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## **The needs of the adult learner : typical characteristics and how it impacts the training process**

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## **The needs of the adult learner : typical characteristics and how it impacts the training process**

### **Abstract**

This literature review was conducted to gain a better understanding of the relationship between the characteristics of the adult learner, and the impact of those characteristics in implementation and training situations in a business environment. The review introduced this researcher to numerous theories, resources, and strategies proven to improve business training activities or programs.

The amount of available research provides evidence that business recognizes quality training must be provided to derive optimum results from training programs for their employees. It also confirms that understanding typical adult learner characteristics will enhance the learning situation when both the course designers and the instructors structure activities to incorporate those characteristics into training strategies.

As a practitioner in adult business training, this review provided a better understanding of the field of adult education and an opportunity to explore some of the training issues other practitioners are attempting to resolve.

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The Needs of the Adult Learner:  
Typical Characteristics And How It Impacts The Training Process

A Graduate Review  
Submitted to the  
Division of Educational Technology  
Department of Curriculum and Instruction  
In Partial Fulfillment  
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Master of Arts  
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### *Abstract*

This literature review was conducted to gain a better understanding of the relationship between the characteristics of the adult learner, and the impact of those characteristics in implementation and training situations in a business environment. The review introduced this researcher to numerous theories, resources, and strategies proven to improve business training activities or programs. The amount of available research provides evidence that business recognizes quality training must be provided to derive optimum results from training programs for their employees. It also confirms that understanding typical adult learner characteristics will enhance the learning situation when both the course designers and the instructors structure activities to incorporate those characteristics into training strategies. As a practitioner in adult business training, this review provided a better understanding of the field of adult education and an opportunity to explore some of the training issues other practitioners are attempting to resolve.

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## *Introduction*

The ever-changing nature of required business skills is reflected in the number of adults seeking work-related training. Statistics indicate there has been a steady increase in the number of adults participating in all forms of educational opportunities, however, according to government sources, work-related training or educational programs continues to see the highest percentage of participation by adults in the United States. With the challenges faced by business today, companies have developed an interest in effective methods to train their employees. The constant introduction of new technology, shrinking labor forces, and shorter cycle times between creation and introduction of new products within a global business environment brings the necessity for businesses to become involved with retraining of current or new employees to stay competitive within their markets. "Since 75 percent of those who will be in the work force in the next decade are already working, for business, retraining programs may be the only option to develop a skilled work force as the needs change" (Watkins, 1989 p. 429).

To make business related training programs effective, the designers and instructors involved in the adult training process should recognize and understand how typical characteristics and expectations of the adult learner impacts training. This paper is a literary review of research and theories discussing the typical needs displayed by an adult involved in a learning situation, how those characteristics might affect the learning experience in a business environment, and strategies that can be incorporated into business training to improve the success of the adult learning experience.

Interest in this topic began several years ago when this reviewer was asked to assume the responsibilities of coordinating an existing technical product-training program



for a business. It was observed that during the training sessions, instructors would present the information but were not necessarily concerned if the participants were gaining any knowledge in the process. This prompted the researcher to seek answers to the basic questions; what are the needs of the adult learner and how do those needs impact the training process? If the instructors involved with training understood why adults participate in learning situations, what adults expect out of learning situations, and how adults best respond to learning situations, would this knowledge encourage the instructors to incorporate strategies that take advantage of those behaviors when creating and delivering an instructional or training program?

This literary review will address three fundamental questions. The initial question is: why do adults participate in work related learning situations? The second question is: what do researchers in the field consider to be typical characteristics displayed by the adult learner? The final question is: by understanding these characteristics, what types of learning strategies are considered to be useful when working with adults?

### *Methodology*

Materials selected for review were based on two primary criteria. The first criterion is based on foundational theory and recent publications. Several works of classic theoretical resources warranted inclusion since their theories form the backbone of the adult education concepts. Updated editions when available were used. The rest of the sources selected for review were authored within the last seven years. Fundamental learning theories have not shifted radically within that time frame, but technological advancements in the last five years may have affected how the theories might be applied. Journal articles were selected primarily for pertinent discussions on adult learning in business or industrial settings. The second criterion was that sources should have practical advice or strategies that could be adapted and incorporated into training sessions.

