



# XORIYIY TILLARNI O'QITISHDA INNOVATSION YONDASHUVLAR NAZARIYANING AMALIYOTGA TATBIQI

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## THE EFFECTIVENESS OF DEVELOPING STUDENTS' SHORT-TERM MEMORY DURING ENGLISH CLASSES

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**Abstract** *This paper explores the effectiveness of strategies used to enhance students' short-term memory during English language classes. Short-term memory plays a crucial role in language acquisition, particularly in literacy development skills. By implementing target exercises, educators can improve students' ability to process and recall linguistic information, ultimately enhancing their overall language proficiency.*

**Keywords:** *short-term memory, working memory, intrinsic, extraneous, germane.*

**Introduction.** Short-term memory is an essential cognitive function that allows students to temporarily store and manipulate information. In the context of English language learning, a well-developed short-term memory facilitates the retention of new vocabulary, comprehension of spoken language, and fluency in communication. This study examines different techniques employed in English classes to develop students' short-term memory and assesses their effectiveness.

Human memory involves preserving and recovering information that we have learned or experienced (Cherry, 2020). However, it can be observed that students, who struggle with short-term memory mostly tend to have short attention, which means perception is very low and thinking of obtained material or information will not be well constructed.

Due to its importance, among the above-mentioned factors, enjoying a powerful memory is the main concern of the study. Arkinson and Shiffrin (1968) presented a model of human memory classification and suggested that human memory works in a three-phase procedure:

1. Sensory Memory is to store the world's perception without any direct processing for a very short time like a few seconds, this phase is going to shape the mind by taking an image of a visual stimulus like size, color or the form of something without defining sense.

2. Short-term memory (STM) is the strongest information for about 15-30s in the mind and this duration of time is considered more than enough to be reused at



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the time of reproduction of ideas. Through this phase, most information processing will happen and all details have their importance and very specific meaning.

3. Long-term memory seems to have an unlimited capacity to store information for a long time. (Pp. 89, 90)

## **Memory and Education**

Learning appears to be impacted differently by various memory systems (Henke, 2010). The various effects of long-term memory systems on learning have a neurobiological basis according to Rolls' (2000) description of the several brain systems that influence memory functions.

Education also has an impact on memory since it serves as a platform for memory construction, communication, and contestation (Paulson et al., 2020). According to Banikowski and Mehring (2017), memory appears to be the only indicator of effective learning and development. Given that learning is entwined with working and long-term memories and their capacities, it must be underlined that giving cognitive psychology and cognitive development principles adequate consideration can have a remarkable impact on teaching and learning. So, while conducting the lessons, teachers have to pay attention for the Cognitive load of giving materials. This includes Cognitive Load Theory (CLT) (Sweller, 1988) which is an instructional theory based on what we know about working memory. We can divide it into three main types: intrinsic (related to the material being presented), extraneous (related to the delivery of teaching of the material), and germane (which seeks to encourage “deep” learning and processing). Therefore, when designing materials, prior knowledge is important. The material will be easier to manage if it connects to what they already know.

For recognizing and identifying working memory problems, we have to consider that there are several behaviors that tend to be associated with reduced working memory abilities. First, as was mentioned earlier is attention. Students with working memory difficulties often struggle to follow instructions or to complete multi-step tasks. They might miss out on steps within a multi-step process, or only complete the first part of the instructions.

Methods that can help develop students' memory

If the teacher struggles with this kind of problem related to memory, he should first identify what is the main skill that students can easily obtain information. Most students with low attention and short-term memory have kinesthetic skills. Teachers should provide material that students can touch or feel and remember. As an example,



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it can be provided a student (let's call her J.) who is going to apply to the university but has struggled with lots of subjects. J. had to pass exams in math and English. She has little attention and can be easily distracted, but time passes and she manages to obtain pieces of knowledge that are related to the specific subjects. After several months English teacher started to give her materials that she could touch. For learning words, she gave a ruler and ties. For each word that she has to learn she repeated and made a tie, and then she repeated this word again and untied it. So, what do you think, about how this simple tie with a ruler could help her? If we look deeply, ties help her to connect these words to her brain. In psychology, this activity helps to take students' attention and concentrate in one position.

So, let's look through the main techniques that can help to develop students' memory:

Repetition and Drills – regular exposure to new words and phrases through repetition reinforces memory retention.

Chunking Information – breaking sentences or vocabulary lists into smaller, meaningful groups helps students process and remember information more efficiently.

Mnemonic Devices – using rhymes, acronyms, and associations aids memory recall.

Visualization Techniques – encouraging students to create mental images of new words or concepts improves recall ability.

Games and Interactive Activities – memory games, role-playing, and storytelling provide engaging ways to reinforce learning.

Listening and Note-Taking Exercises – training students to take quick notes while listening enhances their ability to retain information.

For measuring students' effectiveness in language acquisition it will be beneficial if teachers will provide assessments or take notes of each small achievement of a student in order to analyze and develop more activities related to memory development. In other ways, teachers can take feedback from students by giving short questions, related to students' activities or remembrance.

## **Conclusion**

Developing short-term memory is a vital aspect of English language learning. By integrating targeted strategies into English lessons, educators can significantly improve students' ability to process and recall linguistic information, leading to greater fluency and confidence in communication. Future research could explore the



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long-term benefits of these techniques and their impact on overall academic achievement in language learning.

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