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# Role of Mnemonic Strategies to Enhance Vocabulary Knowledge of Children with Specific Learning Disabilities: A Review

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**Abstract:** This study reviews improving student's vocabulary knowledge through mnemonic strategies. Mnemonics are the instructional techniques to create a link or a connection that can assist in recalling information. These strategies work efficiently because the mind recalls the information appreciably more efficaciously when the new information is linked imagery or with previous learning. Children with special needs sometimes face challenges in reading comprehension because of the deficit in oral vocabulary required to comprehend and retain the subject matter. Through reviewing the literature it has been observed that with the use of different mnemonic strategies such as keyword, visual mnemonics, rhyme mnemonics, there can be an improvement in vocabulary knowledge of children with special needs. It was also suggested that the educators should utilize mnemonic strategies in their classrooms to improve the vocabulary knowledge through making a bridge between the new and existing knowledge.

**KEYWORDS:** Mnemonic Strategies, Vocabulary Knowledge, Children with special needs

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## I. INTRODUCTION

### Specific Learning Disabilities:

"Specific learning disability" refers to a disorder in a single or multiple of the fundamental mentally procedures needed to comprehend or use language, whether written or verbal, which may show up as a poor ability to comprehend, think, communicate, comprehend words, write, or perform mathematical operations. This includes circumstances like conceptual limitations, damage to the brain, limited neurological disorders, dyslexia, and developmental aphasia, among others. This definition excludes learning issues that are largely brought on by intellectual disability, emotional disturbance, visual, hearing, or motor impairment, as well as those brought on by ecological, social, or socioeconomic adversity.

If not identified and treated, learning disorders can affect an individual's daily life in ways other than only their performance in school. Among these factors is an elevated likelihood of experiencing greater emotional anguish, worsening general mental wellness, and skipping off of education.

The group of kids with specific learning disabilities is diverse. These kids are a wide mix of kids that could have problems in a lot of various aspects. Additionally, learning difficulties can range from mild to severe. Children' ways to cope also vary.

Specific Learning Disabilities isn't associated with a specific condition. It is a name for a collection of illnesses. It's notable that learning disabilities lack precise and generally regarded criteria. Since the area is diverse and here has been constant discussion about what it means, and a minimum of descriptions are now available in the professional literature. Various health and education sites provide a number of unclear explanations.

One or more of the following primary traits are present in students with learning disorders: trouble with reading, vocabulary oral or written, difficulty with written communication, and poor performance in math. Poor interpersonal abilities, lack of focus, hyperactivity, and behavioral issues are examples of secondary traits. If someone's education is negatively impacted, they may be determined to be qualified for special education programmes as learners who have a specific learning disability in one or more of the key areas.

### Mnemonics:

Mnemonics are the strategies which are developed to assist the learners in remembering essential content. With the application of these strategies the connection is built between the new learning and the current learning. The keyword,

peg word, acronyms and acrostics are some of the strategies that come under the umbrella term of mnemonics that are used as interventions. Mnemonics are such interventions that can be framed according to the needs of learners and to match with the subject matter. This intervention strategy promotes better learning retention and also boosts recollection of difficult phrases or concepts. Children with special needs benefit significantly with the use of this strategy. Linking the new words with the already known word makes the retention of the presented new knowledge easy to remember for a longer time. Children with special needs find difficulties in communication as they may have limited vocabulary. Learning vocabulary is a necessary component that cannot be avoided for learning a language or concept. Studying vocabulary not only includes understanding its meaning or structure but also to utilize the words when needed. For successful and significant learning, such interventions should be used that are also relevant. Such strategies that could provide the students everlasting knowledge instead of a short- term understanding of words that can be retrieved and even used eternally when required. Mnemonic strategies are flexible and can be applied in a variety of contexts to help people acquire knowledge. Keyword plus peg word methods have all been used to great effect with children with special needs across a variety of subject matter.

## II. LITERATURE REVIEWED

**Mastropieri et al. (1985)** carried out a research in which they assessed three teaching techniques used with students having learning disability and without learning disability. They wanted to know which one technique would be more effective for students remembering the scientific information and to compare that if the same technique would be equally efficient for students who are not having learning disability. Two groups were there of 45 children each of greater and lower comprehension skills. Three sub groups were made from these two groups of 15 children placed for mnemonic training, questioning method, and independent study, respectively. There had been ultimately 6 groups of 15 children with learning disability. When the comparison was drawn, the students place under mnemonic training were able to remember more compared to other two teaching techniques, there was a statistically significant results.