The search for appropriate materials on the needs of the adult learner began with a review of bibliographies from the recommended resources. Searches also included the UNI Rod Library catalog system for non-periodicals. Journal articles were gathered from several databases including the Emerald, ERIC Digest, InfoTrac, ProQuest and WilsonWeb by using a wide variety of search terms, which included Adult Learning, Adult Education, Adult Psychology, Educational Psychology, and Training. Web based searches were conducted using two phrases, Instructional Design and Adult Learners. Organizational and business web sites typically gave more summary data than in-depth details but several proved useful by providing topic related articles, synopses of theory, and additional links for further research as well as additional bibliographical references.

## *Analysis and Discussion*

### *Defining the Adult Learner*

Traditional educational theory is built on the foundation of working with children and adolescents during the formative years. In the 1970's, serious interest and corresponding research about the adult as a learner blossomed. As research expanded into the exploration of adult learners, it became necessary to determine what defines an adult.

An adult can be defined by biological terms; the age at which reproduction can occur (Knowles, 1984; Tight, 2000) or in legal terms when one reaches majority and privileges such as voting and marriage are granted. Societal and psychological issues play an equally significant role in defining an adult (Caffarella, 2002; Merriam & Caffarella, 1999; Wlodkowski, 1999). In his discussion of definition, Rogers (as cited in Tight, 2000) explains the term adult "...can refer to status, an acceptance by society that the person concerned has completed his or her novitiate and is now fully incorporated into the community. . . . Or it can include a set of ideals and values"(p.14). Another way to define adult is as a state of being; as a person matures and becomes aware of self-image and self-direction by recognizing the effect of choices made in one's life (Knowles, 1984; Tight, 2000). Paterson (as cited in Tight, 2000) defines adulthood as "an ethical status resting on the presumption of various moral and personal qualities"(p.15). A traditional academic description would be an individual who has completed the compulsory grade levels and has returned for additional education.

For this paper, adult learner will be defined as a person whose age places them beyond the compulsory education level, has been in the workforce, and is seeking new or additional skills to be used in the workplace. There are many reasons adults seek learning

opportunities. The theories and characteristics being reviewed will apply for the majority of adult education experiences. However, the discussion will be restricted to work-related training opportunities and situations that involve technical training which is being offered to support an increase in employee productivity, improve technical skills, product understanding, or to prepare for a change in career or job requirements. It will not address issues that may be seen in academic or recreational class settings.

In 1976, the National Center for Education Statistics indicated that in the United States by the year 2000, the population would be dominated by people aged 30-44, with the age curve rising into the 45-64 year old category (Cross, 1981). Coupled with the challenges faced today by business, it becomes evident why business has developed an interest in effective methods to train their employees. Watkins (1989) review of statistics indicates that because the majority of the exiting labor pool is already in the work force, retraining programs frequently become business's best option to develop a skilled work force that can meet their changing requirements. To make training programs effective, decision makers involved in training issues or conducting training would benefit by understanding how typical characteristics and expectations of the adult learner impacts training regarding design approach and delivery requirements.

#### *Adults and Business Interests In Work-Related Learning*

When analyzing why an adult seeks out learning opportunities, regardless of the topics, a wide variety of reasons are given. These reasons range from recreational learning and opportunities for social interaction, to gaining required skills, and improving their employment prospects. When placed in relation to a business environment, studies have shown four primary reasons adults will seek additional learning opportunities. These were:

(a) because of advancements in technology, (b) to improve their skills, (c) to maintain their current positions, or (d) because of personal desires or motivations (Birkenholz, 1999; Cross, 1981; Knowles, 1984; Merriam & Caffarella, 1999). Research conducted as early as 1938 showed that in the past the largest percentage of adult students were motivated by a sense of economic or social insecurity (Knowles, 1984). Current occupational concerns, rather than preparation for the future, are the primary reasons for adults participating in further education (Courtney, 1992).

For business, economic security also produces an interest in adult training. Changes in worker demographics and evolving philosophies on management styles continue to drive business to be involved with training issues at some level (Berge, 2001, Creighton & Hudson, 2002). In the span of thirteen years, business and industry has almost doubled their funding of employee training programs. A comparison of historical statistics and predictions with more recent data can best demonstrate the growing reliance on work-related training programs.

