

THE IMPLEMENTATION OF EPISODIC MEMORY TO EFL LEARNERS

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ABSTRACT

Episodic memory is the memory subsystem that stores information about the episodes or events in our lives. It refers to our ability to recall personal experiences from our past. Strategy in using episodic memory according to Jensen (1998) are (1) Embed emotions in the learning. (2) We remember material best when it is structured and meaningful. (3) Attitude is important. (4) Learners remember much more when the learning is connected to a field trip, music, a disaster, a guest speaker, or a novel learning location. Episodic memory can be used as teaching method to help the students to improve their ability in writing, vocabulary, and speaking. Teaching English using episodic memory make students can more explore their critical thinking.

Keywords: Episodic Memory, EFL Learners

INTRODUCTION

One of the most prominent human abilities is language, a complex system involving many components, including sensory motor functions and memory systems. Although the neural basis of language is not fully understood, scientists have learned a great deal about this function of the brain from studies of patients who have lost speech and language abilities owing to stroke, and from brain imaging studies of normal people.

It has long been known that damage to different regions within the left hemisphere produce different kinds of language disorders, or aphasias. Damage to the left frontal lobe can produce non-fluent aphasias, such as *Broca's aphasia*, a syndrome in which speech production abilities are impaired. Speech output is slow and halting, requires effort, and often lacks complexity in word or sentence structure. By comparison, comprehension of heard speech is spared, although structurally complex sentences may be poorly understood.

A remarkable feat of human memory is the ability to vividly remember details from many past experiences – ranging from meaningful, distant memories, such as a family member's wedding over a decade ago, to mundane, recent memories, like dinner last night. These kinds of experiences, and memories for them known as episodic long-term memories¹, are often imbued with language.

Today we think of episodic memory as one of the major neurocognitive memory systems (Schacter & Tulving 1994) that are defined in terms of their special functions (what the system does or produces) and properties (how they do it). It shares many features with semantic memory, out of which it grew (Tulving 1984), but it also possesses features that semantic memory does not (Tulving & Markowitsch 1998). Episodic memory is a recently evolved, late-developing, and early-deteriorating past-oriented memory system, more vulnerable than other memory systems to neuronal dysfunction, and probably unique to humans. It makes possible mental time travel through subjective time, from the present to the past, thus allowing one to re-experience, through autonoetic awareness, one's own previous experiences. Its operations require, but go beyond, the semantic memory system. Retrieving information from episodic memory (remembering or conscious recollection) is contingent on the establishment of a special mental set, dubbed episodic "retrieval mode."

According to Philip, et. al (2008: 119) episodic memory is the ability to remember specific events from the past, and to use this information to guide present and future behavior, enhances one's level of functioning and obviously confers an adaptive advantage. And also, Gaffan in Easton (1994: 189) said that episodic memory could be considered to be a "snapshot" of the event being remembered. The other researcher Ciaramelli (2008: 519) also conclude that episodic memory retrieval captures attention automatically, and influences the deployment of spatial attention.

According to Belleville and Friends (2006:497) that person with mild cognitive impairment (MCI) can improve their performance on episodic memory when provided with cognitive training. The intervention focused on teaching episodic memory strategies (list recall, face-name association, text memory).

Based on the explanation above, the writer is interested in carrying out a paper entitled "The Implementation of Episodic Memory to EFL Learners".

FINDINGS AND DISCUSSION

One of the most interesting areas for such research concerns the role of memory strategy instruction, an area which has been the focus of both theoretical and practical activity. Memory strategies involving deep semantic processing of target word have shown to be more effective than memorization techniques involving shallow processing such as oral rote repetition (O'Malley & Chamot, 1990; Oxford, 1990).

Memory strategy instruction has become a growing area of research within language learning strategies over the last twenty five years. The collected studies result that providing language learners with some memory strategies on vocabulary learning which involve in deep processing will consequently lead to better retention.

It should be noticed that memory strategies could build up learners' learning autonomy, facilitate their vocabulary and develop a long-term retention of English vocabulary. Nation (2002) also indicated the effectiveness of mnemonic devices in vocabulary teaching. Many studies in Iran have investigated

vocabulary learning strategies at different educational levels, but few have surveyed vocabulary learning strategies at intermediate university level. Based on the advantages of strategy-based instruction, it would be worth exploring the effect of an explicit strategy instruction on Intermediate students' vocabulary learning. Strategy which is the main concern of this research falls into one category: "imagery strategy". The researchers have made an attempt to find out the effect of using this strategy for storing and retaining vocabulary items for longer period of time which is the aim of learning.

Hsiao and Oxford (2002) maintains that "Memory strategies are particular Mnemonic devices that aid learners in moving information to long-term memory for storage purposes and retrieving it from long-term when needed for use" (p.371). Most memory strategies (traditionally known as mnemonic) involve relating the word to be retained. with some previously learned knowledge, using some form of imagery, or grouping. The category of memory strategy, in this study involves (imagery).

