Teaching strategies to enhance long term memory essay sample



Chapter one

Introduction

Human beings have memory which is a special trait to them. Memory is extremely important to educators due to the role that it plays in the teaching/learning process in addition to their personal concern and worry about failing memory as they age (Banikowski, Alison, Mehring, Teresa 1999). It has been noted that memory, as a concept, has been relegated a minimal role. "Many of us associate the word memory with the recall of specific dates or facts or lists of information and sets of instructions, requiring memorization and effort" (Caine & Caine, 1997, p. 41). However, memory does not rotate around this one-dimensional aspect of learning but rather focuses on attending, learning, remembering, and using the many pieces of knowledge and skills encountered constantly. For educators, the only evidence that something or anything has been learned is memory.

Memory is required in order to ensure that students attend to learning, attach new learning to previous learning, actively engage in learning, construct meaning and demonstrate their learning (Banikowski, Alison, Mehring, Teresa 1999). As a matter of fact, memory is said to be the processes of encoding, storing and retrieving information. The processes interact with different memory systems which include the short-term memory, working memory and long-term memory. For this paper, discussion is based on the long-term memory. Long-term memory can store information that is vast in size and is considered to be relatively permanent storage of information. Information is stored and retrieved whenever it is needed. It is

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very important for educators to come up with teaching strategies that enhance long term memory.

Chapter two

DiscussionMost of the strategies and ideas discussed below are mainly based on the articles, 10 Strategies to Enhance Student's Memory and; What Strategies Can Be Used To Increase Memory? by Glenda C. Thorne (May 1, 2006).

There are many ways in which teachers can improve and implement the long term memory of their students and assist them in their learning processes. It is good if students are given teacher-prepared hand-outs prior to class lectures. This gives the students an opportunity to have an idea of what the teacher will be talking about and once the teacher presents his/her class lectures along with a series of oral directions, they help reinforce the already read handouts. The handouts may consist of a brief outline or a partially completed graphic organizer that the student can complete during the lecture. The student can therefore identify the salient information and put them down in their own words, this way memory of the information is enhanced. Exposing students to concepts via advance organizers such as introducing vocabulary, objectives or questions prior to reading or presentation of new information can facilitate the memory and learning of this information.

Cues that prepare students for the task to be presented are helpful. This is often referred to as priming the memory. Teachers should prime the memory of the students prior to teaching or rather before the learning takes place. https://assignbuster.com/teaching-strategies-to-enhance-long-term-memory-essay-sample/

For instance, when reading comprehension task is given, students will get an idea of what is expected by discussing the vocabulary and the overall topic beforehand. The students will then be able to focus on salient information and get involved in more effective depth of processing. In Math problems, steps can be written down so that students do not forget what they are doing. This mostly applies to students with weakness in working memory but mastering of the steps by repetition produces long term memory.

Students can be taught to use visual images and other memory strategies, for example, word substitution. Words which are hard to visualize can be substituted by words that sound similar and can be easily visualized, the student can always visualize the substitute word so as to remember well the meaning of the original word whenever they come across them. For example, the word *occipital* which means the region of the brain which controls vision can be substituted by a word which sounds familiar such as *exhibit hall* so that the student can make visual image of walking into an art museum and seeing a big painting of a brain with bulging eyes. With this system, the vocabulary word the student is trying to remember actually becomes the cue for the visual image that then cues the definition of the word. The student can then practice using the word in as many contexts as possible where applicable.

Research has shown that long-term memory is enhanced when students engage in retrieval practice, and so teachers should provide retrieval practice for students. Tests can be given to students often as taking a test is a retrieval practice, that is, the act of recalling information that has been studied from long term memory. Thus it can be very helpful for students to https://assignbuster.com/teaching-strategies-to-enhance-long-term-memory-essay-sample/

take practice tests. Before any tests or exams can be given to the students, it may serve to help if the students are asked questions as the teachers review information about the forthcoming tests. The students can be let to come up with questions which can be answered in class by the other students and the teacher correcting where necessary. This is useful in enhancing the long term memory than just when the teacher retells the students the to-be-learned information. Students can be encouraged to make up their own tests and take them which will help to tell whether they know the most important information or they are instead focused on the less important details.

Teachers should encourage students to review materials before going to sleep. It has evidently been shown that information studied this way is better remembered and when put to practice or used the following morning; it develops capacity for long term memory. Simple activities to help the students discover the best ways to retrieve information include; mind mapping, debating, role playing, mnemonics, metaphors, rhymes, songs, repetition. Students should be discouraged from performing any other task after reviewing and prior to sleeping, for example, listening to music since it interferes with consolidation of information in memory.

