

# Exploration of the Reform of Applied Linguistics Course Under the “Internet+” Platform and the BOPPPS Model

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**Abstract:** The teaching of linguistics courses in traditional teaching mode brings students problems such as cognitive burden, insufficient learning motivation, and lack of understanding of the course setting. According to the established problems and students' learning situation, we analyze the students' learning situation, select an experimental control class among the classes of the same grade and the same major studying the course, and carry out the course teaching reform by combining the characteristics of the applied linguistics course. The experimental class that adopts the BOPPPS model in teaching design relies on the “Internet+” Bodoudou platform to assist in teaching quizzes and carry out classroom teaching reform. The control class adopts the traditional teaching mode. At the same time, in the final results and pre- and post-questionnaire surveys, it was found that after adopting the BOPPPS model of teaching, students have made greater progress in absorbing and applying knowledge than in the previous period. The use of BOPPPS model teaching improves the absorption and mastery of knowledge, and the cultivation of learning habits is better than that of traditional teaching.

**Keywords:** BOPPPS; Pedagogical reform; Applied linguistics; Bodoudou

**Online publication:** June 20, 2024

## 1. Introduction

The BOPPPS model (Bridge-in, Objective, Pre-assessment, Participatory learning, Post-assessment, Summary) was proposed by Douglas Kerr of Columbia University in Canada, which stresses the core of motivating students to participate in all aspects of the classroom and is characterized by a standardized and streamlined teaching process. Students are engaged in the process of knowledge learning, knowledge accumulation as well as the process of reflection <sup>[1]</sup>. Pattison and Day <sup>[2]</sup> pointed out that the BOPPPS instructional model is a closed-loop instructional process model that emphasizes student engagement and feedback and is a model of instruction that is more highly regarded by many prestigious schools in North American countries. As of 2023, the model has been implemented in over 100 universities and institutions in more than 30 countries around the world.

Based on the literature of Zhi.com and Google Scholar in the preliminary stage of this project, it is

found that there is less teaching research on this course, mainly focusing on external teaching under applied linguistics, research methods, comparative studies, etc., and there are no experts and scholars who use the BOPPPS model to reform the teaching of the course of applied linguistics.

## **2. Instructional design of applied linguistics course based on the BOPPPS model**

### **2.1. Situational analysis**

The content of applied linguistics involves theoretical research and practice, which is an important course for students majoring in Chinese language and literature. Under the traditional teaching mode, the teacher teaches and the students learn passively, and the main problems caused by this teaching mode are as follows: (1) The learning atmosphere is weak and students' independent learning ability is poor, they passively accept the knowledge and information and do not effectively play out their subjective role in the classroom; (2) The students generally think that linguistic knowledge is very difficult with a heavy cognitive load and fear of difficulty; (3) The students' awareness of combining the knowledge with practice is weak and the classroom participation needs to be further improved; (4) There is only a single way of assessment and evaluation.

In the academic year 2023–2024, a total of 435 students took the applied linguistics course and 420 valid questionnaires were collected after the preliminary questionnaire survey. It was found that most of the students had a vague or negative attitude towards the question “Why should I study ‘Applied Linguistics,’” among which 177 students said they did not care why they should study the course, and nearly 160 students said they had no idea/no idea at all why they want to study the course.

Since 55% of the students did not know the reason for studying the course and why they wanted to study it, the next question “How much the students know about the Applied Linguistics course” was answered in the same way: more than 100 students said that they had no knowledge of the course.

According to the above situation, we further concluded the reasons for this phenomenon through individual interviews and symposiums, there are mainly the following three points: (1) Students do not understand the professional training program; (2) The composition of the professional knowledge is unclear; (3) There is no willingness to actively learn and understand subjects, and they are more accustomed to passively accepting arrangements.

