learning. Educators have developed a variety of teaching strategies to accommodate varying levels of intelligence, most of which have been based on a traditional Western approach to intelligence. Theories of adult intelligence have evolved considerably in recent decades. The traditional constructs of IQ (intelligence quotient) derived from verbal and nonverbal intelligence have been expanded to include EQ (emotional quotient, suggesting that emotional maturity and ability contribute significantly to achievement), as well as theories of “multiple intelligences.” Howard Gardner (1982), a proponent of “multiple intelligences” theory, suggests that educators do people a disservice by thinking of intelligence levels in traditionally narrow dimensions that relate most

significantly to academic achievement. Gardner proposes seven broader dimensions of intelligences:

- C *Verbal and linguistic.* Ability to deal with words and language, both written and spoken.
- C *Logical and mathematical.* Ability to do inductive and deductive thinking, numbers, abstract patterns, and reasoning ability.
- C *Musical.* Ability to recognize tonal patterns, pitch, melody, rhythms, and tone.
- C *Kinesthetic.* Ability to use the body skillfully.
- C *Visual and spatial.* Ability to observe and process visual stimuli and visualize or create visual images.
- C *Interpersonal.* Ability to develop and maintain relationships and understand, communicate, and work with other people.
- C *Intrapersonal.* Understanding of self and one’s own feelings, values, and purpose.

Many instructors have found applications for this new way of defining intelligence or aptitude. In general, the instructors have utilized this theory to support the notion that instruction should entail far more than a verbal/linguistic presentation of ideas, and include experiential opportunities that enable people with varying types of “intelligence” to be successful.

**LEARNING ENVIRONMENT CONDITIONS AFFECT LEARNING**

The physical environment in which instruction takes place and the structure of the activities in the course can also affect learning positively or negatively. People react differently to such factors as room temperature, arrangement of the room (e.g., closeness of seats), time of day (early morning versus late in the day), brightness of the lighting, and sound (e.g., noise distractions from nearby construction or talking among participants). In addition, adults differ with regard to whether they prefer to work alone or in groups. Sharon Fisher (1989) has combined all of these factors to depict the various types of preferences that adults may have when they enter the learning environment:

**ADULT PREFERENCES REGARDING A LEARNING ENVIRONMENT**

PHYSICAL FACTORS	EMOTIONAL FACTORS	LEARNING FACTORS
<i>Learning Setting:</i> Noise Level Lighting Temperature Structure Time of Day	<i>Social Needs:</i> Learn Alone Learn with Others	<i>Learning Styles:</i> Auditory Visual Kinesthetic
	<i>Motivation:</i> Extrinsic Intrinsic	

An instructor must recognize that adults' preferences in these areas may affect their responsiveness in the session. Efforts should be made to accommodate differences by providing a variety of learning activities in which participants may feel comfortable.

*The ultimate educator delivers instruction in a stimulating, rich, and diverse environment through a variety of instructional methods to appeal to adult participants' learning styles and preferences.*

### **THE ULTIMATE EDUCATOR IS AN ADULT LEARNING EXPERT!**

Adult learning theory is grounded in the notion that adults are in charge of and need to be active participants in their learning. Adults bring a wide range of experiences and perspectives to any instructional setting, and are most likely to be motivated when they see a connection between the learning objectives and activities and their own work or life. Adults also bring preferences for how they learn as well as varying aptitudes and abilities. Ultimate educators provide opportunities for adults to use what they already know and apply what they are learning in the instructional setting.

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