

How We Learn

This lesson serves as a foundational grounding in adult education theory. Adults do better when they understand how learning takes place. The lesson covers basic learning concepts developed by leaders in the field of education. Through understanding how we learn, the learners will be more in control of their learning process.

Educational Goals: The goals of this lesson are for each learner to (1) comprehend principles of learning and (2) respond to the value of the learning process in our everyday life.

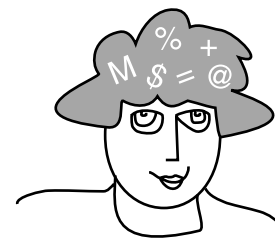
Objectives: The learner will:

- Cognitive:* — Explain the various learning processes covered in class.
— Give examples of the various learning processes in action.
- Affective:* — Provide positive feedback to the value of the learning processes.

Skill/Standard Connections: This lesson has connections to the Tennessee KSAs – *Do the Right Thing* and the EFF Standard – *Take Responsibility for Learning*. (Appendix II)

Teaching Strategy: It is very important for all adult learners to understand the basics of how learning takes place. They need to understand how to acquire knowledge and move that knowledge up the levels of learning as well as attaching value to it to ensure its use. They need to understand that there are some basic concepts and laws that govern learning, so they can use it for self, family, work, and in everyday life. As EFF Content Framework's first of the four Purposes identifies, access to information is critical for the beginning of empowerment. This lesson will help to show adult learners a common-sense approach to learning that they can configure into the best way to understand, value, and apply to their life and that of their families. Using a common-sense approach the teacher will lead an interactive discussion between the learners on these basic learning principles. Using the Read-Write-Discuss method, learners and teacher will alternate reading, taking notes, and discussing the following:

1. Some basic statements and a model for the process of learning.
2. Bloom's and Krathwohl's *Cognitive and Affective Domains of Learning*.
3. Thorndike's *Laws of Learning*.



Time: 1 hour

Student Materials:

- Learner Note Taker
- Comparing Cognitive and Affective Domains of Learning Handout

With this new basic understanding of learning students can approach each day's learning by identifying and measuring how well they are "getting it." They now have a rather sophisticated tool put into a more approachable framework.

Lesson Plan

Attention:

Question: How many of you have ever had a course on "how we learn" in school?

Question: Would a course on "how we learn" have been important to have in school?

Question: Why would this type of course be important?

Anticipated Responses: *Responses will vary, but the bottomline will be that a learning course would've helped the learners to understand more, retain what was being taught, and actually use it in their lives.*

Overview: This lesson will introduce you to the process of learning in a very common-sense and easy-to-understand way. We will take our time to make sure everyone understands each concept and idea because they are very important if you are to reach your goals. We will use the Read, Write (note-taking), Discussion method that we use with our "Thought for the Day." We will also try to think of everyday examples of the principles we are talking about. We will start with some basic statements about the process of learning and how learning takes place in a series of interrelated and connected steps. Finally, we will look at some basic laws of learning that over time have proven themselves to be good rules to follow. Once you understand these concepts and principles, you will have the keys that will unlock the door to learning.

Teaching Tip



Have learners read, take notes, and discuss these statements on learning.

Do they make common sense?

Are they important? Why? How

could they use them? Allow

learners to relate their own

examples of the principles.

Body of Lesson

Main Point 1: Some Basic Statements and Model for the Process of Learning.

Let's start by reading the following statements about the process of learning and see if they make sense with what you already know.

- *Learning is a process, not a thing that can be seen.*

- *Learning is an activity that involves the total central nervous system with the brain as the main processing and control center.*
- *Learning is the process of acquiring information, knowledge, wisdom, and skills.*
- *Learning occurs as a result of interaction with the person’s environment.*
- *Learning takes place in response to the stimulus received through the senses.*
- *Learning is a dynamic process. It is going on constantly, both consciously and unconsciously.*
- *New experiences provide new information; all information must be interpreted and processed on the basis of the old information that is already in the memory bank.*

Basically, there are three kinds of learning:

- **Sensuous** (through the senses)
- **Intuitive** (which means to know or sense as if by instinct without conscious reasoning)
- **Reflective** (serious, thoughtful thinking).

