

# กลยุทธ์อภิปัญญาเพื่อพัฒนาทักษะการพูดภาษาจีนสำหรับนักเรียนระดับมัธยมศึกษาตอนต้นที่เรียนภาษาจีนในฐานะภาษาต่างประเทศ

## Metacognitive Strategies to Develop Chinese Speaking Skills for Junior School Students Learning Chinese as a Foreign Language

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### บทคัดย่อ

งานวิจัยเรื่องนี้มีวัตถุประสงค์เพื่อสำรวจผลกระทบของกลยุทธ์อภิปัญญาต่อการพัฒนาทักษะการพูดภาษาจีนของนักเรียนโดยใช้การประเมินตนเองสำหรับนักเรียนและความคิดเห็นจากครูผู้สอนเพื่อปลูกฝังความสามารถทางด้านอภิปัญญาของนักเรียน การวิจัยครั้งนี้ได้ใช้การสุ่มตัวอย่างแบบแบ่งชั้นภูมิและมีนักเรียนชั้นมัธยมศึกษาตอนต้นจำนวน 36 คน (นักเรียนชั้นมัธยมศึกษาปีที่ 2 จำนวน 17 คน และนักเรียนชั้นมัธยมศึกษาปีที่ 3 จำนวน 19 คน) ที่เรียนภาษาจีนในฐานะภาษาต่างประเทศของโรงเรียนพระหฤทัย เชียงใหม่ถูกเลือกมาเป็นกลุ่มตัวอย่าง เพื่อสำรวจการประยุกต์ใช้และผลกระทบของกลยุทธ์อภิปัญญา การเรียนการสอนได้ดำเนินการในระหว่างกระบวนการวิจัย ซึ่งรวมถึงการทดสอบก่อนเรียน การดำเนินกิจกรรมการพูดภาษาจีนโดยใช้กลยุทธ์อภิปัญญา การสร้างความสามารถในการเรียนรู้ อภิปัญญาของนักเรียนโดยใช้การประเมินตนเองสำหรับนักเรียนและความคิดเห็นจากครูผู้สอน และการทดสอบหลังเรียน วิธีการวิเคราะห์เนื้อหาถูกนำมาใช้วิเคราะห์การประเมินตนเองสำหรับนักเรียนเพื่อรับรู้ความสามารถในการเรียนรู้ อภิปัญญาของนักเรียนและสำรวจการกระจายของการกระทำการเรียนรู้ อภิปัญญา ผลการวิจัยพบว่านักเรียนสามารถใช้แบบจำลอง MLC (Metacognitive Learning Cycle) เพื่อดำเนินการเรียนรู้ อภิปัญญาได้ แต่ให้ความสำคัญกับกลยุทธ์การติดตามมากขึ้น การทดสอบสมมติฐานของกลุ่มตัวอย่าง 2 กลุ่มที่สัมพันธ์กันถูกนำมาใช้วิเคราะห์ข้อมูลในคะแนนการทดสอบก่อนและหลังเรียน ผลปรากฏว่าคะแนนค่าเฉลี่ยหลังเรียน ( $M=13.25$ ) ของกิจกรรมการพูดภาษาจีนสำหรับนักเรียนได้ดีขึ้นเมื่อเทียบกับคะแนนค่าเฉลี่ยก่อนเรียน ( $M=11.58$ ) และมีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติ ( $t=7.77$ ,  $p<0.01$ ) ซึ่งบ่งชี้ว่ากลยุทธ์อภิปัญญามีผลเชิงบวกต่อการพัฒนาทักษะการพูดภาษาจีนของนักเรียน การวิจัยนี้ได้นำเสนอมุมมองใหม่สำหรับการเรียนการสอน CFL โดยใช้กลยุทธ์อภิปัญญา โดยเฉพาะอย่างยิ่งในการส่งเสริมทักษะการพูดของนักเรียน ซึ่งมีส่วนช่วยในการพัฒนาการเรียนการสอน CFL ในอุตสาหกรรมการศึกษา อย่างไรก็ตาม หลักฐานยังเผยให้เห็นว่าการกระจายการเรียนรู้

