

THE DEVELOPMENT OF CHINESE SPEAKING SKILLS IN GRADE 4 THAI STUDENTS USING THE FLIPPED CLASSROOM IN THAILAND

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ABSTRACT

The purposes of this study were to compare the achievement of grade 4 Thai students in Chinese speaking before and after adopting the flipped classroom teaching method and to investigate their satisfaction with learning Chinese speaking. The study used whole cluster random sampling to select one of two classes of grade 4 students (20 students per class) as the sample group, comprising students of mixed gender and varied learning abilities.

In this study, researchers utilized Chinese-speaking tests to gather quantitative data on students' Chinese-speaking skills. Descriptive statistics using a dependent t-test indicated a significant improvement in students' Chinese-speaking skills ($p = .01$, pre-test: $\bar{X} = 200.15$, $SD = 40.68$; post-test: $\bar{X} = 219.05$, $SD = 36.31$). The results show that students' speaking skills improved significantly. Quantitative data from student satisfaction questionnaires revealed an overall mean score ($\bar{X} = 4.14$, $SD = 0.62$), indicating that students were highly satisfied with using the flipped classroom teaching method to learn Chinese speaking. This was corroborated by qualitative data from focus group interviews. Consequently, this study advocates for the adoption of the flipped classroom teaching method as an effective means of enhancing students' Chinese-speaking skills.

Keywords: Flipped Classroom, International School, Thailand, Chinese Speaking skill

INTRODUCTION

Chinese was the official language of China, one of the four official languages of Singapore, and one of the six working languages of the United Nations.

The Chinese language was also very popular in Thailand, where the researcher was based. As Ni (2015) pointed out, since the late 1980s and early 1990s, when the Thai government deregulated Chinese language education, Chinese language education began to emerge rapidly. Especially after the implementation of the Strategic Plan in 2006, Chinese language education became a new trend in Thailand, and Chinese language courses became a regular subject in Thai primary and secondary schools. However, the rapid development of the Chinese language in Thailand was accompanied by many problems.

The researcher studied at an international school in Thailand. It was a trilingual school, with English, Chinese, and Thai as its languages of instruction. The student population was mainly composed of Thai students. According to the researcher's study, the overall standard of the students in Primary 4 at the reaching school was around HSK level 2.

Due to the all-Chinese teaching, the students' Chinese listening was relatively good, and they were able to understand the teacher's instructions in class. However, speaking skills were weak, with most students only able to communicate with simple vocabulary and many grammatical errors. This indicated that the students had not received much training in their speaking skills. The content of the course was heavy, and the teachers were tired of fulfilling the requirements of the course, but there was no way for the students to have sufficient practice with the vocabulary taught, especially speaking practice. Most of the time was spent with the teacher speaking and the students listening. This led to a lack of improvement in students' speaking skills. This was consistent with He (2020) pointing out that most language teachers in traditional teaching practices still devoted their main time and energy to developing students' reading and writing skills, with the development of students' speaking skills not given the attention it deserved.

It can be seen that students need more speaking practice in the classroom. In order to provide more opportunities to practice speaking, research shows

that the flipped classroom teaching method can give students more opportunities to practice speaking with classmates and teachers in the classroom. As cited in Wen (2016), the flipped classroom teaching model was in line with the focus on “getting students to speak more” in Chinese as a foreign language. In addition, the flipped classroom teaching method moved the classroom part to the classroom and moved more of the practice part to the classroom, which reduced the time spent on the teacher’s teaching part in the classroom and allowed students more time to practice speaking. This corresponded to Zhou (2021), who stated that the flipped classroom teaching method reversed the flow of the teacher’s teaching and emphasized the centrality of the student in the classroom. The reversal of the teaching process enabled effective speaking activities to be carried out with the student at the center of the activity and some guidance from the teacher. The flipped classroom approach freed up time in the classroom. Students learned to master keywords before class, making it possible for not just the basic students to participate in the classroom but for every level to participate, thus increasing student participation in speaking.

The flipped classroom approach to teaching placed the focus on students as the main subjects of learning. The traditional teacher-centered approach was replaced by one where students were encouraged to practice and apply what they had learned, both independently and in collaboration with their peers (Lin, 2012). So we could see from the above that the flipped classroom had many advantages, such as allowing students to move from a passive learning role to an active learning role. It could increase students’ motivation for learning. It could free up teaching time in the classroom, from teaching to answering students’ questions, giving students more time to practice and improve their learning efficiency.