Learning takes place in a series of interrelated and connected steps.

Information must be:

1. **Accessed** by our senses and directed to our brain, then
2. **Organized** (processed/integrated) and moved into memory, then
3. **Stored**, accurately and orderly, so it can be
4. **Retrieved**, so it can be used for a specific purpose.

The following diagram will help to understand the steps:

ACCESS	ORGANIZING	STORING	RETRIEVING
Incoming information through the five senses	Sorting Analyzing Comparing Integrating Questioning Sequencing Organizing	Short-term memory & Long-term memory	Recall Remembering to perform

Main Point 2: Bloom and Krathwohl's Taxonomies of Learning

Next, you are going to learn about Bloom's *Cognitive Domain of Learning* and Krathwohl's *Affective Domain of Learning*. I will keep it simple, and you will be surprised at how much common sense it makes. Let's start with the cognitive domain. Domain simply means area or range of control, territory, field, or interest. Taxonomy means a category or classification based on common characteristics. As we go through each level, these terms will make sense.

Teaching Tip

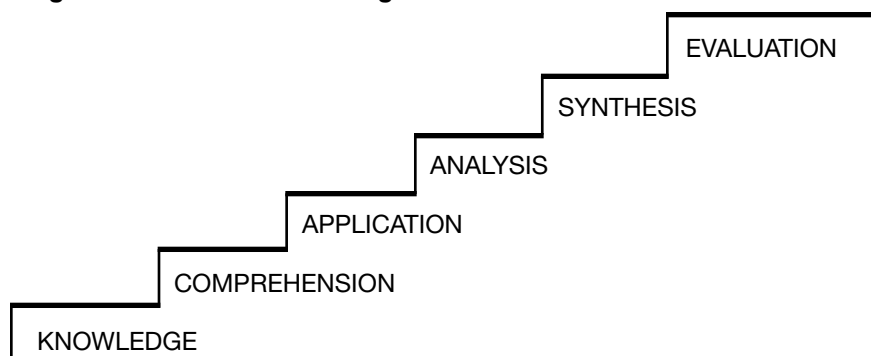


Let the learners develop an example that relates to themselves or their children, family, or at work or school.

A. Let's first look at the Cognitive Domain of Learning. Cognitive simply means how we acquire knowledge and develop understanding. It is what goes on in our mind with learning and understanding. Bloom's cognitive theory talks about a change in thinking and understanding that take place in the learner. Learning can be measured in terms of behavior, but the behavior only represents learning. So the way you see learning change is through our behavior. Think about it. When you don't know something, you act a certain way; but when you know it, you act much differently.

The easiest way to understand it is to think of stair steps. In fact, draw a series of six steps.

Cognitive Domain of Learning



Here are some easy definitions to help remember what each of these words mean:

- **Knowledge** – The ability to remember and recall in the same way it was taught.
- **Comprehension** – The development of understanding to translate (put into your own words), interpret (explain or clarify the meaning), and extrapolate (to infer unknown information from known information).

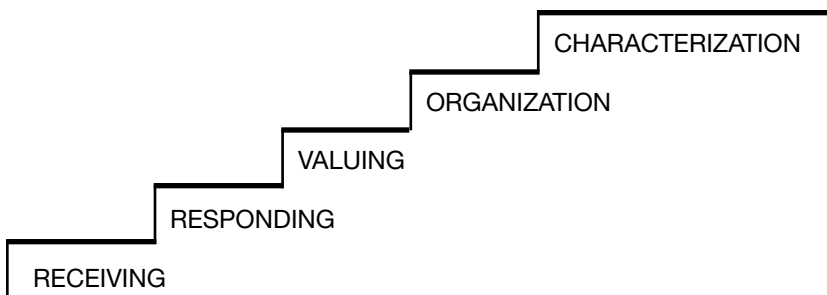
- **Application** – The ability to use the learned information in new and concrete ways.
- **Analysis** – The ability to break down complex things into smaller parts
- **Synthesis** – The ability to put parts together in a new way or to form a new pattern.
- **Evaluation** – The ability to judge how well something went or met a standard goal or objective.

