

## Evaluation of Spaced Repetition Learning Strategy on Sixth-Grade Students in Primary Schools

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### Abstract

No one can deny that teaching-learning strategies occupy the interests, and the fields of research studies here and there in the world. Teachers are mostly looking for giving information to students as simply and easily as possible, to get the targets of the teaching-learning process. In this research, the evaluation of the repetition learning strategy was taken into account by the teacher's observations of students' performance during the school year and in terms of the marks on the final exam. It was concluded, for example, that the student's absence and feeling bored are the most difficult sides this strategy faces. However, this research is a serious attempt to find out the advantages and disadvantages of the repetition strategy of learning for

students in grade 6th primary. I think it'll be a handy reference for specialists in this regard and the researcher recommends of making many studies that help in removing the obstacles that may make this strategy unsuccessful.

**Keywords:** repetition, strategy, teacher(s), learning, performance.

### \* Introduction

First of all, I'd like to say that I think most who are in the teaching-learning fields with students of all ages know about many (or some) teaching and learning ways. These teaching methods are continuously developing due to the appearance of modern technologies here and there for instance, and their noticeable influence on students' understanding and learning English at the same time. In this paper, I'm going to

handle the repetition learning strategy, particularly in grade 6th (males and females), to mention the advantages and disadvantages of this method on the students' performance in gaining information or knowledge.

### **1- Research Problem**

Many teachers of English might find obstacles in choosing the right way that may make students obtain much knowledge correctly and overcome the problem of forgetting. Repetition learning strategy is presupposed to regain or root information accurately into the long-term memory, so long as students under 12 years old, mostly have clear brains (having no busy minds); at the same time, the method of repetition in learning might generate or trigger some problems in the course of teaching for both teachers and students.

### **2- Importance of the research**

Evaluating teaching methods is very necessary these days so long as all teachers and students are in the same life boat of the era of developing sciences and the appearance of new and complicated sciences as well. Learning languages, especially English, has become very important to students in all aspects. So, the significance of this paper stems from the fact that learning English as a second language

efficiently is an inevitable thing for the new generation of students.

### **3- Research objectives**

The main goal of this paper is to evaluate the repetition learning strategy on students under 12 years old by mentioning the strong sides and shortcomings of it. In this research, I am exploring the influence of repetition on the students' performance practically, by looking at their performance and results, especially in the final exam, and making some objective and psychological details of those who did well or badly.

### **4- Research methodology**

The methodology of this paper is mainly going to be built on the principle of noticing the activity of student's and teacher's performance, as well as the extent of their satisfaction with this strategy of learning in the course of applying (the teacher says and the students repeat). This is to be done after giving a considerable theoretical frame of knowledge about repetition learning strategy. The final results or the practical side of this paper will tell us whether this method is effective enough or not and students' interaction will show us the same for the efficiency of this strategy over the school year.

## 5- Limits of Research

This research is limited in scope as it handles a specific learning strategy, i.e. repetition method and this research tackles grade 6th, definitely, those who are ages from 12 to 13 years old. In addition, the number of males is close to the females in the same mentioned grade.

## 6- Data Collection Method

The collected data in this research is essentially going to be taken from Students' marks in the final exam and the details be mentioned to everyone whether the strategy achieved the objective of learning or not. In addition to collecting data concerning other aspects like students' actions and reactions (and their facial expressions) towards the strategy mentioned, and other details about students' performance during the school year (2023-2022).

### \* Repetition Strategies of Learning: Literature Review

Many works have been written about the repetition strategy of learning for example: Moritz-Gasser and Duffau (2013) provide important insights into the role of the strong interaction of dorsal and ventral streams in the word repetition to those who suffer from brain tumor. Joshi (2013) had a good book in which he set many strategic methods

of keeping words by repetition and that course book deserves to be read. Yoo and Lee (2013) examined the subjects of speech sounds verbally repeated according to the physiologic-medical viewpoints. Berthier (2014) tackled the role of white matter pathways in verbal repetition in normal and pathological conditions.

Doğan (2015) wrote about the effect of rehearsal during learning on academic success and concluded that learning strategies have higher effects, on the variance in academic success point of students in the experimental groups that rehearsed daily at home what was learnt in class than on the variance in academic success point of students in the control group that did not rehearse daily at home what was learnt in class.

