ENHANCING SECOND-YEAR ENGLISH MAJOR STUDENTS' MEMORY OF ENGLISH PHONETIC SYMBOLS THROUGH THE CREATING MENTAL LINKAGES STRATEGY

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ABSTRACT

This research aims 1. to compare the second-year English major students' achievement of memorizing English phonetic symbols before and after learning through the creating mental linkages strategy and 2. to study the students' opinions toward using the creating mental linkages strategy. The participants were selected by a purposive random sampling method which included 29 second-year English major students in the Faculty of Education, Suan Sunandha Rajabhat University. The research instruments comprised English phonetic tests and questionnaires. The data were analyzed by the application of t-test, mean, and standard deviation. The findings revealed as follows: 1. After learning through the creating mental linkages strategy, the average scores of memorizing English phonetic symbols were higher ($\bar{x} = 27.57$) than before learning this strategy ($\bar{x} = 25.39$). 2. The opinions toward using this strategy were at the highest level ($\bar{x} = 4.63$, S.D. = 0.48).

Keywords: Memory, English Phonetic Symbols, Creating Mental Linkages Strategy

INTRODUCTION

In the realm of language education, the mastery of phonetic symbols is a fundamental skill for students majoring in English. The ability to accurately recall and apply these symbols plays a pivotal role in language learning, aiding in pronunciation, communication, and overall linguistic competence. Students majoring in English are required to study and memorize phonetic symbols as part of the Phonetics course to accurately produce speech sounds. Nevertheless, second-year English major students at the Faculty of Education, Suan Sunandha Rajabhat University, encounter challenges in recalling these symbols. Consequently, in order to bolster students' retention of English phonetic symbols, the implementation of specific learning strategies is under consideration to enhance both memorization and overall learning outcomes.

According to Chamot et al (1999) who defined learning strategies as methods or approaches that students can employ to help them complete a learning task. Furthermore, according to Wenden & Rubin (1987), students utilized language learning techniques to manage or control their learning. To improve the students' recall of phonetic symbols in English, one of the direct strategies that can be applied by students is memory strategies. Oxford (1990) conceptualizes memory strategies are strategies to help learners store in memory, the important things they hear in a new language that enables them to retrieve information from memory when they need to use it for production. It focuses mostly on the storage function because it is the initial key to learning. Furthermore, memory strategies are divided into four such as: creating mental linkages, applying images and sounds, reviewing well, and employing action Because it is a really broad strategy, this research focuses on discussing creating mental strategies.

Creating mental strategies, a cognitive technique designed to facilitate memory recall through associative thinking is the most fundamental technique and the basis of more complex memory techniques. These are sets of techniques that are helpful for forming connections in the mind such as grouping, associating/ elaborating, and placing words into context. Additionally, Zainil (2006) defines memory strategies as a set of direct strategies that have highly exotic functions to help students store and retrieve new information.

Based on the above-mentioned concepts, therefore, the researcher is interested in enhancing the second-year English major students' memory of English phonetic symbols by using the creating mental linkages strategy. Remembering phonetic symbols or phonemes is the basis of knowledge for learning accurate pronunciation.

LITERATURE REVIEWS

1. Phonetic symbols

The goal of the phonetic alphabet is to write down the speech sounds found in all human languages. One phonetic symbol corresponds to one distinct sound, according to the fundamental principle of the phonetic alphabet. Phonetic transcription is the process of writing speech sounds using phonetic alphabets. The International Phonetic Alphabet (IPA), developed by Otto Jespersen and first introduced in 1886, is the phonetic alphabet used worldwide to represent the sounds of all languages (Ronnakiat, 2011; Choticsathien, 2014). Furthermore, there are 2.4 English consonant sounds and each sound or phoneme can be pronounced variously according to the places of articulation, the manners of articulation, and voicing (Kitikanan, 2020).

