การพัฒนาทักษะการเรียนรู้วิชาภาษาจีนกลางระดับกลางด้วยรูปแบบการสอนแบบ BOPPPS ในวิทยาลัยอาชีวศึกษาภาวนาโพธิคุณ

The Improvement of Learning Skill with BOPPPS Teaching Model in the Intermediate Chinese Language Course at Bhavana Bodhigun Vocational College

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บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อหาแนวทางในการพัฒนาการเรียนการสอนภาษาจีนกลางระดับกลางในวิทยาลัยอาชีวศึกษาภาวนาโพธิคุณ ซึ่งเดิมการสอนภาษาจีนในประเทศไทยแบ่งเป็นการสอนแบบ PPP ซึ่งเป็นการสอนแบบดั้งเดิม จากการศึกษาค้นคว้า พบว่าเห็นว่าวิธีนี้ยังไม่ประสบความสำเร็จเท่าที่ควร งานวิจัยนี้จึงได้พัฒนา

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การเรียนการสอนภาษาจีนแบบใหม่ โดยนำรูปแบบการเรียนการสอนแบบ BOPPPS มาปรับใช้ เพื่อหาแนวทางในการพัฒนาการเรียนการสอนภาษาจีน ที่มีประสิทธิภาพยิ่งกว่าเดิม โดยการใช้รูปแบบการสอนแบบ BOPPPS เปรียบเทียบกับการสอนแบบการสอนภาษาจีนทั่วไปในรูปแบบ PPP ประชากรที่ใช้ในการวิจัย คือ นักศึกษาชั้นปีที่ 3 ที่เลือกเรียนวิชาภาษาจีนกลางเป็นวิชาบังคับเลือก จำนวน 123 คน กลุ่มตัวอย่าง คือ นักศึกษาดังกล่าวที่ได้รับการสุ่มด้วยการสุ่มแบบมีระบบจำนวน 30 คนแบ่งเป็น 2 กลุ่ม กลุ่มละ 15 คน โดยกลุ่มที่ 1 เป็นกลุ่มทดลองที่ได้รับการสอนแบบ BOPPPS กับอีกกลุ่มเป็นกลุ่มควบคุมที่ได้รับการสอนภาษาจีนแบบดั้งเดิมคือแบบ PPP จากการเปรียบเทียบค่าเฉลี่ยการเรียนของแต่ละกลุ่มด้วยการวิเคราะห์ t-test จากโปรแกรม SPSS24.0 พบว่า นักศึกษากลุ่มที่ได้รับการสอนแบบ BOPPPS มีผลการพัฒนาการเรียนที่ดีกว่านักศึกษากลุ่มที่ได้รับการสอนแบบ PPP ใน 3 ทักษะ คือ ทักษะการฟัง การพูด และการอ่าน อย่างมีนัยสำคัญ ที่ระดับ 0.01 ขณะที่การสอนแบบ PPP ทำให้นักศึกษามีผลการเรียนรู้ด้านการเขียนดีกว่าการสอนแบบ BOPPPS อย่างมีนัยสำคัญที่ระดับ 0.01

คำสำคัญ : รูปแบบการสอน รูปแบบ BOPPPS รูปแบบ PPP ทักษะภาษา

Abstract

This research objective is to find approaches for improving teaching intermediate Chinese at Bhavana Bodhigun Vocational College. Formerly, Chinese language instruction in Thailand used the PPP teaching model, which was a tradition method and not successful enough. This research developed a new approach to teaching Chinese by applying the BOPPPS model. The aim was to find ways to improve the effectiveness of Chinese language instruction by comparing the BOPPPS model with traditional Chinese teaching methods using the PPP model. The population used in this

research consisted of third-year students who chose to take Chinese as an elective course, with a total of 123 students. The sample group consisted of 30 students selected through systematic random sampling, divided into two groups of 15 students each. Group 1 was the experimental group, which received instruction using the BOPPPS model, while the other group, the control group, received traditional PPP instruction. The comparison of the average learning scores of each group using a t-test analysis from the SPSS 24.0 program showed that students who were taught with the BOPPPS model had better learning outcomes than those taught with the PPP model in three skills: listening, speaking, and reading, with statistical significance at the 0.01 level. Meanwhile, students taught with the PPP model had significantly better writing outcomes than those taught with the BOPPPS model at the 0.01 level.