Bayram et al. (2016) wrote about rehearsal (repetition) strategies for social studies and they obtained many conclusions underlining important text with a pencil including choosing to repeat. Petersson et al., (2000) made a network analysis of verbal repetition in literate and illiterate subjects and they came up with many conclusions, like the results of the network analysis indicate that the network interactions during word and pseudo-word

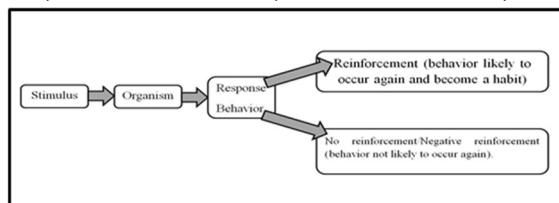
repetition in the illiterate group appeared a difference, while there were no noticeable differences within the literate group. Burner (2001), in his work titled (Repetition is the First Principle of All Learning), suggested many steps about the repetition strategy and gave advantages in this regard, through repetition for instance, students return to where they started, and "know the place for the first time. Ghazi-Saidi and Ansaldo (2017) made a study about second language (L2) word learning through repetition and imitation and they concluded that learning L2 words through repetition induces neuroplasticity at the network level; in addition, repetition effects in L2 learning are modulated by word novelty, a factor that depends upon L1-L2 distance Altalhab (2018) examined the role of oral and written repetition strategies in consolidating students to keep new vocabulary in short- and long-term memory within the classroom context and he found that the Oral + Written repetition strategies are very effective in learning, but there was a relative decline in memorization, as for the participants, in six week delayed post-tests. FTKD (2021) had a good notebook in this regard and proved that repetition is the key to real learning.

#### \* **Teaching methods and repetition strategy of learning**

For many decades, a great deal of academics, researchers, linguists, and others have shown a lot of attention to what are so-called teaching-learning methods. The science of applied linguistics took into consideration the classification of teaching ways, since its appearance formally in the 1940s (For more details about the history of applied linguistics, see: Grabe: 2002). One might wonder, especially teachers, which teaching way they can always rely on and how they can assess the advantages and disadvantages of a specific teaching way or another. Other questions in this regard are strongly submitted by Krashen (1982: 133) who investigated many teaching methods or what is called "the most widely used methods" in the field of teaching. Krashen's questions about teaching way in classrooms are as follows: "To what extent it satisfies the requirements for optimal input", and "To what extent it puts learning in its proper place". Many ways of teaching are positively efficient during second language acquisition so long as there is an urgent need to have more logical views about the approaches and what advantageous and disadvantageous sides the

academics can still show to our contemporary language discussions.

Before talking about the theoretical frames of the repetition strategy of learning, one should bear in mind that this strategy with students goes hand in hand in terms of the “behaviorism” and “structuralism” beliefs, concerning gaining knowledge. In other words, having a second language, like English, relies on a stimulus-response process and every human language is produced by a habit-formation process through an audio-lingual act (See: Richards & Rodgers (1986:50-51), and Skinner (1961: 377-398).



**Figure 1 Stimulus-Response Process in Behaviorism (See: Richards, & Rodgers (1986:50).**

More briefly, behaviorism resembles language acquisition and using it later on, in one's life, like a hungry baby, his/her stimulus is pushing him/her to cry for food, and the response when he/she is fed by caregivers and thus, feels full. So, the baby learns the sounds of crying as a human urgent need for food. Also, according to the approach, the structuralists think that learning a second language is like learning how to drive a car, or a bike for instance.

However, at a certain point in that learning, imitation changed to a specific linguistic process, i.e., speech processing dependent on limited sounds in a specific phonetic domain (Kuhl, 2004).

Undoubtedly, verbal repetition and mimicking the teacher by students are in the middle of the most ancient second language acquisition approaches that are frequently applied in today's classrooms all over the world, despite fierce criticism by many academics and linguists. Verbal repetition refers to articulating a word after hearing it (See: Moritz-Gasser and Duffau, 2013). Intuitively, all of us know that repetition happens when a word, phrase, or sentence is repeatedly uttered at various times in any teaching-learning environment like a classroom. This can help emphasize a point that can help root in keeping information in students' long-term memories and this is also regarded as an effective and successful methodology in this regard (See also: Celce-Murcia, 2001). Milton (2009:227) points out the same opinion that 'multiple repetitions may not help the initial learning of words, but may help them stay in the memory after learning'. Repetition strategies are crucial, especially when starting to learn vocabulary,

according to empirical research in this area (Gu, 2003). However, repetition might lead students get bored” Try, however, to avoid repeating or paraphrasing every question. Such repetition invites students to listen to you and not their fellow students. In addition, you run the risk of the boring class”, (Goodwin, Sharp, Cloutier, and Diamond, 1985).

The strategy of repetition is used a lot in dialogues when “Students are asked to repeat the teacher’s model as accurately and as quickly as possible. This drill is often used to teach the lines of the dialogue”. (Larsen-Freeman and Anderson, 2011).