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อภิปัญญาของนักเรียนนั้นไม่สมดุล ดังนั้น จึงแนะนำว่าครูผู้สอนที่สอน CFL ควรพัฒนากลยุทธ์ อภิปัญญาเพิ่มเติมเพื่อมุ่งความสนใจของนักเรียนไปที่กลยุทธ์การวินิจฉัยตนเอง กลยุทธ์การกำกับตนเอง และกลยุทธ์การสะท้อนตนเอง ซึ่งจะช่วยให้พัฒนาการไตร่ตรองของนักเรียนในการเรียนรู้อภิปัญญา ดังนั้น จึงจะส่งเสริมการพัฒนาคุณภาพการเรียนการสอน CFL อย่างต่อเนื่องในการปลูกฝังทักษะการพูดภาษาจีนของนักเรียน

**คำสำคัญ:** กลยุทธ์อภิปัญญา, ทักษะการพูดภาษาจีน, นักเรียนชั้นมัธยมศึกษาตอนต้น, การเรียนรู้ CFL

## Abstract

This study aims to investigate the impact of metacognitive strategy on students' Chinese speaking skills development by using students' self-assessments and teacher comments to cultivate students' capacity in metacognition. Stratified sampling was adopted in this research; a total of 36 junior school sample students (17 students from Grade 8, 19 students from Grade 9) from Sacred Heart College Chiangmai who were learning Chinese as a foreign language (CFL) participated in this study. In order to explore the application and impact of metacognitive strategy, teaching intervention was conducted during the research process including pre-test, oral Chinese activities implementation with metacognitive training strategies, building up students' metacognitive learning ability by students' self-assessments and teacher comments, post-test. Content analysis was applied to analyze the students' self-assessments to recognize their metacognitive learning ability and explore their distribution of the metacognitive learning acts. The results revealed that students could apply the MLC (Metacognitive Learning Cycle) model to conduct metacognitive learning, however, a stronger emphasis was placed on the monitoring strategy. Paired Samples T-Test was adopted to analyze data in the pre-test and post-test score and the result showed that the post-test mean scores ( $M=13.25$ ) of students' oral Chinese activities significantly improved compared to the pre-test mean scores ( $M=11.58$ ), and is statistically significant difference ( $t=7.77, p<0.01$ ). This indicates that metacognitive strategies have a positive impact on the development of students' Chinese speaking skills. This study offers a new perspective for metacognitive teaching strategies on teaching CFL, especially in promoting students' speaking skills, which contribute to the development of teaching CFL in the education industry. However, evidence also reveals that the students' distribution of metacognitive learning is imbalanced, therefore, it is suggested that teachers who lecture CFL should further develop metacognitive strategies to focus students' attention on self-diagnosis strategy, regulation strategy, and reflection strategy. This will help facilitate students' reflection on metacognitive learning, thereby continuously promoting the development of CFL teaching quality in cultivating students' Chinese speaking skills.

**Keywords:** Metacognitive strategies, Chinese speaking skills, junior school students, learning CFL

## Introduction

Thailand is one of the Southeast Asian countries with the highest proportion of Chinese language learners. The governments of Thailand and China have been collaborating since 2003 to encourage Thai students to learn Chinese, and 800,000 Thai students are now studying Chinese in a variety of settings. Chinese has overtaken English as the second most significant foreign language in Thailand (Chayakul, 2017). In addition, Chinese is taught at all levels of school in Thailand as a second or foreign language (Tangyuenyong & Choonharuangdej, 2009). For four decades, the Chinese language has been offered as a foreign or second language, in both public and private schools, in different programs of study and levels (Luo & Limpapath, 2016). When learning Chinese as a foreign language, emphasis is frequently placed on developing speaking abilities (Shi & Chayanuvat, 2021). Speaking abilities are crucial and should be addressed first for Thai students learning Chinese (Guo *et al.*, 2020). Nevertheless, developing speaking skills is a complex process (Koran, 2015). The biggest challenges and influential factors for speaking fluently and correctly at the beginning stage is that students always rely on the mother tongue, they frequently speak the target language while thinking in their native tongue and making linguistic errors (Nanyan, 2018). Meanwhile, strategies for Thai students to successfully improve their Chinese, especially speaking skills, remain understudied (Sae-thung & Boonsuk, 2022). Therefore, this study focus on

using learning strategies to improve students' Chinese speaking skills.

