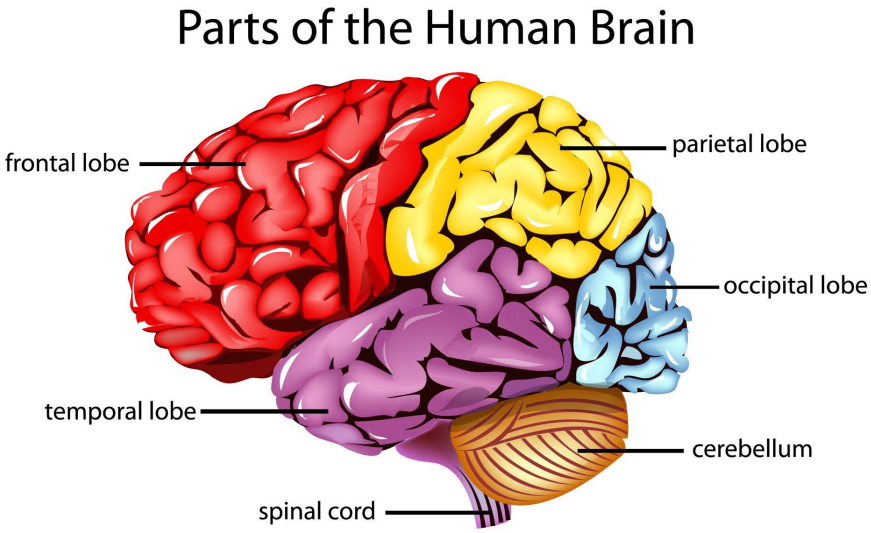
CHAPTER 12
LEARNING TO BE A BETTER STUDENT

Where does the learning occur?

Learning is a continuous process, we are constantly learning throughout our lives as we always gain new information - whether it is huge or little - it is still a piece of information we received every day. A lot of our learning occurs randomly in our life, from new experiences, gaining information and from our perceptions.

Our home, school, churches, offices, and etc., can also be considered as placed where learning occurs.

The Human Brain



There are three major parts of the brain: cerebrum, cerebellum, and brainstem. The cerebrum is divided into two halves: the right and left hemispheres. The cerebral hemispheres have distinct fissures, which divide the brain into lobes. Each hemisphere as 4 lobes: frontal, temporal, parietal, and occipital.

The surface of the cerebrum is called the cortex. It has a folded appearance with hills and valleys. Deep structure of the brain: Hypothalamus, Pictuary Gland, Pineal Gland, Thalamus, Basal Ganglia, and Limbic System.

Neuroplasticity and Memory

"The human brain is a learning machine. Thanks to a phenomenon called neuroplasticity, the brain learns in a range of ways and many different circumstances, including in the classroom." - Pangkaj Say, Queensland Brain Institute, ND.

Stages of Memory

1. Encoding

Encoding is the initial stage of memory where information from the environment is transformed into a format that can be stored in the brain. This process involves converting sensory input (e.g., visual, auditory) into a neural code. There are different types of encoding, including:

- **Visual Encoding**: Processing images and visual sensory information.
- **Acoustic Encoding**: Processing sounds, particularly the encoding of words and other auditory input.
- **Semantic Encoding**: Processing the meaning of information, which is often the most effective form of encoding.

Effective encoding is influenced by factors such as attention, organization of information, and use of mnemonic devices. For instance, associating new information with existing knowledge (elaborative rehearsal) can enhance encoding.

2. Storage

Once information is encoded, it must be stored in the brain for future use. Storage refers to the maintenance of information over time. There are different types of memory storage, characterized by their duration and capacity:

- **Sensory Memory:** This is the shortest type of memory, lasting only a fraction of a second. It holds sensory information long enough for it to be transferred to short-term memory.
  - **Iconic Memory**: Visual sensory memory.
  - **Echoic Memory**: Auditory sensory memory.

