

## 7 KEY PRINCIPLES OF LEARNING & REMEMBERING

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### 1. Motivation

- All learning begins with motivation
- Motivation is based on an "interest" in the subject matter, natural or induced
- There must be an "intention to remember"
- Self involvement promotes interest, attention, and intention to remember

### 2. Understanding

- It is difficult to remember something which a person does not understand
- Seek to "make sense" of the information to be remembered
- Relate the information to existing knowledge - to your own experiences
- Try to get the "big picture," understand how the parts relate to the whole
- Seek to understand the basic concept or principle
- Paraphrase in your own words
- Identify examples and illustrations of the concept or principle to be remembered
- Build a background, a knowledge structure, a schema of the information to be remembered
- You cannot understand anything that stands alone; an isolated thing or fact has no meaning

### 3. Condense

- It is easier to remember less information; condense the information to be learned and remembered
- A person generally remembers less than 10% of the information read or studied
- Over 90% of language is "filler"
- Identify key words: these are usually nouns and verbs
- Underline, highlight, circle bullets, use checks and stars, etc.
- Outline, summarize, abbreviate
- Simplify and remember the "gist" of the information
- Use acronyms
- Break information into memorable "chunks"

### 4. Organization

- A good memory is like a well-organized and well-maintained filing system
- Build a background, a knowledge structure, a schema of the information to be remembered
- You cannot remember (or understand) anything that stands alone; an item to be remembered should be associated (linked) with other similar information in your memory
- Apply logic and order
- Relate the part to the whole
- Categorize, classify, sort, outline

## 5. Association

- Association is the basis for all memory
- Aristotle's laws of association: spatial contiguity, temporal contiguity, similarity, and contrast (opposite)
- Other types of association: order contiguity, numerical contiguity, context contiguity, complementarity, substitute, homonyms, synonyms, cause and effect, part and whole, particular and general
- To remember an item or fact, it must be linked (associated ) with something you already know
- All mnemonic systems (loci, rhyme, consonant keyword image, etc.) used by memory "experts" are based on association and visualization

## 6. Visualization

- Five senses are utilized in various memories
- Over 85% of all semantic memory (meaning) is acquired via the visual sense
- 1 picture is worth 1,000 words
- Using your imagination, create a mental picture or image of the information to be remembered
- Use ACE: create a vivid image that incorporates Action, Color, and Exaggeration
- All memory "experts" use mental images in the various mnemonic systems (loci, rhyme, consonant keywords, etc.)
- Use of more than one sense increases memory

## 7. Repetition

- Understanding is not the same as remembering
- Ordinary information, without special significance or meaning, cannot be remembered very long without attention and effort
- Information must be reviewed one or more times to "fix" it in long-term memory
- Research indicates that spaced review is most effective. The reviews should be at roughly the following intervals: 10 minutes, 1 day, 1 week, 1 month, and periodically thereafter as needed
- Oral review utilizes oral and auditory senses
- Written review utilizes visual, auditory (sub-vocalization) and motor senses