

The Effectiveness of Using Mnemonic Strategy on University Students' Retaining of Important Expressions in William Golding's 'Lord of Flies'

Afrah Adil Mahmood^a, **Jameela Razooq khalaf**^b, ^aMinistry of Higher Education /Iraq, University of Samarra /College of Education/English Department, ^bMinistry of Education /Iraq, The General Directorate of Education of Salah Al- Din / Samarra Education Department,

This study aims to analyze the university students' ability to remember the most important expressions in novel material 'Lord of Flies' that is written in 1954 by William Golding. The problem of this study is the university students' disability to remember some expressions that presented in a novel. In this study the students are partitioned into two gatherings: the Experimental group(20 students) and the control group (20 students). Students are chosen randomly. The researcher applies the strategy of 'Mnemonic' on the experimental group specifically the material of novel that has been taught in the fourth year/English department by using a questionnaire test. This study is limited to the fourth year students/English language department /College of Education/Samarra University. This study is conducted specifically in the first semester of the academic year 2019/2020. The hypothesis of this study is most of fourth year EFL students have no ability to retain many of expressions in a novel. Most of the data are analyzed by using a comparative approach between these two groups. In addition, some of the data from the questionnaire test and writing samples produce the descriptive statistics. The researcher spends one month in applying the 'Mnemonic' strategy to the experimental group, while the control group has been taught traditionally. The researcher presents a questionnaire test for two groups (the experimental and control). According to data statistics ,the researcher finds that the experimental group has the ability to remember the information in the novel material , while the control group has no ability to retain or remember the important information through a written test. The researcher presents a questionnaire test which includes ten items that has been taken from the novel material that is taught in the fourth year /English Department at Samarra University. Five marks have been allotted to each point and

the total mark for this test is fifty. Validity is achieved by following the observation of statistics data through a comparison of questionnaire responses in a selection randomly for two samples that may provide a basis for estimating validity(Best and Kahn,2006:329). By this way, the validity of this study is achieved. Reliability ,also, is achieved in this study by making a comparison between the two group responses (the experimental and control) of the fourth year students/ English Department / Samarra university.

Key words: *Effectiveness, Mnemonic Strategy, Retaining and Expression.*

Literature Review The Theory of Memory

Swanson and Cooney(1991:104) refers to memory as ' the capacity to encode , process and recover data that one is presented to '.

Memory and learning in school are interconnected and disabilities in memory cause difficulties in school(Brown,1979).

The literature has various theories of memory ,among them is the Information Processing Theory of Memory which supplies the theoretical basis for this investigation since it is the most popular model (Woolfolk,1998).

Memory Theory: Information Processing Theory

The Information Processing Theory of Memory shows how the brain or mind processes, stores and recall knowledge (Slavin, 2003).

Most of the information processing theory as Atkinson and Shiffrin(1968,1971) state that it involves three main stages: tangible register, long—term memory and short—term memory. See table (1) for more details.

Table 1: The Information Processing System of memory

Store	Duration	Capacity
Sensory register	1-4 Seconds	Unlimited
Short –Term	15-20 Seconds	Approximately 4 pieces of information
memory		
Long -Term	Long	Unlimited
memory		



'Raw information streams from the faculties into the tangible registers, where it is handled as far as existing information and data'. Data that is resolved to be significant is passed on for additional preparing in the short – term memory, the rest is disposed of (Morris,1996:231). Though the sensory register has limitless capacity for incoming information (Cowan,1988,Ormord,1998).

Henson and Eller(1999)states that its short retention is as the following:

a-the duration of the visual information is less than 1 second. b-the duration of the tactile information is 2-3 seconds. c-the duration of the auditory information was up to 4 seconds.

These visual and auditory information and even the investigation's tactile flow into the subject's sensory register.

The information perceived and attended to the sensory register which is received by short-term memory. So the short-term memory will do one of the following: ignore the information, keep the information in the short-term memory through practice, or move the data into the long term memory via encoding (Eggen and kanchak, 1997).