**Mastropieri et al. (1994)** have again continued with the research to evaluate how well the mnemonic technique works for aiding children with MID in learning states and capitals. The students were given intervention of keyword mnemonics to learn the concept. Pre- test was conducted in which the students were not able to perform well. Then the technique was used to teach states and capitals of US. After the intervention, post test was conducted and the outcome was in favor of those students who were exposed to the intervention. This research supported earlier studies that revealed that mnemonics can aid learners with a variety of disabilities.

**King- Sears, Mercer and Sindelar (n.d)** wanted to see if the children with learning disability were able to use the keyword method on their own. The children were divided into groups; the groups received instructions for science learning through one of three methods separately: organized teaching; organized teaching method with instructor provided keywords, or organized teaching method with learners made keywords mnemonics. The method where teacher has provided the keywords mnemonics to learner was more effective as they were able to learn and recall the new vocabulary when taught with the same. On other hand, the other method where students were asked to make their own mnemonics and learn faced challenges in creating the mnemonics and finds this method to be less interesting.

**Richmond, Cummings and Klapp (2008)** carried out a research to determine if the students would adapt the usage of mnemonics both under individual and overall shifting states. The findings stated that among the different strategies of mnemonic methods such as keyword, peg word, loci method; the keyword mnemonic strategy was more beneficial and successful to be used for teaching or studying various concepts which may or may not be similar to the already known topics.

**Sozler (2012)** has conducted a study on mnemonic strategy training for vocabulary development with 26 students from Austrian Public Senior Secondary School. It was found out that these strategies have the useful effect in the process of vocabulary learning. They outperform the conventional listing methods in regards to acquiring new vocabulary and great memory.

**Awada (2014)** conducted a study to discover the results of instructional strategies for dyslexic middle school students, especially with regard to their ability to comprehend narrative and explanatory materials. It was found out that most of the students were able to perform well in small cooperative groups that are used for instruction in small groups and consists of matched peers working on reading activities. Contrarily, some students may require individualized support

in order to enhance their reading comprehension and skills. The results of the study has emphasized the significance of the elements and predators of reading management but also asserted that although the teachers, management have the best of the intentions, the system contains flaws.

**Koksal and Cekic (2014)** have conducted a study to know about the impact of keyword method for L2 vocabulary learning on 8<sup>th</sup> graders in comparison to rote learning with the contextual approach. The students were divided into two groups- experimental and controlled. After data analysis the outcome showed that the experimental group, which was given the intervention of keyword mnemonic approach mixed with the contextual approach, showed significantly scored higher than the other group.

**Maghy S. J (2015)** carried out research to discover the mnemonics effectiveness in mathematics teaching. The aim of the study was to find out the success of learners by using mnemonic strategies. This was two group experimental research, the class was divided into two groups one is experimental and other is controlled. Pre test were given to both groups then the intervention was given, students were taught with the mnemonic strategy and the other group that is the controlled group was not given any intervention they were taught as in regular lecture method. After the interventions the post test was conducted and it was noticed that the students who were taught by the mnemonic strategies were able to perform well as compared to the controlled group.

**Jangid, Swadia and Sharma (2016)** have researched about the effect of mnemonic instructions upon the thinking of children with learning disability. The result showed that mnemonics have the positive relevance in the development of cognitive functioning such as improving memorization, thinking, and conceptual understanding, and ability to solve problems in learning disabled child in comparison with conventional classroom teaching methods.

**Ghoneim and Elghotmy (2016)** performed an experimental study that focuses on the usage of mnemonics in improvement of EFL vocabulary of primary stage students. The study was two group pre- test and post- test experimental. It was found out from the study that the experimental group was able to perform well in comparison with the control group. The mnemonic training helps the students to arrange information and were able to collect the information more effectively, also made the process of learning interactive and fun. It was also recommended that the effectiveness of mnemonic devices in enhancing other English language abilities has to be further studied. The improvement of pupils' language abilities in the preparatory and secondary phases needs to receive more focus.

**Susana (2017)** carried out the research on the university students to know the effect of mnemonic keyword method for mastery on vocabulary. The results showed that the strategies were effective and able to enhance the vocabulary mastery of the university students through keyword method. This keyword mnemonic intervention can aid the development of a broad, powerful vocabulary in students who have special needs. It is another helpful tool that can help in expanding vocabulary through conversation and eventually in reading and writing.