Watkins (as cited in Merriam & Cunningham, 1989) reviewed the following existing statistics on business and retraining issues. The 1989 *Training Magazine* annual survey indicated 29 billion dollars were spent on training in business and industry. A fact sheet produced by American Society of Trainers and Developers (ASTD) in 1987 indicated that changes in job market due to foreign competition, new technology, and changes in consumer demands would help create situations where by the year 2000 75% of the existing workforce would require retraining because of a change in required skills. At that time ASTD also indicated that 75% of the people requiring a different set of job skills were already in the workforce, business's primary option would be to develop the skilled work

force as changes required (Merriam & Cunningham, 1989). Current statistics add support to those projections. A recent 2002 survey of pre-qualified responders from subscribers to the magazine *Training Magazine* indicates that 54.2 billion dollars was the projected spending for training and development programs with the traditional instructor-lead training still being preferred as a delivery method (Galvin, 2002).

Creighton and Hudson's (2002) report for the National Center for Educational Statistics (NCES), and the NCES 2003 Condition of Education report support the projections of a continued increase in business-related training. Research conducted by NCES proposed a series of conclusions by comparing trends through ten years of data. First, rapid shifts in the labor market make continuous learning critical for job success. Second, the shift from a service to an information-based economy places a greater importance on human capital that is a well educated and an adaptable labor force. The ability to develop new skills and the adaptability of the work force has become critical assets for both business and national growth. To develop the workforce through retraining, "places a greater importance on initial education and continuing education of adults who have left the formal education system" (Creighton & Hudson, 2002 p. 2). Finally, the number of businesses providing training to their workforce seems to be growing as evidenced by the use of corporate universities, distance education, and continuing education programs. Creighton & Hudson (2002) believe the statistics confirm that even if the rate of participation in adult education remained constant, the sheer number of adults involved has created an increase demand for adult educational opportunities.

Despite the emphasis in business to provide better training for their employees, it is a common practice to entrust the training to individuals with little working knowledge of

the learning process, especially of the adult learner. Bankirer's research (as cited in Birkenholz, 1999), found that part-time instructors comprise 80% of the adult educators and that they are typically hired for their expertise in content and experience. But, "they are frequently less knowledgeable and experienced in the teaching/learning process and personal needs and interests of the target audience" (p. 139). Similar to the researcher's experience, it may be a subject matter expert who is assigned to do the training on the assumption that if a person knows the topic then the person is qualified to teach it to others. "Without the understanding of how adults learn too many trainers have taught people the way they were taught as children – by talking at their students from the front of the classroom" (Caudron, 2000, para 13). Businesses that are most successful in establishing successful training programs recognize there is a relationship between the success of the learning situation and an understanding of the adult learner. This is most frequently demonstrated through hiring or contracting with individuals whose background in adult education provides an understanding of the adult in a learning situation.

### *Typical Adult Characteristics*

Analysis of adult learning characteristics evolves from the works of Malcolm Knowles. While not the first to observe adult learning behavior, the theories he developed in the 1970's became a stepping stone for other discussions on adult learning and learning styles. There is a general consensus among adult learning theorists about typical characteristics displayed by the adult learners. These characteristics include:

1. Adults are intrinsically motivated.
2. Adults have immediate and concrete needs, therefore materials and instruction must be relevant to their objectives.

3. Adults bring experience and some prejudice into the learning situation and those must be taken into consideration.
4. Adults can be used as a resource within the learning process.
5. Adults process information in different ways and therefore need variation and active involvement in the learning experience.
6. Providing physical and psychological comfort within the learning situation will help the adult be more receptive to the learning. (Birkenholz, 1999; Caffarella, 2002; Fardouly, 1998; Knowles, 1984; McNamara, 1999; Merriam & Caffarella, 1999).

Experts in the field continue to explore and develop specific aspects of these general characteristics from different perspectives producing a variety of theories, each addressing what they believe are driving forces within the adult and its effect on the learning style. Since these six characteristics are the cornerstone of theory and practice for working with adult learners, each of the six general characteristics will be discussed. A general synopsis of the characteristic will be provided along with supportive data or viewpoints of theorists.

*Adults are intrinsically motivated.* Normally there is some need or a desire that triggers the internal motivation prompting an adult to seek a learning experience. This desire to enhance proficiencies in life or job skills encourages the learner to be an active participant in the learning process (Knox, 1986).