When a teacher or any academic wants to teach English, the method of repetition in addition to students’ ages should be taken into consideration and this fact was mentioned by Maxom, (2009):” In Teaching English Foreign Language (TEFL) you grade whatever you say so that your speech matches the students’ level of English. When you start a beginners’ course, for example, you use a lot of pictures, gestures, and repetition to put across the meaning of basic words like car and bus”. I think this method of learning has not been new and it can be updated here and there in a great

deal of genera and ways within the teaching fields, one of them is the evaluation of summarizing texts, (See: De Fina and Johnstone (2015, p. 187). In addition, we must focus on language learning within the semantic and cognitive side too, as far as this study is concerned, as Cohen (1998) said in this regard: “Language learning strategies include strategies for identifying the material that needs to be learned, distinguishing it from other material if need be, grouping it for easier learning (e.g., grouping vocabulary by category into nouns, verbs, adjectives, adverbs, and so forth), having repeated contact with the material (e.g., through classroom tasks or the completion of homework assignments), and formally committing the material to memory when it does not seem to be acquired naturally (whether through rote memory techniques such as repetition, the use of mnemonics, or some other memory technique). (p. 5). Additionally, Dörnyei, (2005) argued that “Cognitive strategies, involving the manipulation or transformation of the learning materials/input –(e.g., repetition, summarizing, using images)- (p.169). So, entering the cognitive side within the teaching-learning processes can remove the form of stagnation from

curricular courses. Whereas Pintrich et al. (1991) pointed out that the cognitive activity of repeating facts or definitions are within the metacognitive strategies, as they say for example: "When I study for this class, I practice saying the material to myself over and over." (p.44)

There is no doubt that students can obtain information by learning the English language, whatever it is and whatever their level, but the problem they face is how they can retain this or that knowledge in their long-term memory without forgetting. However, Baddeley and Hitch suggested some subsystems to make memory still work; one of them is in harmony with this paper as follows: (See: Baddeley, 2003).

"The phonological loop is the specialized verbal component of working memory, concerned with the temporary storage of verbal and acoustic information. The stored material is subject to rapid decay (over approximately two seconds) but the loss of information can be offset by sub-vocal rehearsal, which reactivates the decaying representations and which can also translate visual information into phonological form". So, as for this paper, verbal repetition is highly taken into account to see what positive and negative results teachers

can get from a repetition learning method with students in classrooms.

As far as grammar is concerned, there is no practice of what is called repetition strategies in the teaching-learning processes as I believe that grammatical rules should be applied, not just kept without practice. In other words, I'd like to say that grammar should be prescriptive, not descriptive and there is no doubt that learning the structure of a language with no actual use or communication is just a vain. [For more details see: Mughal, 2016 and Aitchison, 2010, p.5]; Also, I'd like to say that I believe that one should live the language, not only has its correct structures or keeping vocabs and it is noticed, especially within the last decades, that authors of teaching-learning books are titled their labels in use, for example, as follows: English Grammar in Use by Murphy, 2019; English Vocabulary in Use by McCarthy & O'Dell, (2017), English Pronunciation in Use by Marks, 2007; and other books in different levels of linguistics and Second Language Acquisition (SLA) fields.

#### \* Applying to the research sample

The research sample for our study here contains 20 students (10 males and 10 females) whose ages were about (12-14) in grade 6th primary. Those students mostly had

the same level of intelligence (all of them are relatives). In other words, individual differences between them were not significant.

#### \* **1Pre-and post-applying the strategy of repetition**

##### **1- Pre-applying the repetition strategy of learning in the class**

There is no doubt that the student's actions and reactions about what he/she learnt from the teacher, in addition to the marks of the exam levels (orally and in writing) can be regarded as a main criterion concerning showing what level(s) students reached in their academic performance. Before the use of the repetition strategy of learning (or at least before applying it a lot), particularly at the beginning of the academic year, students had many obstacles and problems they faced in the course of answering questions orally, or even in developing their academic performance; all these factors can be summarized as follows: -

- 1- In general, problems in keeping vocabulary and texts, for instance.
- 2- A sort of negative feeling(s) or presentiments of disability to understand and answer; this pushed some to be absent, and others say or write nothing in the class.
- 3- Most students don't know how to keep what the teacher gives them in a

minute way or they only read the material in a surfing way (not deeply).

4- Reading without interest and eagerness.

5- Doing their duties to get rid of them, like someone who has lifted a heavy burden on his back in order to relieve himself/herself.

6- The students' fighting spirit for learning is almost missing. In other words, the motives or wish for learning English was weak.

7- Forgetting information about what they learnt of English quickly.

##### **2- Post-applying the repetition strategy of learning in the class**

The evaluation of this strategy can undoubtedly be noticed by the students' performance regarding what they learnt from their teacher and this is more definitely noticed by the exam results students had in their monthly and final exams. As far as this paper is concerned, the final exam results were only taken into consideration to see what level(s) of development students reached in learning English. One of the criteria or one of the procedures that was conducted was students' facial expressions in the course of applying the verbal repetitions of a word, phrase, utterance, and even a specific short English text(s). The teacher knows here (according to what I have

just mentioned) whether the student was happy, interested, and serious when he/she repeated the information that was intended to be sent to his/her long-term memories.

