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## WORD MAPPING TECHNIQUE: A PEDAGOGICAL TOOL FOR TEACHING STUDENTS' VOCABULARY SKILLS

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### Abstract

**Aims:** This study aimed to determine the effectiveness of the Word Mapping Technique as a pedagogical tool in improving the vocabulary skills of Grade 8 students in Filipino. Specifically, it sought to determine the vocabulary performance of the students before and after the implementation of the intervention and to identify whether significant differences existed between the control and experimental groups.

**Study Design:** The study employed a quantitative approach using a quasi-experimental pretest-posttest control group research design.

**Place and Duration of the Study:** The study was conducted at Nueva Gracia National High School, Nueva Gracia, Loreto, Agusan del Sur during the School Year 2025–2026.

**Methodology:** The respondents of the study consisted of sixty-seven (67) Grade 8 students from the Molave and Narra sections. Thirty-five (35) students were assigned to the control group, while thirty-two (32) students belonged to the experimental group. A researcher-made vocabulary test was utilized as the primary instrument for data gathering. The control group was taught using the traditional method of instruction, whereas the experimental group was exposed to the Word Mapping Technique. Mean, class proficiency level, independent samples *t*-test, and dependent samples *t*-test were used to analyze the gathered data.

**Results:** The findings revealed that both groups had comparable vocabulary proficiency before the intervention. However, after the implementation of the Word Mapping Technique, the experimental group obtained a higher posttest mean score (23.72) compared to the control group (20.40). The results further showed a significant difference between the posttest scores of the two groups ( $p < .001$ ), indicating that the Word Mapping Technique was more effective in improving students' vocabulary skills. Likewise, the experimental group demonstrated a significant improvement between the pretest and posttest scores after exposure to the intervention.

**Conclusion:** Based on the findings, the study concluded that the Word Mapping Technique is an effective instructional strategy in enhancing students' vocabulary skills. The use of visual and relational vocabulary activities increased students' comprehension, participation, and retention of unfamiliar words. Therefore, the continuous integration of the Word Mapping Technique in Filipino instruction is highly recommended.

**Keywords:** Word Mapping Technique, Vocabulary Development, Filipino, Quasi-Experimental Design, Pedagogical Strategy.

## INTRODUCTION

Vocabulary development plays a significant role in language learning because it directly affects students' reading comprehension, communication skills, and academic performance. Students with limited vocabulary often experience difficulty understanding texts, expressing ideas, and participating actively in classroom discussions. According to Nagy and Townsend (2019), inadequate vocabulary knowledge hinders students' comprehension and limits their ability to communicate effectively.

In many classrooms, traditional vocabulary instruction still focuses on memorization and repetitive activities that fail to sustain students' interest and engagement. As a result, students tend to struggle in retaining and applying newly learned words in meaningful contexts. Because of this, educators continuously seek innovative and interactive teaching strategies that can effectively improve students' vocabulary skills.

One instructional strategy that has gained attention in vocabulary instruction is the Word Mapping Technique. This strategy helps learners organize and connect words through visual representations, associations, meanings, and contextual relationships. Studies revealed that visual and relational strategies such as word mapping and semantic mapping improve students' understanding and retention of vocabulary words.

At Nueva Gracia National High School, the researcher observed that many Grade 8 students encountered difficulties in understanding unfamiliar Filipino words and applying them appropriately in communication and classroom activities. Consequently, this study was conducted to determine the effectiveness of the Word Mapping Technique as a pedagogical tool in strengthening the vocabulary skills of Grade 8 students.

## THEORETICAL BACKGROUND

This study is anchored on the Constructivist Learning Theory of Jean Piaget (1972), which emphasizes that learners actively construct knowledge through experiences, interactions, and prior understanding. According to this theory, students do not simply receive information from teachers; instead, they build meaning by connecting new knowledge to existing concepts.