Table 1: English phonemes

Place Manner	Bilabial		Labiodental	Dental	A 1	Alveolar		Postalveolar	Palatal	Velar	Glottal	Labual-Velar
Plosive	p b				t	d				k g		
Nasal	m					n				ŋ		
Fricative		f	v	θ	S	Z	ſ	3			h	
				ð								
Affricate							t∫	dз				
Approximant						Ţ						W
	_								j			
Lateral						1						

Source: Adapted from Kitikanan, 2020

2. Creating mental linkages strategy

According to Oxford (1990) memory strategies can be divided into four strategies. The first strategy is creating mental linkages. There are three kinds of strategies related to creating mental linkages, they are: grouping, associating/elaborating, and placing new words into a context. Grouping involves classifying or reclassifying what is heard into meaningful groups. Associating/elaborating is a strategy that can encourage the students to associate the

information from the text with familiar concepts already in memory. Then, placing new words into a context is a strategy to place new words or expressions that have been heard in a meaningful context

CONCEPTUAL FRAMEWORK

Creating mental linkages strategy:

- 1. Grouping
- 2. Associating/elaborating
- 3. Placing new words into a context



- 1. Students' achievement of memorizing English phonetic symbols
- 2. Students' opinions toward creating mental linkages strategies

OBJECTIVES

- 1. To compare the second-year English major students' achievement of memorizing English phonetic symbols before and after learning through the creating mental linkages strategy
 - 2. To study the students' opinions toward using the creating mental linkages strategy.

METHODOLOGY

Participants

The participants in this study were selected by a purposive random sampling method which included 29 second-year English major students, Faculty of Education, Suan Sunandha Rajabhat University.

Research instruments

The research instruments used in this study comprised English phonetic tests and questionnaires.

Data collection

- 1. Clarified the purpose and preliminary agreement with the sample students.
- 2. In the course of Phonetics and Phonology for Teachers of English, students studied the phonetic symbols or phonemes based on their places and manners of articulation
- 3. Utilize the strategy of creating mental linkages, which consists of (1) grouping, (2) associating/ elaborating, and (3) placing new words into a context for learning activities on phonetics symbols.

(1) Grouping

The students can apply grouping in learning phonetic symbols by classifying the phonemes based on places or manners of articulation. For example:

The students write the phonemes related to plosive manner such as /p/, /b/, /t/, /d/, /k/, /g/. And for manner of nasal, they write the phonemes /m/, /n/, /n/

(2) Associating/elaborating

The students can apply to associate by connecting what they listen to with the previously learned definition. For example:

When students listen to the word "plosive", they consider its manner of articulation, where the speech organs touch each other completely and then release the air through the

mouth. Based on this definition, they identify phonemes or phonetic symbols that share a similar manner in producing sounds, like plosive.

(3) Placing new words into a context

Students can apply by placing new words that have been heard into a meaningful context as a way to remember them. For example:

The students write the words that begin with each phoneme or phonetic symbol and then put words into sentences.

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The phonemes in manner "plosive" are /p/, /b/, /t/, /d/, /k/, /g/
/p/ = Peter /b/ = buy /t/, /d/ = toy doll /k/ = kite /g/ = guitar

The sentence for manner "plosive" is "Peter buys a toy doll, a kite, and a guitar."
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The phonemes in manner "nasal" are /m/, /n/, /ŋ/
/m/ = Mom /n/ = nose /ŋ/= long
The sentence for manner "nasal" is "Mom's nose is long."
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From this strategy, the students can remember the phonemes or phonetic symbols in each manner from the contexts or sentences they created.

- 4. Students completed the questionnaires about their opinions regarding the strategy of creating mental linkages.
 - 5. The data were collected for statistical analysis.

Statistics

The data were analyzed by the application of t-test, mean (\overline{x}) , and standard deviation (S.D.)

RESULTS

1. Students' achievement of memorizing English phonetic symbols before and after learning through the creating mental linkages strategy

Table 1 Average scores of memorizing English phonetic symbols before and after learning through the creating mental linkages strategy

Testing	N	$\overline{\mathbf{X}}$	S.D.	Df	T	Sig.
Before using the creating	29	27.57	1.32			
mental linkages strategy				27	14.076	5.92
After using the creating	29	25.39	1.34	- 21	14.076	
mental linkages strategy						

p < 0.05

From Table 1, after learning through the creating mental linkages strategy, the average scores of memorizing English phonetic symbols were higher ($\bar{x} = 27.57$) than before learning this strategy ($\bar{x} = 25.39$) with a statistically insignificant difference.