**Bahrami, Izadpanah, and Bijani (2018)** wanted to know the influence of musical mnemonics on recalling of vocabulary words of Iranian learners. Sixty students who were studying English as second language, they were divided into two groups of experimental and controlled group, pre- test was conducted, then the intervention was provided to experimental group and after the completion of the intervention the post test was given to both the groups to compare the outcome of the tests. From the data analysis the result was drawn that the students who were getting the intervention of musical mnemonics performed well than the other group, the students were able to remember the words which were taught through the intervention. The comprehending ability of the learners was also enhanced. This research indicates that the mnemonic strategies or methods make possible to learn new vocabulary words. Also, music creates the connection through known notes, rhythm of music with the unknown information that is meant to be learned.

**Farrokh, Vaezi, and Ghadimi (2021)** conducted a research to know the effect to visual mnemonics strategies on vocabulary of Iranian English students. They used the method of quasi experimental design to know the cause and effect of visual mnemonics and vocabulary. The participants were divided into four groups having two groups of experiment and two groups of control. 8 sessions were conducted in which the experimental group received the intervention of visual mnemonics for vocabulary learning on the other hand, the traditional strategy of teaching the same was given to the controlled group. The outcome of the test was in favor of the group which received the teaching of vocabulary through the visual mnemonics. The images which were used to teach vocabulary proved to be effective in creating the link between the known and unknown words in a significant way.

Hill (2022) wants to research how learners are able to obtain and implement that knowledge, and also know about what strategy could be used by the teachers or instructors in making the learners obtain and put in application the knowledge that has been provided to them. The research was conducted up on the students of university level in Wuhan, China to find out the function of different mnemonics in the process of learning and how much these strategies are enhancing the learner's ability to maintain the learnt vocabulary in English as a second language. The outcome of this research came out that the techniques of mnemonic to teach English as second language proved to be effective and learners found this method more interesting tool for studying English vocabulary words.

### III. CONCLUSION

The above review of related literature clearly revealed that mnemonic strategies are combination of different strategies, these strategies found to be effective for learning new or unknown information by connecting it with the already learnt concept. These strategies could be applied over different concepts and with students with special needs. As, from the above researches it has been found out that mnemonics prove to be effective for students to learn new vocabulary, students found this an interesting way of learning new concept and were able to maintain the concept for long term. By employing mnemonics to help students learn, remember, and recall concepts presented in subject areas, teachers can give struggling learners extra chances to understand topics. Use of images, music, keywords, peg words have motivated the learners and teachers to shift from the traditional way of teaching towards interactive methods. These strategies have assisted the learners to keep, generalize, and recall the information which they might have previously forgotten. Students now have a tool that they can use with different content areas. These methods have raised the performance level of students with different needs. Mnemonic techniques have enhanced the capacity of learners who have learning difficulty, MID to retain the learning concept and recall it later when needed. Mnemonics are a valuable instructional approach due to its many advantages.

### REFERENCES

1. Access Center (2006). Using Mnemonic Instruction to Facilitate Access to the General Education Curriculum. Retrieved from <https://www.ldonline.org/ld-topics/teaching-instruction/using-mnemonic-instruction-facilitate-access-general-education>
2. Bakken, J. (2017, July 28). Mnemonic Strategies: Helping Students with Intellectual and Developmental Disabilities Remember Important Information. Global Journal of Intellectual & Developmental Disabilities. Retrieved from <https://juniperpublishers.com/gjidd/pdf/GJIDD.MS.ID.555587.pdf>
3. Fairbrother, M & Whitley. (2014, May 6). Mnemonics. Retrieved from [LDAOeng. https://www.ldatschool.ca/mnemonics/](https://www.ldatschool.ca/mnemonics/)
4. Boon, R. & Spencer, V. (2017, April 25). Mnemonic Strategies to Help Students Succeed in School. The Brookes Blog. Retrieved from <https://blog.brookespublishing.com/5-mnemonic-strategies-to-help-students-succeed-in-school/>
5. "Specific Learning Disability: Definition, Examples, Types." (n.d.). WeCapable.com. Retrieved November 14, 2022 from <https://wecapable.com/specific-learning-disability-definition-examples-types/>
6. Peterson, T. (2022, January 17). What Causes Learning Disabilities?, HealthyPlace. Retrieved from <https://www.healthyplace.com/parenting/learning-disabilities/what-causes-learning-disabilities>
7. Amiryousefi, M & Ketabi, S. (2011, January). Mnemonic Instruction: A Way to Boost Vocabulary Learning and Recall. Journal of Language Teaching and Research, Vol. 2, No. 1, pp. 178-182, Retrieved from <https://www.academypublication.com/issues/past/jltr/vol02/01/23.pdf>
8. Weiser, B. (2013, September). Effective Vocabulary Instruction for Kindergarten to 12th Grade Students Experiencing Learning Disabilities. Council for Learning Disabilities. Retrieved from <https://council-for-learning-disabilities.org/wp-content/uploads/2013/11/Vocabulary-Word-2013.pdf>
9. J, M. (2015, April). Effectiveness of Mnemonic on Achievement of Students in Mathematics at Highschool Level. International Journal of Modern Engineering Research, Vol. 5, Iss. 4. Retrieved from [https://www.academia.edu/16397887/Effectiveness\\_of\\_Mnemonics\\_on\\_Achievement\\_of\\_Students\\_in\\_Mathematics\\_at\\_Highschool\\_Level](https://www.academia.edu/16397887/Effectiveness_of_Mnemonics_on_Achievement_of_Students_in_Mathematics_at_Highschool_Level)
10. Jangid, N., Swadia, H., Sharma D. (2016, July) Effectiveness of Mnemonic Instructions on the Thinking Strategies of Children with Learning Disability. Journal of Disability Management and Rehabilitation. Retrieved from <https://www.jdmronline.org/index.php/jdmr/article/view/19/72>