The Constructivist Learning Theory is appropriate for the Word Mapping Technique because both emphasize active student participation in the learning process. Through word mapping activities, students establish relationships among words, meanings, and contexts, enabling deeper comprehension and retention of vocabulary. Studies further revealed that the Word Mapping Technique effectively enhances vocabulary learning and students' ability to use words in meaningful communication.

## RESEARCH OBJECTIVES

This study aimed to determine the effectiveness of the Word Mapping Technique in improving the vocabulary skills of Grade 8 students.

Specifically, it sought to answer the following questions:

1. What is the pretest vocabulary scores of the control and experimental groups?
2. Is there a significant difference between the pretest scores of the control and experimental groups?
3. What is the posttest vocabulary scores of the control and experimental groups?
4. Is there a significant difference between the posttest scores of the control and experimental groups?
5. Is there a significant difference between the pretest and posttest scores of the control group?
6. Is there a significant difference between the pretest and posttest scores of the experimental group?

## STATEMENT OF THE HYPOTHESES

The following null hypotheses were tested at the 0.05 level of significance:

H01: There is no significant difference between the pretest and posttest scores of the control group.

H02: There is no significant difference between the pretest and posttest scores of the experimental group.

H03: There is no significant difference between the pretest scores of the control and experimental groups.

H04: There is no significant difference between the posttest scores of the control and experimental groups.

## METHODS

### Research Design

This study utilized a quantitative research approach employing a quasi-experimental pretest-posttest control group design. The design was used to determine the effectiveness of the Word Mapping Technique in improving students' vocabulary skills by comparing the performances of the control and experimental groups before and after the intervention.

### Research Locale

The study was conducted at Nueva Gracia National High School during the School Year 2025–2026. The school is located in Barangay Nueva Gracia, Loreto, Agusan del Sur, and operates under the Department of Education.

### Research Respondents

The respondents of the study consisted of sixty-seven (67) Grade 8 students from the Molave and Narra sections. Thirty-five (35) students were assigned to the control group, while thirty-two (32) students composed the experimental group.

### Research Instrument

The researcher utilized a researcher-made vocabulary test administered as both pretest and posttest to determine the vocabulary performance of the students before and after the intervention.

### Research Procedure

Prior to the conduct of the study, the researcher secured approval from the Ethics Review Committee, the Department of Education, and the school principal. Informed consent was also obtained from the participants and their parents or guardians. After the administration of the pretest, the experimental group was exposed to the Word Mapping Technique, while the control group received traditional instruction. Following the intervention period, a posttest was administered to determine the improvement in students' vocabulary skills.

### Statistical Treatment of Data

Mean, class proficiency level, independent samples t-test, and dependent samples t-test were used to analyze the gathered data and determine the significant differences between and within groups.

## RESULTS AND DISCUSSION

**Table 1**

### Pretest Scores of the Control and Experimental Groups

Group	N	Mean	Class Proficiency Level	Interpretation
Control Group	35	15.71	60%	Nearing Mastery
Experimental Group	32	14.34	57.4%	Nearing Mastery

The findings revealed that the control group obtained a mean score of 15.71, while the experimental group obtained a mean score of 14.34 during the pretest. The results indicate that both groups had nearly similar vocabulary proficiency before the intervention and were described as nearing mastery.

**Table 2**

### Difference Between the Pretest Scores of the Control and Experimental Groups

Group	Mean	t-value	p-value	Interpretation
Control Group	15.71	1.228	0.223	Not Significant
Experimental Group	14.34			

The independent samples t-test revealed that there was no significant difference between the pretest scores of the control and experimental groups ( $p = 0.223$ ). This indicates that both groups had comparable vocabulary proficiency before the implementation of the intervention.

**Table 3**

### Posttest Scores of the Control and Experimental Groups

Group	N	Mean	Class Proficiency Level	Interpretation
Control Group	35	20.40	81.6%	Attained Mastery
Experimental Group	32	23.72	94.9%	Attained Mastery

The posttest results revealed that the experimental group obtained a higher mean score of 23.72 compared to the control group's mean score of 20.40. The findings indicate that the Word Mapping Technique positively influenced students' vocabulary development.