Although most students did not know enough about the reasons for and content of the course, they showed a high degree of motivation and cooperation in class. Among them, more than 46% of students said they would participate/actively participate in the class, but there is also an equal number of students with an average attitude of participation in the class, and they need to be further encouraged to actively participate in the class. Some factors that affect students' participation in the classroom are whether the class content is practical, whether the classroom atmosphere is attractive, whether the teacher's teaching method is appropriate, etc.

To maintain the active participation of the students who are willing to participate in the class and to get the students with average attitudes to actively participate in the class, it is also necessary to know the students' study habits. The results of the survey showed that about 85% of the students in this program said that they did not have the habit of studying in advance, and only 60 students said that they would study in advance for the next class; only about 27% of the students had the habit of reviewing.

Moreover, students' learning styles are a factor to be considered to better apply the BOPPPS model in the classroom. In a comprehensive review of the literature on learning styles, no less than 71 approaches with significant differences were identified <sup>[3]</sup>. For statistical purposes, Kolb's two-dimensional coordinate theory was utilized to investigate students' learning styles. Kolb's learning styles scale is based on preferences for his experiential learning model <sup>[4]</sup>. It was found that more than 50% of the students' learning styles were

divergent thinkers, i.e., these students were imaginative and excelled when asked by the teacher to express their views. Among the remaining students, convergent thinking accounted for a relatively large proportion, but only accounted for 23% of the remaining number of students, these students focus on finding answers or solutions when encountering the teacher's questions and are more inclined to think and discover the answer by themselves. The remaining students were assimilated learners and compliant learners. The learning styles of the students were generally consistent with the teacher's evaluation of the class observations.

As the Ministry of Education has explicitly requested in the latest undergraduate education teaching audit and evaluation index system that the implementation of "learning-centered and teaching-led" classroom teaching be examined<sup>[5]</sup>. Promoting students' deep learning is the basic path to realizing the cultivation of the core qualities of higher education talents and improving the quality of teaching<sup>[6]</sup>. Based on the above information about students' learning styles, learning habits, and attitudes toward disciplines, we can establish a dynamic adjustment mechanism for disciplines and majors and a guiding mechanism for the development of characteristics, and to enhance the relevance of disciplines in higher education institutions<sup>[7]</sup>. The BOPPPS model is used as the basis for the design of curricular reforms to improve the degree of cooperation between students in the classroom, promote students' better participation in the classroom, and connect the previous and subsequent knowledge.

## 2.2. Instructional design ideas

The BOPPPS model consists of the following six components: Bridge-in, Objective, Pre-assessment, Participatory learning, Post-assessment, and Summary.

- (1) Bridge-in (classroom introduction): This involves the activities related to the content of the teaching carried out by the teacher before class. As the main organizer and participant in the classroom, the teacher cannot merely give lectures but should take different forms of teaching organization based on the content of the knowledge imparted<sup>[8]</sup>. Its purpose is to stimulate students' interest in learning and help students prepare for the new class. Classroom introduction needs to be closely related to the content of the teaching, such as review introduction, scenario introduction, audio-visual introduction, free conversation introduction, problem introduction, and so on.
- (2) Objective: Objective is one of the cores of the BOPPPS model. Students are expected to achieve knowledge, skills, and affective goals through instructional activities, and two to four instructional objectives are usually identified based on curriculum standards and specific learning situations.
- (3) Pre-assessment: Pre-assessment can be used to understand students' knowledge base and pre-learning, so as to design targeted teaching. Teachers conduct pre-assessments through the online platform Bodoudou to stimulate students' minds and cultivate their habit of pre-reading before class. The contents of the pre-assessment generally include reviewing old knowledge and grasping the main knowledge of the new chapter.
- (4) Participatory learning: This is the core of classroom teaching. Through the feedback of the pre-assessment, the teacher explains the important and difficult points, and designs and arranges a series of thematic and hierarchical questions that connect the previous and new knowledge through a combination of flexible and diversified teaching methods such as discussion, independent practice, online random selection, and small group activities, so as to structure and systematize the knowledge.
- (5) Post-assessment: Post-assessment tests students' knowledge mastery, both as an assessment of the established teaching objectives of the lesson and to help teachers make continuous improvements to the teaching process. Post-assessment questions are designed to focus on the key points in teaching and to

test students' ability to apply their knowledge.

