

## Quadrant II – Transcript

**Paper Code: EDU 02**

**Module Name: Memory Process - registration, retention, recall and recognition**

**Module No: 29**

---

### Learning Outcomes

**After going through this presentation teacher trainee will,**

>acquire the knowledge of Memory Process

>be able to understand how memory works

Let'sstart with the Definition :-

Memory refers to retaining and recalling information over a period of time, depending upon the nature of cognitive task you are required to perform.

Memory is the capacity to store all information that we acquire through learning and experience.

Brain-----vast store-house -----all information stored-----retrieved when needed

Memory is conceptualized as a process consisting of three independent , though interrelated stages, that are...

Encoding, storage and retrieving.

Encoding :- where incoming information is received and some meaning is derived. It is then represented in a way so that it can be processed further.

If we consider, Structure of the information processing system, there are three compartments for storage of information . that are-

Sensory Memory

Short term / Working Memory

Long-term Memory

Sensory Memory

Information is received through a person's senses, it comes from the environment around you – McDevitt & Ormrod, 2004

Visual sensory memory is known as iconic memory

Auditory sensory memory is known as echoic memory.

Holds information associated with the senses ( e.g. vision, hearing ) just long enough for the information to be processed further (mere seconds).

The sensory stores are constantly receiving information but most of this receives no attention and remains in the sensory register for a very brief period.

The sensory memory store has a large capacity but a very brief duration, it can encode information from any of the senses and most of the information is lost through decay.

Attention is the first step in remembering something, if a person's attention is focused on one of the sensory stores then the data is transferred to STM.

Sensory Register Detects visual, auditory, haptic( touch), smell, taste, temperature, pain, body position information, Filter out much of the world's potential information in Seconds before decay at Unconscious level.

Encoding recasts sensory information into meaningful representations suitable for manipulation using strategies like- rehearsal, organization, elaboration.

Short Term Memory :-

Most of the information that gets into sensory memory is forgotten, but information that we turn our attention to, with the goal of remembering it, may pass into short-term memory. Short-term memory (STM) is the place where small amounts of information can be temporarily kept for more than a few seconds but usually for less than one minute (Baddeley, Vallar, & Shallice, 1990). Information in short-term memory is not stored permanently but rather becomes available for us to process, and the processes that we use to make sense of, modify, interpret, and store information in STM are known as working memory.

STM functions as temporary working memory, whereby further processing is carried out to make information ready for long-term storage or for a response.

One way to prevent the decay of information from short-term memory is to use working memory to rehearse it. Maintenance rehearsal is the process of repeating information mentally or out loud with the goal of keeping it in memory. We engage in maintenance rehearsal to keep a something that we want to remember (e.g., a person's name, e-mail

address, or phone number) in mind long enough to write it down, use it, or potentially transfer it to long-term memory.

Continual rehearsal “regenerates” or “renews” the information in the memory trace, thus making it a stronger memory when transferred to the Long Term store.

If maintenance rehearsal (repetition) does not occur, then information is forgotten, and lost from short term memory through the processes of displacement or decay.

**Long Term Memory :-**

If information makes it past short term-memory it may enter long-term memory (LTM), memory storage that can hold information for days, months, and years. The capacity of long-term memory is large, and there is no known limit to what we can remember (Wang, Liu, & Wang, 2003). Although we may forget at least some information after we learn it, other things will stay with us forever.

Some information retained in STM is processed or encoded into Long Term Memory.

This information is filed away in your mind and must be retrieved before it can be used.

**Divisions of Long Term Memory :-**

Explicit Memory ( declarative memory) :- includes all the memories that are available in consciousness.

Episodic Memory – refers to memory for specific events in time, as well as supporting their formation and retrieval.

Semantic Memory – refers to knowledge about factual information, e.g. meaning of words

Autobiographical Memory – refers to knowledge about events and personal experiences from an individual’s own life.

Implicit Memory ( procedural memory) :- involves memories of body movement and how to use objects in the environment.

**Processes that keep information “alive” or help transfer it from one memory stage to the next :-**

**Attention**

**Rehearsal**

**Chunking**

**Encoding**

**Retrieval**

**And here are the references.**

**Thank you.**