Based on all the above information, this study aimed to improve the Chinese speaking of Thai primary school students in grade 4. It did so through the use of a flipped classroom. It was hoped that it would provide an effective reference for future teaching of Chinese speaking in primary schools in Thailand. Additionally, the project aimed to extend the flipped classroom approach to teaching Chinese speaking as a more complete teaching system.

It provided a reference for Chinese language teachers in Thailand to better

understand the curriculum standards, which stipulated student-led status. The project also aimed to improve students' speaking skills and increase their satisfaction in learning Chinese speaking through the flipped classroom approach.

RESEARCH OBJECTIVES

The purposes of this study were to examine the development of Thai Grade 4 students' Chinese-speaking skills before and after using the flipped classroom teaching method and to investigate and collect Thai Grade 4 students' satisfaction after using the flipped classroom teaching method.

LITERATURE REVIEW

The Development of Chinese Teaching in Thailand

Chinese is one of the world's most spoken languages with the longest history and richest culture. With the rise of China in the fields of economy, politics, and technology, more and more people became interested in learning Chinese.

The development process of teaching Chinese as a foreign language in Thailand can be summarized as follows:

Origin stage: Thailand's interest in Chinese language and culture can be traced back to ancient times. However,

formal Chinese teaching began in the early 20th century, mainly through private professors and study groups.

Establishing formal courses: From the late 20th century to the early 21st century, as Thailand's economic and cultural exchanges with China increased, Chinese teaching began to receive official support and was incorporated into the curriculum systems of schools and universities.

Increased demand: China's economic rise and interest in the Chinese market have led to greater demand for Chinese language learning, promoting the rapid development of Chinese language teaching in Thailand.

Although Chinese as a Foreign Language (CFL) is growing rapidly in Thailand, there are many problems with the traditional teaching of CFL as follows:

1) Communication issues: The traditional Chinese teaching in Thailand pays more attention to written language and ignores communication. Lack of speaking practice, resulting in students often making errors in pronunciation and intonation. Zheng (2022) found out that Thai students often confuse the Chinese initials z, c, s with zh, ch, and sh, such as reading “是(shi)” as “四(si)” and “老师” as “老丝”.

2) Grammatical errors: In traditional Chinese teaching, Thai students may be affected by the grammatical structure of their native Thai language, resulting in some grammatical errors in Chinese use, such as improper word order or inconsistent grammatical habits. Lu (2012) pointed out that Thai students tend to use Thai thinking when speaking Chinese and then translate Thai vocabulary into Chinese to express themselves.

The Relationship between Flipped Classroom Teaching Method and Chinese-speaking Teaching

The flipped classroom teaching method can effectively help students improve their Chinese speaking skills in the face of these speaking problems.

1. Independent learning

A flipped classroom emphasizes students' independent learning outside the classroom to develop their independent learning ability. In language learning, this means that students can learn independently through various resources (multimedia materials, online courses, etc.) in order to improve their speaking skills. Lu & Lu (2020) point out that the flipped classroom emphasizes students' initiative and independent learning skills and encourages active thinking and interaction in the classroom.

Through this approach, students can improve their speaking skills.

2. Classroom interaction

In a flipped classroom, class time is spent more on discussion, practice, and problem-solving rather than traditional knowledge transfer. This means that students have more opportunities to engage in authentic language communication in the classroom and improve their speaking skills by interacting with the teacher and their classmates. According to Gilboy & Pazzaglia (2015), the flipped classroom approach encourages students to collaborate and discuss with their classmates in the classroom and apply what they have learned in the classroom, thereby improving their speaking skills.

3. Personalized learning

The flipped classroom teaching method emphasizes students' independent learning outside the classroom and more in-depth discussion and practice inside the classroom. This concept of personalized learning also applies to language learning, as each student's language learning needs and pace may be different. Students can learn about the language at their own pace and in their own way outside of the classroom and then engage in more speaking practice and communication

in the classroom. Wei & Jia (2018) states in his article that in flipped classroom teaching, students can learn according to their own learning pace and ability, thus personalizing teaching and improving independent learning.