American psychologist J.Flavell first proposed the concept of metacognition in the 1970s, Flavell (1976) found that children's judgment on the correctness of their memory increases with their age. On this basis, he proposed the concept of "meta-memory", and then specifically come up with the concept of "meta-cognition". Metacognition refers to the knowledge and cognition about cognitive phenomena (Flavell, 1979). Although later researchers have made different interpretations on the concept of metacognition, there is a common on potential "bystander" role in their concepts, which is to observe, reflect, and even regulate cognitive activities. The introduction of metacognition concept provides a new perspective for the study of human cognition, and researchers divide its components in different ways. Plentiful researchers investigated and analyzed its components and classifications. Whether it is the method of thirds or dichotomy, the importance of metacognitive knowledge is basically affirmed that it is mostly listed as an independent structure (Armbruster *et al.*, 1983; Flavell, 1979). The way to stimulate understanding of learners' metacognitive is to explore the learning strategies closely related to students' self-regulation (Sun & Zhang, 2021).

Second language learning strategies are complex, dynamic thoughts and behaviors (Oxford, 2018). It is worthy noted that this definition highlights "dynamics" and "situational

factors” of second language learning strategies which provides an important theoretical foundation for the experiment of metacognitive teaching strategy in this study. Metacognitive learning strategies benefit learners to build self-esteem and self-confidence mechanisms (García Magaldi, 2010). In order to regulate students’ behavior, learners consciously choose and use strategies according to the situation. While the purpose of strategy use is to complete language tasks (Oxford, 2018), learners use the learning strategies flexibly or in different combinations according to their learning needs. These learning strategies are intrinsic and observable behaviors.

As the learning strategy is fundamental and vital, is it teachable? The general view now is that strategies are teachable, students can learn how to select strategies according to the situation and improve their awareness of strategies through training (Pawlak, 2021). However, the training of second language learning strategies is a complex and dynamic process, which requires comprehensive consideration of both the elements of teaching and learning. Research evidence shows that metacognitive strategies control the cognitive process in learners’ learning process, and the use of metacognitive strategies plays an important role in improving students’ learning ability (Marantika, 2021). It is possible to influence learners’ second language acquisition through metacognitive intervention, that it, the more the learners use metacognitive resources in their second language learning, the more

successful they were at performing language tasks (Raoofi *et al.*, 2014). In order to promote the training of second language learning strategies, many researchers in the academic area advocated its opinion and suggestions. Veenman *et al.* (2006) proposed three principles for the effectiveness of metacognitive teaching: 1) Embedding metacognitive teaching in specific objects; 2) Encouraging learners to stay focused by showing learners the effectiveness of metacognitive activities; 3) Continuous training to ensure the continuity of metacognitive activities (Veenman *et al.*, 2006). Meanwhile, Vandergrift and Goh (2012) proposed the listening metacognition teaching method, systematically described the teaching steps of metacognition strategies and designed metacognition teaching activities suitable for teaching class and environment. Its goal is to enable second language learners to become self-regulated learners who are aware of their own learning progress and understand the needs of their learning tasks. Nakatani (2005) explored further into connection between oral communication strategy use and metacognitive awareness-raising training. Zhang and Goh (2006) researched the relationship between students’ metacognitive strategy and speaking skills.

However, the application and research of metacognitive strategies in the field of CFL teaching is still very limited. Most studies focus on the use of metacognitive strategies to develop students’ Chinese listening and writing skills, while few researchers have

applied metacognitive strategies to the training of speaking skills for learning CFL. Moreover, the research on metacognitive strategies in the field of teaching Chinese as a foreign language is mostly static investigation and description, the number of dynamic and interventional research is very small. Therefore, this study focuses on the use of metacognitive strategies to cultivate the Chinese speaking skills of CFL students, in order to further improve the teaching quality and promote the development in the field of teaching CFL.

## Research Objectives

This study aims to explore the impact of metacognitive strategies including students' self-assessment and teacher comments on students' metacognitive learning skill cultivation and Chinese speaking skill development, in order to further stimulate the application of metacognitive strategies on students' Chinese speaking skills improvement.