Keywords : teaching model, BOPPPS Model, PPP model, language skill

Introduction

The outbreak of the new Covid epidemic has had a major impact on global education. According to data from the United Nations Educational, Scientific and Cultural Organization (UNESCO) on April 12, 2020, more than 1.578 billion students worldwide were affected by the new Covid epidemic, accounting for 90.1% of all registered students. 194 countries have suspended classes nationwide (O'Hagan, 2020).

Therefore, the opening of Thailand's national gates, the introduction of foreign investment, the requirements of digital business, and the spread of the new COVID pandemic worldwide have all contributed

to the gradual transformation from offline to online education (Wang & Liu, 2021). The teaching model of Chinese as a foreign language is still in the research and exploration stage. The research results related to the teaching model at home and abroad have not been applied in teaching Chinese as a foreign language, resulting in a relatively limited teaching model.

Questionnaires collected by BBVC showed that 92.8 % of students did not learn Chinese language more than 1 year before enrollment (Figure 1), which could have made them feel inadequate or hindered effective learning.

How long had you studied Chinese language before enrolling at Pavana Phothikhun Vocational College?

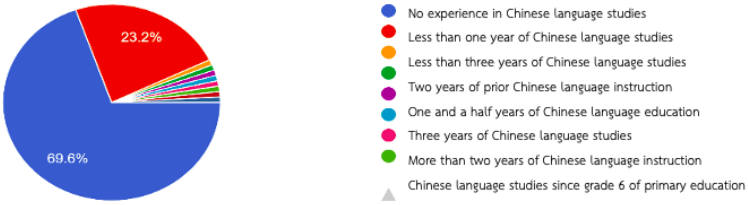

Figure 1 Chinese language learning before enrollment

75% Chinese teachers in BBVC prefer to use Chinese and English as mediums for teaching (Figure 2), and language barriers make it difficult for students to understand new knowledge points.

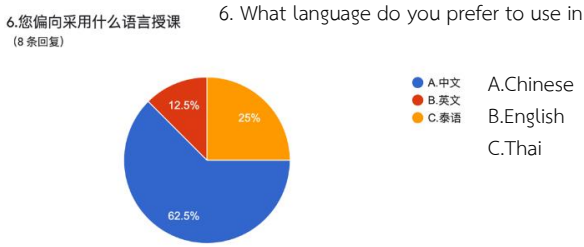

Figure 2 The languages that Chinese teachers in BBVC prefer to use

Pan & Bai (2020) believe that the expansion of the scale of international students in China is related to the encouraging admissions policies adopted by Chinese government and universities, such as scholarship programs. Pan (2020) pointed out that in order to attract students from countries along the "Belt and Road" to study in China, the Chinese government has maintained a certain scale of scholarships and introduced relevant policies to attract international students to study in China. Thus, rapidly improving Thai students' listening, speaking, reading, and writing skills have become essential goals for Chinese language teaching.

Chinese classrooms are influenced by traditional exam-oriented education, students lack opportunities for independent inquiry, and do not focus on cultivating students' ability to apply knowledge. In the process of participating in learning, the sense of classroom participation is low and their learning efficiency is not high (Wu, 2021). Plus, subjectively, language

learning itself can be somewhat boring. If students' interest in learning was not effectively stimulated, learners may not listen in class or review after class; this could cause a gradual development of fear and desire to quit. Therefore, we urgently need to explore alternative Chinese teaching models for our school.

Communicative language skills can be categorized into five language skills: listening, speaking, reading, writing and translating (Ministry of Chinese Education, 2021). The four language skills of listening, speaking, reading, and writing differ in mother tongue acquisition from second language learning. Revealing the developmental sequence and functional relationship of the four language skills will help to show the laws of mother tongue acquisition and second language learning (Guan & Tan, 2023).

Quickly improving the students' comprehensive listening, speaking, reading, and writing levels has become a top priority for Chinese language teaching. Since 90% of BBVC students had nearly zero Chinese exposure, many felt embarrassed about learning Chinese, leading to low classroom proficiency. Therefore, there is an urgent need to explore more suitable Chinese teaching models. The 'model' concept was introduced as a scientific term in educational research by Bruce Joyce and Marsha Weil from the United States. Furthermore, an instructional model was deemed a paradigm or plan that constituted lessons and assignments, selected materials, and prompted teacher activities (Bruce & Well, 1999). Through specific practice, Yang (Yang, 2021) argues that the BOPPPS teaching model can effectively increase learners' interest in education and enhance

classroom interaction. Therefore, this paper compares and analyzes the BOPPPS teaching model against the standard PPP teaching model.