A number of studies related to the flipped classroom teaching method proved the effectiveness of using the flipped classroom teaching method in Chinese language teaching. This section summarizes the research on the application of flipped classroom teaching methods in Chinese language teaching.

Li (2018) studied the application of the Flipped classroom in Chinese language instruction for fourth-grade primary school students. The researcher focused on using the flipped classroom teaching method. The students were divided into an experimental group and a control group, and their comprehensive abilities, including speaking proficiency, were compared before and after the intervention to evaluate the effectiveness of this teaching approach. The experimental results indicated that the students in the experimental group achieved significantly higher academic performance than those in the control group, and there was also a notable improvement in their speaking proficiency. This suggests

that the flipped classroom teaching method effectively enhanced students' speaking skills in Chinese language instruction for grade 4 primary school students.

Bu (2018) researched the design of flipped classroom-based English instruction for fourth-grade primary school students. There are some similarities between learning Chinese-speaking skills and learning English-speaking skills, especially in the basic skills and methods of language communication. The following are some of the similarities between them, such as the learning of pronunciation, the learning of grammar, and the process of language learning. The researcher implemented the flipped classroom teaching method. The experimental process involved pre-class video learning, in-class group activities, and post-class reflection and feedback. This study aimed to enhance students' speaking skills through the use of flipped classroom teaching. The experimental results demonstrated a significant improvement in students' speaking skills and a positive learning outcome. This indicates that the flipped classroom teaching method has a beneficial effect on promoting students' speaking skills in English instruction for grade 4 primary school students.

Based on the experimental results, students demonstrated improved communication and expression skills, as well as increased motivation to learn. This suggests that the flipped classroom teaching method effectively enhanced students' speaking skills and stimulated their learning engagement in elementary Chinese language instruction. The results of these studies consistently showed that the flipped classroom teaching method could enhance students' independent learning ability, stimulate students' motivation, improve the efficiency and confidence of speaking learning, and improve students' speaking skills.

HYPOTHESIS

In this study, Thai fourth-grade students' Chinese speaking skills improved after using the flipped classroom teaching method and the students were satisfied with learning Chinese speaking by using the flipped classroom teaching method.

CONCEPTUAL FRAMEWORK

This study consisted of independent and dependent variables. The independent variable was the flipped classroom teaching method. Grade 4 Thai Students' Chinese speaking skills and student satisfaction were the dependent variables. (Shown below in Figure 1.

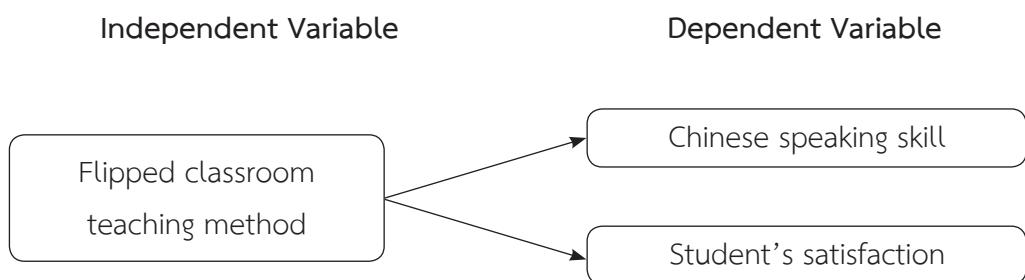


Figure 1 Independent and Dependent

METHODOLOGY

In this study, a mixed methods research approach was employed to collect data. Quantitative data on Chinese speaking skills were collected through the pre-test and the post-test, while student satisfaction was assessed using quantitative data from satisfaction questionnaires. Additionally, a focus group was conducted to gather qualitative insights and opinions from grade 4 Thai students about their experiences with the flipped classroom teaching method for improving their satisfaction. The target population of the study was 40 students from the Grade 4 classes of two primary schools. The students were between the ages of 9 and 11 and had mixed gender and learning abilities.