B. Now let's look at the Affective Domain of Learning. Affective domain deals with emotions, attitudes, values, etc. It deals with the importance we place upon what we learn. Think about those things that make sense to us and that we can use. We value them, remember them, and use them. But the things we do not value go in one ear and out the other.

Krathwohl's Affective Theory talks about how we build our value system based on our learning and experiences. This learning is a little more difficult to measure, but it is still measured by our belief and value systems and our actions.

Again an easy way to understand this domain is to think of stair steps. In fact draw a series of five steps.

Affective Domain of Learning



Here are some easy definitions or ways to remember what each of these words mean:

- **Receiving** – Paying attention to someone or something.
- **Responding** – Taking action, giving feedback, obtaining satisfaction.
- **Valuing** – Acceptance, appreciation, preference, commitment to something because of its perceived worth or value.
- **Organization** – Adding new values or beliefs to your own value system. Starting to organize your daily life around a set of values.
- **Characterization** – The integration of values into your life style or philosophy. Start to live it naturally. It becomes a part of your life.

Teaching Tip

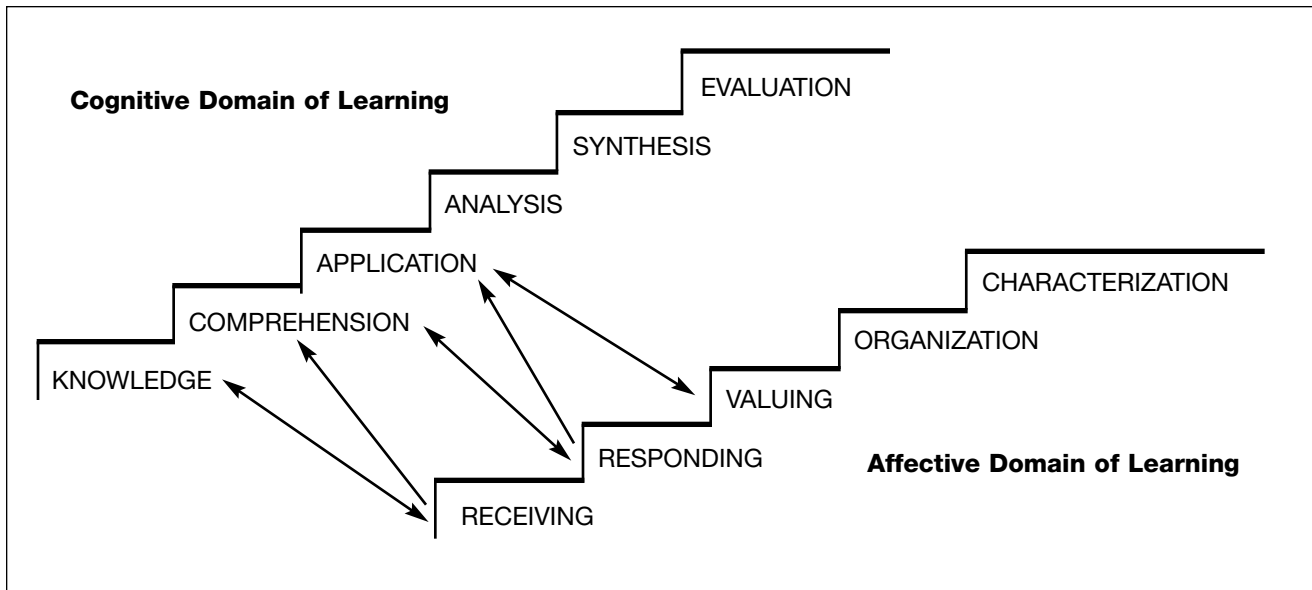


Let the learners develop an example that relates to themselves or their children, family, or at work or school.