Objective

1. This research compares and analyzes the differences between the BOPPPS teaching model and the standard 3P teaching model regarding the teaching effectiveness of Chinese learners' listening, speaking, reading, and writing skills in vocational schools.

2. This research provides new ideas to stimulate learners' interest in learning Chinese, increase students' classroom participation and improve the efficiency of Chinese language teaching.

Conceptual framework

The conceptual framework of this research is designed as shown in Figure 3.

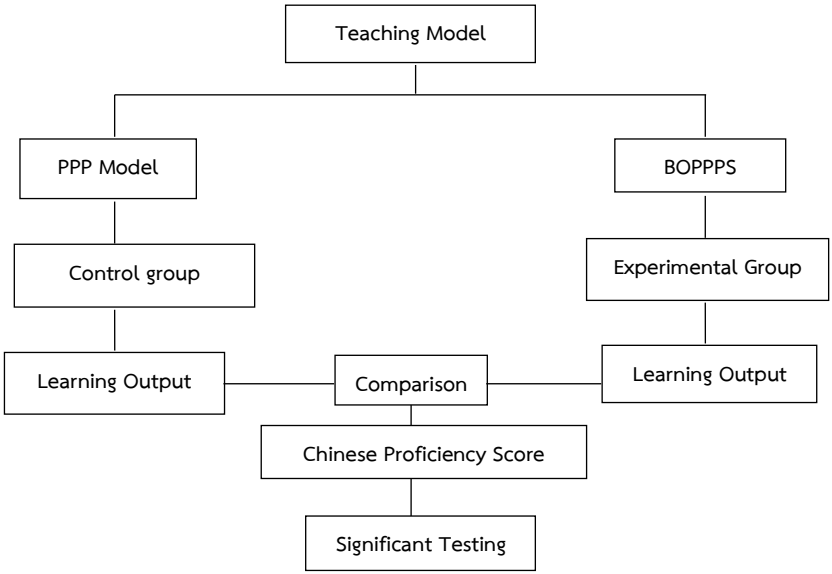

Figure 3 Conceptual framework

Thirty third-year students were selected from the Bhavana Bodhigun Vocational College and were divided into an experimental and control group. The experimental group utilized the BOPPPS teaching model, and the control group used the traditional 3P teaching model. The teaching time was 8 weeks. Pre-tests and post-tests were administered to

the students before and after the instruction, and the data were examined using SPSS 24.0 analysis.

BOPPPS Model literature review

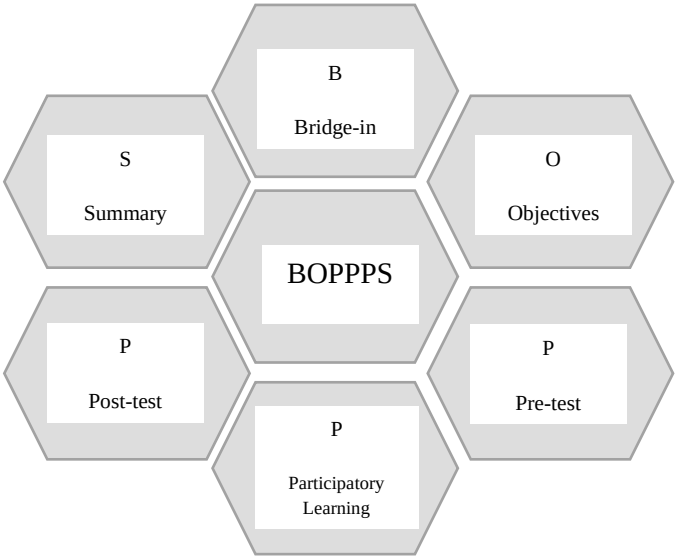

Figure 4 The BOPPPS model

The BOPPPS teaching model (Figure 4) is based on the teacher certification in British Columbia, Canada, and is highly practical and operational. It divides the teaching process into six steps: Bridge-in, Objective or Outcome, Pre-test, Participatory Learning, Post-test, and Summary. It is a teaching model that can guide all classroom teaching and learning aspects. Many countries and universities worldwide have now introduced and adopted this model (Pattison & Russell, 2006).

Cognitive development theory shows that children of different ages have unique characteristics (Piaget, 1973). The clear goals in the BOPPPS model of pre-test and post-test, and summary links are consistent with the level and stage of the intellectual development of students over 15 years old in secondary vocational schools.