- (6) Summary: This helps students review and reinforce knowledge points in a concise manner. Usually before the end of class, teachers and students work together to summarize the content of the lesson and chapter. At the end of the lesson, the knowledge is sorted out and summarized by designing mind maps and other means.

Based on Ausubel's pedagogical thinking, the logical starting point for setting teaching objectives is not "how much the teacher can teach" but "how much the students can learn" [9]. Through the applied linguistics course, the following teaching objectives in **Table 1** should be achieved this semester.

**Table 1.** Comparison of teaching objectives before and after the teaching reform of applied linguistics

Pedagogical objectives	Pre-reform	Post-reform
Knowledge goal	To develop students' knowledge of theory and research methods in applied linguistics	<ol style="list-style-type: none"> <li>1. To train students in the theory and research methods of applied linguistics.</li> <li>2. To cultivate students' habits of independent learning and learning with problems.</li> <li>3. To develop literature reading habits, analytical skills, and basic research skills.</li> </ol>
Skill target	To cultivate the ability to write a linguistic thesis that meets graduation requirements.	<ol style="list-style-type: none"> <li>1. To apply the methods learned to solve linguistic problems in other disciplines.</li> <li>2. To cultivate students' comprehensive qualities of social interaction and communication in terms of language expression, searching for information, and knowledge integration.</li> <li>3. To have the ability to write a high-quality linguistic paper with attention to real-life discourse situations.</li> </ol>
Emotional goal	-	<ol style="list-style-type: none"> <li>1. Through the flipped classroom and the reflection and discussion in the classroom, students will develop dialectical thinking, a self-confident attitude, and the ability to solve problems with patience and care.</li> <li>2. To have the aspire to join the development of applied linguistics in China.</li> </ol>

The teaching objectives of applied linguistics after the teaching reform have begun to pay more attention to the cultivation of students' learning initiative and practical application, and consciously cultivate students to observe, think, and analyze current language phenomena and language policies by applying what they have learned based on books.

China's Education Modernization 2035 puts forward new requirements for changes and innovations in the form of education courses, namely, the deep integration of information technology with the education and teaching process, and the creation of a brand-new teaching environment for front-line teachers to make full use of modern information technology [10]. Combined with the analysis of students' learning situation in this major and the requirements of China's Education Modernization 2035, we explored the BOPPPS model as an applied linguistics class reform, used Bodoudou as an online pre-assessment and post-assessment platform for the classroom in order to examine students' pre-assessment and reviewing through the classroom purposeful quizzes, to help students to understand the course content in advance, consolidate what they have learned, and subtly affect their learning habits. Meanwhile, at the end of the pre-assessment and post-assessment, teachers lead students to review the wrong questions and check for learning gaps, in addition to the use of "Internet+" to assist classroom teaching and assessment (**Figure 1**).

