

## The effects of using the spelling mnemonics technique to develop English spelling skill of grade 7 students

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### abstract

This research aimed to: 1) study the effects of using the Spelling Mnemonics technique to develop English spelling skill of grade 7 students; 2) study students' satisfaction on using Spelling Mnemonics techniques.

The sample was seventh grade students from 3 different schools. There are 42 participants from Khanuwittaya school, 17 participants from Bannongphra school and 12 participants from Watsridok school. The samples are purposively selected. One-group pretest posttest design are used in this research. The duration of the experiment was one month. The instruments consisted of 1) The Spelling Mnemonics lesson plans 2) English-spelling pre-test and post-test 3) Students' satisfaction questionnaire on Spelling Mnemonics techniques.

The research results found that 1) students' test scores of 3 experimental groups after using the Spelling Mnemonics technique was significantly higher than before at the .05 level 2) students' satisfaction towards the Spelling Mnemonics techniques was at high level.

( $\bar{X}$  = 4.25 S.D.= 1.41)

**Key words:** Mnemonics technique; Spelling Mnemonics; spelling skill

## Introduction

Nowadays, English is an international language that can be used to communicate around the world. In addition, Thailand is moving towards internationalization with the opening of the ASEAN Community. For this reason, learning English is very important and useful for learners. In the Thai education system, it is clear that English has played a very important role for the Thai people. Learning English in this era is considered very popular among Thai people as following the Core Curriculum of Basic Education, B.E. 2551 (Ministry of Education, 2008), emphasizes learning English, and in today's world society, learning a foreign language is very important and necessary in everyday life because it is an important tool for communication, education, seeking knowledge and occupation, building an understanding of the global community's culture and vision, being aware of cultural diversity, and global social perspectives. This can bring friendship and cooperation with other countries, helping to develop learners to have a better understanding of themselves and others; learning and understanding differences in language and culture; traditions; thinking; society; economy; politics; having a good attitude towards using foreign languages; and using foreign languages for communication.

As a result, Thai schools and institutions have realized the importance of English and follow the Basic Education Core Curriculum of 2008 by emphasizing the teaching of English at primary, secondary and higher education levels. To provide students with a good knowledge of English, they need to practice listening, speaking, reading, and writing skills and be able to apply and adapt to use these skills correctly, effectively, and suitably in various situations in real life (Sumitra, 1991 as cited in Somchit, 2008). In order to have good skills in English, it is necessary to have students practice their English skills as much as possible. When considering the practice of all four English skills, called listening, speaking, reading and writing, there is another important skill that is the basic skill that learners have to be good at. This is called a "spelling skill. Nuanthip (2010) claimed that spelling skills, whether read aloud or written, are difficult and complex skills that can affect the four skills mentioned above. When the students make a spelling mistake, it can lead to the miscommunication of the receivers or may cause ineffective communication and also affect listening, speaking, reading, and writing skills.

From the study of students' spelling abilities, the researcher found that most students were not as good at spelling vocabulary as they could be, especially the spelling of long and complex vocabulary. Most of the reasons that affected students' spelling skills were from teachers because most teachers did not focus on teaching English spelling vocabulary to students, following the fact that teachers did not use techniques that help students memorize the spelling

of vocabulary in the teaching process. The teachers tended to focus on teaching grammar and memorizing vocabulary with an emphasis on meaning rather than spelling. As a result, students were not developed in spelling skills as they should be, and this affected their abilities in other English skills, as Wilkins (1972) said that without knowledge of grammar will lead to very little meaning. But if you don't know the vocabulary, you won't be able to convey the meaning at all. This means that learning a second language requires having sufficient vocabulary knowledge for comprehensive communication, even with limited grammar knowledge. By observing and studying the problems in the English language teaching of grade 7 students at WatSriDok (Prachaphatthana) School, Bannongphra School, and Khanuwittaya School, we found that most students at WatSriDok School (Prachaphatthana) could not spell complex or multi-letter words because of the students' lack of basic spelling skills. As a result, it affected the learning of other English skills that include learning English at a higher level. At present, this problem leads to the students at Watsridok School (Prachaphatthana) having poor results in the English O-Net examination. In the academic year 2021, grade 9 students had an average score of 26.79 on the O-net exam in English subjects, which was lower than the national average of 34.38 (National Educational Testing Institute, 2022), which was consistent with grade 9 students in Banongphra school, It found that the results of the O-Net examination in the academic year 2021 in English subjects had an average score of 29.17, which was lower than the national average of 34.38 (National Educational Testing Institute, 2022) and also at KhanuWittaya School, which is a medium-sized high school with a large number of students. Due to the results of English scores in the academic year 2021, it was found that the average score of the overall learning in English courses was 40 percent, which was lower than the criteria set by the school. According to the Academic Self-Assessment Report for the academic year 2021, it was found that Khanuwittaya School students had difficulty reading and spelling English. Students in grade 7 scored lower than the teachers' criteria (60 percent), especially in reading and spelling. Only 40% of the students met the criteria for evaluation.