Due to the arrangement of the school, the researcher was responsible for only one class in grade 4 of the primary school; the researcher used whole cluster random sampling to select a class as

the sample group (20 pupils) with mixed gender and learning ability of the students, which consisted of 9 boys and 11 girls. The study was conducted at an international school in Pattani Province, Thailand, which was established in 2007. The school offered Chinese language programs from kindergarten to high school. The school offered four hours of Chinese language classes per week for students in grade 4 of primary school. This study used the following three instruments to collect quantitative data: lesson plans, Chinese speaking tests (pre-test and post-test), and student satisfaction questionnaires, and focus groups were used to collect qualitative data.

RESEARCH RESULTS

Table 1 shows the scores for the pre-test and post-test for the sample group.

Table 1 Student Pre-test and Post-test score

Student	Pre-test Scores (Full score = 256)	Post-test Scores (Full score = 256)	Increase in test score	Difference %
1	78	98	20	7.8%
2	115	147	32	12.5%
3	175	213	38	14.8%
4	179	210	31	12.1%
5	187	200	13	5.1%
6	189	232	43	16.8%
7	199	229	30	11.7%
8	203	224	21	8.2%
9	204	217	13	5.1%
10	209	220	11	4.3%
11	212	238	26	10.2%
12	216	224	8	3.1%
13	217	234	17	6.6%
14	222	240	18	7.0%
15	225	239	14	5.5%
16	228	243	15	5.9%
17	232	244	12	4.7%
18	236	238	2	0.8%
19	238	249	11	4.3%
20	239	242	3	1.2%
Mean Scores	200.15	219.05	18.90	7.54%

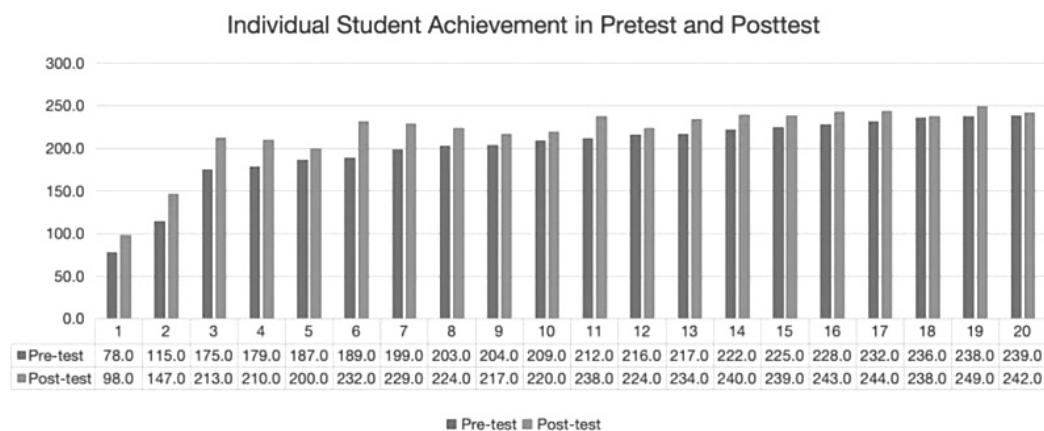
Table 2 Paired Samples T-Test

Group	Pre-test		Post-test		Mean difference	T	P-value
	X	SD	X	SD			
Sample Group	200.15	40.68	219.05	36.31	18.90	-7.54	0.000

* $p < 0.05$

From Table 2, it could be seen that there was a difference of 18.90 between the pre-test and post-test means; this represented an increase from the post-test mean. The obtained significance value (p) was 0.000, which was lower than 0.05 ($p < 0.05$). The post-test scores showed a statistically significant increase compared to the pre-test scores of the sample group.

Figure 2 below represents the individual students' pre-test and post-test scores. In the figure, blue represents the pre-test scores, and orange represents the post-test scores. It could be found from the figure that all students' post-test scores improved, indicating that the flipped classroom teaching method helped improve students' Chinese-speaking scores.

**Figure 2** Graphical representation of students' pre-test and post-test scores

In order to collect quantitative data and study students' satisfaction with the use of the flipped classroom teaching method in the Chinese-speaking class. A five-point Likert scale was used in the student satisfaction questionnaire, and the purpose of this study was to collect quantitative data and explore students' satisfaction with the use of the flipped classroom teaching method in the Chinese classroom. The questionnaire was designed with 15 items and was divided into three parts: Part A: Interest, Part B: Engagement, and Part C: The Efficacy of the Flipped Classroom Teaching Method; each part had 5 items. A total of 20 study participants ($N = 20$) were administered the questionnaire. The findings were analyzed through the use of descriptive statistics (mean and standard deviation). Based on the mean scores, the evaluations were categorized into five levels: highest (4.01-5.00), high (3.01-4.00), medium (2.01-3.00), low (1.01-2.00), and lowest (1.00-0.00).