When the data reached the short-term memory, it should be rehearsed or practiced or else it disappears in 15-20 seconds (Morris,1996) and what Schmitt (2000,129-131) confirms that the information which is processed in a short –term memory (i.e., new words a person encounters for the first time) is kept in the short-term memory for an exceptionally brief timeframe on because that its stockpiling limit is small. Then the mnemonic information is transferred from the tactile register into the short-term memory. The last step is that the selected information found in the short-term memory enters the long-term memory. So, mnemonic is mainly used for the purpose of keeping words in the long-term memory that has boundless limit compared with the short-term memory.

The last part of the human memory framework is the long -term memory which Morris defines it as 'portion of memory that is more or less permanent and that corresponds to everything we know' (ibid:239).

the long-term memory contains unlimited storage capacity (Banikowski and Merhing , 1999).

In addition it keeps a lot of information for a long time (Kosslyn and Rosenberg, 2004),though its exact duration has not been determined (Eysenck and Keane, 1990).



The Meaning of Mnemonic

Mnemonic is defined by many scholars and linguists .Mastropieri and Scruggs (1991:ix) define mnemonic as 'a strategy or device for improving or strengthening the memory '.

Solso (1995) cited in Amiryousefi and Ketabi(2011:179) states that 'Mental aides are procedures or gadgets either verbal or visual in nature that serve to improve the capacity new data and the review of data contained in memory'. The word 'Mnemonic' originates from the Greek word 'Mnemosyne'. It alludes to the old Greek 'goddess' of 'memory.

Schmitt (2000:129-131) claims that our mind is like to London underground system. He implies that the data put away in the mind is connected in various ways, therefore, the general picture of the mental lexicon is one in which there are different links between words, some strong, some weak. Mnemonic is a memory improving instructional technique used to instruct understudies to interface new data.

Interest in memory including mnemonic strategies which increased during the 20th century (Mastropieri and Scruggs, 1991).

Many linguists demonstrate the viability of memory aide methodologies in learning situation .Raugh and Atkinson (1975) clarify the influence of mnemonic systems in teaching Russian jargon to college students.

Mastropieri and Scruggs (1989), Bulgern, et al. (1994) state that mnemonics are very influential strategies in helping students to remember information. If the information is presenting in a way that relates to what is as of now known, it will be held for a moderately significant stretch of time and in this way the review through verbal or visual pieces of information turns out to be simple.

Teachers can use mnemonics to help their students memorize information like the state capitals, vocabulary or ordered list like the artists and their chief works (Bergin and Bergin, 2015:161).

Among linguists, Wolgemuth et al. (2008) emphasize the idea that mnemonic instructions assist understudies with recalling data all the more adequately and effectively through connecting new data with natural definitely known data using a visual picture or word mix. While Schmidman and Ehri (2010:160)confirm that 'mnemonics are effective when they accelerate learning, lessen disarray among comparative things and upgrade long haul maintenance utilization of the data.



Most mnemonic techniques are effective for high and middle school age. Not only the school students make use of mnemonic strategies, but also college students, as Higbee(1994) confirms 'The utilization of mental helpers with colleges as understudies would have enough potential for making learning simpler and conceivable progressively fun'.

Classification of Mnemonics

Before mentioning the types of mnemonics it is worthy to say that some linguists and scholars state that there are some factors affect the learning process beyond various types of mnemonic strategies, as Tyng et al. (2017) mention person emotional state and his/her ability to learn or retain information.

Regarding the classification of mnemonics, not all the linguists have the same classification. Primrose (2016:xii) mentions two types of mnemonics :acronyms and acrostics.

Bergin and Bergin(2015:161) mention acronyms and keywords methods as two types of mnemonics .Among important types of mnemonic Mastropieri and Scruggs (1989) cited in Reid (2013: 266) mention: acronyms, acrostics, keywords and pegwords.

Baine(1986:32)mentions the underlying strategies of mnemonic as labeling ,visual imagery maintenance rehearsal.

Oxford(1990), then again, distinguishes four significant procedures to be specific ,creating mental linkage ,sounds and applying pictures , reviewing great and utilizing activity.

Baddeley(1999)thinks mnemonic strategies involve visual imagery strategies and verbal strategy, while Thompson (1987) orchestrates mnemonic techniques into five classes: spatial, linguistics, visual, physical reaction and verbal strategies. This study adopts the classification developed by Mastropieri and Scruggs.

Mnemonic Strategies According to Mastropieri and Scruggs

Mastropieri and Scruggs mention important mnemonic strategies namely, acronyms ,acrostics, keywords and pegword .

