

Efficacy Of Mnemonic Techniques In Enhancing History Achievement Among IX Standard Students

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ABSTRACT

To improve history achievement among ninth-standard students, the researcher introduced mnemonic techniques as an innovative practice in history education. Employing a non-randomized single-group quasi-experimental design, the researcher utilized purposive sampling to select a government higher secondary school, enrolling 40 ninth-grade students, as the study sample. The researcher then developed and standardized an achievement test. Various mnemonic strategies such as acronyms, image associations, loci method, chunking, rhymes, and concept mapping were employed for the selected content. The researcher personally conducted seven teaching sessions based on mnemonic techniques. Pre-test and post-test scores were compared, revealing a significant improvement in history performance among ninth-grade students compared to the pre-test. Thus, mnemonic approaches prove beneficial when students possess some understanding of the information to be learned and need to organize it for efficient access.

Key words: History achievement and Mnemonic Techniques,

INTRODUCTION

The educating of History reinforces the mental capacities of students by giving them openings for judicious considering. It gives understudies the opportunity to consider the past and get it that human exercises are unusual and complex. Mental aide methods can incorporate tunes, sonnets, rhymes, traces, pictures, and acronyms. History ought to be instructed to give understudies concepts of time, space, and society, connecting the display with the past, the neighbourhood with the removed, and the individual life with national life, linking lives and societies across time and space. Memory aides provide meaning to something standard, making it more vital for recall. The preferences of memory aides are two-fold: first, they help encode information in long-term memory, and second, they assist in retrieving information from long-term memory. Memory aides serve nearly like a fishing line.

NEED AND SIGNIFICANCE OF THE STUDY

History should be taught to provide students with an understanding of time, space, and society, bridging the present with the past and connecting individuals across different times and places. The traditional method of education often focuses on rote memorization, which may not suit every student's learning style. Instead, mnemonic techniques, as highlighted by Nelson and Toxophilite (1972) and Morris and Cook (1978), offer a more effective approach. These techniques use memorable associations to aid in learning and recall, promoting deeper understanding.

Additionally, mnemonic instruction, as described by Jurowski, Jurowska, and Krzeczowska (2015), emphasizes long-term retention and enhances learning through the use of memory aids. Such strategies not only improve memory but also make the learning process more engaging, as noted by Solso (2005).

Furthermore, academic achievement in history, as discussed by Uwaleke and Offiah (2013), is measured by a student's performance on assessments. This reflects the effectiveness of the educational program in imparting knowledge and skills over time. Integrating mnemonic techniques into history education can enhance students' understanding and retention of key concepts, contributing to their academic success.

STATEMENT OF THE PROBLEM

In the realm of social science education, the traditional teaching method typically involved straightforward verbal recitation. In this conventional approach, students would spend much of their time sitting quietly, listening as each student in turn recited their lesson until everyone had been called upon. To enhance achievement in history for ninth-grade students, the researcher introduced a mnemonic strategy as an innovative teaching practice. The study aimed to assess how effective the mnemonic approach could be in improving history achievement among ninth-grade students. This research endeavor was undertaken to investigate the potential impact of the mnemonic strategy on history performance among ninth-grade students.

OBJECTIVES

1. Develop and finalize a mnemonic teaching procedure for history instruction among ninth-grade students.
2. Design an achievement test to assess the initial knowledge level and evaluate the impact of using mnemonic strategies in history education.
3. Determine the baseline level of achievement in history among ninth-grade students.
4. Implement the Memory Helper technique to facilitate students' learning of historical concepts.
5. Evaluate the effectiveness of the Memory Helper methodology in improving historical achievement.

RESEARCH QUESTIONS:

1. What is the initial level of History achievement of the IX standard students before the implementation of the Mnemonics strategy in teaching History?
2. How much does the Mnemonic strategy improve the history achievement among the IX standard students?
3. What is the significant difference in the mean score of History achievement between the pre-test and post-test scores among IX standard students?

HYPOTHESIS:

1. There is a significant difference in the mean score of History achievement between the pre-test and post-test scores among IX standard students.