- **Short-Term Memory (STM)**: Also known as working memory, it has a limited capacity (about 7±2 items) and duration (about 20-30 seconds). STM is used for temporarily holding and manipulating information.

- **Long-Term Memory (LTM)**: This type of memory has a seemingly unlimited capacity and can store information for extended periods, from hours to a lifetime. LTM is divided into:
  - **Explicit (Declarative) Memory**: Conscious memories, such as facts and events. It includes:
    - **Episodic Memory**: Personal experiences and specific events.
    - **Semantic Memory**: General knowledge and facts.

- **Implicit (Non-declarative) Memory**: Unconscious memories, such as skills and conditioned responses. It includes:
  - **Procedural Memory**: Skills and habits, such as riding a bike.
  - **Emotional Memory**: Conditioned responses to emotional experiences.

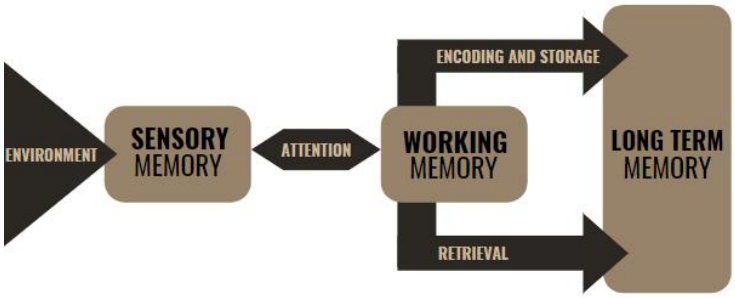
3. Retrieval

Retrieval is the process of accessing and bringing stored information into conscious awareness when needed. Effective retrieval depends on various factors, including the method of encoding, the storage conditions, and the presence of retrieval cues. There are several types of retrieval processes:

- **Recall**: Retrieving information without explicit cues, such as answering an essay question.
- **Recognition**: Identifying previously learned information when presented with it, such as multiple-choice questions.
- **Relearning**: Learning information again, which often occurs faster than the initial learning due to prior exposure.

Retrieval can be influenced by the context in which the information was encoded (context-dependent memory) and the state of the individual (state-dependent memory). For instance, studying in the same environment where you will take a test can enhance recall due to context cues.

How does memory work?



- **Sensory Memory -** Takes information from the environment through the human senses (sight, hearing, touch, smell, and taste) - stored for a very short time from 0.5 seconds to 4 seconds.
- **Working Memory** - It is a system responsible for retaining and using memories. This is what you are conscious of, or what you are thinking at any given moment.
- **Long Term Memory** - We hold all our memories in here. The goal of learning is to move information here so we can use it later when we need it. It can be explicit and implicit. For memories to become long term memories, they need to be retrieved regularly. Unlike sensory and working memory, long term memory capacity is unlimited.

3A' of Learning Process

1. **Align** - should have a thorough understanding of what they are expected to learn, how their behavior is expected to change, the results they are expected to achieve, and how these results contribute to the overall goals of organization.

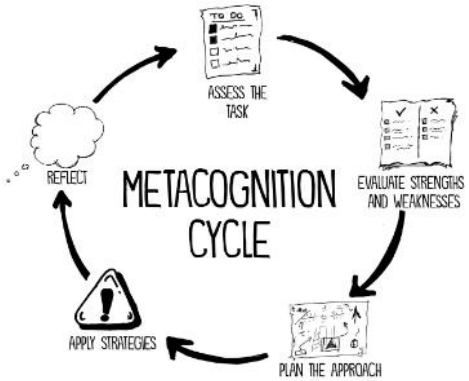
2. **Assimilate** - will help you engage in applying what you already know in building relevant skills and knowledge that you decide to focus on and practice in the class.

3. **Apply** - involves using the skills and knowledge within your work environment that makes the learning stick, causing a behavior change that produces desired results.

Metacognition

Defines as "Thinking about how you think and learn". Thinking about what we already know, what works best on how we learn, and accurately gauging if we've mastered the material. This is vital for mindset growth.

