



# Construction of Oral English Teaching Behavior Based on PBL Model

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## Abstract

According to the requirements of the curriculum standards, English teaching needs to focus on the cultivation of students' comprehensive ability to enhance students' practical application ability. Most teachers neglect the creation of the theme or the real situation, fail to dig deeply into the meaning of the theme, and lack in-depth analysis of the text. In the current English teaching, the teacher is still the leader, while the students are the passive recipients. This study is based on the analysis of the impact of the PBL reading teaching mode on students' reading achievement. The paper puts forward countermeasures for the impact of the PBL teaching mode on students' reading comprehension ability and creative thinking ability. The PBL teaching mode is to explore its impact on students' reading comprehension and creative thinking ability and to verify the effectiveness and feasibility of this teaching method in English reading teaching. The experimental results show that the fluency and flexibility of creative thinking ability are significantly improved after the PBL English training. The significance level of originality is 0.087, which is higher than that of the ordinary teaching mode. This study provides some support and practical basis for future researchers to study the PBL teaching method, and encourages them to continue to carry out relevant research to make this study more perfect and rich.

**Keywords:** Foreign Language Teaching, Oral Training, Behavior Model, PBL Model

## 1 INTRODUCTION

Language learning should focus more on the cultivation of abilities and skills, not just knowledge memorization. Students' comprehensive English proficiency is improved more obviously and significantly during the reading of English texts. Reading is a comprehensive ability based on knowledge and understanding. In the process of reading, students need not only the foundation of vocabulary and grammar but also the assistance of relevant reading skills and even some reading background [1]. English reading courses should carry out some overall design based on the text, and interpret the text structure as well as the text ideas to improve students' understanding and memory ability and enrich the content of the text teaching [2]. In discourse teaching, students should consciously learn the basic knowledge of discourse infiltrated by teachers to help them form discourse awareness and learn to grasp the structural features of discourse to improve their ability to understand the meaning of discourse [3].

The current reading teaching lacks a deep interpretation of the text. It has weakened the function of the syntax check, which pays more attention to discourse reading ability and understanding of the text. The traditional text reading teaching method is still difficult to change. Besides, the traditional reading teaching method mainly exists in the teaching focus on language knowledge. The single teaching mode only pays attention to the problems such as surface reading, which is also found in the actual teaching. In EFL (English as a Foreign Language) classes, students are not treated as readers, that is, they are not really reading, but only learning language knowledge and grammar knowledge. The focus of the class is also on the understanding of the content, and the cultivation of critical thinking of students is lacking [4]. In the design of reading class, the teacher to the understanding of the discourse is not enough in-depth. The teacher to student's guide and the lack of deep thinking often ignore the intention of the text and the author's emotional attitude. Some teachers rely too much on reference books and the network teaching resources, not combined with the students learning in teaching design [5].

To explore whether PBL (Problem-based Learning) teaching method can improve reading comprehension ability and creative thinking ability, this study adopted experimental intervention for the subjects. It obtains the data information through the test of the application of teaching methods before and after and questionnaire survey. Finally, based on the data obtained, a conclusion is drawn and some suggestions on the application of the PBL approach in English reading teaching are put forward.

## 2 PBL PATTERN VARIABLE DESIGN

(1) The design of research variables in this study is as follows: the researcher mainly uses the experimental method to study and analyze the influence of the PBL teaching method on students' English reading achievement, reading comprehension ability, and creative thinking ability. According to the research plan

of this study, the researcher divided the students who participated in the experiment into the experimental group and the control group. The study completed the test before and after the experiment, in which the experimental group implemented the PBL teaching model, while the control group implemented the conventional teaching model [6]. Therefore, in this experimental study, two independent variables and six different dependent variables were designed. In the control group, the conventional English reading teaching mode was used as the independent variable. The subjects' English reading achievement, reading comprehension ability, and creative thinking ability were used as the dependent variables. The experimental group took the PBL teaching model as the independent variable, and their English reading scores, reading comprehension ability, and creative thinking ability as the dependent variables. The specific design of the research variables is shown in Table 1.