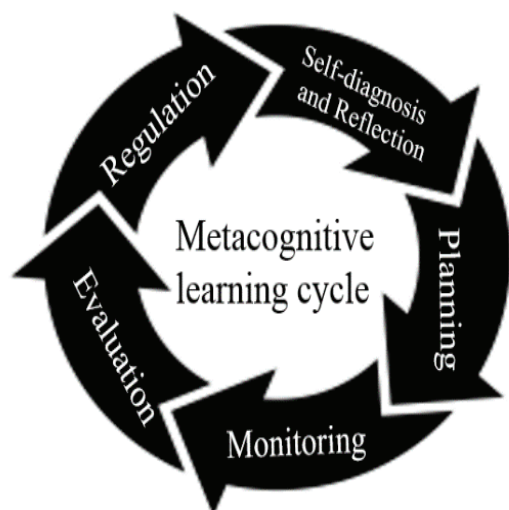
## Research Methodology

### Research design

This research is an interventional study and includes two subjects, teachers and students, and the teacher's responsibility is to develop students' metacognitive skills. The theoretical framework of this study is based on the metacognitive learning cycle (MLC) proposed by Liu (2020). The developed MLC model (see Figure 1) incorporates self-diagnosis, planning, monitoring, evaluation,

regulation, and reflection approaches (Liu, 2020). In addition to the four essential metacognitive strategies, Liu's model incorporated and emphasized self-diagnosis and reflection into the metacognitive strategies training (MST). In Liu's MLC model, the process begins with self-diagnosis and ends with reflection. In actual practice, the two approaches can be used in conjunction to create a continuous metacognitive cycle, where self-diagnosis serves as a reflection on prior acts.

The training material of the MST in this study includes an introduction and MLC strategies content which includes three facets: what, why and how. How to self-diagnose speaking difficulties and potential causes are covered in the self-diagnosis strategy. The planning strategy entails knowing how to make plans for the next oral performance. The monitoring strategy outlines where to concentrate attention and speak correctly and fluently. The evaluation strategy emphasizes how to evaluate the extent of oratory skills and the appropriateness of approach use. The regulatory strategy addresses how to maintain and modify approach utilization after evaluation. The reflection technique explains how to use answers to guided questions to examine and summarize one's own speaking performance and problems.



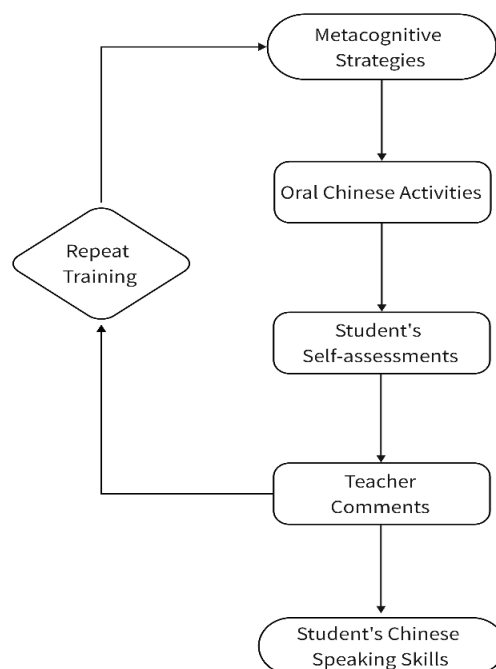
**Figure 1** Metacognitive learning cycle (MLC) Model

**Source:** Effects of metacognitive strategy training on Chinese listening comprehension (Liu, 2020)

### Research Conceptual Framework

The research conceptual framework of this study is demonstrated in Figure 2. Students are taught metacognitive strategies throughout the intervention and conduct self-assessments after each oral Chinese activity, teachers would return comments to students about their oral performances. This process helps students review their oral performances to facilitate their cultivation and development of metacognitive strategies, which include self-diagnosis, planning, monitoring, evaluation, regulation and reflection learning cycle, in order to further promote student's Chinese speaking skills. In short, research methodology is designed in four steps: pre-test, oral Chinese activities

implementation with metacognitive training strategies, building up students' capacity in metacognition by students' self-assessments and teacher comments, post-test.