Acronyms and Acrostics

Bergin and Bergin (2015:161)state that acronym is to take the first letters of words to be retained and combine them into a word or phrase. For instance, the word HOMES may represent the incredible lakes (Ontario, Huron, Erie, Michigan, Superior).



Regarding acrostics Primrose(2016:xii) explains that we often use a saying whose words start with the first letters of the item to be retained are in the form of an expression where the principal letter of each word is a signal for recalling .For instance, Roy G. Biv is the most commonly remembered acrostic used to remember the colours of the rainbow : O=orange , R= red, Y=yellow , B=blue , G= green , V=violet and I=indigo.

The keyword

This technique is based on a combination of two imageries :visual and aural. The basic theory of this technique is that using both auditory and visual links facilitate L2 word (Crookall and Oxford,1990:18-19).

Hulstijin (1997) confirms that there are three stages in using keyword technique .The first stage is to specify a natural word in the native language that has acoustic likeness to the new word that the learner is going to learn in the TL (auditory image) . This word acts as a key word . Making an association between the keyword and the target word is what the learner does in the second stage . Finally , the learner is asked to form a mental image between the keyword and the target word (visual image) . for instance , the English word 'shear' which means ' to cut the wool of a sheep' has acoustic similarity with the Persian word 'shir' which signifies 'lion' in English. The word 'shir' is used by the learners as a keyword . Then they are requested to make affiliation between 'shir ' and 'shear' . The association might be in this way 'A shir(lion) is shearing a sheep.

Peg Word

This technique is helpful when you want the learners to retrieve numbered or ordered information (Mastropieri, 1988).

Baine(1986:77) states that peg word mnemonic supplies 'a system of remembering numbers, nouns and the numerical order of nouns.

This technique is more applicable with recalling the numerical arrangement of words like :book, apple, car ,etc. The first thing learners must do is to remember objects the learners might easily visualize . These words have similar rhythm with cardinal numbers.

Madigan(2015:190), Mastropieri(1988) and (Baine, 1986:78) mention the following list of peg words that are most commonly used with the cardinal numbers:



One is bun(gun) six is sticks

Two is a shoe seven is heaven(oven)
Three is a tree eight is a gate(plate)

Four is a door nine is a line
Five is a hive ten is a pen (hen)

The learners must practice this list of peg words many times so that they can recall quickly the corresponding peg word 'plate', for example, for the number 'eight' or vice- versa, the learner is given a peg word like 'pen', he/she can easily remember the corresponding number 'ten'. In order to make the learners remember the numbers 2,5,8 and 3, they have to match these numbers with their corresponding peg word. To do so, they use 'syntactic encoding' to imagine 'a shoe stuck in a hive on a top of gate under a tree '(Baine, 1986:77).

Methodology Questionnaire

A questionnaire has been conducted as the valence operation between the students of experimental and control gatherings according to the certain variables such as (the age that calculated as months and the students' par of study for the previous academic year and degree of intelligent. The calculated t-value is less than the organized t- value and that means the valence operation between the two groups according to these variables as it appears in table (2)

Table 2: Standard Deviation and Mean Scores to the Experimental and Control Groups According to the Age of Students, Their Previous Levels and Intelligence

Variables	Group	Mean	Standard	T- Valu	T- Value	
		Scores	Deviation	Comp.	Tabu.	
Age	Experimental	240.8000	4.18770	0.989		
	Control	241.9500	3.08605			
Previous	Experimental	62.7500	5.76628	0.448	2.04	
level	Control	62.1000	2.98946			
Intelligence	Experimental	35.1500	1.59852	0.675		
	Control	35.5500	2.711449			

Data Analysis

The use of 'Mnemonic' strategy by a researcher that has been employed in the principal semester of the academic year 2019/2020 has a positive effect on the students' improvement in retaining many expressions presented in a novel of 'Lord of Flies'. This strategy seems useful for this study because there is a hope to create students that having the ability to retain

the expressions and more information. Statistical data according to the variables of students' (age ,the previous level in the last academic year and intelligence)for this study refers to the valence in both groups (the experimental and control).