METHODOLOGY:

A. Method of study: The study employed a pre-test and post-test non-randomized single-group quasi-experimental design.

B. Population and Sample for the study: The researcher selected standard IX students from Namakkal District in Tamil Nadu as the population and used purposive sampling to select one government higher secondary school. A sample of 40 students studying in standard IX was selected.

C. Selection of the content: The research focused on the III unit of IX standard Tamil medium social science subject, covering topics such as Early Tamil Society and Culture.

D. Mnemonic strategy: Mnemonics were prepared in Tamil language for the chosen content using various methods such as acronyms, image mnemonics, connection mnemonics, loci method, chunking, rhymes, and mind map methods.

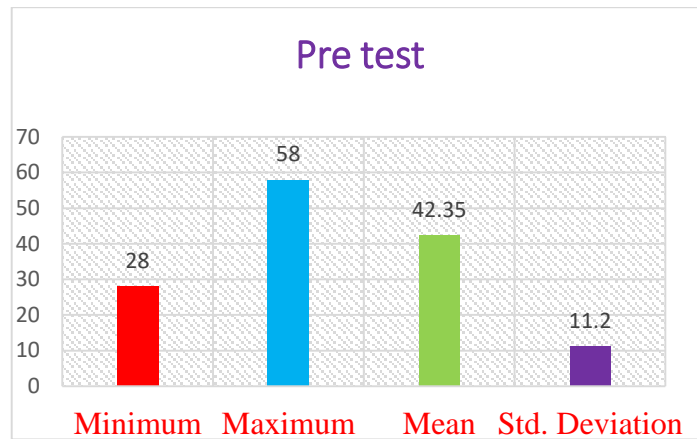
E. Validity of the Mnemonics Strategy: The developed mnemonic strategy was validated by professors in the Department of Education, a lecturer in the DIET, and five graduate social science teachers teaching at the high school level in Namakkal District.

F. Tools for the study: An achievement test was constructed with 40 multiple-choice questions after item analysis. The split-half method was used to determine the reliability of the tool, yielding an R value of 0.87.

ANALYSIS AND INTERPRETATION OF THE DATA

Table 1 and Graph 1 illustrate the Minimum, Maximum, Mean, and Standard Deviation in the History achievement of IX standard students in the pre-test

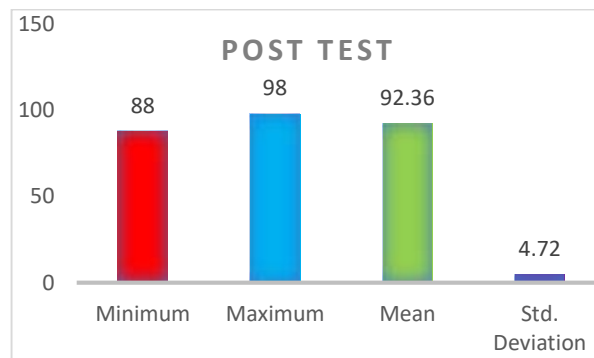
Test	N	Minimum	Maximum	Mean	Std. Deviation
Pre test	40	28	58.00	42.35	11.20



- In the pre-test, the minimum score is 28, and the maximum is 58.
- The mean and standard deviation are 42.35 and 11.20, respectively.

Table 2 & graph 2 showing the Minimum, Maximum Mean and Standard Deviation in the History achievement of the IX standard students in the Post test

Test	N	Minimum	Maximum	Mean	Std. Deviation
Post test	40	88	98	92.36	4.72



- ❖ In the post-test, the minimum score is 88 and the Maximum is 98.
- ❖ The mean and standard deviation are 92.36 and 4.72 respectively.

Table 3 and Graph 3 demonstrate the Minimum, Maximum, Mean, and Standard Deviation between the Pre-Test and Post-Test of History Achievement among IX Standard Students.

Test	N	Minimum	Maximum	Mean	Std. Deviation
Pre test	40	28	58	42.35	11.20
Post test	40	88	98	92.36	4.72

- The minimum score in the pre-test (28) has increased to 88 in the post-test.
- The maximum score in the pre-test (58) has increased to 98 in the post-test.
- The mean value of the pre-test has increased from 42.35 to 92.36 in the post-test, with standard deviations of 11.20 and 4.72, respectively.

