Andragogy is defined as the art and science of leading adult learning.

An insight into the way adults learn can help the trainer to do a better job. Research has exploded the notion that learning capacity dwindles rapidly as a person ages. It shows that adults learn in their own way and this way differs significantly from the way in which children learn.

Some of the important facts that research has uncovered about the way in which adults learn include the following:

1. **Adults Must Want to Learn.**
   Adults decide for themselves what is important and strongly resist learning anything merely because someone says they should. They learn effectively only when they have a strong inner motivation to develop a new skill or to acquire a particular type of knowledge. Their desire to learn may be awakened or stimulated by outside influences, but it can never be forced upon them.

2. **Adults Will Learn Only What They Feel They Need to Learn.**
   Adults are practical in their approach to learning. They want to know, "How is this going to help me right now?" Sometimes they can be persuaded, through wise counseling, to learn things that will help them in the clearly foreseeable future — as for example, when they expect to get immediate benefits — when the knowledge or skill they are trying to acquire will be directly useful in meeting a present responsibility.

3. **Adults Expect Information to Be Useful Immediately.**
   Adults are not satisfied with assurances that they will eventually learn something useful from a course of study. They expect results from the first training session. They have no patience with trainers who insist on a lot of preliminary background, theory and historical review. In short, material which may be meeting the trainer's needs to educate, as opposed to the trainees' needs to learn, will encounter considerable trainee resistance.

   If adults are to be taught something, they must be taught simply and directly. If they decide that the training has no relevance to their personal needs, they will become dropouts — physically, if the training is voluntary; mentally if attendance is mandatory.
Before a trainer (or supervisor) begins teaching a trainee (or a subordinate) all the things s/he feels the trainee (or subordinate) should know, they should first find out what the trainee feels a need to learn.

4. **Adults Learn by Doing.**
Studies have shown that adults will forget within a year at least 50% of what they learn in a passive way. But retention of new knowledge or skills is much higher if the adult has immediate and repeated opportunities to practice or use what he has learned. It is for this reason that consideration should be given to the use of **group** and **high participation** methods of training whenever practicable.

This finding also explains why on-the-job training is often the most effective type. It also underscores the importance of timing in all types of training. If it is possible to schedule one's learning experiences so that they dovetail with actual operation responsibilities at each stage of one's career, the learner will have a chance to use what was learned before it is forgotten.

5. **Adult Learning Centers Around Solving Realistic Problems.**
Adults can be taught a general rule or principle, and then be shown by a series of hypothetical illustrations how it applies to specific situations. But studies show that they will learn much faster if you reverse the process. Let them begin with specific problems, drawn from actual experiences, and work out practical solutions from which principles may be deduced.

A human being can only use information when s/he can relate to what is already known. A teacher must show points of reference, or draw from the students' personal experience to illustrate the relationship between what is known and the new information. This is why the use of practical problems or examples that presently affect the learner will work better than the sole use of abstraction or theory.

6. **Segment Information into Manageable Portions.**
Pace the learning so that learning can occur. Learning is best when the information is communicated in small increments. Each piece must be assimilated and blended with what went before, and so is best taught in small pieces.

7. **Experience Affects Adult Learning.**
An adult's mental state is already pretty crowded. The learning must therefore be rational. The new knowledge must be related to, and integrated with, the accumulated results of a lifetime of learning experiences. If the new knowledge does not fit in with what the trainee already knows, s/he is powerfully disposed to reject it. In fact, past experience may actually prevent one from perceiving accurately, let alone absorbing the meaning of new data.
8. **Adults Learn Best in an Informal Environment.**

   Learning is a natural human process. All people could use their intelligence and would be eager to learn if it were not for the negative learning experiences that have preceded this one. Starting with this premise, the teacher will hold high expectations of the learner, but at the same time will recognize that most of us have been taught some fear or insecurities around our learning abilities.

   Many adults have unpleasant memories of their school days. They will respond to adult training programs in inverse relationship to the degree they are reminded of their childhood experiences. To minimize these effects, the learning situation should be as free as possible from influences that remind the learner of other situations where learning was painful. These include tests, formality in the classroom and a disciplinary or critical attitude on the part of the teacher.

   Coffee breaks, informal dress, and perhaps smoking in class, provided it doesn't infringe on or disturb others, give needed reassurance that there is nothing childish about their present engagement with the learning process. Again, establishing a collaborative environment and using group-in-action methods of training (i.e., brainstorming, role-playing, exercise, etc.) aid in achieving informality.

9. **Structure for Success.**

   Learning experiences should be structured as one successful experience after another. One famous educator says, "No teacher should ever ask a question to which a student can possibly give a wrong answer." The difficulty of the teacher's work is increased this way, but the learner will not experience the failure.

10. **A Variety of Methods Should Be Used.**

    People learn in different ways and at differing speeds. Consider differences in educational background, reading and speaking ability, cultural bias, and prior training.

    Research has demonstrated that learning proceeds most quickly when information reaches the learner through more than one sensory channel. That is why a movie, filmstrip, flip chart or other visual aid can do so much to heighten the impact of a talk or conference. The trainer who uses a scratch pad and begins drawing a diagram when they try to explain a complicated subject is displaying an intuitive grasp of this point. Other methods such as in-baskets, simulations, role-playing, small groups, etc. should also be utilized extensively.

11. **Repetition Improves Retention.**

    An old trainer maxim says: "Tell them what you're going to say, say it, and tell them what you said." Each repetition should add a new point of reference for the same information because it is through relating to the already known that the learner assimilates
information. Repetition of the original message also overcomes the effect of static or interference that prevented the learner from absorbing it the first time.

12. **Adults Want Guidance, Not Grades.**
Most adults are apprehensive about their learning capacity because they have been out of school a long time, and they have been assured repeatedly that "you can't teach an old dog new tricks." If they are confronted with tests, grades, and other devices for comparative evaluation of their progress, they may draw back from the whole experience for fear of being publicly humiliated.

At the same time, adult learners need to feel liked, accepted and approved of. They want desperately to know how they're doing, and need to know whether they are learning correctly before they can continue learning. Encouragement and praise from the teacher are crucial. This can often contradict the lack of self-confidence that a learner may carry from past experiences.

Adults tend to set exacting goals for themselves; often, they may bite off more than they can chew. They are impatient with their own errors, and easily become discouraged about their ability to learn; this means that they need as much praise as the trainer can honestly give them.