Results

Through making a comparison between the mean scores of both test and control bunches by utilizing T test for autonomous sample. The result refers that the calculated t- value (4.161) is more than the organized t- value (2.04) and that means there is a contrast between the two groups (experimental and control) .The students of experimental group have the ability to retain many expressions by practicing 'Mnemonic' strategy for one month, while the students of control group are unable to remember or retain many expressions in this novel as it is shown in table(3)according to the variable of understanding.

Table 3: Mean Scores and Standard Deviation to Control Groups and the Experimental as Independent Samples

	Group	Mean	Standard	T- Value	
		Scores	Deviation	Comp.	Tabu.
Understanding	Experimental	34.0000	5.98243	4.161	2.04
	Control	25.7500	6.54438		

Table 4: Mean Score and the percentage for each point of the Experimental Group

Item	Mean Score	percentage
1	3,25	%65
2	2,25	%50
3	3,75	%75
4	4	%80
5	4	%80
6	3,25	%65
7	3,25	%65
8	4	%80
9	2,75	%55
10	3,5	%70

Table 5: Mean Score and the percentage for each point of the Control Group

Item	Mean Score	percentage
1	3	%60
2	1.75	%35
3	1.25	%25
4	3.25	%65



5	1.75	%35
6	2.5	%50
7	3,25	%65
8	3	%60
9	2.5	%50
10	3,5	%70

It is obvious to the reader that the mean scores and the percentages of the experimental group students is higher than the control group students and that means the students of experimental group retain or remember many expressions that found in the material of 'Lord of Flies' novel , whereas the students of control group find a difficulty in retaining the important expressions in this novel.

REFERENCES

- Amiryousif, A. and Ketabi, S.(2011) .Mnemonic Instruction : A way to Boost Vocabulary learning and Recall. Journal of Language and Research.1:178-182.
- Atkinson, R.C. and Shiffrin, R.M.(1968). Human Memory: A proposed System and its Control Process. In K.W. Spence and J.I. Spence (eds.), The psychology of Learning and Motivation (vol.2) NY: Academic Press.
- Atkinson, R.C. and Raugh,M.(1975). An Application of Mnemonic Keyword Method to the Acquisition of Russian Vocabulary . Journal of Educational Psychology : Human Learning and Memory ,104,Z:126-133.
- Baddeley, A.D.(1999). Essential of Human Memory .East Sussex: Psychology Press ltd, Publishers.
- Baine, D.(1986). Memory and Instruction . New Jersey: Educational Technology Publication, Inc.
- Banikowski, A. K. and Mehring, T. A. (1999). Strategies to Enhance Memory Based on Brain Research. Focus on Exceptional Children ,32(2)1-16.
- Bergin, C. C. and Bergin, D. A. (2015). Child and Adolescent Development in Your Classroom (2nd ed.).Stamford: Cengage Learning.
- Best, J.,W. and Kahn, J.,V.(2006). Research in Education(10th ed.).USA: Pearson Education Inc. .
- Brown, A. L.((1979). The Development of Memory: Knowing, Knowing about Knowing, and Knowing how to know. In H. W. Reese (Ed.), Advances in Child Development about Behavior. New York: Academic Press.
- Bulgern, J.A., Schumaker, J.B. and Deshlor, D. D.(1994). The Effect of a Real Enhancement Routine on the Test Performance of Secondary Students with and without Learning Disabilities : Research and Practice, 9,2-11.
- Cowan, N.(1988). Evolving Conceptions of Memory Storage, Selective Attention, and their Mutual Constraints within the Human Information .Processing System. Psychological Bulletin, 104(2), 163-191.
- Crookall, D. and Oxford ,R.(1990). Language Learning Through Simulation /Gaming .New York :Newbury House /Harper and Row.