C. The interrelationship between cognitive and affective learning.

There is a back-and-forth relationship between the cognitive and affective domains of learning. When we place a value on something, we learn it and use it. We are more open to things that make sense to use.

A simple way to see this interaction is to put both series of steps together and connect them up.



Simply, in order to gain knowledge there is an interaction between receiving the information. This interaction helps to build the interaction between comprehension and responding and on to application and valuing the information. Obviously, there is individualized adaptation depending on how the student learns best, the classroom experience, and outside experiences.

Teaching Tip



Talk the learners through the following process using the common language. Don't spend a great amount of time or get too much into the details. Keep the lesson as an overview and a developmental lesson. Learners should understand that they will be asked to move beyond the knowledge level to comprehension, application, analysis, synthesis, and evaluation. Remind learners that the "Thought for the Day" requires them to move beyond the knowledge level.

Main Point 3. Thorndike's Laws of Learning

In 1933 Edward Thorndike developed the Laws of Learning, which are simple, easy-to-understand principles that we can use to help our learning, as well as the organizing, storing, and retrieval of the learned material.

Let's walk our way through the six laws using our Read, Write (note taking), Discussion method.

Law of Readiness: People learn best when they are ready to learn.

(This is a pretty straightforward law so you can ask the learners for an example of it. An obvious example is their returning to school. The learners would talk about being mentally and physically ready to learn.)

Law of Exercise: People can enhance their memory through repetition, based on drill and practice. Those things repeated are best remembered. Repetition will help us to retain and retrieve information. What it does is provide us the numerous opportunities to work with the information. The more we work with the information the more we understand it, organize it, store it, and are able to retrieve it.

So we can practice recalling important information, reviewing it, restating it in different ways, practicing it, and actually doing it in different situations.

Law of Effect: Learning is strengthened when it is accompanied with a pleasant or nonthreatening situation or environment but is decreased when associated with an unpleasant situation or environment.

(This is a great law to use for past school experience as the focus for the discussion. If the *Learning Skills* environment is a positive, nonthreatening one, the learners will have a great comparison to talk about. The next step to understanding is to have the learners think about their children or other family members. What is their situation or environment like? How can they help to change it? This goes to involvement in PTAs, community groups, etc.)

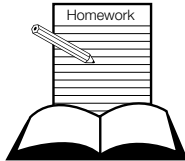
Law of Primacy: First impressions are often strong, almost unshakable. Things learned first stay with us longer. This goes to the old saying, “You never get a second chance to make a first impression.” It also goes to the heart of why it is difficult to let go of many things that were taught or happened in school. Those negative feelings stay with us. (For teachers this means we need to present information in a clear, systematic way that builds on the learners’ previous knowledge. We must create an environment that expects *all* learners to learn and achieve results.)

Law of Intensity: Learners learn more from doing the real thing than a substitute. (For teachers this is always the task to find real direct simulations, practice, examples that support the actual real focal point of the learning.)

Law of Recency: This law basically means, all things being equal, things most recently learned are best remembered. We remember things we have recently done but have difficulty remembering things we did a week or two ago. This law helps to re-enforce why repetition is important.

Teaching Tip

Have learners summarize the lesson using their notes and translating the information into their own words.

**Conclusion**

Re-Motivation: The ability to learn is critical for adults. The more adults understand about how to learn, the more they will be in control of their future and empowered to take action.

Homework Assignment: The Communication Loop (in Appendix I)

Close: We never stop learning, and we hold the key to our future.