Table 1 Study variables

| Group         | Argument                     | Variable               |
|---------------|------------------------------|------------------------|
| Control group | Conventional teaching method | English reading grades |
|               |                              | Reading understanding  |
|               |                              | Creative thinking      |
| Test group    | PBL teaching method          | English reading grades |
|               |                              | Reading understanding  |
|               |                              | Creative thinking      |

### (2) Collection and statistics of research variables

First, the researcher used the data results of the test as an indicator to measure the dependent variables of English reading achievement and reading comprehension ability. Among them, the reading comprehension test questions are mainly divided into four different types of questions, each of which represents a kind of ability: the fact detail questions represent the ability of detail extraction; the main idea questions represent the ability of induction and summary; the word meaning guessing questions represents the ability of new word-guessing; and the reasoning and judgment questions represent the comprehensive inference ability [7]. Finally, for the collection of dependent variable data, researchers collect test papers and use the SPSS professional statistical software to complete the statistics and analysis of data after data collection.

Secondly, in the study of the change of creative thinking ability of the dependent variable, the researcher

intends to use the questionnaire survey method to make statistics. The results of the questionnaire survey are used as a reflection of the changes in this ability. The questionnaire examined four aspects of the subjects' English creative thinking abilities, mainly including English word association ability, problem-posing ability, problem-solving ability and English imagination ability [8]. In addition, the scale of the whole test will also complete the scoring work from the three characteristics of creative thinking.

## 3 EXPERIMENTAL ANALYSIS

### 3.1 Experimental way

The researcher of the experimental implementation mode set the two classes of the subjects as the experimental group and the control group respectively. The experimental model is shown in Figure 1:

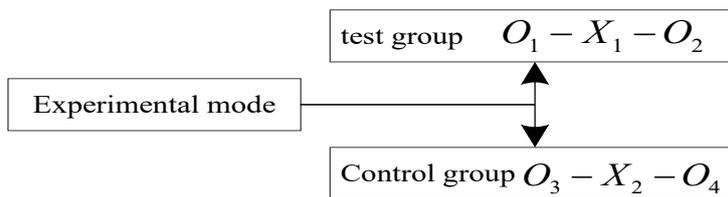


Fig. 1 Experimental mode

In the experimental study, the researcher tested the students in the experimental group and the control group respectively. The experimental group used  $O_1 - X_1 - O_2$  and the control group used  $O_3 - X_2 - O_4$ , in which  $O_1$  was the pre-test score of English reading comprehension and the pre-test result of creative thinking ability of the subjects in the experimental group, and  $X_1$  was the intervention variable, that is, the PBL teaching method was used in the experiment group.  $O_2$  is the post-test score of English reading comprehension and the post-test result of creative thinking ability of the experimental group [9].  $O_3 - X_2 - O_4$  was used in the control group, in which  $O_3$  was the pre-test score of English reading comprehension and the pre-test result of creative thinking ability of the subjects in the control group,  $X_2$  was the intervention variable of the control

Group, that is, the control group was taught English with conventional teaching method, and  $O_4$  was the post-test score of English reading comprehension and the post-test result of creative thinking ability of the subjects in the Control Group.

### 3.2 Experimental implementation plan

To ensure that the researcher can successfully implement the PBL teaching method in the experimental class for three months, the researcher formulated a detailed teaching implementation plan in the early stage of the experiment and implemented the teaching according to the teaching plan in the course of the experiment. The specific implementation plan and progress of the PBL teaching method are shown in Table 2 and Table 3.