11. Richmond, A. S., Cummings, R., & Klapp, M. (2008). Transfer of the method of loci, pegword, and keyword mnemonics in the 8th grade classroom. *Researcher*, 21(2), 1-13. Retrieved from [https://www.academia.edu/21517020/Transfer\\_of\\_the\\_Method\\_of\\_Loci\\_Pegword\\_and\\_Keyword\\_Mnemonic\\_s\\_in\\_the\\_Eighth\\_Grade\\_Classroom](https://www.academia.edu/21517020/Transfer_of_the_Method_of_Loci_Pegword_and_Keyword_Mnemonic_s_in_the_Eighth_Grade_Classroom)
12. Ghoneim, N. M. M., Elghotmy, H. E. A. (2016) Using Mnemonic Strategies to Improve Primary Stage Pupils' EFL Vocabulary Learning and Retention Skills. *Research Journal of English Language and Literature*, Vol. 4, Issue 4. Retrieved from <https://files.eric.ed.gov/fulltext/ED598705.pdf>
13. Susana, I. (2017). Enhancing for Vocabulary Mastery through Mnemonic Keyword Method to the University Students. *English Education: Journal of English Teaching and Research*, 2(1), 8. Retrieved from <https://doi.org/10.29407/jetar.v2i1.725>
14. Delong, V. W. (1984). A Keyword Approach in Teaching Concrete Constructs to Learning Disabled and Non-Learning-Disabled Children. (Doctoral dissertation, Texas A&M University). University Microfilms International.
15. Nelson, P. M., Burns, M. K., Kanive, R., Ysseldyke, J. E. (2013, August 21). Comparison of a Math Fact Rehearsal and a Mnemonic Strategy Approach for Improving Fact Fluency. *Journal of School Psychology* 51 (2013) 659- 667. Retrieved from <https://doi.org/10.1016/j.jsp.2013.08.003>
16. Sozler, S. (2012). The Effect of Memory Training on Vocabulary Development of Austrian Secondary School Students. *Social and Behavioural Sciences*, Vol. 46, (2012), Pages 1348- 1352. Retrieved from <https://doi.org/10.1016/j.sbspro.2012.05.300>
17. Awada, G. (2014). Instructional Strategies for Enhancing Learning Disabled Students' Reading Comprehension and Comprehension Test Performance. (Doctoral dissertation, Rovira I Virgili University).
18. Koksai, O., Cekic, A. (2014). The Effect of the Mnemonic Keyworh Method on 8th Grades' L2 Vocabulary Learning. *Journal of Social Science Publications*, Vol. 12, Issn 1313- 2571, 2014. Retrieved from [https://www.academia.edu/12696225/The\\_Effects\\_of\\_the\\_Mnemonic\\_Keyword\\_Method\\_on\\_8th\\_Graders\\_L2\\_Vocabulary\\_Learning](https://www.academia.edu/12696225/The_Effects_of_the_Mnemonic_Keyword_Method_on_8th_Graders_L2_Vocabulary_Learning)



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