Cross (1981) examined research conducted by several groups on reasons why adults participate in learning opportunities. She presents a representative sample drawn from surveys conducted by the Commission of Non-traditional Studies compiled in 1974. This sampling indicates the two primary goals seen as important by the learning participants were knowledge goals (becoming better informed and to satisfy curiosity) and personal



goals (get new job, advance in current job, obtain a certificate or license, attain a degree). The primary motivation for most adults in work related training is based on a desire to improve their advancement opportunities. Recent changes in the industry-base itself has also resulted in a greater demand for training situations as technology and service-based positions begin to replace manual operation and machining skills commonly seen just a decade ago. Marquardt and Kearsley (1999) indicated that in 1996 over 50% of American workers used computers in their jobs and 73% of employers indicated that computer skills were necessary for employment. Business today places a greater value on workers who are capable of handling a variety of jobs and who possess problem-solving skills. The worker must therefore approach job-related training as an opportunity to acquire new knowledge, skills and attitudes (Berge, 2001).

There is a correlation between the age, familial responsibilities, and type of business-related learning situations with which an adult will become involved. Adults in the 20 - 30 age group, tend to focus on skills required to establish a career or gain certification or licensing. Progressing into the age group of 40 to mid 50s, the focus will be on skills that will bring job advancement or possibly change in career direction. As adults advance through the mid 50's and beyond, the interest in learning situations for career advancement begins to peak and then decline (Cross, 1981; Merriam & Caffarella, 1999). Statistics confirm that this trend continues. In 1999 the largest group of adults who participated in work-related course activity, approximately 30 %, were between the ages of 25 and 54 while adults aged 54-64 showed only 19 % participation rate (Creighton & Hudson, 2002).

Typically, an adult learner is voluntarily participating in a learning situation, primarily for economic or personal growth. However, while studies frequently look at voluntary involvement in learning, one would be remiss not to include the situations where external influences, such as an employer or a government agency, place an adult into a learning or training experience under a threat of penalty or the necessity of retraining due to job loss. Birkenholz (1999) indicates that those required to participate in a learning situation by an authority figure are more challenging to reach because their desire, potential, or motivation to be involved in the learning process may be greatly diminished because the activity is not one of their own choosing.

*Adults have immediate and concrete needs, therefore materials and instruction must be relevant to their objectives.* Birkenholz (1999) cites Knowles's theory on learner readiness, which emphasized that the adult is ready to learn when there is a pressing need, desire, or problem to solve. Adults want to identify knowledge and skills that will have immediate application. Adults tend to personalize the learning as they incorporate the new skills into their existing knowledge base. The learning environment should be designed to take advantage of this readiness to learn by incorporating authentic problems and cases (Berge, 2001; Wentland, 2003; Wlodkowski, 1999).

The need for well-defined instructional goals and objectives is important to the adult learner. Adult learners have numerous priorities all demanding their time and energies. Because of this, adults in particular are less tolerant of objectives that do not have application to their learning requirements (Birkenholz, 1999; Caffarella, 2002; Fardouly, 1998). Adults are less likely to invest time into learning situations that do not meet their expectations (Fardouly, 1998; Wlodkowski, 1999). The goals need to define what will be

accomplished, but they must also be based on the learner's background and motivation for engaging in the instruction. Clearly defined goals and objectives allow the learner a higher level of control and understanding of the skills they are to acquire, the conditions under which the learning is to be demonstrated, and the criteria that performance will be measured against (Dick, Carey, & Carey, 2001; Wlodkowski, 1999). When realistic, allowing the learners to participate in setting the learning objectives or activities related to a new concept will help motivate and stimulate interest in the learning as the students tailor information to their requirements or learning styles.

A number of research projects have been conducted to study the relevancy of incorporating authentic work-based problems as a method to accomplish the transfer of learning or required skills. Two reviewed studies confirmed there is a relationship to an increase in adult motivation and the perceived value of training when new skills were directly applicable in individual's job. A study by Ford, Quiñones, Segó, and Sorra (1992) included an investigation of the relationship between retention of newly learned skills, the level of supervisory support [on the job], and the rate of decline in competency if opportunities to practice newly acquired skills were not provided. Their report indicated that the complexity of the task, when coupled with the lack of opportunity to use the newly acquired skill, had a negative impact on the student's rate of proficiency. McDonald, Gabriel, and Cousins (2000) conducted an impact study to determine if applying adult education principles to a training program in advanced technology industries would improve the program. Data based on extensive student interviews and written evaluations indicated that participants agreed that the relevancy and immediacy of the content was

directly related to their ability to transfer the job-related skills through the use of job-related assignments.