Table 2 Progress of the first stage of the experiment

| Stages   | Units  | Names of units                       | Reading contents                                      | Test contents |
|--|--------|--------------------------------------|---|---------------|
| Pre-reading comprehension test and pre-creative thinking scale |        |                                      |   |               |
| The first stage  | Unit3  | I'm more outgoing than my sister.    | Section B 2b: My mother told me that a good friend... | No            |
|  | Unit 4 | What's the best movie theater?       | Section B 2b: Who's Got Talent?                       | No            |
|  | Unit 5 | Do you want to watch a game show?    | Section B 2b: When people say "culture"               | No            |
|  | Unit 6 | I'm going to study computer science. | Section B2b:  | No            |

Table 3 Expected progress of the second phase of the experiment

| Stages           | Units  | Names of units                       | Reading contents  | Test contents |
|------------------|--|--------------------------------------|---|---------------|
|                  |  |                                      | Do you know what a resolution is?                         |               |
| The second stage | Unit 7   | Will people have robots?             | Section B 2b: Do you think you will have your own robots? | No            |
|                  | Unit8  | How do you make a banana milk shake? | Section B 2b: Thanksgiving in the United States.          | No            |
| The third stage  | Post-reading comprehension test and post-creative thinking scale were administered |                                      |   |               |

To further examine whether there is any difference between the two groups of subjects in the pre-test, the researcher collected and analyzed the reading comprehension scores of the two groups in the reading comprehension test A (pre-test). From the previous experimental data, we can see that the number of subjects

in both groups is 49, and the valid test paper is 100%. After all the data entry and collation are completed, the researcher uses the SPSS professional software to conduct a *t*-test and descriptive statistics on the data obtained from the pre-test. The specific test results are shown in Table 4.

Table 4 Descriptive statistics of the pre-test of reading comprehension scores of the experimental class and the control class

| Class              | N  | Mean  | standard deviation | Mean standard error |
|--------------------|----|-------|--------------------|---------------------|
| Comparison class   | 49 | 29.35 | 6.238              | 0.758               |
| Experimental class | 49 | 30.78 | 5.412              | 0.636               |

In Table 4, the average score of the subjects in the control class in the English reading pre-test is 30.92, while the average score of the subjects in the experimental class in the pre-test is 30.98. Therefore, in the pre-test, the average scores of the subjects of the control class are 0.69 lower than those of the experimental class, which indicates that the difference between the average scores of the two classes is very small. According to the standard deviation data, the standard deviation of the control class is 5.627, while that of the experimental class is 4.935. Therefore, we can see

that the subjects in the control class have a relatively higher degree of performance dispersion [10]. Although the average score difference between the experimental class and the control class is very small, it does not prove that there is no significant difference in English reading scores between the two classes. Therefore, researchers also need to use an independent sample *t*-test to analyze whether there is a big difference in the performance of the two classes. The specific results are shown in Figure 2.

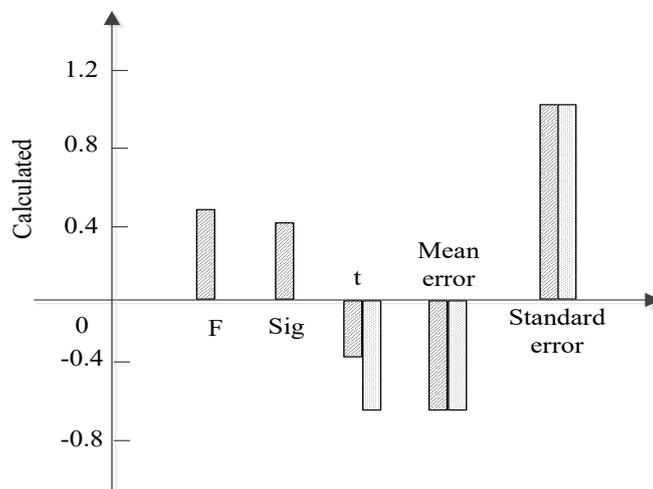


Figure 2 Independent sample *t*-test

In Figure 2, the independent sample *t*-test data of the two classes is 0.518, which is greater than 0.05, indicating that there is no significant difference in the reading comprehension pre-test scores of the two classes, that is, the two classes are at the same level. Therefore, even though there is a slight difference in the mean performance of the subjects in the two classes, from the independent sample *t*-test data, the pre-test scores of the experimental class and the control class are equivalent, which meets the sampling criteria of the experiment, so they can be used as subjects in this study.