### 3- Analysis of the results

The following table shows the students' marks (Grade 6<sup>th</sup> – males and females) in the final exam of English (2022-2023).

RESULTS OF THE GENERAL MINISTERIAL EXAMINATIONS OF ENGLISH FOR THE SIXTH GRADE / JAHOO NI PRIMARY SCHOOL / IRAQ THE ACADEMIC YEAR: (2022-2023) / FIRST ROUND			
Seq	Student Exam Number:	Student's full name	Marks in English (Final Exam)
1	17231103015001	Ayman Ammar Ramadhan	31%
2	17231103015002	Turki Muhammad Ali	12%
3	17231103015003	Khudhair Hani Khudair	28%
4	17231103015004	Da'oud Ammar Salem	42%
5	17231103015005	Rokan Ali Fathi	16%
6	17231103015006	Ali Husein Abdullah	50%
7	17231103015007	Imad Abdul-Muhsin Mahmood	86%
8	17231103015008	Omar Ahmad Hasan	38%
9	17231103015009	Laith Ahmad Iz-Aldeen	18%
10	17231103015010	Mushaaq Abdul-Muhsin Mahmood	50%
11	17231103015011	Abraar Ahmad Abdullah	64%
12	17231103015012	Israa' Khamees Mutar	50%
13	17231103015013	Zamzam Muhammad Husein	78%
14	17231103015014	Zahraa' Saad Khudair	64%
15	17231103015015	Zaynab Mahmood Saleh	58%
16	17231103015016	Sara Qusay Ahmad	36%
17	17231103015017	Shahad Muwaffaq Ibrahim	54%
18	17231103015018	Taeba Adnan Muslih	62%
19	17231103015019	Hiba Ali Salmaan	72%
20	17231103015020	Yamama Hasan Abdullah	80%

I'm not only going to mention the success ratio which is more than 60%. I'm going to mention the condition of each student who did badly in the final exam of English. First of all, the students who have sequences: 2, 3, 5, and 9

respectively were absent, in most lessons of English (and other materials) all over the academic year (2022-2023) and thus, there is no doubt that the repetition strategy of learning had little impact on developing their performance in learning because of that. So, they weren't allowed to do the exams in the second round. Here, one can bear in mind and conclude that students' absence is regarded as one of the obstacles that hinders the success of getting the fruits of this strategy for both teachers and students.

Regarding the student who has the sequence number: 4, he was feeling bored due to the use of this strategy of learning. I (the teacher of English) noticed that he had been refusing to move his tongue compared to his other colleagues in the class, and I noticed that from his facial expressions, in addition to keeping silent all over the lesson. However, this student passed the final exam of English during the second round. Of course, his success was made in the exam mentioned later, after I exerted many efforts to satisfy him by repeating information and embedding what he got in his long-term memory.

As for the students number 8 and 16, they had problems in writing; in other words, they were committing

many spelling mistakes in the exams, although they were relatively not very bad in oral tests. I admit I have focused on verbal repetition compared to weak practices about the repetitions that develop students' writing. So, I discovered a new gap in the application of the repetition strategy of learning, hence one can say that verbal repetition should go hand in hand with repetitious practices in developing students' spelling in writing properly. In fact, I found out some students were neglecting to develop themselves concerning writing correctly. However, the other students passed the exam and their performance developed noticeably. Also, it was noticed that most of the students couldn't express themselves freely; they have just said what the teacher ordered them to say, and this made them unable to be creative in using their speech style in making dialogues.

#### \* **Results**

**This research came up with advantageous and disadvantageous sides to the teaching-learning process: -**

1- The repetition strategy of learning had a huge impact on students, especially those who followed their teacher's instructions.

2- Verbal repetition should go hand in hand with other sorts of repetitions in the course of learning English, like repetition in writing vocabulary and texts that enable students not to commit mistakes in writing and have beautiful handwriting at the same time.

3- The repetition strategy of learning might face some obstacles or problems in the course of the teaching-learning process, such as students' repeated absence and feeling bored.

4- The students' psychology of few students wasn't fully satisfied with this strategy of learning and that was obvious from their facial expressions.

5- The repetition strategy of learning was an active and ideal way that enables students to keep well due to their clear minds and thus, doing well in the exams of English. So, their performance in learning English developed noticeably.

6- The over-use of this strategy might freeze students' brains as for being able to create or speak freely. In other words, the exaggeration of using this strategy can put students' ideas in limited matrix with respect to expressing themselves.

#### \* **Recommendations for further studies**

How to remove the boring feelings and other obstacles that

hinder the best use of the repetition strategy of learning is a fertile field for researchers and specialists in teaching-learning ways.

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