**Figure 2** A Framework for using metacognitive strategies to improve students' Chinese speaking skills

### Population and Participants of the Study

#### Sampling method

Stratified sampling is a probability sampling technique that is commonly used in sample surveys (Taherdoost, 2016). Stratification is a technique used to improve the efficiency of a sample design in terms of estimator precision, in practice, a population's elements are divided into distinct groups or strata where within each stratum the elements

are similar to each other with respect to select characteristics of importance to the survey (Parsons, 2014). In this study, Grade 7, Grade 8 and Grade 9 are defined as three stratum based on the education background. However, students from Grade 7 have limited Chinese learning experience and ability which is hard to carry out the experiment, so the Grade 7 students are excluded in this study. One class (sub-stratum) is selected as the research sample from each grade (stratum) by using simple random sampling. In conclude, two classes with total 36 students were selected as a sample through stratified sampling out of total 10 classes with population of 216 students in Sacred Heart College, Chiang Mai., including class A in Grade 8 (17 students) and class B in Grade 9 (19 students). All sample students would participate in the whole experiment process and would be collected their oral Chinese activities performance and metacognitive strategies self-assessments for content analysis, as well as their pre- and post-test score.

## Research Instruments

The instruments used in this study are lesson plans based on metacognitive strategies and oral Chinese activities. The instruments are as follows:

### 1. Lesson Plans

Ten lesson plans were designed by the researcher in which metacognitive strategies was integrated in each lesson and each lesson plan lasted 55 minutes. The lesson plans were designed based on the indicators and expected outcomes identified in the school's curriculum and the Basic Education Core Curriculum B.E. 2551. The intervention duration was 10 weeks and each week lasted 55 minutes.

### 2. Oral Chinese Activities

A pre-test was carried out among all students to identify their current level of oral performance for comparison with the post-test at the end of the experiment. The Grade 8 and Grade 9 students were tested separately, and the testing materials are set based on their different learning levels. In order to decrease bias, the post-test was executed among students to recognize their oral learning performance after the intervention process was completed similarly. The evaluation and criteria methods are demonstrated in Table 1 and three Chinese teachers are responsible for grading the student's oral performance individually. The evaluation criteria described in Table 1 are derived from the HSK examination assessment rubrics.

**Table 1** Assessment criteria for oral Chinese activities

| Assessment criteria | Elaborations                                                                                                                                                                                                                                                                                                                 |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Content             | <ul style="list-style-type: none"> <li>• Context - can understand and use simple words and sentences to fulfill specific communication needs</li> <li>• Organization- properly organize language for discussion</li> <li>• Originality - give one's own opinion</li> </ul>                                                   |
| Expression          | <ul style="list-style-type: none"> <li>• Pronunciation - pronounce the words correctly</li> <li>• Vocabulary - use the correct vocabulary in context</li> <li>• Fluency - speak with few pauses or repeated words; speak naturally</li> <li>• Intonation - speak in a tone and pitch appropriate to the situation</li> </ul> |

**Source:** HSK elementary speaking test official evaluation criteria

Li (2023) has evaluated the current HSK by adopting Bachman and Palmer's (2010) AUA framework, revealed the following key points: The HSK reliably assesses L2 Chinese learners' general speaking skills; HSK is aligned with other internationally recognized standards such as CEFR (The Common European Framework of Reference for Languages) and ACTFL (American Council on the Teaching of Foreign Languages), in theory, to be interpreted by the global language testing and assessment community. This is the reason for this study chooses the HSK evaluation criteria to score.

The duration of this study is from September 2022 to December 2022, lasting for 12 weeks. Students are asked to have a weekly cycle of oral Chinese activities as follows:

Step 1. Learning MLC model and Metacognitive Strategies.

Step 2. Making an oral Chinese activity based on a given topic (see Table 2).

Step 3. Conducting a self-assessment of oral performance after finishing the oral Chinese activity.

Step 4. Absorbing comments from teachers.

Step 5. Making a re-practice oral Chinese activity based on the same topic as students have done before.

