THE DEVELOPMENT OF CHINESE PHONETIC ALPHABETS PRONUNCIATION ACHIEVEMENT BY USING GAME-BASED LEARNING OF GRADE 7 STUDENTS

Maychaya Leawboongim*

*Demonstration School of Suan Sunandha Rajabhat University (Secondary), Bangkok 10300, Thailand E-mail: maychaya.le@ssru.ac.th

ABSTRACTS

The purpose of this research was to study the achievement, Chinese phonetic alphabets pronunciation using a game-based learning of grade 7 students. The samples included thirty-one students in the first semester of 2023 academic year at Demonstration School of Suan Sunandha Rajabhat University. The duration of the teaching period were eighteen hours. Using the purposive sampling method and a one-group pretest-posttest design. The instruments used in the research Chinese Phonetic Alphabets Pronunciation includes: 1) the four learning activities about pronunciation of consonants, vowel pronunciation, tonal pronunciation and tonal, and inflection Pronunciation of consonant combinations vowels and tones, and 2) the Chinese phonetic alphabets pronunciation test. The data were analyzed using a t-test for the dependent samples and a t-test for one sample. The research finding revealed which considered individually, it was found that all student's score increased. This shows that students who practice pronouncing Chinese phonetic alphabets characters using a game-based learning management model have a higher ability to pronounce correctly and clearly.

Keywords: Chinese Phonetic Alphabets, Pronunciation, Game-Based Learning

INTRODUCTION

Mandarin Chinese is an incredibly important language in today's world. It is the second most widely spoken language, with over 1,372 million people speaking this language. China, with its rich civilization, has contributed immensely to thought, belief, philosophy, and history. Not only has China made significant progress in scientific and technological knowledge, but it has also made rapid strides in academic studies and economic growth. As a result, Mandarin has become one of the five major languages of the United Nations, emphasizing its significance in the global arena.

In today's society, it's widely recognized that learning a foreign language is essential. Creating citizenship for children and young people in current to become adults is an important force in the development of a prosperous nation equal to many civilized countries (Somkiat Korbuakaew, 2020:1). Pronunciation is a crucial skill to master, especially for introductory Chinese language students who need to learn the Chinese phonetic alphabets. However, pronunciation can be a challenging task, as it requires correct enunciation of consonants, vowels, and tones. When Chinese speech is hindered by unclear or incorrect pronunciation, conveying meaning accurately becomes difficult, and misunderstandings are likely to occur. Therefore, it's important to focus on mastering proper pronunciation in order to communicate effectively in Chinese.

Based on the feedback from Chinese language teaching management, it has been observed that some students struggle to pronounce Chinese phonetic alphabet correctly. Specifically, in grade 7 room 3, out of 31 students, 11 students had difficulties with Chinese

phonetics alphabets. To address this issue and support better learning outcomes, the researcher aims to study the effectiveness of a game-based learning management model in improving Chinese phonetic alphabets pronunciation skills among students.

Objectives

To develop of Chinese phonetic alphabets pronunciation achievement by Using Game-Based Learning of Grade 7 Students at Demonstration School of Suan Sunandha Rajabhat University.

Research Hypothesis

To study the improvement of Chinese phonetic alphabets pronunciation after organizing teaching by using a game-based learning management model of Grade 7 Students at Demonstration School of Suan Sunandha Rajabhat University.

METHODOLOGY

Population and Sample

- 1. Population: Grade 7 Students in the first semester of 2023 academic year at Demonstration School of Suan Sunandha Rajabhat University.
- 2. Samples: The sample consisted of thirty-one grade 7 students from room 3 in the first semester of the 2023 academic year at Demonstration School of Suan Sunandha Rajabhat University.

Research instruments

The instruments used in the research Chinese Phonetic Alphabets Pronunciation includes:

1) the four learning activities about the pronunciation of consonants, vowel, tonal pronunciation, and inflection pronunciation of consonant combinations vowels and tones, and 2) the Chinese phonetic alphabets pronunciation test.

Research Methodology

The researcher aims to assess the learning outcomes of each student individually. To achieve this, the student data is analyzed on an individual basis. The progress of learning outcomes is evaluated by comparing pre-and post-study scores. A game-based learning management model is used, which has predefined parameters for evaluation.

$$X^{2}$$
 = Pretest Scores

 X^{2} = Posttest Scores

 X^{2} - X^{1} = Individual Improvement Scores

The researcher spent eighteen hours collecting data during the first semester of the 2023 academic year.

RESEARCH METHODS

The following are the steps to be taken to improve Chinese phonetic alphabets pronunciation skills of students:

- 1. Start by administering a test before the study. The test will involve pronouncing the Chinese phonetic alphabet using a game-based learning management model. This will help in evaluating the level of Chinese phonetic alphabets pronunciation knowledge of students.
- 2. Practice Chinese phonetic alphabets pronunciation skills by starting with consonants, vowels, and tones. The next step is to mix consonants, vowels, and tones in all four activities. Each activity will be practiced once a week, for one class period, which is 50 minutes, with a single instructor for every activity.
- 3. After the study period, administer a post-test. The post-test will involve giving Chinese phonetic alphabets pronunciation using a game-based learning management model. This will be used to compare the achievement before and after participating in the activity.