PPP Model literature review

The PPP model is also called the mainstream EFL style which came into being in the 1970s and has developed since the 1980s up to the present day. The 3P approach (Figure 5) is characterized by the fixed procedures in language teaching: presentation, practice, and production (Skehan, 1998).

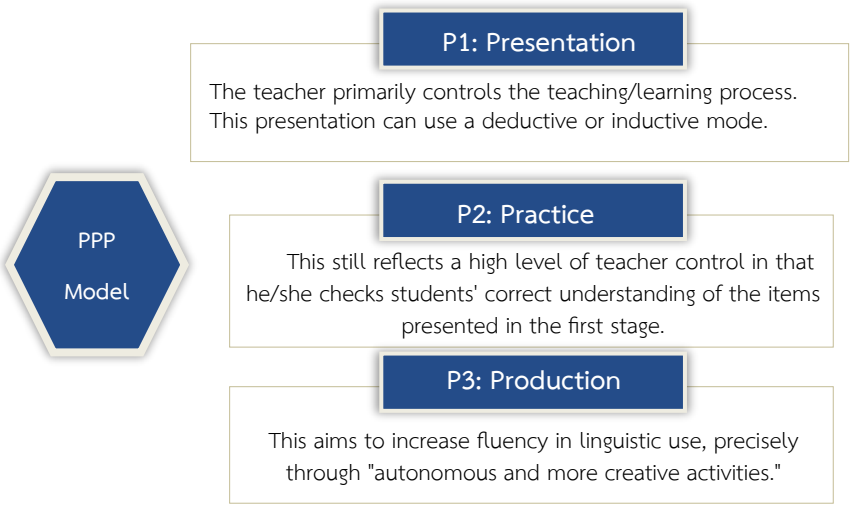

Figure 5 The PPP model

PPP is a three-part teaching model: Presentation, Practice and Production; based on behaviourist theory which states that learning a language is just like learning any other skill. The high degree of teacher control which characterizes the first and second stages of this approach lessens as the class proceeds, allowing the learner to gradually move away from the teacher's support towards more automatic production and understanding.

The PPP model has been used as a representative of the traditional model in language learning. However, it has been shown to have problems. Still, due to the model's convenience, it has been used until now, and its status has not been shaken. Guo (2020) has pointed out that "PPP grammar teaching mode is the most widely used teaching mode in the process of second language teaching at home and abroad."

Overall, the PPP model of English grammar teaching is purposeful in practice but lacks appeal and the opportunity for students to explore independently (Huang, 2022).

The application of BOPPPS model in teaching Chinese as a foreign language literature review

In recent years, there has also been a wave of the BOPPPS model in China, but there are few practical applications in teaching Chinese as a foreign language. The director of the CENTER FOR LANGUAGE EDUCATION AND COOPERATION, Ma (2004), said, "It is the common goal of Chinese teachers and researchers to establish a highly efficient and exemplary teaching model and apply it effectively in teaching practice." In the face

of the growing business of teaching Chinese as a foreign language, finding a suitable teaching model is a task that Chinese language teachers have been exploring. The BOPPPS teaching model has been proven to be effective, but there are only a few research results on this model in teaching Chinese as a foreign language. The keywords “BOPPPS” and “teaching Chinese as a foreign language” can be searched in CNKI, and 14 related research articles can be found.

Liu (2019) applied this model to teaching elementary Chinese comprehensive courses for the first time and concluded through teaching experiments that the BOPPPS model had a significant role in improving learners' Chinese skills, especially the learners' listening and speaking skills. Although the progress of learners' writing and reading abilities is not immediately apparent, in terms of enhancing learners' interest, this model can significantly improve engagement in speaking, reading, and listening. It is further pointed out that the BOPPPS model can promote the teaching effect of elementary Chinese comprehensive courses and provide new ideas for teaching Chinese as a foreign language.

Zhong & Zhang (2020) conducted a study titled “Research on the Application of BOPPPS Model in Reading Courses of Chinese as a Foreign Language.” This study uses multiple classroom practices to identify the most effective teaching forms of BOPPPS links. Each form is accompanied by detailed teaching examples, focusing on the participatory learning link. Various participation activities are instituted to enhance reading-related skills using various article topics. These activities include travel discussions, group activities, and role-play. This approach aims to

avoid oversimplifying ability training and ensure the comprehensive development of reading skills. The study also suggests some practical recommendations based on real situations. For instance, it is recommended that preview content and pre-test links should be appropriate and moderate. Too much or overly complex content can lead to students' fear of complications and hinder their full participation in subsequent activities. Furthermore, it is recommended to adopt a targeted approach to aptitude teaching.