*Adults bring experience and some prejudice into the learning situation and it must be taken into consideration.* Knowles's exploration of adult learners indicates that one of the defining differences, when dealing with adult learners, is the greater number and increased quality of life experiences brought into the educational setting by the adult (1984). As part of their impact study, McDonald et al. (2000) reviewed several significant theorists' works for their own impact study. They stated:

Researchers report that it is important for facilitators and instructors of adults in learning situations to both recognize and use the knowledge and experience of the group in the learning process (Mezirow & Associates, 1990) . . . . Therefore, adults learn best when their experience is acknowledged, and new information builds on previous knowledge (Caffarella, 1994). (p. 223)

McDonald et al (2000) are of the same opinion that the ability of the instructor to incorporate the learner's experience, as part of the available educational resources will enhance the learning process for all involved.

Part of the instructor's role is to create an atmosphere where participation and the sharing of information and viewpoints are encouraged. But experience can be a two-edged sword. For adults with low self-esteem or previous bad experiences in a learning situation, it is not at all unusual to for them to dismiss the relevancy of their own experience in the face of the instructor's authority or just as easily dismiss other's experience, classmates and instructor alike, if it conflicts with their own. (Taylor, Marienau, & Fiddler, 2000).

*Adults can be used as a resource within the learning process.* Because the adult learner has life experiences, they hold a wealth of supplemental information, examples, and potentially more practical experience than the instructor on a given topic. This experience can be put to good use both as motivation and positive reinforcement for the student and as a resource for the instructor and classmates (Corder, 2002, McDonald et al, 2000). Within business situations, employees can be an asset in identifying problem areas and can help in defining projects and project plans to address such issues (Poell, Van Der Krogt, & Warmerdam, 1998).

*Adults process information in different ways and therefore need variation and active involvement in the learning experience.* To effectively develop training, a basic understanding of learning styles in relation to the characteristics is also necessary. A learning style is based on the assumption that “we are efficient as learners when information comes in aligned with the way we want to process it” (Delahoussaye, 2002, p. 29). Kolb, (as cited by Delahoussaye, 2002), indicates that each individual has a unique preference for receiving and processing information. Research shows that individuals process information differently. By understanding the various processing patterns of the learner, the instructor and course designer can make decisions on how best to approach material to make the learning more meaningful.

Delahoussaye (2002) reviewed three common learning-style assessment tools. These were Kolbs’s Learning Style Inventory, Honey & Mumford’s Learning Style Questionnaire, and Salton’s I-Opt. Comparing the descriptors used for classifying various demonstrable personality/learning tendencies, the conclusion was that each of the three displayed striking similarities in the underlying behaviors for each learning style.

The comparison shows that these learning-style assessment tools group learning styles and behaviors into four basic approaches to thought processing. The first grouping solves problems by viewing a problem from many perspectives, they can be slow to make up their minds and usually look at the big picture to see if an idea fits. Most frequently, this group is more people-oriented and prefers to deal with feelings. The second grouping solves problems by inductive reasoning and typically is very organized and systematic in their thought process. They can be task and process orientated. The learning experience should be detailed and progressive in design. This group may learn well through hands-on practice, but often require justification to warrant a change in behavior. They prefer concrete examples to theoretical. The third grouping solves problems through hypothetical-deductive reasoning. They can be task and action-oriented preferring to dive right in rather than planning a process, often wanting to apply new knowledge immediately rather than discussing the why of a theory. The fourth grouping solves problems through planning and experimentation. They are more “how” than “why” orientated and they learn best through analogies and examples. One of their skills is influencing those around them (Delahoussaye, 2002). The learner may or may not be conscience of their learning style preferences. But if the instructor has a general understanding of the various learning styles, it encourages more flexibility in the approach or a variety of activities used to insure learning takes place.

Yet another way to look at learning styles is through sensory input. Neuro Linguistics Programming (NLP) looks at how knowledge is processed through a sensory connection. The basic theory revolves around auditory, visual, and kinesthetic connections that are made between information and the learning process. These behaviors have been

defined as predicates by practitioners of NLP. The predicates will display typical patterns and be observable through the adjectives used by individuals. A person who thinks in visuals will use words like see, perspective, vision, scene, and use phrases like “that is too vague”, “I need to see that in black and white”, or “I’m glad we see eye to eye”. Graphics, flipcharts, and drawings help visual learners to grasp new concepts. A person who thinks in sounds will use words like say, tell, tune, speak, and would use phrases such as “let’s talk things over”, “something tells me”, and “I hear you”. Auditory learners will prefer to discuss ideas and concepts. People who learn kinesthetically will use words like grasp, feel, solid, and use phrases like “carry a project through”, “a cool customer”, or “a hot tip” (Lavan, 2002).