For this reason, researchers studied theories and techniques to improve students' spelling skills and found that the mnemonic technique called "spelling mnemonics" is an interesting and suitable method. The Mnemonic technique is a technique that is able to connect the knowledge that students have to the knowledge that they do not know. It is a strategy used to improve memory by linking new knowledge with familiar vocabulary. Chonlada (2010) explained that memorization techniques are a good way to help students memorize vocabulary in a systematic way. In addition, teaching mnemonic techniques to students can help students retain what they have learned in their memory in the long term, and spelling mnemonics is a technique

that has learners use the information from the vocabulary they have learned to associate with the letters in the target vocabulary so that they can remember the spelling of the target vocabulary.

Therefore, the researchers are committed and interested in developing English spelling skills for grade seven students in order to improve students' spelling skills, have students achieve in English language learning efficiently, and to serve as a guideline for other researchers to develop the further teaching and learning of the English language.

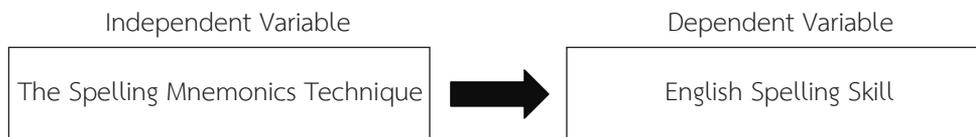
### Research objectives

The objectives of this research were:

1. To study the effects of using the Spelling Mnemonics technique to develop English spelling skill of grade 7 students.

To study the students' satisfaction on using Spelling Mnemonics techniques.

### Conceptual framework



### Research Scope

#### Population scope

The population in this study is 51 seventh grade students who are studying in the first semester of 2022 from Kanuwittaya school, Bannongphra school, and Watsridok school.

#### Variable scope

Independent Variable is the using the Spelling Mnemonics technique  
Dependent Variable is students' English spelling skill

### Content scope

Following the seventh grade English Subject curriculum, there are vocabulary topics are on Describing people, Families, and Occupations.

#### Timing scope

The timing scope is four weeks with three sessions per week, and each session takes an hour. The total time is 12 hours.

### Area scope

1. Khanuwittaya school, Kamphaengphet 62130, Thailand. 2. Banhnongphra school, Pichit, 66180, Thailand 3. Watsridok school, Phare 54130, Thailand

### Research Methodology

The study is quantitative research. The data in this study is in numbers and a statistical analysis used in it. The participants, research instruments, data collection, and data analysis are addressed respectively in this section.

### Participants

The participants in this study are a purposive sampling selected from seventh grade students who study in the first semester of 2022 from 3 different schools. There are 42 participants from Kanuwittaya school, 17 participants from Bannongphra school and 12 participants from Watsridok school.

### Research instruments

The research instruments included: The Spelling Mnemonics lesson plans, English-spelling pre-test and post-test, Students' satisfaction questionnaire on Spelling Mnemonics techniques.

#### 1. The lesson plans by using Spelling Mnemonics techniques

The researcher analyzed the content and developed Spelling Mnemonics lesson plans. Each lesson had appropriate Spelling Mnemonics techniques used. There are 3 Vocabulary topics taught in the lesson plans and each topic is from grade 7 English Subject curriculum as follow:

Topic 1: Describing People

Topic 2: Family

Topic 3: Occupations

#### 2. The English-spelling pre-test and post-test

The English-spelling pre-test and post-test consists of 20 items. Before having the Spelling Mnemonics teaching, a pre-test was given to students in order to assess their ability of English spelling skill. After the students finished the Spelling Mnemonics lessons, they were asked to complete a post-test, which had the same contents as the pre-test in order to learn whether their English spelling skill has improved.