Ye (2021) applied the BOPPPS teaching model to a Chinese as a Foreign Language (CFL) elementary integrated class by using two texts in the Chinese Language Course (Book 2 - Lower) as examples to carry out a specific teaching design. This aimed to verify that the BOPPPS teaching model is practical and feasible for an online Chinese language elementary integrated class. This study reflected: first, that the learning objectives of the model are clear and explicit, which makes it easy for students to know and grasp the key points of learning; second, the model focuses on pre-tests and post-tests, which facilitates teachers and students adjusting the teaching pace. It further refines the framework and content of the BOPPPS teaching model at the level of teaching design and provides new ideas for teaching Chinese as a foreign language. It has proved that the BOPPPS teaching mode effectively improves learners' interest in learning and enhances classroom interaction in various ways.

To summarize, the BOPPPS model in applying Chinese as a second language has proved it can improve learners' academic performance and interest. It can effectively promote learners' motivation. However, exactly

which aspect of ability is improved is controversial. Many papers mainly focus on the research and teaching design of BOPPPS in enhancing students' interest and classroom efficiency. Comparatively, a few of the four skills of listening, speaking, reading, writing, and writing were singled out for comparative analysis, especially in targeting the students at vocational colleges in Thailand. Hopefully, this study can fill the gap between the BOPPPS and conventional teaching models in the comparative analysis of listening, speaking, reading, and writing skills related to Chinese language learning in Thai vocational colleges (Table 1).

Table 1 Differences in models

Subject	PPP	BOPPPS
Classroom	Teacher-centered	Student-centered
Teacher control	Strong	Weak
Student participation	Passives participate	Active participation
Feedback	Not in time	Timely and accurate
Advantages	Scientific, systematic, and controllable	Participation, subjectivity, clarity of purpose, and development of learning
Weaknesses	1. The gradual decrease in students' enthusiasm for learning Chinese and overall effectiveness. 2. Cultivating mechanical memory in students.	1. Teachers must prepare in advance, which greatly increases working time. 2. Not suitable for large classes.

Subject	PPP	BOPPPS
		3. Not suitable for students who have no Chinese foundation.

Research Scope

Population

A total of 123 students in year 3 of BBVC. They needed to be selected through a purposeful sampling method. Most students at BBVC had zero Chinese language proficiency before enrollment and were not highly motivated to learn.

Sample

The sample of this research is selected by systematic sampling. The 123 students were ranked by grade, with 30 students being approximately a quarter out of 123 students by selecting every fourth student.

To ensure the accuracy of the experiment, the 30 students are divided again. The way of class division is to put everyone's grades together and arrange them according to the grades. The odd number is divided into group A and the even number is divided into group B.

Scope of Content

Data that were used for research purposes were: (1) HSK Basic Chinese Tutorial 3 (2) Chinese Proficiency Test Level 3 for all of the skills

(reading, writing, listening and speaking) (3) The textbook chosen for the integrated Chinese course was HSK Basic Chinese Tutorial 3 (Jiang, 2014).

Research Methodology

This study aimed to compare the learning outcomes of the BOPPPS and PPP teaching models in teaching Chinese as a second language in Thai vocational schools. This paper used quantitative research, comparative experimental research, and questionnaire surveys to collect empirical data and analyze experimental results. The specific research methods are as follows.

Thirty third-year students were selected from BBVC and divided into experimental and control groups. The experimental group used the BOPPPS teaching model, and the control group used the conventional 3P teaching model. The teaching time was eight weeks. Pre-tests and post-tests were administered to the students before and after their instruction, and the data were examined using SPSS 24.0 analysis.

The research is a mixed model design composed of 2 student groups: the experimental group and the control group.

Experimental Design

Group A or Group B were selected as the experimental and control groups by simple random sampling. As a result of sampling, Class A is classified as an experimental group and Class B as a control group (Table 2).

Table 2 Experimental design in this study

Sample	Pretest	Intervention	Posttest
experimental group	O_1	X_1	O_1
control group	O_1	X_2	O_1

O_1: Chinese Proficiency Level 3 assessments

X_1: BOPPPS teaching model X_2: traditional PPP model

Statistical Analysis

In this experiment, the experimental and control groups' results were compared after one semester to demonstrate whether adopting the BOPPPS teaching model impacted students' learning outcomes and which language skills had the greatest impact, i.e., listening, speaking, reading, and writing. The test paper used in this experiment was divided into four parts: listening, speaking, reading, and writing. The writing part of the test mainly evaluated students' ability to write Chinese characters, and each part was worth 50 points. The test paper only examined what students had learned that semester, and each part of the listening, speaking, reading, and writing test was decentralized.