The researcher used focus groups to collect qualitative data on student satisfaction. Not only that, the data collected complemented and supported the data collected from the questionnaire.

After the lesson on learning Chinese speaking through the flipped classroom. All 20 participants who took part in the course

were divided into three groups of 6-7 participants each, and the participants voluntarily answered six questions through focus group interviews. The researcher analyzed the collected responses under three themes. Part A: Interest, Part B: Engagement, and Part C: The Efficacy.

Part A: INTEREST

According to the students' feedback, the students maintained a positive satisfaction with using the flipped classroom to learn Chinese speaking. The following student responses support these views:

“The material provided by the researcher was very helpful to me and the videos and audio can be repeated and watched over and over again. (Student 4, Group 1).

“Through the flipped classroom, it makes me feel that Chinese learning is not that difficult, and I am more willing to speak Chinese” (Student 1, Group 2).

Part B: ENGAGEMENT

Most of the students said that the activities designed based on the flipped classroom method were very interesting and could help them learn Chinese and improve their speaking skills; the following student responses support these views:

“The activities in the flipped classroom are all interesting and meaningful.

It can help me to speak more Chinese.
“(Student 5, Group 1).

“I like the classroom activities where my friends can help me and take me along to learn and speak Chinese together.
“(Student 2, Group 3).

Part C: THE EFFICACY

The vast majority of students found the use of flipped classroom pedagogy helpful and efficient. The following student responses support this view:

“The flipped classroom teaching method can effectively help me to improve my Chinese speaking skills.”(Student 3, Group 1).

“Self-studying classroom content at home has helped me to develop a good habit and improve my self-learning skills.
“(Student 4, Group 2).

RESULTS CONCLUSION AND DISCUSSION

Results Conclusion

In this study, the first objective was to compare the Chinese speaking skill of grade 4 Thai students before and after using the flipped classroom teaching method. In the research process, a paired-sample t-test was conducted on the results of the pre-test and post-test to compare the differences in learning achievement between the sample groups.

1) The t-test with a p-value less than .05 indicates that there is a significant difference in Chinese Speaking Skills before and after learning. The mean score of post-learning outcomes is 219.05 with a standard deviation (S.D.) of 36.31 compared to the mean score of pre-learning outcomes is 200.15 with a standard deviation (S.D.) of 40.68 indicating a statistically significant difference in mean scores. Post-learning scores are higher than pre-learning scores. The higher mean score of the post-test indicated that the flipped classroom method of teaching played a positive role in the students' speaking learning.

2) The highest score (239) (Student No.19) and the lowest score (78) (Student No.1) were obtained in the pre-test. The highest score (249) (Student No.19) and the lowest score (98) were obtained in the post-test (Student No.1). The highest score in the post-test was higher than the pre-test (11) (Student No.19), and the lowest score in the post-test was higher than the pre-test (20) (Student No.1). It can be seen that the students' speaking ability was improved by using the flipped classroom.

3) All of the participants had higher scores on the post-test than on the pre-test, with a difference in scores ranging from 2 to 43 points.

The quantitative data analyzed above show that the student's performance was significantly improved. Therefore, the results of this study suggest that the use of the flipped classroom teaching method can effectively improve the Chinese speaking skills of grade 4 Thai students.

The second main objective analyzed in this section was to investigate the satisfaction of grade 4 Thai students after using the flipped classroom teaching method. The entire questionnaire for student satisfaction consisted of 15 questions which were further divided into three parts: Part A: Interest, Part B: Engagement, and Part C: The Efficacy. Quantitative data were collected from this student satisfaction questionnaire.

Student satisfaction with Part A of the questionnaire remained at the highest level ($\bar{X} = 4.09$, $S.D. = 0.72$). Students believed that the flipped classroom could stimulate students' interest.

Students' satisfaction with Part B of the questionnaire remained at the highest level ($\bar{X} = 4.15$, $S.D. = 0.59$). Students enjoyed and actively participated in classroom activities designed based on the flipped classroom teaching method.