#### 3. Students' satisfaction questionnaire on Spelling Mnemonics techniques.

The students' satisfaction questionnaire consists of 15 items which responders specify their level of agreement to a statement typically in five points: (1) Strongly disagree, (2) Disagree, (3) Neither agree nor disagree, (4) Agree, (5) Strongly agree.

## Data collection

The study was conducted using development and data collection steps as follows:

### **Step 1: The development and assessment of instrument quality had the following steps:**

1. Critical analysis and synthesis of related approaches, authentic and learning principles, learning steps, and learning curriculum for drafting and development of lesson plans, pretest, posttest, and students' satisfaction questionnaire.

2. Validity check by experts using a 5-level rating scale for lesson plans and using IOC for pretest, posttest and students' satisfaction questionnaire.

3. The effectiveness and reliability were checked by conducting a pilot study with a grade 7 class of 35 from Khanuwittaya school selected by using clustered random sampling.

### **Step 2: The implementation of the Spelling Mnemonics techniques as follows:**

1. The developed spelling mnemonics techniques were implemented in 3 different schools. There are 42 participants from Khanuwittaya school, 17 participants from Bannongphra school, and 12 participants from Watsridok school. This study employed a one-group pretest and posttest design. The implementation was done for one month with three sessions per week. Each session took an hour. A total of 12 hours was used for the implementation of experimental groups.

2. During the Spelling Mnemonics techniques implementation process, students were given vocabulary teaching. Then, students were given tasks to create their own spelling mnemonic that helps them remember a new vocabulary individually by following the steps written on the lesson plan.

### **Step 3: collecting the data of Spelling Mnemonics techniques from pretest, posttest and students' satisfaction questionnaire on Spelling Mnemonics techniques.**

Participants were asked to take a pretest, posttest before and after using Spelling Mnemonics techniques. After taking the posttest, the students had to rate their personal satisfaction level on a Spelling Mnemonics techniques satisfaction questionnaire.

## Data analysis

Scores From the pre-test and post-test, and student Students' satisfaction assessment were analyzed using descriptive statistics including mean ( $\bar{X}$ ) and standard deviation (S.D.). After that, inferential statistics, t-test analysis, was used to analyze whether test scores were statistically significant and compare the mean scores of the pre-test and the post-test of the experimental groups.

## Research Results

### 1. The result of using the Spelling Mnemonics technique to develop English spelling skill

There were two kinds of tests for the experimental group, pre-test and post-test. The following were the result of the English spelling skill pre-test and post-test that were taken before and after using Spelling Mnemonics techniques in experimental groups.

**Table1:** Comparison of students’ English-spelling skill before and after using Spelling Mnemonics techniques

Group	test	n	$\bar{x}$	S.D.	T	P
Kanuwittaya school	pre-test	42	11.05	2.08	23.00*	0.0000
	post-test	42	16.69	1.52		
Bannongphra school	pre-test	17	8.29	2.91	8.04*	0.0000
	post-test	17	12.82	3.68		
Watsridok school	pre-test	12	6.58	2.35	12.89*	0.0000
	post-test	12	12.33	2.49		

\*p < .05

The results show statistically significant improvement of English-spelling skill from the pretest to the posttest by using a t-test, paired two samples for means. The test scores of 3 experimental groups showed that the mean score of the posttest was higher than the pretest at .05 level of significance as shown in Table 1.

### 2. The results of Students’ satisfaction questionnaire on Spelling Mnemonics techniques

**Table 2 :** The average level of Students’ satisfaction questionnaire on Spelling Mnemonics techniques

Group	n	$\bar{x}$	S.D
Kanuwittaya school	42	4.11	0.31
Bannongphra school	17	4.27	0.37
Watsridok school	12	4.36	3.56
total	51	4.25	1.41

The results revealed that students' satisfaction questionnaires on Spelling Mnemonics techniques in 3 experimental groups were at high level ( $\bar{X}$  =4.25). There are  $\bar{X}$  =4.11 on Khanuwittaya school,  $\bar{X}$  = 4.27 on Banhnongphra school, and  $\bar{X}$  = 4.36 on Watsridok school.