SPSS 24.0 was adopted for statistical analysis. Quantitative results are expressed as Average ± Standard deviation ($\bar{x} \pm s\bar{x} \pm s$). The rank sum test for two independent samples was adopted to compare the two groups.

Table 3 Comparative the scores of the two classes before the experiment

variable	Grouping (Mean ± Standard deviation)		t
	PPP(n=15)	BOPPPS(n=15)	
speaking	3.467±1.995	3.933±2.463	-0.570
listening	18.800±3.649	19.133±5.055	-0.207
writing	2.200±1.146	2.133±0.915	0.176
reading	9.467±5.566	8.933±4.559	0.287
total	30.467±8.576	30.200±9.291	0.082

$p<0.01$

As seen from Table 3, an independent sample t-test was used to study the differences between groups in speaking, listening, writing, reading, and total scores of these five items. It can be seen from table 3: different group samples showed no significant difference in speaking, listening, writing, and reading scores ($p<0.01$), which means that different group samples showed consistency in speaking, listening, writing and reading scores without difference.

Table 4 Comparing each result of the two classes after the experiment

variable	Grouping (Mean ± Standard deviation)		t
	PPP(n=15)	BOPPPS(n=15)	
speaking	4.133±2.386	10.200±3.649	-5.389**
listening	18.733±5.405	26.267±5.311	-3.850**
writing	6.333±1.543	3.867±1.959	3.831**

variable	Grouping (Mean ± Standard deviation)		t
	PPP(n=15)	BOPPPS(n=15)	
reading	9.933±4.026	14.000±4.690	-2.548*
total	35.000±7.474	44.133±9.812	-2.868**

**p<0.01 *p<0.05

It can be seen from Table 4 that the t-test (independent sample t-test) is used to study the differences in the five items of speaking, listening, writing, reading, and total scores. It can be seen from the above table that: the total scores of speaking, listening, writing, and reading of different groups of samples were all significant (P <0.01), which means that the total scores of speaking, listening, writing and reading of different groups of samples were different. Specific analysis shows that:

The grouping showed significance at 0.01 level for spoken language (t=-5.389), and the average PPP (4.13) was significantly lower than the average BOPPPS (10.20).

Grouping showed significance at 0.01 level for listening (t=-3.850), and the average PPP (18.73) was significantly lower than the average BOPPPS (26.27).

Grouping showed 0.01 level significance for writing (t=3.831), and the specific comparison showed that the average PPP (6.33) was significantly higher than the average BOPPPS (3.87). The grouping showed a significant level of 0.05 for reading (t=-2.54), and the average PPP (9.93) was significantly lower than the average BOPPPS (14.00).

The group showed significance at 0.01 level for the total score (t=-2.868), and the average PPP (35.00) was significantly lower than the

average BOPPPS (44.13).

This study used a random sampling method to select two groups from all third-year students as experimental samples. It used the written and oral sample papers of the HSK Chinese Proficiency Test as the pre-test and post-test papers to ensure the reliability and validity of this study.

Results

BOPPPS outperformed PPP in improving the three Chinese listening, speaking, and reading skills, especially in listening and speaking, where the scores were much higher than those of the PPP group. However, BOPPPS did not improve Chinese writing skills significantly, and in this study, it even appeared that the standard teaching method was more effective than BOPPPS in improving writing skills. In teaching Chinese as a foreign language, BOPPPS can improve classroom efficiency to a certain extent, enhance learners' interest in learning Chinese, and promote students' participation in the classroom.

New knowledge and utilization

The BOPPPS model is effective in improving the efficiency of language teaching and learning. It outperforms in certain areas but is less effective in writing skills, for which the conventional teaching model PPP is more effective. It cannot conclude that the teaching modality is superior to another method. But we should flexibly use and choose the relevant

teaching modes according to the characteristics of the learning target, the teaching purpose, and other external conditions (Liu, 2012).

The US higher education community proposed seven countermeasures in the mid to late 1980s. It included: Good Practices, Gives Prompt Feedback and Emphasizes Time on Task (Chickering & Gamson, 1987). Because Google Form's feedback ability has the three characteristics of accuracy, immediacy, and personalization, and the six links of the pre-tests and post-tests in the BOPPPS mode complement each other, it ensures that the six links in the BOPPPS mode can be completed in a relatively short time. Teaching efficiency is greatly improved, and the completed test papers can be reused many times to test students' learning results.