- Eggen, P. and Kauchak, D. (1997). Windows on Classroom :Educational Psychology. (3rd ed.).Columbus, OH:Merrill- Prentice Hall.
- Eysenck, M. W. and Keane, M. T. (1990) .Cognitive Psychology :A Student's Handbook . Lawrence Erlbaum Associates . Ltd., Hove, UK.
- Golding, W. (1954). Lord of Flies . Fiber and Fiber : Great Britain.
- Henson, K. T. and Eller, B. F. (1999). Educational Psychology for Effective Teaching . Albany, NY: Wadsworth.
- Higbee, K. L.(1994). More Motivational Aspects of an Imaginary Mnemonic .Applied Cognitive Psychology 8 (1):1-12.
- Husltijin, H. J. (1997). Mnemonic Methods in Foreign Language Vocabulary Learning: Theoretical Consideration and Pedagogical Implication. In J. Coody and T. Huckin (Eds.), Second Language Vocabulary Acquisition (203-224). Cambridge: Cambridge University Press.
- Kosslyn, S. M. and Rosenberg, R. S. (2004). Psychology: The Brain, The Person, The World (2nd ed.). Needham Heights, MA:Allyn and Bacon.
- Madigan, R. (2015). How Memory Works and How to Make It Work for You .New York and London : The Guilford Press.
- Mastropieri, M. A. (1988). Using Keywords Method. Teaching Exceptional Children ,20 (2), 4-8.
- Mastropieri, M. A. and Scruggs, T. E. (1989).Reconstructive Elaborations: Strategies for Adapting Content Area Information. Academic Therapy, 24, 391-406.
- Mastropieri, M. A. and Scruggs, T. E. (1991). Teaching Students ways to Remember: Strategies for Learning Mnemonically. Cambridge, M. A.: Brookline Books.
- Morris, C.G.(1996). Psychology: An Introduction. Upper Saddle River, NJ: Prentice Hall.
- Ormord , J. E. (1998) .Educational Psychology: Developing Learners . Columbus ,OH: Prentice Hall.
- Oxford, R. (1990). Language Learning Strategies: What Every Teacher Should Know .New Burry House Publisher.
- Primrose, P. (2016). Complete Phlebotomy /Exam Review (2nd ed.) Missouri: Elsevier, Inc.



- Raugh, M. R. and Atkinson, R. C. (1975). A Mnemonic Method for Learning a Second Language Vocabulary. Journal of Educational psychology, 67, 1-16.
- Schmidman , A. and Ehri, L. (2010). Embedded Picture Mnemonics to learn Letters. Scientific Studies of Reading , 14(2), 159-182.
- Schmitt, N. (2000). Vocabulary in Language Teaching . Cambridge: Cambridge University Press.
- Slavin, R. E. (2003). Educational Psychology: Theory and Practice. Boston: Allyn and Bacon.
- Solso, R. L. (1995). Cognitive Psychology (4th ed.). Boston: Allyn and Bacon.
- Swanson, H. L. and Cooney, J. B. (1991). Learning Disabilities and Memory . In B., Wong(ed.) Learning about Learning Disabilities(103-127). San Diego: Academic Press.
- Thompson, I. (1987). Memory in Language Learning . In A. Wenden and J. Rubin (eds.) Learner Strategies in Language Learning (15-30). New Jersey : Prentice- Hall.
- Tyng, C. M., Saad, H. V. and Malik (2017). The Influence of Emotion on Learning and Memory. Frontiers in Psychology. Doi: 10-3389/Fpsyg. 2017.01454.
- Wolgemuth, J. R., Cobb, R. and Alwel, M. (2008). The Effect of Mnemonic Intervention on Academic Outcomes for Youth with Disabilities: A Systematic Review Learning Disabilities Research and Practice, 23(1), 1-10.
- Woolfolk, A. E. (1998). Educational Psychology .(7th ed.) .Boston: Allyn and Bacon.



Appendix

The Test

Subject: Novel

fourth Year Exam

Q1/ Write about the meaning of expressions that presented in the following items according to the reading of 'Lord of Flies' novel: (50 Marks)

Note: each item has been allotted 5 marks.

- 1-What do we mean when we say 'The lord of flies'?.
- 2-Why did Simon consider as a very important character and what a religious figure represent in a novel?.
- 3-Why does the beast consider as the most important character in this novel?.
- 4- What do the glasses of piggy's refer to?.
- 5-What is the signal of fire that has been found in 'lord of flies' novel?.
- 6-Why is 'conch of shell' a very important expression from the beginning of this novel?.
- 7-Why does Jack in 'lord of flies' paint his face?.
- 8-Why does the writer of 'the lord of flies' novel use shelters and rocks?.
- 9-What does the ocean represent spiritually?.
- 10-What does the weather expression symbolize in a novel of 'Lord of Flies'?.