Knowledge of the various learning styles allows both the learner and the instructor to play to an individual’s strengths. In an interview, Delahoussaye (2002) posed the question: “is there unequivocal, empirical evidence to validate the practical relationship between learning style and learning effectiveness?”(p. 31). Honey (as cited by Delahoussaye, 2002) responded:

“Yes, but there are two sorts of learning effectiveness. People can either play to their strengths and in so doing become better at selecting learning opportunities that suit their style or they can set to work to become better all-round learners by investing extra effort in underdeveloped or underutilized styles. The former is easier; the latter is the ultimate challenge” (p. 31).

Curry (as cited by Delahoussaye, 2002) responded to the same question indicating:

“There is a particularly strong relationship in those individuals *without* style flexibility, which is the ability to match their learning processes to the learning

environment encountered. When the environment is consistent with their inflexible styles, they do at least OK. When the learning environment is not conducive to their inflexible style, they do less well and have to work harder with predictable threats to motivation and engagement” (p. 31).

The act of processing and retaining information into memory can become a challenge, especially when its new information or concepts and not related to anything previously learned. Cross (1981) indicates that if a learner is not provided a means to organize and connect complex material or meaningless information to previously learned information, or if it requires reassessment of old learning there is little motivation or justification for the learner to retain that new information. It is extremely important that the association between old and new information is made. Allowing the learner to be involved in making decisions about what they wish to explore or how to explore it can enhance this motivation. Participation should include repetition and multiple opportunities to practice new skills (Ford, et al., 1992; McNamara, 1999; Mager, 1982).

*Providing physical and psychological comfort within the learning situation will help the adult be more receptive to the learning.* There are some physical and emotional aspects in the adult learner that also need to be recognized. Physical capacities, the memory processes, and information processing capabilities change as the adult ages. Physically, sensory and memory functions tend to peak when a person is in their twenties and then start to decline. Sharp declines are evident as the learners begin to approach their 50's. Hearing and eyesight begin to change faster. The auditory sensors begin to lose the capability to capture certain sound frequencies (low frequencies in females, high frequencies in men) and it takes up to 45% longer for the brain to process and react to what is heard (Cross,



1981). Eyes begin to lose the ability to process light effectively. A fifty year old may need up to 50% more illumination in a room than a person in their twenties to properly see (Cross, 1981; Kennedy, 2003).

Memory and information processing skills also change. Physically it takes longer for the brain to assimilate information. It will take an older person longer to complete tasks because they perceive information, process the information, and act on the information more slowly than a younger adult. When asked to complete a task, an adult tends to compensate for loss of speed by an increase in attention to detail and accuracy (Cross, 1981). Because older adults have more experience to draw upon, deductive reasoning situations are much easier than inductive reasoning or rote memory tasks. “Consequently, as adults grow older, they tend to substitute wisdom for brilliance when dealing with intellectual tasks” (Knox, 1986, p. 22). This is especially true if it is not associated with pre-existing knowledge and concepts.

Common sense adjustments to the learning situation and the delivery process will aide the physical changes in the older adult. Simple items such as using larger print or a higher level of lighting, reducing the level of competing noise, and increasing the speaking volume of the instructor will be of great assistance (Cross, 1981; Kennedy, 2003). Slowing the pace of delivery will also be helpful. When possible, allowing adults to set their own learning pace will provide benefits.

Psychologically, a safe environment needs to be provided to promote a change in attitude and knowledge. Part of the learning process involves unlearning old behaviors and practices while accepting and incorporating new ideas and concepts. Tanner (1998) discusses the adverse effects of continuing to promote the argument culture “with its

tendency to approach issues as a polarized debate” and the culture of critique “with its inclination to regard criticism and attack as the best if not the only type of rigorous thinking are deeply rooted in western [educational] tradition” (p. 257) as part of a classroom setting. Tanner explains, the adherence to the practice of argument and critique is seen as a method of sharpening thinking skills. However, it may create a negative impact on the learning process, particularly when learning environments include women and certain non-western cultures. Frequently, from the learner’s perspective asking questions is an admittance of ignorance and weakness. If the student does not feel secure in questioning information and personal beliefs, learning will not take place (Cross, 1981; Merriam & Caffarella, 1999).

