

# **Active Learning**

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# Cultural Literacy

E.D. Hirsch, Jr.

## Literacy

- is the ability to communicate effectively beyond a narrow social sphere and
- is accomplished by everyone knowing the traditional culture; which means teaching traditional myths and facts.

The easiest way of learning something is to associate it with something we already know. Reading and learning both depend on a diversity of prior knowledge. Reading ability depends not only on broad knowledge but also on shared background knowledge.

**Knowing a lot of words means knowing a lot of things.**

When the schools of a nation fail to adequately transmit the literate national language and culture, the unity and effectiveness of the nation will necessarily decline.

Ernest Gellner

# Teaching Vocabulary

Pat Wyman

## Directions:

- Determine student's visual memory – When remembering does the students' eyes go up, left or up, right?
- Create vocabulary word cards for each unknown word.
- Choose the first word. Ask: What does this word remind me of? Create a visual image of the answer. Look up the definition. Include the visual image in a picture of the definition.
- Draw the picture in the center of the card.
- Write the meaning of the word in color at the top of the card – up, left for those students whose visual memory is up, left; up, right for those students whose visual memory is up, right.
- Write the word in a different color in the center, at the bottom of the card.
- When all of the cards are complete, hold the card up, left or up, right. Say the meaning of the word first, then the word, aloud, three times.

# MEMORY

## THERE CAN BE NO LEARNING WITHOUT MEMORY.

The difference between novices and experts in a field appears to be that experts tend – because of a great deal of experience in a field – to organize information into much large chunks, while novices work with isolated bits of information. Benjamin Bloom

## LS DTVF BIJ FKU SA

A high proportion of all learning takes place at the **subconscious level**.

**EMOTION** is the basis on which memory is organized. **Short term memory** is primarily an **electrical activity** and **long term memory** involves a predominantly **chemical process**

### *3 R's of Memory*

1. registration
2. retention
3. recall

### *Kinds of Memory*

1. procedural
2. episodic
3. semantic

The process of rehearsal involved in subvocalization is critical to transferring information from short to long term memory. Unless an item is rehearsed, it is lost out of the short term memory and does not enter the long term memory. Repetition has little value unless it involves activity. The processing and transfer to long term memory needs adequate time for the encoding and consolidation of the new information into the storage networks. We file information by similarity and retrieve by difference.

### **Patterns are the key to intelligence.**

Patterning information really means  
Organizing and associating new information with  
Previously developed mental hooks. *Your Child's Growing Mind*, Jane Healy

*Mental patterns are built on networks of sensory connections.*

### **The Learning Pyramid**

Lecture	5%	Average Retention Rate after 24 hours
Reading	10%	
Audio-Visual	20%	
Demonstration	30%	
Discussion Group	50%	
Practice by Doing	75%	
Teach Others/Immediate Use	90%	

# LEARNING

Learning is an emotional event, building memory. Memory is information contained on the nerve cells. Branches grow on the nerve cells in response to the information coming into the brain. Building memory is predominately about understanding. As you think hard about the information with the objective of understanding, major consolidation of memory branches occurs and information is converted from short to long term memory. Thinking stimulates electric impulses. You will be able to hold on to what you have learned and use it only with sustained practice and deep understanding. We grow branches of nerve cells the harder and deeper one thinks. Long term memory is consolidated memory with heavy branching and well connected memories. How well you think and the more efficiently you think, the more you understand.

We build all memories in duplicate. The right brain provides the big picture to detail perspective (4 equals 2 groups of 2). The left brain provides the detail to big picture perspective ( $2 \times 2 = 4$ ).

## The SWITCH On Your Brain 5-Step Learning Process

Dr. Carolyn Leaf

80% **Input** physically building memories

- input read; listen; watch
- think ask, answer, discuss
- write cognitive map to consolidate memories

20% **Output** get the information out

- recheck check for accuracy; look at brain on paper
- output reteach

**Input:**

- read with the eyes; guiding the eyes causes both sides of brain to work at same time
- read a chunk of information (2-3 sentences) aloud at a time; reading leads to a level of understanding but does not build long-term memory until the information is understood
- interact with the words on the page; ask, answer; paraphrase what was read
- write something down

**Develop thinking:**

Read 1-3 sentences out loud with a guide; circle concepts; discuss  
If more than 35% of the information is circled; it is not understood.

**Metacognitive Mapping:** both sides of the brain work together at the same time

# Brain Speed

## a key to learning success

### Brain speed

- is how fast the brain processes what is going on, around and within you
- determines attention, alertness, learning, memory, decision making, problem solving, mental clarity
- determines how efficiently the mind works.
- reflects how quickly memories can be recalled, questions answered, problems solved and decisions made.
- the faster your brain processing speed, the more focused you are, the more you take in and learn, the more you remember, the quicker you make sound, split-second decisions and react
- the faster you can mentally recite or rehearse long list of items, the better you remember

### Brain speed exercise is the antidote to brain stress.

Joshua Reynolds, Robert Heller, M.D, and Christine Macgenn Rodgerson.  
Living Longer Thinking Younger. CA: BriteAge Corp. 2005-2007.

**Play games like: Jeopardy, Concentration, Memory, Boggle** ([www.wordsplay.net](http://www.wordsplay.net)),  
**Scrabble, Set** (set daily puzzle [www.setgame.com](http://www.setgame.com))

**Work puzzles, word searches, Sudoku**

**Answer Questions** [www.freerice.com](http://www.freerice.com)

**Do mental math.**

**Memorize poems.**

**Make ABC lists.**

**Read aloud.**

**Practice Brain Age games** ([www.memory-improvement-tips.com](http://www.memory-improvement-tips.com))

**Speed stack cup stacking eye-hand program** [www.speedstacks.com](http://www.speedstacks.com)

**Exercise Brain Gym Infinity Walk Bal-A-Vis-X**

## #1 predictor of success: how much one practices

Talent Is Overrated. What Really Separates World-Class Performers from Everybody Else. Geoff Colvin.

### Deliberate practice

- requires concentration
- builds mental models
- requires repetition
- provides lots of feedback on result

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