The students need to be taught the relationship and difference between understanding and remembering (Lorayne and Lukas, 2001). It's very important that the students understand well what they have been taught during lectures or the information that is presented in discussions. However, this is not enough if they don't engage in some activity for the purpose of enabling them to remember what they have understood.

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Teachers should activate the student's prior knowledge when they are learning new information. New information can be linked to the prior knowledge to bring about a better understanding of the subject. Activation of a prior knowledge about a topic provides students with a 'hook' to hang the new information on in their mental memory network (Marzano, 2004). It is also useful if the students are taught the necessity of over-learning new information. Practicing until they are able to perform error-free repetition of the material and again performing several error-free repetitions are needed to solidify the information so as to achieve long term memory.

It is of importance if teachers help their students towards elaborative rehearsal. This involves elaborating on the new information in some way. Elaboration in this sense means making associations between the new information and what one already knows, creating a mental image of the new information, recoding information in some way such as taking notes on a chapter while reading it, or creating some mnemonic device that helps memory of the information. Information can be stored in long term memory through this process as opposed to maintenance rehearsal which keeps information in short term memory and does little to facilitate the transfer of the information to the long term memory.

The use of multisensory instruction is helpful in enhancing memory and learning in all students. This is the use of multiple senses such as seeing, hearing, touching, smelling and testing when teaching materials to students (Lorayne and Lukas 2001). Information on any topic should be presented to students in a variety of formats including spatial, linguistic and sequential.

For example, if students are presented with an outline, it may be given the https://assignbuster.com/teaching-strategies-to-enhance-long-term-memory-essay-sample/

traditional sequential way as well as using strategy such as mind mapping which is a spatial or configurational format while the traditional way in which students are instructed is a linear/sequential format. The students then have a number of ways to recode information and this facilitates long term memory storage and retrieval.

According to memory research, information can easily be retrieved when it is stored using a cue that should be present at the time the information is being retrieved. Teachers should help students develop cues when storing information as this will enhance long term memory. For example, "the acronym HOMES can be used to represent the names of the Great Lakes-Huron, Ontario, Michigan, Erie, and Superior" (Thorne, 2006). With this cue, the acronym, it will be easy to recall information which is represented by the acronym. The cue is used when the information is being learned, and recalling the cue when taking a test will help a student to recall the information.

Chapter three

Conclusion

Generally, it is better said that efforts are being made now by both social and physical scientists, more than ever in history, to unlock the secrets to enhancing memory. Students are compelled to commit knowledge or skills to memory and therefore it calls for enhancement of long term memory so that what has been learnt in class can be easily retrieved and put to practice even after a long time of study. Actually, there is no true educator who simply wants to teach, but educators want students to learn. They want https://assignbuster.com/teaching-strategies-to-enhance-long-term-memory-essay-sample/

learners to be able to organize, store, and retrieve knowledge and skills all of which requires the use of the mental resource -memory. If teaching occurs without learning, we might as well skip the teaching in the first place! (Banikowski, Alison, Mehring, Teresa 1999). This clearly depicts the great difference that exists between being taught and learning. Research empirically document that students who effectively utilize learning strategies in the classroom are better able to learn and retain information (Marzano, Pickering and Pollock 2001). By applying the teaching strategies discussed above, educators can actually focus on the learning aspect of teaching process which greatly utilizes long term memory.

References:

- 1. Banikowski, Alison K, Merring, Teresa A. (Oct, 1999) *Focus On Exceptional Children.*
 - 2. Caine G. and Caine R. (1997) The Brain and Learning
- 3. Lorayne H. and Lucas J. (2001) *The Memory Book,* Ballantine Publishing Group, 6th edition.
 - 4. Marzano, R. (2004). *Building background knowledge for academic achievement*, ASCD publishers, 3 rd Edition
- 5. Thorne G. (May 1, 2006) Memory: 10 Strategies to Enhance Students'

 Memory, and What Strategies Can Be Used To Increase Memory?

 Center for Development and Learning, vol. 3 pages 1 and 2
- 6. Marzano R., Pickering D. and Pollock J. (2001) *Classroom Instruction*that Works: Research Based Strategies for Increasing Student

Achievement, Association for Supervision and Curriculum Development Alexandria, Virginia.