#### *Incorporating Adult Characteristics into the Training Environment*

Educational theorists broadly define learning as a change in the individual. This may be a change in behavior, a change in process, a change in attitude, or in skills (Knowles, 1984; Birkenholz, 1999). Caffarella (2002) includes the concept of organizational change through changes in policy, procedures, and work habits.

While discussing the link between training and solving business problems, Berge (2001) gives an interesting differentiation between training and education:

Training should be just-in-time and just enough. When training is delivered close to the time that it is to be used by the trainee as possible, its relevancy is increased and the student’s motivation to learn is often raised. . . . *Training* has to do with the learner’s acquiring knowledge, skills and attitudes that are useful to them immediately to improve performance on the job. *Education*, on the other hand, by definition is just-in-case and not just-in-time. . . . Education is concerned with improving future job performance or simply promoting personal growth (p. 4).

So, when business asks an employee to learn new skills, are they involved with a training process or an education process? Frequently business becomes involved in both, but the emphasis is normally focused on issues involving training.

It is critical in a business or industrial environment to provide new skills or improve existing skills of employees in a cost effective manner. The intent is normally to improve performance and productivity. New skills and information must be disseminated in such a way as to produce the desired change in repeatable performances of the specified task. If a training opportunity is not directly related to a required job skill, it will quickly lose its effectiveness (Berge, 2001; Dickover, 2002; Ford, et al., 1992). The understanding of adult characteristics becomes a keystone in developing a successful training program that taps into the needs and strengths of the participant.

There is a growing shift in academic settings away from the more traditional instructional-centered experience to one that is more of a learner-centered experience (Barr & Tagg, 1995). If an adult has not recently participated in any form of formal training, the shift in methodology may be disquieting. If the instructor and/or course designer has an understanding of the adult learning characteristics and various learning theories, it can become an advantage in the design and implementation of the training program. Through the articles and books researched, regardless of a particular learning theory, some common threads begin to emerge. First, some level of needs analysis must be done to identify the expectations of the learner and to understand the requirements of the business. Second, clearly define the objectives and methods of measuring the learner's growth in knowledge or performance. Third, provide a wide variety of activities to accommodate the individual learning styles, sufficient practice opportunities to insure the transfer of new skills or

concepts, and adequate feedback to the learner to help the learner measure their success or shortcomings in the acquisition of the new skill sets. These three areas are seen as providing the basic structure successful of an adult learning situation.

*Needs Assessment.* The formal needs assessment process, as described by instructional design theorists Dick et al. (2001) and Caffarella (2002), is beneficial in helping to determine the learner's profile, identify levels of proficiency; and the best method to reach business goals, especially when creating new coursework. Within the classroom or instructional setting, the instructor will need to conduct an assessment of the learner to gain a sense of the student's entry knowledge, why the learner is involved in the class, and what the individual hopes to learn. This assessment, coupled with the instructor's previous experience with the topic, can assist in making adjustments to a session structure to suit the characteristics of that particular group. If the training session is required to be highly structured in content and delivery, the instructor may have less latitude for restructuring material to accommodate the group, but the assessment will allow for possible adjustments in the methods and activities to match the dynamics of the current group to provide a successful outcome for the learners.

*Defining objectives and measurement standards.* Voluntary participation in a learning situation is usually precipitated by a recognized lack of a particular skill or a desire to learn specific new skills. In such cases, adults will often have specific concepts of what they are seeking to gain from a course. Discussions between the learners and the instructor help to develop a commonality of purpose and allow a working relationship to form.

Defining the objectives and measurement standards specifically includes what the course will cover, the new skills or concepts that are to be mastered, and how the learner is to demonstrate competency in those skills or concepts. The course designer may be responsible for the determination of the performance-demonstration criteria but the instructor plays a significant role in the success of the learner in meeting those criteria. Discussions between the learner and instructor will help clarify expectations and provide some degree of control and accountability to the learner for their own success in the learning experience.