2. Students' opinions toward using the creating mental linkages strategy

Table 2 Mean and standard deviation of students' opinions toward using the creating mental linkages strategy

Content	Level of opinion				
Content	$\overline{\mathbf{X}}$	S.D.	Meaning		
1. This strategy encourages students to engage in	4.55	0.51	Highest		
associative					
thinking.					
2. This strategy assists students in accurately memorizing	4.79	0.41	Highest		
the phonetic symbols and their positions of them.					
3. This strategy triggers memory recall.	4.69	0.47	Highest		
4. This strategy makes the learning process more interesting	4.62	0.49	Highest		
and					
enjoyable.					
5. This strategy improves memory retention	4.51	0.51	Highest		
Total	4.63	0.48	Highest		

From Table 2, the findings showed that students' opinions toward using the creating mental linkages strategy were at the highest level (\overline{x} = 4.63, S.D. = 0.48). When considering each item, it revealed that all items were at the highest level. The highest average item was "This strategy assists students in accurately memorizing the phonetic symbols and their positions." (\overline{x} = 4.79, S.D. = 0.41). Next, "This strategy triggers memory recall." (\overline{x} = 4.69, S.D. = 0.47). The last, "This strategy makes the learning process more interesting and enjoyable." (\overline{x} = 4.67, S.D. = 0.49).

DISCUSSION

The conclusion and discussion were illustrated based on the objectives as follows:

1. Students' achievement of memorizing English phonetic symbols

After learning through the creating mental linkages strategy, the average scores of memorizing English phonetic symbols were higher ($\bar{x} = 27.57$) than before learning this strategy ($\bar{x} = 25.39$). From the findings, it can be assumed that the creating mental linkages strategy aided students' remembering the phonetic symbols. This is because creating mental linkages strategy consists of three kinds of strategies: grouping, associating/elaborating, and placing new words into a context. When learning phonetic symbols, students use grouping by categorizing the phonemes according to their places or manners of articulation. Moreover, when students hear the word "plosive," they identify phonemes or phonetic symbols that produce sounds in a similar way, such as plosive. For the last strategy, the students construct sentences using the words from each phoneme. The students can retain the phonemes or phonetic symbols in each manner from the contexts or sentences they created by using this strategy. The students have a good awareness of applying the strategies and know the importance of it so that the strategies enable them to memorize the phonetic symbols quickly. This finding line with Oxford (1990) who explains that the grouping strategy is useful for students to memorize information. It is consistent with Nithiwaraphakun et al., (2020) who developed an innovation for improving the pronunciation of English alphabet sounds for freshmen year students at PNRU and to study the outcomes of students' alphabet sound pronunciation. The results of PNRU students' improvement in pronouncing the sounds of English alphabets after learning was higher than that before learning at a statistical significance of 0.5.

2. Students' opinions toward using the creating mental linkages strategy

The findings showed that students' opinions toward using the creating mental linkages strategy were at the highest level. It revealed that this strategy assists students in accurately memorizing the phonetic symbols and their positions. Furthermore, the strategy triggers memory recall and makes the learning process more interesting and enjoyable. It is due to creating mental linkages strategy encouraging students to remember the phonemes or phonetic symbols by using grouping, associating/elaborating, and placing new words into a context in their learning activities. Additionally, these strategies encouraged them to pronounce and communicate in their daily life. Moreover, students enjoyed various activities based on these strategies as each one encouraged them to create and brainstorm with their friends. It is in line with Unnanantn (2019) who claimed that the features of the format, which emphasize activities and practice, can promote real-life communication skills. Furthermore, it is consistent with Pichayasupanun (2022) who investigated the students' satisfaction with the learning strategy of memorizing vocabulary through the video clip. The result showed that the learners were greatly satisfied with learning via the video activity which was at the level of 4.69.

As seen from the findings obtained in the study conducted about enhancing second-year English major students' memory of English phonetic symbols through the creating mental linkages strategy, the strategy contributed to the improvement of students' ability to recall and retain English phonetic symbols. The findings above contribute valuable insights to educational strategies aimed at strengthening students' memory of English phonetic symbols, which affect the study of related fields in phonetics of students. The impact of this research extends beyond the academic realm, influencing pedagogical practices and strategies for teaching English phonetics. By demonstrating the efficacy of the "Creating Mental Linkages" strategy, educators can consider incorporating such approaches into their teaching methodologies. This research contributes to the ongoing discourse on enhancing memory retention in language learning, providing valuable insights for educators.

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