During each oral Chinese activity from week 1 to week 10, students were asked to conduct a self-assessment and the teacher have given comments based on their performance. The topics were given to the students (see Table 2) are from the textbook "Hua Wen" compiled by Beijing Chinese Language and Culture College, which is the textbook for students' oral Chinese class. The teaching goal of this textbook is to be in line with HSK (Hanyu Shuiping Kaoshi) elementary level.

**Table 2** Topics for students’ oral Chinese activities

| Week        | Topic title                                          |                                    |
|-------------|------------------------------------------------------|------------------------------------|
|             | Grade 8                                              | Grade 9                            |
| (Pre-test)  | What is your hobby?                                  | Who is your favorite idol?         |
| 1           | My favorite book                                     | This is my friend                  |
| 2           | My favorite book (re-practice)                       | This is my friend (re-practice)    |
| 3           | I have...                                            | Where I often go                   |
| 4           | I have...(re-practice)                               | Where I often go (re-practice)     |
| 5           | Do you like playing with mobile phone?               | How are you today?                 |
| 6           | Do you like playing with mobile phone? (re-practice) | How are you today? (re-practice)   |
| 7           | What's on the shelf?                                 | My hero is...                      |
| 8           | What's on the shelf? (re-practice)                   | My hero is...(re-practice)         |
| 9           | Welcome to my home                                   | I don't like...                    |
| 10          | Welcome to my home (re-practice)                     | I don't like...(re-practice)       |
| (Post-test) | An unforgettable day                                 | One thing that influenced me a lot |

**3. Student’s Self- Assessments**

The following evaluation strategies are used to build and develop students’ capacity in metacognition (see table 3). After completing the oral Chinese activities, students were asked to conduct a self-assessment on their

oral performance in which printed handouts are provided (see Table 3) with the lists of sentence beginnings designed according to the metacognitive framework proposed by Goh and Zhang (2001)

**Table 3** Sentence openings help students self-assess using different metacognitive strategies (English translation version)

| Types of comment         | Sentence openings                                                | Types of meta-cognitive strategy           |
|--------------------------|------------------------------------------------------------------|--------------------------------------------|
| Self-assessment          | 1. My speaking problems and possible reasons.                    | Self-diagnosis,<br>Evaluation, Monitoring, |
|                          | 2. I think I have made progress because ...                      |                                            |
|                          | 3. I am satisfied with the ... because ...                       |                                            |
|                          | 4. Compared with my previous oral performance, this time I ...   |                                            |
| Planning for improvement | 1. In my next oral performance, I'll try to ...                  | Planning,<br>Regulation                    |
|                          | 2. My targets for the next oral performance are ...              |                                            |
|                          | 3. I will reinforce and adjust the use of certain strategies ... |                                            |

**Table 3** Sentence openings help students self-assess using different metacognitive strategies (English translation version) (cont.)

| Types of comment                              | Sentence openings                                                                                               | Types of meta-cognitive strategy   |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------|
| Overall evaluation of the learning experience | 1. After conducting the self-assessment, I think...                                                             | Evaluation, Monitoring, Reflection |
|                                               | 2. After listening to teachers' comments, I think...                                                            |                                    |
|                                               | 3. By analyze and summarize my own oral performance and problems using answers to guided questions, I think ... |                                    |
|                                               | 4. During this practice cycle, I learned to...                                                                  |                                    |

Source: Metacognitive framework proposed by Goh and Zhang (2001)

#### 4. Teacher Comments

The HSK Elementary Speaking Test Official Evaluation Criteria (see table 1) was adopted as the criteria for teachers to make comments based on student's oral performance. Meanwhile, teachers give targeted suggestions based on the deficiencies in the content and expression to help students review their oral performance for making self-assessments.

#### Data Collection and Analysis

Open-question survey was carried out among students to identify their capacity in metacognition learning and the distribution of the metacognitive learning acts. Content analysis was used to analyze the distribution of metacognitive strategies in students' self-assessments.