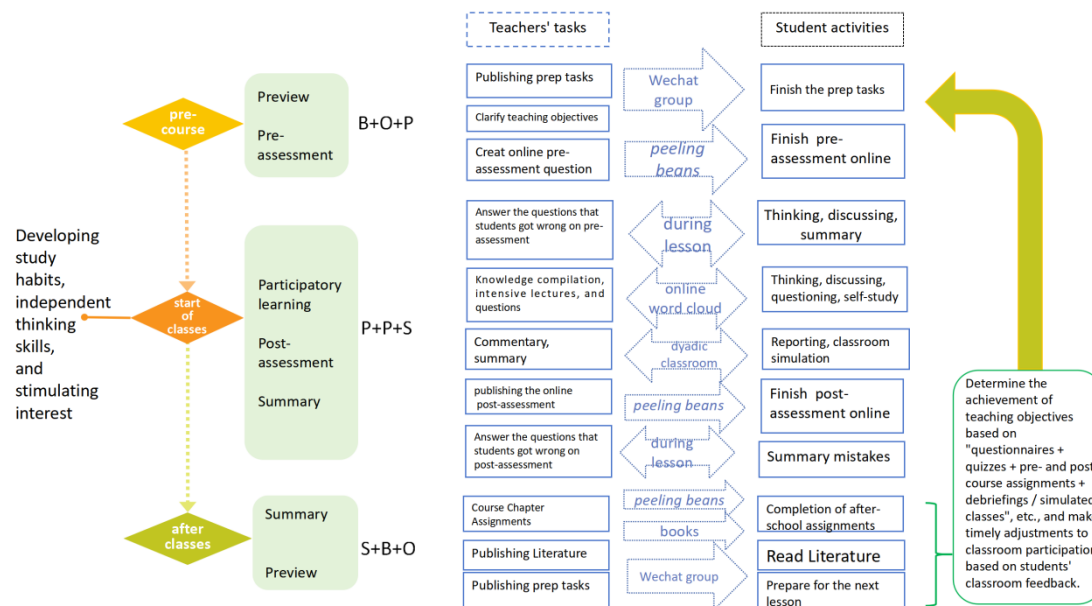


Figure 1. Classroom design of the BOPPPS model based on Bodoudou

### 3. Comparative study of the application of the BOPPPS model of teaching and traditional teaching practices

In this teaching reform, in addition to the basic investigation of students, in order to explore whether the BOPPPS model is effective for teaching, eight large classes of grade 21 were selected as the research subject. Four large classes used the BOPPPS model to carry out the teaching reform and the other four classes used the traditional teaching mode, which was compared and analyzed before the beginning of the research, during the research, and after the research in conjunction with the effect of actual practice.

#### 3.1. Comparison of the effectiveness of regular learning through the platform

This course relies on the Bodoudou platform to record students' pre-assessment and post-assessment on applied linguistics before class. The BOPPPS model is used to design the classroom, which can help students understand the deficiencies of the pre-assessment, focus on their linguistic knowledge, and use questions to stimulate their thinking, so that they can participate in the classroom more actively and achieve familiarity with and absorption of knowledge.

Students' classroom discussion and interaction partly relied on the online platform and the pre-assessment and post-assessment all relied on the online platform Bodoudou, fully realizing online and offline blended teaching. In order to provide better feedback on the teaching effect, the pre-assessment of students' knowledge was carried out before class, and the average correct rate of pre-assessment course knowledge in a semester is 55.75%; as for the evaluation of students' knowledge mastery after class, the results show that after students studied in the BOPPPS mode, the average chapter test rate in the first semester after the review is 57.38%, which is effective to a certain extent. In contrast, because of the lack of access to specific assessment data in traditional teaching classes, students can only be subjectively evaluated based on the review in the course introduction, and an objective analysis of the knowledge prep and absorption of all students cannot be made.

Meanwhile, all eight classes have students participating in the BOPPPS classroom, among which, in the BOPPPS pedagogical reform class, teachers and students can enter into their roles more easily, the classroom

atmosphere and teachers' teaching attitudes are relatively more mature, and the class of pedagogical reform is more complete in the production of classroom materials and the logic of teaching due to reference to the usual classroom of applied linguistics. On the other hand, it can be found that the teachers' teaching by words and example also has a subtle influence on the students.

### **3.2. Comparative analysis of learning outcomes**

At the end of the semester, the results showed that the final grades of the traditional class and the class taught with the BOPPPS model are normally distributed within the overall range: there are no failing grades in the traditional class and the class taught with the BOPPPS model. There were four students in the traditional class and one in the BOPPPS model class in the passing range (60 to 69 points); in the moderate range (70 to 79 points), there were 135 students in the traditional class and 110 students in the BOPPPS model class, accounting for 56.32% of the total number of students in this year's major; in the good range (80 to 89 points), there were 67 students in the traditional class and 89 students in the BOPPPS model class, accounting for 35.86% of the total number of students in this year's major; the excellent part (90 points and above) had 14 students in the traditional teaching class and 15 students in the BOPPPS model teaching class, accounting for 6.67% of the total number of students.