The BOPPPS pattern is a product of this era and is ideal for electronic applications. Google Forms can submit timely feedback on objective questions, which can significantly reduce teachers' workloads to correct homework and help teachers quickly and intuitively grasp the mastery of a certain knowledge point.

Discussion

Liu (2019) concluded through teaching experiments that the BOPPPS model (Figure 6) has a significant role in promoting the improvement of learners' Chinese skills, especially the learners' listening and speaking skills. However, the progress of learners' writing and reading abilities was not obvious. Comparing the results of this study, the BOPPPS model improved learners' Chinese language proficiency most in listening,

followed by speaking and reading skills, but did not significantly improve writing skills. The B section mobilizes the learner's listening and vision, the O section clarifies the objectives, P1 identifies the students' problems, P2 develops students' ability to analyze and solve problems, P3 tests the learning results again, and S self-summarizes and reflects. The whole session was carried out on a Google Form, with almost no writing. This format resulted in writing ability not being practiced. The session focused on cultivating students' self-learning and thinking abilities.

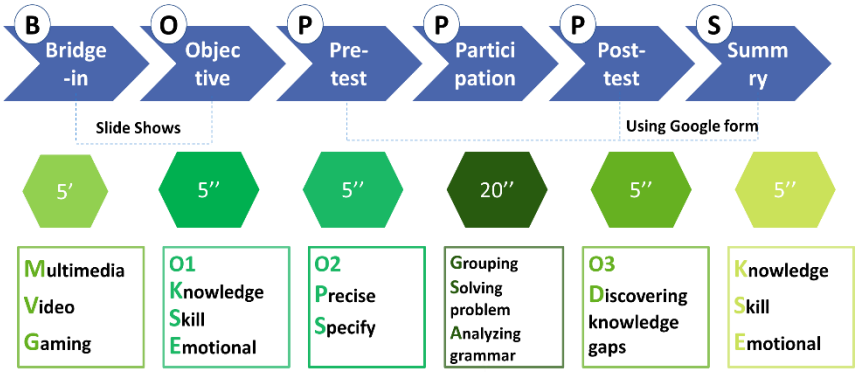

Figure 6 BOPPPS Teaching Design

Liu's research did not utilize advanced technological tools such as Google Classroom, and the article mentions that manually recording student learning and levels on a laptop is slow and inefficient. In this study, the functions of Google software were utilized to create assessments, which is a convenient and effective way to get feedback on students' learning in the classroom. This feedback was not only timely but also scientific. This led to a significant improvement in students' reading ability,

which shows that a helpful teaching model should be used in tandem with advanced teaching software for more substantial improvement.

However, these two comparative studies found that the BOPPPS teaching mode did not significantly improve Chinese writing ability. This study showed that the standard teaching mode was more effective than the BOPPPS teaching mode in improving writing ability. The three sessions of the PPP (Figure 7) were under the strict control of the teacher, and students were required to take notes in each session and practice writing throughout the entire class. It also shows that over-reliance on high-tech electronic technology such as laptops and cell phones lead to compromised learning of writing skills.

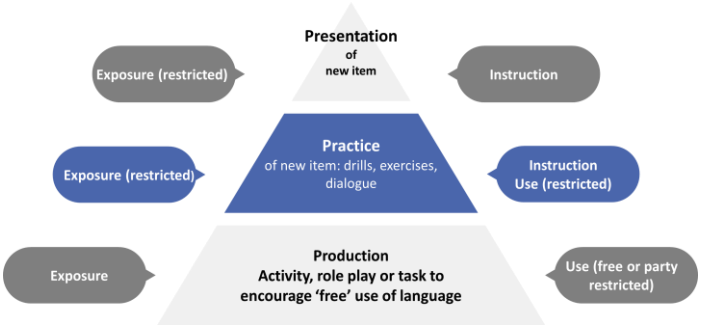

Figure 7 PPP Teaching Design

Zhong & Zhang (2020) analyzed BOPPPS for reading ability but did not apply it in practice. Ye (2021) also analyzed BOPPPS on teaching Chinese as a foreign language in the instructional design context. Yang (2021) also analyzed the effectiveness of BOPPPS in increasing learners'

interest in education and enhancing classroom interaction. Yang (2021) also verified that the BOPPPS teaching model effectively increases learners' interest and enhances classroom interaction.