Student satisfaction with Part C of the questionnaire remained at the highest level ($\bar{X} = 4.18$, $S.D. = 0.71$). Teaching based

on the flipped classroom teaching method can effectively improve students' Chinese speaking skills.

Focus group interviews were conducted with three groups of 6-7 students each. The required qualitative data were collected. The student's speaking accounts during the interviews were audio recorded, transcribed, interpreted, and analyzed, and the interview data were analyzed thematically. The results of the data analysis are presented below:

1) All students reported that they were satisfied with the use of the flipped classroom teaching method to learn Chinese speaking. This could be illustrated by the responses collected from the focus groups and the results of the questionnaire.

2) Most of the students thought that the flipped classroom teaching method could improve their speaking skills, and they also said that watching the video repeatedly before class, could deepen their impression and enable them to use Chinese more efficiently in class, It also improved their self-study ability.

3) Some students also mentioned that the classroom activities were very interesting and helped them practice speaking Chinese better, as well as developing their cooperation skills.

Discussion

The results of this study showed that the flipped classroom teaching method was successful in helping to improve students' Chinese speaking skills. This was evident through the pre-test and post-test. The mean score of the post-test (219.05) was higher than the mean score of the pre-test (200.15) by 18.90 points (a 7.54% difference). Among the 20 students, the most remarkable improvement was made by student number 6, whose scores on the pre-test and post-test were 189 and 232 respectively, with a difference of 43 points between the post-test and pre-test. This student studied the material provided by the teacher very seriously before class and actively participated in classroom activities. That's why he improved his speaking score most significantly. This result shows that flipped classroom teaching can significantly improve students' Chinese speaking skills. The lowest improvement was made by student number 18, with a difference of only 2 points between the post-test and the pre-test. Since this student already scored 236 points in the pre-test, the progress of this student was not very obvious. However, through the flipped classroom teaching method, this student's

speaking ability was also improved to a certain extent.

In summary, the improvement in students' scores suggests that the use of the flipped classroom teaching method improved students' Chinese speaking skills. Therefore, all of the above findings credibly addressed the first research question.

This result has been confirmed in previous studies. In Liu's (2020) experimental study using the flipped classroom teaching method to study speaking in Chinese as a foreign language, students in the experimental group showed a significant increase in the number of spoken outputs. The study proved that the flipped classroom teaching method could increase students' participation in the classroom and improve their Chinese speaking skills. Lian (2018) also pointed out in his article that the flipped classroom teaching model is more student-centered. It frees up classroom time, and more time is spent on adequate speaking practice. It also develops students' habit of learning Chinese. As a result, students' Chinese speaking skills were significantly improved.

The second main objective analyzed in this section was to investigate the satisfaction of grade 4 Thai students

after using the flipped classroom teaching method. Xu & Li (2023) used the flipped classroom teaching method to teach Chinese speaking. An experimental comparison revealed that the flipped classroom teaching method significantly increased students' interest in learning and activities. Lin (2012) found that based on the flipped classroom teaching method, Teacher materials can reduce students' learning pressure and stimulate their interest in learning.

Recommendations for Implementation

Through the above analyses, we found that the flipped classroom teaching method played a positive role in the Chinese speaking of grade 4 Thai students. The following recommendations are listed:

1) The flipped classroom teaching method efficiently and successfully improved the Chinese speaking skill of grade 4 Thai students in international schools. So, the Flipped classroom teaching method could be implemented in other schools Chinese speaking courses.

2) Since the flipped classroom approach required students to self-study at home using video and audio, the researcher suggested that the flipped classroom approach should be used with multimedia to help students learn actively, thereby improving students' Chinese speaking skills.

Recommendations for Future Research

1) A limitation of this study is that the number of researchers was only 20 grade 4 Thai students. Therefore, the researcher could have conducted the study under the condition of different grades and larger samples in other schools in Thailand, which would have helped to ensure the credibility of the findings of this study.

2) The duration of this study is limited to only four weeks, so future researchers may get different results if they have conducted a longer study.

3) This research focused on improving students' Chinese speaking ability, so it is recommended that future researchers try to extend this method to the teaching of other aspects of Chinese, such as listening, reading, and writing.

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