Students' pre-test and post-test scores would be calculated through mean and standard deviation and use t-test analysis to determine whether there are statistically significant differences in students' Chinese speaking skills before and after the experiment. In this case, the hypothesis was provided to examine whether there are statistically

significant differences between student's pre-test and post-test scores as follows:

$$H_0: \mu_{\text{post-test}} - \mu_{\text{pre-test}} = 0$$

$$H_1: \mu_{\text{post-test}} - \mu_{\text{pre-test}} \neq 0$$

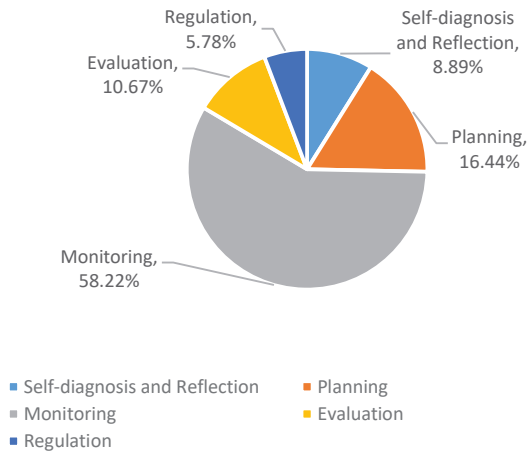
#### Result

Based on the research objectives, the investigation and analysis concentrate on the following two domains: the impact of the use of students' self-assessments and teacher comments on the improvement of students' metacognitive strategies and the impact of metacognitive strategies on the development of Chinese speaking skills for CFL students.

#### The Impact of Students' Self-assessments and Teacher Comments on the Students' Metacognitive Strategies

To investigate the impact of students' self-assessments and teacher comments on the students' metacognitive strategies. Metacognitive strategies and knowledge demonstrated in student surveys were identified, and data were collected for all 36 sample students. The researcher categorized the metacognitive strategies expressed by

students in surveys. The following figure summarizes the distribution of students' metacognitive strategies.



**Figure 3** Metacognitive strategies exhibited in students' surveys

The result implies that the students made a greater effort to keep track of how different variables might impact how well they performed orally. In planning for the oral performance in the next time and comprehensive oral performance evaluation were not given as much attention, especially regulation, self-diagnosis and reflection. In conclusion, the table implies that students use a large number of metacognitive strategies in self-assessments: students can clearly reflect on their own problems in the monitoring stage, students are able to objectively compare their oral performance this time with last time and

make evaluations in the evaluating stage, and they have cognitive thinking on how to improve the deficiencies in their oral performance. All this evidence indicates that students' self-assessments and teacher comments have the positive impacts on the students' metacognitive strategies.

### The Impact of Metacognitive Strategies on the Improvement in Students' Chinese Speaking Skills

The 36 sample students' scores were examined in the pre-test and post-test (see Table 4). The testing enables for a maximum score of 20, with 10 points granted for "Content" and 10 points granted for "Expression". From the table 4, the results reveal that the null hypothesis is rejected and conclude that there were statistically significant differences in the pre-test and the post-test mean scores of sample students ( $t = 7.77$ ,  $p < 0.01$ ). The pre-test mean score was 11.58 ( $SD = 3.85$ ), while the post-test mean score was 13.25 ( $SD = 3.66$ ). As a result, the post-test mean score was significantly higher than the pre-test mean score which implies that the students' Chinese speaking skills have improved after the intervention. In other word, the results indicate the positive effects of metacognitive strategies on the improvement in students Chinese speaking skills.

**Table 4** The Comparison of the Pre-test Score to Post-test Score of sample students

|           | N  | M     | Min | Max | SD   | df | t    | p      |
|-----------|----|-------|-----|-----|------|----|------|--------|
| Post-test | 36 | 13.25 | 6   | 20  | 3.66 | 35 | 7.77 | 0.00** |
| Pre-test  | 36 | 11.58 | 5   | 19  | 3.85 |    |      |        |