TESTING THE HYPOTHESIS OF THE STUDY

There is a significant difference in the mean score of History achievement between pre-test and post-test score among IX standard students.

Table 5 presents the t-test results, indicating a significant improvement.

Test	N	Mean	SD	t value	P value	Result
Pre test	40	42.35	11.20	17.36	0.00	Sig
Post test	40	92.36	4.72			

The above Table 5 shows that the calculated P-value of 0.00 is less than 0.01, indicating no significance at the 0.01 level. Therefore, the formulated hypothesis, "There is a significant difference in the mean score of History achievement between pre-test and post-test score among IX standard students," is accepted.

Inference: The mean score of the pre-test, 42.35, increased to 92.36 in the post-test, with standard deviations of 11.20 and 4.72, respectively, suggesting a notable improvement.

Findings: There is indeed a significant difference in the mean score of History achievement between the pre-test and post-test among IX standard students.

FINDINGS

1. The pre-test scores range from 28 to 58, with a mean of 42.35 and a standard deviation of 11.20.
2. Post-test scores range from 88 to 98, with a mean of 92.36 and a standard deviation of 4.72.
3. The minimum and maximum pre-test scores increased to 88 and 98, respectively, in the post-test.
4. The mean value increased from 42.35 to 92.36 in the post-test, with standard deviations of 11.20 and 4.72, respectively.
5. There is a significant difference in the mean score of History achievement between pre-test and post-test among IX standard students.

DISCUSSION OF THE STUDY

The pre-test scores' range and measures of central tendency provide insight into students' initial performance levels. Post-test results demonstrate a substantial improvement, indicating the effectiveness of applied educational interventions. The shift in minimum and maximum scores from pre-test to post-test signifies the intervention's impact on enhancing student achievement. The significant increase in the mean score from pre-test to post-test, coupled with reduced standard deviations, indicates improved overall performance and consistency within the student group. The observed significant difference in history achievement scores between pre-test and post-test underscores the efficacy of implemented interventions.

These findings collectively highlight the positive influence of tailored instructional approaches, such as mnemonic techniques, on students' academic performance in history. It reinforces the importance of employing effective teaching strategies to foster enhanced learning outcomes among students. Furthermore, a supportive study by Nelson and Toxophilite (1972) and Morris and Cook (1978), emphasized the positive impact of mnemonic techniques on students' academic achievement, reinforcing the importance of tailored instructional approaches for enhanced learning outcomes.

EDUCATIONAL IMPLICATIONS

The study suggests significant improvement in History performance among IX standard students compared to the pre-test. Mnemonic strategies facilitate efficient access to ordered information, aiding memory recall. Parents and teachers should utilize mnemonic techniques to enhance students' memory retention, especially in eLearning contexts. Incorporating mnemonic techniques, as supported by various studies can enhance students' academic performance by simplifying complex concepts and facilitating effective learning. Teachers can adopt personalized instructional approaches, such as mnemonic strategies, to cater to diverse learning needs and promote better retention of subject matter. The effectiveness of mnemonics in improving academic achievement, as observed in the study on social studies underscores the importance of subject-specific application of mnemonic techniques to optimize learning outcomes. Studies, such as the one focusing on vocabulary acquisition in history highlight the potential of mnemonic teaching strategies in enhancing vocabulary acquisition and retention, thereby contributing to overall academic success. Incorporating mnemonic strategies can benefit students with learning disabilities, promoting inclusive education practices and fostering academic success among all learners.

CONCLUSION

The conclusion of the study emphasizes the efficacy of mnemonic techniques in enhancing students' academic achievement, particularly in the context of history education among ninth-grade students. Through the implementation of mnemonic teaching strategies, a significant improvement in history achievement was observed, as evidenced by the notable increase in mean scores between pre-tests and post-tests. This underscores the importance of utilizing mnemonic strategies as effective instructional tools to facilitate learning and retention of historical concepts among students. The findings support the notion that tailored instructional approaches, such as mnemonic techniques, play a crucial role in fostering improved academic outcomes and highlighting the need for innovative teaching methodologies to enhance students' learning experiences.

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