Based on Oxford's (1990) explanation, memory strategies served as "a highly specific function: helping students store and retrieve new information"(p.37). She found out that "language learners have a serious problem remembering the large amounts of vocabulary necessary to achieve fluency" (p.39). To deal with the learning problem, memory strategies were of great help. Thus, memory strategies become a key group in Oxford's strategy classification system. Back to 1981, Memorization is part of direct strategies under Rubin's classification. However, there was no subgroup for memorization under O'Mally, Chamot, Stewner-Manzanares, Russo and Kupper's (1985) and O'Mally and Chamot's (1990) frameworks. Take subgroups of memory strategies in Oxford's (1990) study for example, memory strategies fell into ten sub-strategies, including grouping, associating/elaborating, placing new words into a context, using imagery, semantic mapping, using keywords, representing sounds in memory, structured reviewing, using physical response or sensation, and using mechanical techniques.

Memory on the whole means keeping knowledge somewhere and then retrieving it when it is needed. Long-term memory is the storehouse of information which is relatively permanent. This memory is called the unconscious memory because the information stored in it is largely out of awareness and can be called into working memory to be used when needed. The specialists believe that long-term memory information will be stored in two ways either explicitly or implicitly. The wealth of the findings on implicit and explicit memory is based on the pioneering work of Kolers (1975). Implicit memory, also called "nondeclarative or procedural" (Squire, 1992, p. 233) memory, is nonconscious and requires no conscious awareness. It does not appear to depend on actively recalling earlier learning. On the other hand, explicit memories, sometimes referred to as declarative memory, defined as conscious recollection of episodes, events, items, and information that can easily be verbalized. In order to recall explicit memories which are consciously stored, such as the memory of a past experience, not only should one recall that experience, but he should also recall

the condition, date, and place in which that experience has happened in their presence. Two kinds of learning or memory storage (semantic and episodic) have been suggested in explicit memory.

Episodic memory is subserved by a widely distributed network of cortical and subcortical brain regions that overlaps with but also extends beyond the networks sub-serving other memory systems. The essence of episodic memory lies in the conjunction of three concepts—self, autonoetic awareness, and subjectively sensed time.

Episodic memory is oriented to the past in a way in which no other kind of memory, or memory system, is. It is the only memory system that allows people to consciously re-experience past experiences. Its special, and unique, relationship to time, surprisingly, is not widely known. Nor is it, I think, adequately appreciated.

Most people naturally associate all memory with the past and are astonished to learn that this is not so. The theory holds that episodic memory evolved out of semantic memory: Semantic memory appeared long before episodic memory. Many nonhuman animals, especially mammals and birds, possess well-developed knowledge-of-the-world (declarative, or semantic, memory) systems and are capable of acquiring vast amounts of flexibly expressible information. Early humans were like these animals, but at some point in human evolution, possibly rather recently, episodic memory emerged as an “embellishment” of the semantic memory system. The details of this emergence are unknown, and one can only speculate about them (Tulving 2001b). It is not even certain that the evolution of episodic memory was a part of (neo)Darwinian evolution. Episodic memory may represent an instance of the so-called Baldwin effect (Baldwin 1902, Richards 1987). Episodic memory was built on top of the earlier systems, including semantic memory, is in agreement with other ideas and facts about memory.

The concept of episodic memory according to Endel Tulving (1972) that episodic memory has to do with one's autonoetic awareness of one's experiences in the continuity of subjectively apprehended time that extends both backwards into the past in the form of remembering and forward into the future, in the form of thinking about or imagining or planning. Episodic memory is autobiographical, in that the remembered event has been personally experienced.

Our memory of personal experiences called episodic memory is a mental movie of things we have seen or heard (Slavin, 1997:7). When you remember what you had for breakfast this morning or what happened at your 12th birthday party, you are recalling information stored in your long-term episodic memory. Episodic memory is the memory subsystem that stores information about the episodes or events in our lives. It refers to our ability to recall personal experiences from our past.

Tulving (1972) has seminally defined three key properties of episodic memory recollection. These are a subjective sense of time (or mental time travel), connection to the self, and autonoetic consciousness. Auto noetic consciousness refers to a special kind of consciousness that accompanies the act of remembering

which enables an individual to be aware of the self in a subjective time. Aside from Tulving, others named the important aspects of recollection which include visual imagery, narrative structure, retrieval of semantic information and the feelings of familiarity.

By the definition of episodic memory, the model must address the encoding and retrieval of the place and time of the episode. In addition, the model must address the encoding and retrieval of a viewpoint and the direction of action during specific events in the episodic memory. In the model presented here, the components of time, space, and action are bound together in the manner of physics.