Before and during the teaching experiment, classroom observations and records were made in three lessons of the experimental group, and the number of people with each type of participatory behavior in each lesson was calculated on average, and the results are shown in Table 5.

Table 5 Classroom Observation Record Data

Student participation behaviors	Period	Numbers	Percentage
Pay attention in class and do nothing else (e.g., talk to each other, read other books)	experiment	14	96%
	pre-experimental	11	76%
Actively raise hand to express opinions	experiment	12	80%
	pre-experimental	10	64%
Participate actively in group discussions and express views	experiment	13	86%
	pre-experimental	8	54%
Can complete practice tasks assigned by the teacher	experiment	13	86%
	pre-experimental	6	40%
Seek help from teachers or peers when in trouble	experiment	14	95%
	pre-experimental	11	76%
Not nervous about classroom assessments and questions	experiment	12	78%
	pre-experimental	8	56%
Have an enjoyable classroom experience	experiment	14	96%
	pre-experimental	12	77%
	experiment	12	80%

Student participation behaviors	Period	Numbers	Percentage
Take the initiative to demonstrate your learning achievements	pre-experimental	7	46%

After using the BOPPPS teaching mode, students' participation in the IT classroom improved significantly. The phenomenon of talking to each other and walking away in the classroom decreased significantly; students actively raised their hands in class to ask and answer the teacher's questions; everyone actively participated in the group cooperation session, expressed their own views, offered suggestions for the task, the group's division of labor was clear, and group members cooperated to fulfill their duties; when encountering problems, they chose to think by themselves or communicate and discuss with their peers; when experiencing communication demonstrations, there was even the phenomenon of competing to be the best in class. When encountering problems, they chose to think independently or communicate and discuss with their peers; when offering communication and presentation, there was even a phenomenon of scrambling to be the first. The breadth of participation in the whole classroom has dramatically improved. These results show that the use of this teaching model is conducive to the enhancement of student participation.

A comparison of this research confirms that BOPPPS can improve classroom efficiency and increase learners' interest in learning Chinese to a certain extent in language teaching.

There are still a lot of shortcomings in this study, for example, the limited number of students in the classes and the need to control the variables of the students. Plus, the study sample is insufficient, which reduces the reliability of the findings to a certain extent. In addition, due to the limited time, it would be more conducive to the study's validity if a pre-test and a post-test could be conducted on students' satisfaction. At the same time, the author faces a new teaching model and has problems such as a lack of experience, which will also affect this article's validity.

If there is an opportunity to continue to study this topic, it is hoped that the sample size can be increased, and increasing the sample size requires first training the relevant lecturers and making a unified lecture template. Thus, all the teachers involved in the test can collectively undergo pedagogical training and compare scores afterwards. Finally, the pre-test and post-test on students' satisfaction would examine whether students' satisfaction with classroom effectiveness has improved.

Recommendations

Yang & Yao (2019) argue that the BOPPPS teaching model truly achieves student-centeredness and problem-oriented instruction, overcoming the difficulties of the curriculum and exerting a positive impact on the formation of students' values and life perspectives.

Zhang (2021) proposed conducting online teaching practices based on the BOPPPS model and integrating online teaching platforms. It is believed that BOPPPS is conducive to achieving teaching goals of student

autonomy, positive teacher-student interaction, and efficient and engaging classroom instruction. The effectiveness of this teaching approach was fully verified through end-of-term grades and questionnaire surveys.

With the rapid development of the knowledge economy, globalization and the information society, the traditional knowledge-based talent quality structure has become increasingly challenging to meet the needs of the future society. The article "Creativity, Critical Thinking, Communication, and Collaboration: Assessment, Certification, and Promotion of 21st Century Skills for the Future of Work and Education" addresses educational challenges posed by the future of work, examining 21st Century Skills, their conception, assessment, and valorization. It focuses on key soft skill competencies known as the "4Cs": creativity, critical thinking, collaboration, and communication (Thornhill-Miller et al., 2023).

The BOPPPS teaching model is characterized by a new student-centered teaching model that combines the cognitive, psychological, and emotional characteristics of the learners, which is not only in line with the features of the age group of students from secondary to higher education but also with the lively character and learning habits of Thai students. It also meets the needs of the 21st century in terms of human resources training. It enables Thai students in vocational schools to learn Chinese not only to grasp language skills and Chinese culture but also to solve problems creatively and develop the ability to cooperate and communicate with others. Teaching students to learn is more important than teaching knowledge in this new era.

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