RESEARCH RESULTS

The research was conducted to study the pronunciation achievement of Chinese phonetic alphabets pronunciation achievement by using game-based learning of grade 7 students. The study had 11 participants, and the findings are summarized below:

Table 1. Pronunciation of consonants

No.	Pretest Scores	Posttest Pretest Scores	Individual Improvement Scores
	(X)	(X^2)	$(X^2 - X^1)$
1	9	17	+8
2	12	20	+8
3	9	19	+10
4	9	15	+6
5	13	20	+7
6	11	19	+8
7	15	22	+7
8	12	22	+10
9	8	19	+11
10	15	21	+6
11	12	20	+8
Totals	125	214	+89
Average	11.36	19.45	+8.09
score			

From table 1, in terms of the pronunciation of consonants, the study found that the average score before learning was 11.36, while the average score after learning was 19.45. This indicates an improvement of 8.09 points, with individual improvement scores ranging from 6 to 11 points. The results suggest that the game-based learning management model used in teaching management can effectively enhance learners' pronunciation of Chinese phonetic alphabets.

Table 2. Pronunciation of vowels

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No.	Pretest Scores	Posttest Pretest Scores	Individual Improvement Scores
	(\mathbf{X}^{I})	(X^2)	$(X^2 - X)$
1	10	21	+11
2	17	32	+15
3	13	19	+6

No.	Pretest Scores	Posttest Pretest Scores	Individual Improvement Scores
	(X)	(X^2)	$(X^2 - X)$
4	15	29	+14
5	12	24	+12
6	16	31	+15
7	16	33	+17
8	9	22	+13
9	11	26	+15
10	15	31	+16
11	10	27	+17
Totals	144	295	+151
Average	13.09	26.81	+13.72
score			

According to the information in the table, it can be observed that students scored higher on average after studying than before. The average score after studying was 26.81 while it was 13.09 before. This shows an increase in the average score by 13.72. Upon evaluating individual scores, it was found that each student's score increased by 6 to 17 points. This highlights the fact that learners who practice reading aloud the Chinese phonetic alphabet by using game-based learning management model have a better ability to read.

Table 3. Tonal pronunciation and tonal

No.	Pretest Scores	Posttest Pretest Scores	Individual Improvement Scores
	(X)	(X^2)	$(X^2 - X)$
1	16	32	+16
2	15	35	+20
3	11	23	+12
4	12	28	+16
5	14	35	+21
6	13	28	+15
7	14	29	+15
8	11	31	+20
9	10	25	+15
10	14	34	+20
11	10	26	+16
Totals	140	326	+186
Average	12.72	29.63	+16.91
score			

From the table above It can be seen that teaching and learning arrangements using a game-based learning management model. of grade 7 students at Demonstration School of Suan Sunandha Rajabhat University. The average score after studying was higher than before studying. The average score increased to 16.91 and when considered individually it was found that all learners gained progress scores from 12 to 21 points.

Table 4. Pronunciation of consonant combinations of vowels and tones

No.	Pretest Scores	Posttest Pretest Scores	Individual Improvement Scores
	(X)	(X^2)	$(X^2 - X^1)$
1	11	26	+15
2	14	33	+19
3	11	25	+14
4	11	30	+19
5	12	25	+13
6	9	23	+14
7	10	32	+22
8	15	32	+7
9	13	29	+16
10	8	20	+12
11	14	31	+17
Totals	128	306	+178
Average	11.63	27.81	+16.18
score			

According to table 4, there was a significant improvement in the pronunciation of consonant combinations, vowels, and tones among the students who practiced Chinese phonetic alphabets characters using a game-based learning management model. The study found that the average score increased from 11.63 to 27.81 after the students had undergone the training, with an average score increase of 16.18. The progress score of every student also increased, indicating an improvement in their understanding and ability to pronounce Chinese.

SUMMARY AND DISCUSSION

A study of Chinese phonetic alphabets pronunciation achievement by using game-based learning management model of grade 7 students at Demonstration School of Suan Sunandha Rajabhat University, totaling 11 people, with content on consonant pronunciation, vowel pronunciation, tonal pronunciation and tonal inflection pronunciation of consonant combinations vowels and tones the results of this research can be summarized as follows:

- 1. The pronunciation of consonants has improved after learning, with an average score increase of +8.09. Individual analysis showed that all learners made progress, indicating that teaching management based on the game learning model helps develop learners' Chinese phonetic alphabets reading skills.
- 2. The learners had a higher average score in vowel pronunciation after school than before. The average score after learning was 26.81, while the average score before learning was 13.09. There was an increase of 13.72 points in the average score, with a maximum score of 17 points.
- 3. Tonal pronunciation and tonal inversion had an average progress score of 16.91. When considered individually, learners achieved a maximum progression score of 21.
- 4. Pronunciation of consonant combinations, vowels, and tones leads to higher scores after studying. which had an average score increase of 16.18, when considered individually, it was found that every student's progress score increased. It shows that teaching and learning using a game-based learning management model helps the students understand and be able to pronounce Chinese higher than before.

SUGGESTION

General recommendation

- 1. Teachers should choose games that align with course learning objectives for effective teaching and learning.
- 2. Teachers should incorporate modern Chinese technology innovations to facilitate new methods of learning for students.

Suggestions for next research

- 1. You should learn more about Chinese phonetics alphabets, including consonants, vowels, tones, and tone changes, to improve your pronunciation.
- 2. Continuous monitoring of students' Chinese phonetic alphabets pronunciation is necessary to track their progress in different areas.

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