Metacognition cycle - assess the task, evaluate strengths and weaknesses, plan the approach and reflect.



Self regulated learning

Self regulated learning refers to one's ability to understand and control one's learning environment. Self regulation abilities include goal setting, self-monitoring, self-instruction, and self-reinforcement. Self regulation should not be confused with a mental ability or an

academic performance skill. Instead, self-regulation is a self-directive process and set of behaviors whereby learners transform their mental abilities into skills and habits through a developmental process that emerges from guided practice and feedback.

Elements

- **Cognition -** the mental process involved in knowing, understanding and learning.
- **Metacognition -** often defined as “learning to learn”.
- **Motivation -** willingness to engage in metacognitive and cognitive skills.

Skills

Students go through three main stages when they regulate their own learning: planning, performing, and reflecting:

- **Planning Stage** - establishing goals and standards
- **Performing Stage** - demonstrating their commitment in learning experience
- **Reflecting Stage** - think and evaluate learning experience

Advantages

- Students are in control of their learning process and can manage time as they see fit.
- Students feel a sense of achievement and fulfillment when they have accomplished goals they have set for themselves.
- Self-regulation is not a process that is only applicable to school learning, it will be carried with students for the rest of their lives in the work force, social lives, and families.

Becoming a Better Student

As a person growth is an inevitable goal and change will always be present in what we do. As such, for students, the need to understand that just barely passing the different subjects and graduating after is not necessarily the best option for successfully landing you dream job, or becoming successful in the world of work. It is also important to note that being a student does not necessarily mean that the only thing you have to do is to read books, go to class, or prepare and answer tests, these things may be the usual things expected for a student to do in school, but understanding that the preparation for real life endeavors may start in the class room, but not necessarily end there.

In terms of having freedom in the classroom, there are several things that needs to be noted, one of which is in the freedom of the students towards their choices of what to learn as well as how they are going to use such learning in real life situations. Aside from having a good learning environment where the needs of the students are being met, the students should also understand the value of what they are learning and why they are learning those (Kujjpers, Meijers, Gundy, 2011).

To become a better student, several things are needed to be done, aside from just listening from the discussions and following the directions taught by the teachers a student should be able to have a better understanding of what they are doing, have the ability to recognize and sort the different information that they are encountering, and to be able to have a certain level of understanding on the concepts that they are studying in which could result for better application and appreciation of such learnings.

Tips to Become a Better Student

1. Prepare Before going to school
   - Always try to research or read the next lesson, do your assignments at home or before going to school, eat and have proper rest before going to school.
   - In preparation for school not only your assignments, or making sure that you have all the tools you need for class ready and prepared but to also make sure to have your body prepared by making sure to have enough rest and eating as to ensure that you as a student have enough energy to go through the entire day.

2. Use different Resources
   - Aside from books provided for the class, don't forget to use the library, and the internet. Using different resources will enable you as a student to access more information and be able to learn the latest learnings and information related to the subject matter that you are studying.

3. Be Critical and make learning personal
   - Know what you are learning, why you are learning and how they are important to you and your plans in life.
   - By being critical to the information that you acquire you will be able to appreciate more their value and be able to apply and relate them to your situation and let these learning help you to be able to achieve your goals.

4. Ask Help
   - The school may focus on the interaction between the teachers and students but the institution is comprised of more than what or who are inside the class room and the people in the school from the guidance office, librarian, registrar, etc. and even people outside the school such as your parents and friends or other professionals can help you as a student to break limitations, ease the difficulties that is brought about by the requirements of the curriculum.

5. Do other things
   - The school provides co-curricular or extra-curricular activities, join clubs, or school groups to widen you experiences as a student. Not only can you have better relationships which will translate to more help in the future, but an active body and mind that may or may not necessarily related to school work can also help a student to balance their lifestyle and maintain a healthy body and mind.