# Making Memory Stick

Memory & Learning with Seniors
Research findings of the Carnegie Learning Centre



First: A little bit of background information...

# What is Memory?

Memory is the ability of the brain to **store**, **retain** & **recall** experiences. The primary purpose of memory is to guide our actions in the present by using information we have gained in the past. Survival! Where did I find that berry patch....

# **Brain Biology & Memory Types**

People talk about two kinds of memory: **Short-term & Long-term** memory.

**Short-term** memory is when information is kept in your head only long enough to use it momentarily e.g. doing mental arithmetic

**Long-term** memory is when information from short-term memory is transferred to the hippocampus (part of the brain) for encoding. Basically, the neurons involved in generating the original experience are re-activated.

There are five types of memory that are used for different purposes.



**Episodic** – memories usually unfold like a movie from your point of view, complete with sensations and emotions

Semantic – memory is non-personal, factual knowledge



**Working memory** – the capacity to hold information in mind for just long enough to use it



**Procedural** – these are body memories from learned actions like walking, swimming, riding a bike



**Implicit memories** – these are memories we don't know we have! For instance, you may dislike a certain person "for no apparent reason" because they remind you of someone nasty(The Human Brain Book, Rita Carter, 2009)

Memory that is stored with more than one sense (sights, sounds, smells, tastes) has greater sticking power. These memories can be re-activated or recalled from more places in the brain. So, you have a greater chance of re-calling or remembering. Yes!

Focus. It is biologically impossible to learn something you are not paying attention to. Learning requires that a learner's attention is captured, and that the learner is engaged. People become engaged when they find meaning or an emotional connection.





# Next: Here's what we found...

### **Brain Health – A healthy brain = better memory**

- **RELAX.** A relaxed brain is more efficient than a scared one.
- Exercise! Stretching and gentle movement helps memory by increasing blood flow, mood, and self-esteem. It also activates nerves that stimulate brain function.
- Go Rote. Simple memorization exercises build memory 'muscles'
- **REST.** Brain 'work' is important, but as with our bodies rest is too. Regularly focus on a simple, beautiful thing for 30-60 min.
- **Seek Wellness.** Memory can be impaired by depression, anxiety or isolation. Social contact, friendship, laughter and a sense of belonging can help seniors progress.



# Finally: Here are some ways to apply it...

# **Good Practices for Helping Seniors Learn**

#### Make a Safe Environment

- As much as possible, help seniors feel safe and free from distractions so that both they and their brains can relax.
- Begin your time by asking how their day has been to help them get oriented and feel welcome.
- As you explain, use lots of detail. Write it down so they can refer to it later.

#### **Use More Than One Sense**

• Don't just say it, write it. Don't just write it, have them write it too.







#### **Try Memorization Exercises**

• Take a few minutes to memorize a list of a few items. Do this for each lesson.

#### **Add Some Physical Activity**

• Take a break to do some gentle exercises. This can be really fun!



#### **Keep It Simple**

 Remember that seniors often learn more slowly. Keep instructions simple.

#### It's OK, Repeat It Again

- If you think you've repeated yourself too many times keep going!
- Try to use different words or methods (eg. say it, then mime it).



#### Stay Positive, Be Friendly, Have fun!

- Make learning accessible by using examples that are meaningful for them.
- Remember socializing as a key part of your time.
- Tell jokes. Smile! Enjoy yourself!



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