\* $p < 0.05$  \*\* $p < 0.01$ 

## Discussion

First, the content analysis on the students' self-assessments result reveals that after learning the knowledge about metacognitive strategies, students are able to apply metacognitive strategies, including self-diagnosis, planning, monitoring, evaluation, regulation, and reflection, to analyze their own oral Chinese activities in their self-assessments to varying degrees. Instructing students in the use of metacognitive learning strategies can have a positive impact on their confidence and proficiency levels in speaking (Forbes & Fisher, 2018). However, it is worth noting that the concentration of students' analysis was unbalanced, in which a lot of attention has been devoted to monitoring strategy in particularly. It indicates that students place great emphasis on their behaviors in oral performances. This imbalance in the application of metacognitive strategies illustrates the imbalance in the development of students' metacognitive awareness. Metacognition feedback is crucial during learning. Feedback needs to be specifically tied to learning objectives. In practice, these kinds of feedback appear to be scarce (Van den Bergh *et al.*, 2013). Based on the above reasons, the teacher's comments are particularly important, which can stimulate

students' metacognitive awareness in another way, help students focus on steps in metacognitive strategies that have not been considered. However, in order to avoid the preconceived influence of teachers' comments on students' cognitive behavior, teachers' comments should be carried out after students complete self-assessments, to ensure that students can use metacognitive strategies independently to complete the evaluation of their oral performance without being influenced by other factors. This will be more conducive to the development of students' metacognitive awareness and the mastery of metacognitive strategies.

Second, students' learning habits were observed in students' self-assessments: students prefer to use Thai grammar to express Chinese, which will negatively affect some of their oral performance. Mother tongue interferes with second language learning in some way, the most challenging part was Grammar (Denizer, 2017). It may be more effective and appropriate if students are able to revise their strategic knowledge accordingly as they review previous oral performances and plan for upcoming oral activities. Meanwhile, how to help students use metacognitive strategies to find the most suitable learning

strategies for them to improve their Chinese speaking skills is an area worthy of further research. Certainly, it is appropriate to create a problem or situation for students to guide students to establish learning goals, formulate plans, and ask questions. On the other hand, it is effective to improve students' metacognitive ability by guiding students to continuously monitor, evaluate, modify the learning process and its results, learning strategies and their effects.

Finally, this study inevitably has certain limitations. Firstly, this study lasted only three months and was only for Grade 8 and Grade 9 students due to time and sample size constraints. Secondly, whether the application of metacognitive strategies is still effective in the improvement of Chinese speaking skills of students who learning Chinese as a second language in the case of longer duration remains to be discussed. Thirdly, further research may investigate in whether metacognitive strategies are also useful for improving Chinese speaking skills for students who learning Chinese as a foreign language in other grades, especially for high school students and even university students.

## Recommendation

This study is qualitative research combined with observation, aims to investigate the relationship between metacognitive strategies teaching, learners' metacognitive awareness and Chinese speaking skills. However, whether there are other variables in the process of learning metacognitive strategies

to improve oral Chinese skills remains to be further studied by researchers.

This research focuses on examining metacognitive strategies for learning Chinese speaking skills to facilitate language learning tasks. The researchers conducted a three-month intervention experiment with students, and the performance of students' oral Chinese skills has been proven to significantly improve. The finding offers positive evidence of the feasibility of using self-assessments and teacher comments are beneficial for the students' metacognitive ability cultivation and Chinese speaking skills development. However, whether metacognitive strategies is still effective in a longer period of time is also worthy of further exploration by researchers.

During the experiment, the researchers collected data on metacognitive strategies and knowledge demonstrated in students' survey, it was found that the metacognitive strategies are crucial in encouraging students to reflect and evaluate their performance. The students are able to apply a systematic approach to reflection: self-diagnosis, planning, monitoring, evaluation, regulation and reflection, with greater emphasize on the monitoring strategy. However, the employment of metacognitive strategies by students was disproportionately distributed in their self-assessments, with the monitoring approach being the most common one employed while the self-diagnosis, regulation, and reflection techniques went mostly unnoticed. Based on this imbalance, whether teachers can achieve a balance in

the use of metacognitive strategies by students in the teaching process, and how to achieve this balance, is also the content that future research can further explore.

In conclusion, this study contributes to the development of teaching CFL, provide advice on teaching methods for teachers who teach Chinese as a foreign language, especially in the teaching of Chinese speaking skills. Future studies can take this research method as reference and apply it to the oral Chinese

teaching of students who learning CFL in other grades, especially high school students and even university students. Alternatively, further researchers may conduct a longer-term intervention experiment to further confirm the effectiveness of using metacognitive strategies to develop Chinese speaking skills for students who learning Chinese as a foreign language, and new problems may be discovered in this process.

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