In the case of the same major in this grade, although the final grades of the two types of classes are normally distributed, the percentage of students with passing and moderate grades in the traditional teaching class is higher than that of the class taught with the BOPPPS model; while the good and excellent rates of the class that adopted the BOPPPS model for the reform of teaching and learning are higher than that of the traditional teaching class. It can be seen that the adoption of the BOPPPS model showed positive results in promoting students' knowledge acquisition.

In the process of teaching practice, the most fundamental difference between the BOPPPS model teaching and the traditional teaching mode is that the BOPPPS model teaching reform has added a platform to observe the effect of students' pre-study and post-study. According to the above data, the teaching reform of the BOPPPS model in applied linguistics has improved students' interest in learning, cultivated students' learning habits of pre-study and review, improved students' motivation and practical skills, and significantly improved the teaching effect.

### **3.3. Comparative analysis of student questionnaire data**

After the course practice of applied linguistics in eight classes of Chinese language and literature 2021, questionnaires were administered to the BOPPPS model teaching class and the traditional teaching class respectively, which mainly involved the content on the ability of independent learning, the purpose of the students, and the degree of understanding of the course, with the purpose of making a comparison of the preliminary mapping.

Through the analysis of the questionnaire data, it is found that in the option of "pre-study before class," 48 students in the BOPPPS model teaching class chose "have the habit of pre-study," which is an increase of 33.33% compared with that of the previous mapping period, while 27 students in the traditional teaching class chose "have the habit of pre-study," which is unchanged compared with that of the previous mapping period. The number of students in the traditional class was 27, unchanged from the previous period. The total number of students with revision habits in the previous mapping test was 108, of which 51 were in the traditional class and 57 in the BOPPPS model class. After one semester, the number of students with revision habits increased to 54 in traditional classes and 71 in BOPPPS classes, which is an increase of 19.72% compared to the previous

semester.

In the BOPPPS model teaching, the teacher will upload the learning materials and pre-study tasks for the next class to the online platform after each class. At first, when checking the completion of pre-study in class, there have been cases in which only a few students in a class have completed it, and after a period of time of training, a part of the students have gradually cultivated the awareness and ability of independent learning.

In the question “Why do you want to take an applied linguistics course,” there was a decrease in “do not know/not at all” in both classes. In the BOPPPS model class, there was a 35.29% decrease in “do not know/not at all,” while in the traditional class, there was an 18.91% decrease. In the question “Knowledge of the course applied linguistics,” the number of students who chose “know/very well” increased in both classes; while only four students in the traditional class indicated “know/very well” in the mapping survey, which increased to 10 in the final survey, while in the BOPPPS model class, the number of students increased from 11 to 35.

The reason for the different increases in the above problems is that the BOPPPS model class used the online platform Bodoudou to carry out classroom reform and monitor student learning. In the design of classroom teaching, effective teaching activities such as real-time quizzes, thematic discussions, and follow-up exercises were designed on the platform, taking into account the survey of students’ learning situation and the content of the teaching, so as to formulate an effective implementation plan for the teaching of the applied linguistics course.

## 4. Conclusion

At present, most colleges and universities still adopt traditional teaching methods for Chinese language and literature courses, without fully combining “Internet+” with the actual curriculum, which leads to problems such as insufficient motivation and poor problem-solving skills of students in talent cultivation. This study carried out teaching reform through experimental control with a semester of observation and experiments and finally concluded that relying on the “Internet +” platform and using the BOPPPS model, the comprehensive quality and teaching effect of the class is better than the overall situation of the traditional teaching class.

## Funding

Xiangtan Institute of Science and Technology School-Level Projects “Exploration of the BOPPPS Model in Applied Linguistics” (XTLG2022B026)

## Disclosure statement

The author declares no conflict of interest.

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