**Table 4**

### Difference Between the Posttest Scores of the Control and Experimental Groups

Group	Mean	t-value	p-value	Interpretation
Control Group	20.40	-7.657	< .001	Significant
Experimental Group	23.72			

The independent samples t-test showed a significant difference between the posttest scores of the two groups ( $p < .001$ ). This indicates that the Word Mapping Technique was more effective than the traditional teaching method in improving students' vocabulary skills.

**Table 5**

### Difference Between the Pretest and Posttest Scores of the Control Group

Measure	Mean	t-value	p-value	Interpretation
Pretest	15.71	-5.310	< .001	Significant
Posttest	20.40			

The results revealed a significant improvement between the pretest and posttest scores of the control group. Although no intervention was implemented, the group still demonstrated improvement in vocabulary performance.

**Table 6**

### Difference Between the Pretest and Posttest Scores of the Experimental Group

Measure	Mean	t-value	p-value	Interpretation
Pretest	14.34	-14.85	< .001	Significant
Posttest	23.72			

The findings revealed a significant difference between the pretest and posttest scores of the experimental group. The results confirm that the Word Mapping Technique effectively enhanced students' vocabulary skills after the intervention.

## CONCLUSION

Based on the findings of the study, the Word Mapping Technique was proven effective in improving the vocabulary skills of Grade 8 students. The use of visual and relational vocabulary activities enhanced students' comprehension, retention, participation, and understanding of unfamiliar words. Furthermore, the significant increase in the experimental group's posttest scores demonstrated that the Word Mapping Technique was more effective than the traditional method of vocabulary instruction.

Therefore, integrating the Word Mapping Technique in Filipino instruction may serve as an effective pedagogical strategy in strengthening students' vocabulary development and overall learning performance.

## RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are offered:

1. Filipino teachers may integrate the Word Mapping Technique in vocabulary instruction to improve students' comprehension and participation.
2. Schools may conduct seminars and training programs on innovative vocabulary teaching strategies.
3. School administrators and educational supervisors may support the implementation of interactive and visual learning strategies in language instruction.
4. Future researchers may conduct similar studies using larger samples and different grade levels to further validate the effectiveness of the Word Mapping Technique.

## CONSENT

In compliance with ethical standards, informed consent was secured from the participants and their parents or guardians prior to the conduct of the study.

## ETHICAL APPROVAL

The researcher ensured adherence to ethical standards through voluntary participation, confidentiality of data, and proper coordination with school authorities before conducting the study.

## REFERENCES

1. Jean Piaget (1972). *The Psychology of the Child*. Basic Books.
2. William Nagy, & Dianna Townsend (2019). Words as Tools: Learning Academic Vocabulary as Language Acquisition. *Reading Research Quarterly*, 54(1), 91–108.
3. Averil Coxhead (2021). *Vocabulary and English for Specific Purposes Research: Quantitative and Qualitative Perspectives*. Routledge.
4. Peter Yongqi Gu (2022). *Vocabulary Learning Strategies and Language Acquisition*. Springer Nature.
5. Donald Ary, Lucy Cheser Jacobs, & Christine Sorensen (2019). *Introduction to Research in Education*. Cengage Learning.
6. John Creswell, & J. David Creswell (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). Sage Publications.
7. Robert Marzano (2020). *Building Academic Vocabulary Teacher's Manual*. ASCD.
8. Michael Graves (2019). *The Vocabulary Book: Learning and Instruction*. Teachers College Press.
9. Isabel Beck, Margaret McKeown, & Linda Kucan (2021). *Bringing Words to Life: Robust Vocabulary Instruction* (3rd ed.). Guilford Press.
10. Department of Education (2023). *K to 12 Curriculum Guide in Filipino*. Department of Education Philippines.
11. David Ausubel (1968). *Educational Psychology: A Cognitive View*. Holt, Rinehart and Winston.
12. Donna Ogle (2018). Building Vocabulary Through Semantic Mapping and Word Association. *Journal of Educational Strategies*, 12(3), 45–53.