## Discussions and Conclusions

1. The result of using the Spelling Mnemonics technique to develop English spelling skill

The result of using the Spelling Mnemonics technique to develop English spelling skills revealed that all students in 3 experimental groups had a higher mean in English spelling skills post-test than pre-test at a 0.05 level of significance. This is a reflection that using the Spelling Mnemonics technique was effective enough to develop students' English spelling skills. The findings were consistent with Negin (1978), as cited in Suda (2011), who claims that the mnemonic approach presents cues to aid the memory in remembering difficult materials. It works by relating the new information to known pieces, or something strange or nonsensical to be remembered. The findings were also consisted of the study conducted by Abbas (2016), whose study on "The Effect of Mnemonic and Mapping Techniques on L2 Vocabulary Learning" found out that the students who used pegword mnemonic could achieve the highest mean on L2 Vocabulary Learning among all the groups on both vocabulary comprehension and production tests. It is also consistent with a study on "Using Mnemonic Devices to Help College English Language Learners Improve Spelling: An Exploratory Study" conducted by Suda (2011), where the results revealed that the mnemonic strategy worked better than the traditional method in helping students retain the correct spelling over a longer period of time.

2. The results of Students' satisfaction questionnaire on Spelling Mnemonics techniques  
The students' satisfaction questionnaires on Spelling Mnemonics techniques in 3 experimental groups were at a high level ( $\bar{X}$  = 4.11,  $\bar{X}$  = 4.27 and  $\bar{X}$  = 4.36). This meant the students expressed positive responses to using Spelling Mnemonics techniques to develop their English spelling skills. The reasons for this high satisfaction and positive feedback were that the students grasped the spelling mnemonics techniques directly and enjoyed them by creating their own sentences activities to remember the new vocabulary with their own background knowledge. This led the students to feel more comfortable practicing spelling vocabulary. These research findings were consistent with the research conducted by Parima, Siros, and Ali (2018) on the topic "The Effects of Mnemonic Vocabulary Instruction on Content Vocabulary Learning of Students." claimed that the students of third-year senior high school, who used mnemonic vocabulary instruction to improve content vocabulary learning, were very satisfied with using this technique for learning

new content vocabulary. Furthermore, it's also increased student engagement and motivation toward learning new vocabulary.

Based on the results and explanation of the research, it can be concluded that using the Spelling Mnemonics technique was effective in developing students' English spelling skills. This mnemonics technique supports students in creating and using spelling mnemonics to help them spell difficult vocabulary by enhancing students' storage of new vocabulary by recalling vocabulary contained in memory (Solson, 1995 as cited in Mohammad, 2011). It was shown by all experimental groups' scores that the mean of English spelling skills post-test is higher than pre-test at 0.05 level of significance. Moreover, using the Spelling Mnemonics technique also has students satisfied positively with the given Spelling Mnemonics activities because the results of satisfaction questionnaires were at a high level. Therefore, using the Spelling Mnemonics technique is one of the Mnemonics techniques that enhance the students' learning in different ways than usual on spelling vocabulary and leads students to effectively remember the vocabulary.

### **Research Recommendations**

The study recommendations for application and future research are provided as follow:

#### 1. Recommendations for Application

1.1 Teaching English vocabulary using the Spelling Mnemonics technique is a technique that takes the students through the Creative Process. Students can learn by connecting new knowledge with knowledge and concepts that they already know and can apply to learning vocabulary through a variety of contexts.

1.2 Teachers should do research with other content that adapts to each student's level and student's interests for improving teaching English vocabulary using the Spelling Mnemonics technique.

#### 2. Recommendations for Further Research

2.1 This research focuses on learning English vocabulary by using spelling mnemonics for only grade 7 students. Therefore, further research should be conducted about learning English vocabulary using spelling mnemonics in other grades.

2.2 The results showed that the Spelling Mnemonics technique makes students remember words better and that students are excited about learning. Teachers should study other mnemonic strategies to promote positive attitudes in students towards English language learning.

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