Objective’s for Today’s Class:
- What are some types of memories?
- How can we retrieving memories?

Let’s Share Some Memories!
What kinds of things do you remember?

What do you remember?
- Two types of long-term memories
  
  **Declarative Memories (Explicit)**
  - Memories with conscious recall
  - Memories for facts

  **Procedural Memories (Implicit)**
  - Memories without conscious recall
  - Memories for actions, skills, and operations
Declarative Memory

- The ability to state a fact
  - These memories are learned quickly but compared to procedural memories they are more likely to be forgotten over the long term
  - Examples:
    - Being able to tell someone your phone number
    - The meaning of the word “consciousness”

Two Types of Declarative Memories

- Semantic Memory
  - Contains general knowledge that is not tied to the time when the information was learned
    - Memories of general principles, facts, rules and ideas.

- Episodic Memory
  - Made up of chronologically, or temporally dated, recollections of personal experiences

Episodic Memory

- Who was the first person you kissed?
- What was your favorite toy in childhood?
- Memories for specific events
  - Includes details of when and where the events happened
  - Help us construct a sense of self
Procedural Memory

It is the repository of motor skills and habits such as handwriting or driving.

- These skills are essential part of our memory store, but it is difficult to describe the ‘know-how’ in words.

- In this sense the memory is said to be implicit or non-declarative …you just cannot explain how to ride a bicycle.

The skills may be difficult to acquire, but once learned they are never forgotten, even without occasional practice

Retrieval

How do we get information back out?
What Influences Retrieval?

- What’s the difference between Jeopardy and Who wants to be a millionaire?
- Which game would you prefer to play? Why?
- Both games are examples of retention

How Do We Test Memory?

- Recognition is a method of testing memory by asking someone to choose the correct item from a set of alternatives.
- Example: True-false, multiple choice and matching tests

Recognition Task

- The next time you see someone at a party who is having trouble walking properly, you might say, “He has had too much to drink, and it went right to his ______________.”
  a) Reticular formation
  b) Cerebellum
  c) Frontal lobe
  d) Parietal lobe
How is Information Retrieved?

- **Free Recall** is a method of testing memory by asking someone to produce certain items without substantial hints (Lefton & Brannon, 323).
  
  - Example: fill-in-the-blank, short-answer or essays exams

- Words positioned at the beginning and the end of a list are most likely to be remembered, a phenomenon called the **serial position effect**.

- Also, any unusual stimuli have a greater chance of being recalled, a phenomenon called the **von Restorff effect** (Hunt & Lamb, 2001).

Here’s a HINT…

- **Cued Recall** is a method of testing memory by asking someone to produce a certain item after being given a hint.
Where were you…?

Flashbulb Memories

- Unusually vivid and detailed memory for circumstances at the time of dramatic event.
  - These are emotionally significant memories
- Highly detailed and long-lasting
  - Memory of Princess Diana’s death
  - Memory of the 9/11 attack
  - Memory of the Challenger explosion
  - Memory of JFK’s assassination

How Can You Improve Your Memory?
**Encoding Specificity Principle**

- The associations you form at the time of learning will be the most effective retrieval cues.

- **Mood congruence**
  - If you experience something while you're in a particular mood – you are more likely to think of it again when you are in the same mood.

- **State-dependent retrieval**
  - The tendency to remember something better if your body is in the same condition during recall as it was during the original learning.

**Mnemonic Devices**

- Any memory aid that is based on encoding each item in a special way.
  - Use silly images
    - The sillier the image the more effectively you will remember it.
  - Use pleasant images
    - Your brain often blocks out unpleasant images.
  - Use vivid colorful images
    - They are easier to remember than boring ones.
  - Use all your senses to code information
    - Mnemonics can contain sounds, smells, tastes, touch, movements, feelings, and pictures.

**Verbal Mnemonics**

- **Word associations** (i.e., acronyms or acrostics)
  - Example:
    - ROY G BIV (acronym for colors of the spectrum)
    - King Philip Came Over For Good Sex (acrostic for order of taxonomy in biology)
Verbal Mnemonics

- Narrative stories and rhymes

- Examples of rhymes:
  - Thirty days has September, April, June and November. When short February's done. All the rest have 31.
  - Red sun at night – sailors delight, red sun in the morning – sailors false warning
  - Righty tighty lefty loosey
  - Learning the ABCs to the tune of twinkle, twinkle little star

How Should You Study?

- Distributed practice is better than massed practice
  - Ten 1-hour blocks is better than one 10-hour block

- You should continue to rehearse the material after you first appear to have mastered it
  - Skimming or speed-reading will not promote long-term retention

How Should You Study?

- Active is better than passive (allows you to engage in deeper processing)
  - Writing out a detailed outline is better than passively reading over notes
  - Try to relate material to your own life and experience rather than just memorizing material
  - The better organized you are – the better you learn and remember
Next Class
Why do we forget?