

Role of A Science Teacher in Memorizing and Forgetting Process of the Students

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Abstract

A good teacher plays a major role in the memorizing and forgetting process of the children, when he teaches in the class as per children's mental level and age along with the appropriate teaching methods, strategies and appropriate use of audio-visual aids. The present paper highlights on those factors which are considered responsible for remembering and forgetting process of the students. The sound memory of the students is considered as mental activity and one of the basic elements of learning process. Good memory and forgetting less can help the students in encoding, storing and retrieving information.

Keywords- Cognitive Development, Memory Retention, Active Learning, Teaching Strategies, Student Engagement, Conceptual Understanding, Reinforcement Techniques, Forgetting Curve

Introduction

A Teacher plays a major role in both ways ie facilitating memory capacity and combating forgetting in students. He can employ strategies to enhance memory retention, such as applying the spaced repetition, retrieval practice, and elaborative rehearsal etc. The efficiency of learning depends upon memory. Due to the developed memory, human beings hold superiority over other animals. Good memory helps the human beings to react in desirable ways in different situations of life. It will be unthinkable about a man without memory. Memory consists in remembering what has previously been acquired or learned by the children or individual, man gets information at first hand through sense organs, every information comes as a short term memory but by the help of drill or practice, it becomes a long term memory. In psychology, the ability of retention and repetition is known as memory. It helps man to think reasonably and rightly. Memory is not a simple process but consists of learning, retaining, recalling and recognizing ability of the individual.

Memory is an extremely important cognitive faculty, because it forms the cognitive basis for learning. Without a way of storing mental representations of the past, we have no way of profiting from experience. But more important, memory frees us from the tyranny of perception, allowing behavior to be guided by the past as well as the present (Kihlstrom 1999).

Of major interest in the present research were the questions of how and when teachers encourage children's cognitive activity and how such instruction is related to children's skill acquisition.

There is an extensive literature demonstrating developmental change in the ways that children approach memory tasks (Brown, Bransford, Ferrara, & Campione, 1983; Kail & Hagen, 1977; Moely, 1977) and differential effects of training on strategy maintenance and generalization as a function of the child's developmental level (Brown, Campione, & Barclay, 1979; Moely, Olson, Halwes, & Flavell, 1969).

Objectives-

O₁ To study the concept of memorizing

O₂ To pinpoint the types of memory

- O₃ To mention the methods of memorizing
- O₄ To study the concept of forgetting
- O₅ To highlight the suggestions for minimizing forgetting

The Concept of Memory-

Memory is the ideal revival that is to revive the things, objects or experience in the same order and forms i.e. a memory is a new experience determined by the disposition laid down by previous experience; the relation between the two being clearly understood. memory originates from learning; a complex process involving learning, retention, recall and recognition. It reproduces the past experiences. It is constructive. The process of memory works as follows-

Learning-----Retention-----Recall-----Recognition

Guilford has rightly marked, for an efficient memory learning is more than half the battle.

Following are the factors which affect the retention capacity of the students or children-

- Nature of material
- Method of learning
- Speed of learning
- Mental set
- Thinking and reasoning
- Regency and frequency of impressions
- Individual differences

Role of a Science Teacher in the memorizing and forgetting tendency of students

- Peaceful environment in the class
- Use the appropriate teaching method as per requirement
- Use Audio-Visual aids
- Applying the lecture cum demonstration method
- One to one attention in the class
- Appropriate home-work
- Timely tests or internal evaluation
- Assigning projects for holidays
- Use laboratory maximum
- Surprise test time to time to be organized
- More emphasis on learning by doing method
- Telling to students the true factors of forgetting
- To tell the significance of repetition

The Types of Memory- True memory, habit memory, immediate memory, delayed memory, personal memory, impersonal memory, rote memory, logical memory, associated memory, sensory memory, short term memory and long term memory

Short term memory- (a temporary working memory) information is stored in coded form. At the time reproduction, this is again decoded. Whereas long term memory (permanent store house of information) is limitless permanent store house knowledge of the world.

Symptom of good memory- rapidity, accuracy, length of time, promptness, serviceableness

The Ways of Memorizing Longer

Other things being equal like motivation, interest etc, the more intelligent the child is, the better he usually does in his school or college work and avoid the forgetting which means attempting to recall an experience but unable to recall or perform an action previously learned. Following are the ways to learn longer-

- To develop motivation for remembering
- To be confident about one's ability to remember
- To have focus on what he wants to remember
- To make connection between new material and other information already stored to the long term memory
- To utilize as many as memory senses as possible
- The physical, emotional and mental health of the learner
- To have proper rest
- Repetition and continuous practice
- Familiar with the goals and aims of the activities
- Rewards or punishment at appropriate time
- Close attention and avoid distractions
- More emphasis on understanding, not on rote learning
- Use the diagrams to remember longer
- To organize properly in the memory
- To monitor the progress cognitively
- To use mnemonic strategies
- Be good time manager and planner
- To make good notes

The Concept of Forgetting

Forgetting is usually regarded as a liability and memory as an asset. It is a great problem of students' life. The losing ability to recall information is known as forgetting. Causes of forgetting- 1 laps of time, 2. disuse of activity, 3. Lack of interest, 4. No time of rest after serious activity, 5. Emotional disturbance, 6. Fatigue 7. Morbid forgetting due to unpleasant and painful happenings

Suggestions for Improving Remembering

There are some general principles for improving remembering and minimizing the forgetting-

- Principle of motivation
- Principle of understanding
- Principle of attention
- Principle of dynamic methods
- Principle of whole and parts
- Principle of incentives

- Principle of learning by doing
- Principle of vividness
- Principle of adequate repetition
- Principle of freshness
- Principle of good health
- Principle of association
- Principle of spaced learning
- Principle of evaluation

Conclusion

A good science teacher can help the students in overcoming from the tendency of forgetting and developing the long term memory. It will help the students in examination and in life later on.

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