*Provide a wide variety of activities, practice opportunities, and feedback.* Over the last two decades, research has been emerging that tests general adult learning characteristics against the more mainstream learning theories. As specific concepts of the various theories are tested, much of this research seems to bolster the validity of theories in practice. The concepts of self-directed learning as defined by theorists such as Brockett, Brookfield, and Candy among others; Mezirow's transformational learning; Kolb's experiential learning; and Knox's proficiency theory, were designed to address the learning needs and styles in a multitude of settings (McDonald et al, 2000). Each have applications within business training and all have a valid use when constructing a training program.

“When instructing adults, thoughtful teachers have always been challenged by the differences learners bring with them to the learning activities...adults bring a rich but often divergent life experiences... have preferred ways of learning and want practical solutions to problems and issues” (Caffarella, 2002, p. 180). Caffarella indicates three primary items that influence the selection of instructional technique: (a) the learning objectives, (b) the instructor's capabilities, and (c) the context of the learning.

For the course designer, instructional design practitioners such as Dick et al. (2001) and Caffarella (2002) detail a wide array of considerations to guide the selection of activities that are cognitive-level and sensory appropriate for various desired learning outcomes. If a courseware packet is being provided, performance-tested activities may be sufficient. The courseware packet becomes more versatile if it provides the instructor with a selection of activities, designed to fit several environments and learning settings, to improve the opportunities to provide a transfer of skills. For the instructor who is responsible for developing their own training program, a repertoire of activities will allow matching the skill level and interest of the group to the learning tool, enhancing the reinforcement of new skills and concepts.

Providing realistic activities and ample opportunities to practice new skills is the most practical way to insure the transfer of the new skills and knowledge. Adjusting an activity to reflect the real life situations of the learner allows for concepts to be tested and practiced in relative safety. The research of McDonald et al. (2000) and Ford et al. (1992) documents the positive results, as perceived by the learners when they were allowed to practice new skills required for improved job performance.

Reinforcement and feedback on a learner's progress is critical as a means of measuring student growth and proficiency. The course designer/instructor must determine the criteria for measuring acceptable performance standards and develop methods to measure the learner's performance. The instructor becomes the link to insure the learner understands and can attain the standards set. Feedback also allows the learners to judge their own progress.

### *Conclusion and Recommendations*

This literary review was conducted to gain a better understanding of the relationship between the characteristics of the adult learner and the impact of those characteristics in implementation and training situations in a business environment. The review was limited to three questions for exploration. The first question dealt with why an adult participates in organized learning activities. Research reviewed supports the concept that adults are motivated to participate primarily by a need or desire to improve occupational or economic status or for personal enrichment. The investigation also revealed the extent of economic importance business places on adult learning. The second question dealt with exploring the typical characteristics adults bring to the learning environment and how those unique requirements need to be addressed when structuring learning situations. Experts in the field have identified a number of specific characteristics. The materials reviewed confirm that understanding typical adult learner characteristics will enhance the learning situation when both the course designers and the instructors structure activities to incorporate those characteristics into training strategies. The third question dealt with identifying strategies that could be used by instructors working with adult learners to improve the outcome of the learning experience. Re-occurring themes were found in the review. When working with adult learners: (a) understand the true requirements of why the learner is attending the training, (b) help the learner know what they are expected to accomplish, (c) provide active rather than passive learning experiences, and (d) allow plenty of opportunity to practice their newly acquired skills.

The literary review confirms that professionals in both academic and business-related education recognize there are distinct issues that must be addressed when working

with adult learners. This confirmation is evidenced by the wide variety of empirical and qualitative research articles, journals, and magazines, both educational and business, that are researching the adult learning in theory and practice. The volume of research does support the idea that in order to derive optimum results from training programs for a business' employees, quality training must be provided.

However, one area of concern raised from the research was not resolved. Both research and personal experience have identified that the success of any training program is heavily dependent on the support of the organization that sponsors the training. One underlying question that prompted this investigation is: how does one create a strong training program and develop instructors who are concerned about the learner when there is little support from the business? The group of materials selected for the scope of this review topic did not address organizational support issues with any detail. It is this reviewer's intent to conduct additional research into that specific area of interest.

This review provides a practitioner in adult business-training a better understanding of the field of adult education and an opportunity to explore some of the training issues other practitioners are attempting to resolve. It confirms there is extensive interest in the field of work-related training and professionals in the field recognize the need to test theory and report on its validity in practice. The review also confirms the importance for practitioners involved in adult training to routinely monitor current published materials as a method to improve both the learner's and the instructor's performance in training situations.



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