

## Learning Curve

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The fire service is made up of adults who possess unique abilities and weaknesses. Instructors must be able to understand and recognize their students' needs to ensure that they acquire the skills necessary to inspire confidence and achieve precision when working under emergency conditions. This understanding, along with the principles of learning, can help instructors to enhance the learning process.

As an instructor, sometimes the best way to teach is to learn along with the students. Feeding off students' experiences and ideas allows an instructor to offer more the next time a particular subject is approached. This interaction also helps set the tone for taking risks, fostering innovation and developing trust in the group.

Instructors can use their expertise in a field to create the learning environment, but they should allow students to contribute their experiences. Instructors and students can work together to set the learning goals based on the students' needs and motivation. The instructor becomes a coach or resource person rather than a dispenser of knowledge, and the students become more responsible for their own learning.

### Learning types

Adults are motivated to learn for different reasons, such as gaining knowledge, improving self-esteem, earning financial reward and advancing in a career. How they learn is influenced by their learning type. It's important for instructors to adapt to students' different motivations and learning types.

There are five types of adult learners:

1. **Goal-oriented learners** compete with themselves. They are very confident and self-directed. Identifying their personal needs is one of their strengths. They prefer and excel in an interactive or participative classroom.
2. **Affective learners** take a cooperative role in the learning experience and show excitement toward their learning environment. They regard instructors as a source of knowledge and expertise and don't feel comfortable questioning them. One-on-one instruction outside the classroom can help raise such a student's comfort level.
3. **Transitional learners** look for ways to connect prior education and experience with what they're learning. They prefer a learning environment that encourages interaction and discussion of their ideas. They favor a level of equality with instructors and prefer not to be fed information through video presentations and one-sided lectures.
4. **Integrated learners** are interested primarily in personal success. They are self-directed learners who prefer an environment where they can stand out.
5. **Risk-taking learners** are very self-confident and eager to learn new concepts. They will stray from guidelines if there's an opportunity to gain new knowledge.

## Multiple intelligences

Adult students will learn best in an atmosphere that employs the multiple-intelligence theory. According to this theory, people are born with at least seven intelligences and will demonstrate different levels of ability or weakness in each.

**Verbal/linguistic intelligence** allows people to process complex ideas through the use of language. Reading and writing are considered the standard for this form of intelligence. Verbal/linguistic intelligence can be appealed to by having students use puzzles, develop questionnaires and perform oral presentations. Sharing or delegating responsibility in preparing and presenting drills will help instructors reach out to people who are strong in this area.

**Logical/mathematical intelligence** enables individuals to analyze and engage in higher-order thinking. It centers on problem-solving and allows people to perceive meaning from logical patterns, functions and processes. All classroom experiences require students to use logical thought processes to some degree. Tactical simulations that challenge students to employ previously discussed theories and methods will appeal to and be most beneficial to people who rely heavily on this intelligence.

**Musical/rhythmic intelligence** allows individuals to create, communicate and form understandings by using the pitch, rhythm and tones of sounds. Music modifies the mood, sharpens focus and deepens insight. How often do we see athletes listening to music through earphones just prior to competition? As humorous as it sounds, can you remember the adrenaline rush when you first watched an action movie accompanied by its high-impact soundtrack? Background sound can be very effective when introducing a new topic or stimulating discussion. The type of sound used depends on what an instructor is trying to convey. For example, recordings of fireground transmissions, an activated PASS device or hard rock music can create heightened feelings of chaos or confusion during SCBA survival or rapid-intervention training. High volume isn't necessary to achieve a desired effect.

**Visual/spatial intelligence** enables students to learn through graphic images such as pictures, diagrams or maps. The mental transformation of colors, shapes, space and the relations among them allows people to understand concepts. To people relying on this form of intelligence, a picture truly is worth a thousand words. Students with strong visual/spatial intelligence may be confused by the constant flow of words in sentences and paragraphs, but they can understand a concept more easily if it's illustrated graphically. Using photos, drawings and diagrams is the way to appeal to students relying on this intelligence. Any technique introduced in training can't be oversimplified by using too many illustrations or photos.

**Bodily/kinesthetic intelligence** recognizes that some students think or reason best when their bodies are active. They have a better understanding when they're involved with hands-on applications of theories. Most firefighters tend to learn best when this form of intelligence is addressed. For the most part, firefighters are action-oriented people. Performing techniques and seeing results first-hand adds the concepts to a person's experience base, allowing the individual to have the necessary confidence to employ a practice safely and with confidence on the fireground.

**Interpersonal intelligence** centers on a student's awareness and interpretation of the feelings, emotions, motivations and goals of those around them. Students who favor this form of intelligence thrive best when working in small groups to complete projects or assignments. Drill sessions that use skills and methods employing teamwork and trust will help provide the best learning experience for people who rely on this intelligence. Those skills and methods also will help develop qualities demanded by the fireground.

**Intrapersonal intelligence** allows people to form a mental model of themselves that can be used to make decisions that concern them. This model is a personal understanding of the person's own emotions, motivations and learning goals. People who favor this form of intelligence will give a lot of thought to decisions while capitalizing on their strengths. They also want to tie a personal benefit to the instructor's training objective. Unfortunately, this "what's in it for me" attitude means people need to be shown the worth of the training that they're going to receive. Explaining why a technique is being introduced will clarify its importance. Case studies are an excellent way for instructors to reinforce concepts and should be used whenever feasible.

People are endowed with all of these forms of intelligence, but the way an individual blends and uses them is what makes each person a unique learner. An environment that emphasizes all forms of intelligence will help adult students get the most out of their educational experience. For this reason, an instructor or course developer should consider all seven when designing lesson plans and presenting material.

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