### 3.3 Comparison of post-test total scores between groups

To explore the effect of the PBL teaching method on the subjects' English reading achievement, after three

months of the teaching experiment, the researcher conducted a reading comprehension post-test on the subjects of the two classes at the same time to observe whether there is a significant difference in the reading comprehension achievement between the two classes after the application of PBL teaching method. From the previous data, we can see that the number of subjects in the two classes is the same, in which both are 49. The effective test volume recovered by the researchers in the experimental class and the control class is 100%. After collecting, collating, and analyzing the reading comprehension scores of the two classes, the researcher used the SPSS23.0 professional statistical software to make a statistical analysis of the scores of the post-test papers and observed whether there were differences in the performance of the two groups in the post-test. The specific data are shown in Table 5.

Table 5 Descriptive statistics of the reading comprehension scores of the experimental class and the control class

| Class              | N  | Mean  | Standard deviation | Mean standard error |
|--------------------|----|-------|--------------------|---------------------|
| Comparison class   | 49 | 30.56 | 5.936              | 0.758               |
| Experimental class | 49 | 35.25 | 3.152              | 0.636               |

It can be seen from Table 5 that the average scores of the subjects in the two classes in the reading comprehension post-test were 35.25 and 30.56 respectively. The average score of the subjects in the experimental class was 3.152 points higher than that of the control class. In addition, in terms of the dispersion of sample data, the standard deviation of the experimental group is 3.152, while that of the control group is 5.936, which indicates that the performance

sample of the experimental group is more concentrated. From the data analysis, after the implementation of the PBL teaching method, the students in the experimental group not only improve their reading comprehension scores, but also reduce the polarization of the class so that the scores tend to be more stable. In addition, the researchers also made a statistical analysis of the pretest and posttest scores of the two groups, and the specific results are shown in Table 6.

Table 6 Descriptive statistics of the pre-test and post-test scores of reading comprehension in the experimental class and the control class

| Class              | N  | Mean     |           | Mean standard error |           |
|--------------------|----|----------|-----------|---------------------|-----------|
|                    |    | Forecast | Post test | Forecast            | Post test |
| Experimental class | 49 | 30.78    | 35.25     | 5.412               | 3.152     |
| Comparison class   | 49 | 29.35    | 30.56     | 6.238               | 5.936     |

After three months of study, the reading comprehension scores of the two classes have been improved. The average score of the experimental class in the pre-test is 30.98, and the average score in the post-test is 34.41, which has increased by 3.43. The average score of the subjects in the control class was 30.29 in the pre-test and 31.06 in the post-test, an increase of 0.77. It can be seen that the increase of reading comprehension scores in the experimental class is significantly higher than that in the control class.

To sum up, the significant level sig values of the subjects in the pre-test of reading comprehension in the experimental class and the control class are all greater than 0.05, which indicates that the implementation of the PBL teaching method is helpful to improve the ability of oral English teaching.

#### 4 CONCLUSION

The purpose of this study is to explore the feasibility of this teaching method according to the current situation of English reading teaching, and to analyze whether it can improve the quality of teaching through experimental and testing methods. Design a teaching plan according to the PBL teaching method, and then consult the tutor or teaching practice teacher to judge whether the teaching plan designed by the researcher is in line with the learning status of the research object. Through the analysis of the experiment, the PBL teaching method can improve the subjects' English reading scores, reading comprehension ability and creative thinking ability. PBL teaching method can help students exert their subjectivity, and teachers are only the assistants and guides in the process of students' learning. Therefore, this teaching method has changed the previous situation that teachers are dominant and students can only passively accept knowledge, which can better meet the requirements of English curriculum standards, improve the level of English teaching in junior middle schools, and enrich the theory of education and teaching in China.

The limitation of this study is that there may be some errors between the interview results and the teacher's presupposition. In the interview, due to the different classroom concerns of students, the results of their answers are different from the teachers' presupposition. What critical views will be expressed in future work? With the thinking of these problems, teachers are

designing problem-based teaching according to the goals they want to achieve, and are guiding students to achieve these goals in the form of problem chains or problem blocks.

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