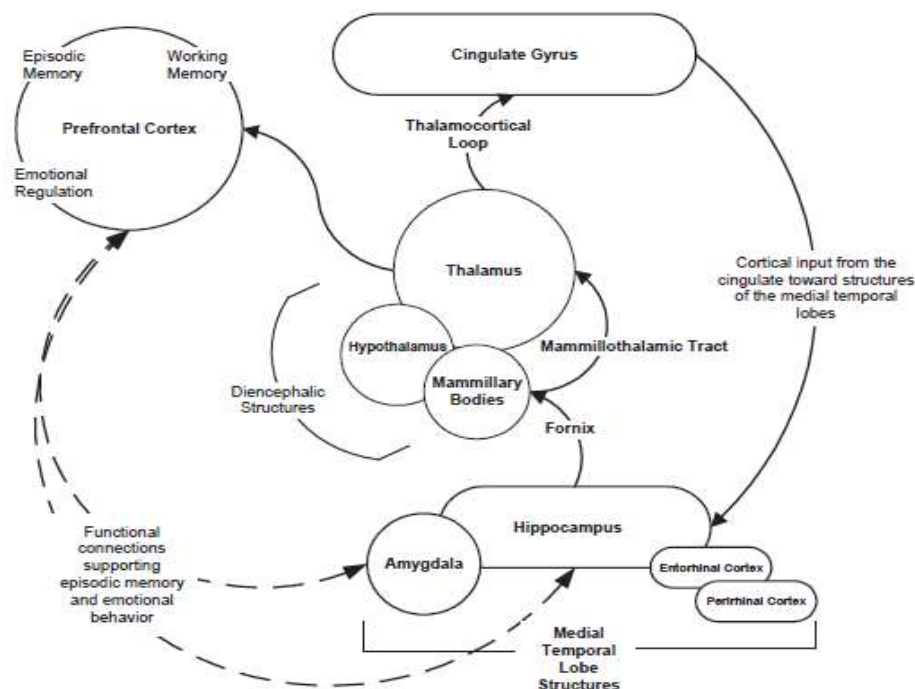


Fig. 1. Anatomical model. The traditional limbic system. Note the importance of portions of the medial temporal lobes and prefrontal cortices to emotional and episodic processes (Adapted with permission from Allen et al., 2005)

According to Aggleton and Brown (1999), the characteristics of episodic memory are: (1) Episodic memory is the memory for what occurred together with the spatial and temporal context in which it occurred. (2) Episodic memory involves memory for a specific experience and therefore involves rapid (one-trial) learning, and a representation of the event that is distinct from that for other events. (3) Episodic memory involves mental time travel and must, therefore, require recollection of a specific previous event rather than a simply familiarity judgment of prior occurrence.

According to Jensen (1998:106) said that “Our episodic memory process has unlimited capacity, forms quickly, is easily updated, requires no practice, is effortless, and is used naturally by everyone” (advantages of episodic memory). Episodic processing does have a major drawback: contamination. That occurs when you have too many events or material embedded in the same location”. It is like virus renaming all the files in your computer with the same filename-the information is there, but it is nearly useless. This often happens to students who really do know their material but lack the specific “hooks” or mental “file names” to retrieve all their learning (disadvantages of episodic memory).

Strategy in using episodic memory according to Jensen (1998) are (1) Embed emotions in the learning. Add a small daily celebration to heighten emotions. Because the first and last few minutes of a class will make the strongest impressions, invest more time on affecting emotions in the middle of class. (2) We remember material best when it is structured and meaningful. Teachers might want to put the most important material first and last, so it is recalled better. Open and close the class with the three most important words or concepts for the day. Use music, props, or costumes to introduce them. Or, use openings for personal or controversial discussions that engage students emotionally. At the close, ask students to share what they have learned with their classmates. (3) Attitude is important. Tell students, “Yes, you can.” Start with a new attitude about memory and recall. Avoid saying, “Oops, I have to go back. I forgot something.” A more accurate statement is, “Hey, I just remembered something; I’ve got to go back.” In other words, you never forget anything; you just remembered it later than you wanted to! (4) Learners remember much more when the learning is connected to a field trip, music, a disaster, a guest speaker, or a novel learning location. Follow up with a discussion, journal writing, a project, or peer teaching. Use location (context) changes. To enhance recall and better codify or “mark” the learning, learn concepts in different places so each location is a key clue to the content. Take the class outside for an introduction to something new.

Procedures in teaching by using episodic memory strategy are: (1) Explained about episodic memory. To make the students easy to understand explain it based on our experiences. Example we remember something by we connected to another thing that close to us such as place, a thing, and when it happened. (2) Embed emotions in the learning. (3) Explained about the important of attitude in memory and recall. It can help the students to enhance their motivation to do writing activity by using episodic memory.

CONCLUSION

Episodic memory is the memory subsystem that stores information about the episodes or events in our lives. It refers to our ability to recall personal experiences from our past. Strategy in using episodic memory according to Jensen (1998) are (1) Embed emotions in the learning. (2) We remember material best when it is structured and meaningful. (3) Attitude is important. (4) Learners remember much more when the learning is connected to a field trip, music, a disaster, a guest speaker, or a novel learning location.

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