Research on the Design and Application of Jigsaw Method in English Reading Teaching in Senior High School

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Abstract

In English class, reading has always occupied a dominant position. The improvement of reading ability is the key to promote the development of comprehensive English ability. However, the existing problems of high school English reading teaching, such as the single form, the low enthusiasm and the lack of cooperative learning, are not conducive to the development of students' reading ability. The application of jigsaw method can mobilize students' participation in class, promote their independent learning and cultivate the ability of cooperative learning. This teaching method is an effective way to solve the problems of reading teaching at present. On the one hand, it can help students to participate in class and develop their self-learning ability. On the other hand, a specific high school English reading case design can provide teachers with a new teaching perspective and way to improve students' English reading ability. The use of jigsaw method can make up for the shortcomings of the existing reading teaching methods and provide help for the cultivation of students' reading ability.

Keywords

Jigsaw method, senior high school, English reading teaching

1. Introduction

As an international language and the most commonly used language in the world, English plays an important role in economy, culture and other fields. In English teaching, reading occupies a dominant position. Students' English reading ability has direct or indirect influence on students' listening, speaking, reading and writing (Juan Huang & Fu Lin, 2010). Although most English teachers have realized the importance of cultivating and improving students' reading and are committed to improving the efficiency of reading teaching, there are still many problems in reading class. The single teaching form, low enthusiasm of students, low class participation and the lack of cooperation are the main predicaments in English reading class (Chen Jiaojiao, 2016). In order to change the deficiencies in reading teaching class, many educators are constantly looking for new teaching methods to promote the improvement of students' English reading ability. The proposal of Jigsaw method makes up for the deficiency of the existing reading classroom to some extent. Jigsaw method is a kind of cooperative learning, which emphasizes the division of labor and cooperation among students, and explores the problem through role-playing, practice and exploration (Wang Jingya & Guo Hongyan, 2022). This method can promote students' learning, mobilize students' participation and change the deficiencies of reading teaching. So, it plays an important role in reading. The existing researches on the jigsaw method and reading teaching mainly focus on the definition. However, the study lacks the combination with specific reading classes, the design and application of actual reading cases, and it cannot provide certain enlightenment for teachers. Therefore, based on the definition and advantages of the segmentation method, this study will provide a specific design of jigsaw method in
English reading class, so as to provide teachers with new reading teaching method and improve students' reading ability.

2. The definition of Jigsaw method

The jigsaw method refers to the method of cooperative learning in the form of jigsaw puzzle. Teachers divide articles into several parts by cutting and splitting some articles, and then assign the article fragments to students to read (Sagsoz O et al., 2017). It is based on constructivism and zone of proximal development and is one of the most commonly used methods in cooperative teaching. This method has been modified and verified many times since it was proposed (Francesca Pozzi, 2009).

The jigsaw method was proposed by Aronson, an American educator and sociologist, in the 1970s. The purpose of this teaching method was to eliminate conflicts between students from different ethnic groups, thus Jigsaw I was formed (Aronson et al., 1978). The first generation of jigsaw method has the following steps. Firstly, teachers need to divide the class into some basic groups of 4-6 students. Grouping emphasizes that students should be divided according to gender, learning style, performance and characteristics. The groups need to be evenly distributed so that different students can complement each other. Secondly, everyone will be assigned the same task, and each member will learn the assigned task materials independently. The students who are given the same task are then regrouped into expert groups and talked to each other until they master it. Finally, the students of the expert group return to their original group and explain their tasks to the other members. There are many shortcomings in the first-generation method. Firstly, students do not have a clear understanding of the task. During the discussion, students' enthusiasm is not stimulated. Finally, after the activity, the teacher does not make corresponding supplements and tests. Such teaching method can easily lead to poor learning effect of students.

After that, the jigsaw method goes through three generations of development. Steinbrink (1986) proposed Jigsaw II and added the link of group stratified scoring. This process promotes competition among groups by means of group points, and the group with the highest score will be rewarded, while the group with the lowest score will feel a sense of accomplishment for their contribution (Dwight C. Holliday, 2000). The evaluation method of the second generation pays attention to the use of competition to mobilize the enthusiasm of students. But some scholars stress that testing should be separated.

In 1988, Jones and Steinbrink improved Jigsaw I and II's teaching model by adding a review part before the test. In this way, learners in the basic group can cooperate and assist other members in reviewing the learning material in preparation for the test. This is the Jigsaw III method (Céline Darnon, Céline Buchs, & Delphine Desbar, 2012). Holliday Dwight C proposed the fourth generation of this method. It mainly increases teachers' supplementary teaching and students' knowledge mastery (Holliday D C, 1999). After students finish the learning activities, teachers must test the basic group to check whether students have mastered the knowledge. Finally, teachers need to supplement the knowledge according to the situation of students and make up for the missing.

The jigsaw method has become a representative method in cooperative learning from the first generation to the fourth generation. The teaching steps of this method have become more and more perfect and have tended to become a complete theoretical system. Therefore, this study will make some improvements and innovations on the basis of the fourth generation of this method, so as to make up for the deficiencies of the existing research and improve the effect of reading teaching.

3. The design of jigsaw method in reading class

According to the steps of jigsaw method, this study will take the Unit 4 Earthquake Section A, Reading: A Night the Earth Didn't Sleep in PEP version as an example. The specific case of this method and reading class will be presented to provide some enlightenment for teachers to design their reading class.

This unit takes earthquake as the topic. There are many words in this passage. In addition, there are many attributive clauses and numbers in the passage, which increase the difficulty of reading the passage and put forward higher requirements for students' reading ability. Therefore, it is necessary to divide the reading text to a certain extent, so that students can understand the reading content and achieve correct understanding. Instructional design is divided into the following eight steps.

3.1 Grouping

According to the characteristics of the students, the class is divided into reasonable groups. There are six people in a group, the class is divided into 9 groups. The basic group is named with the English letters. The teaching material is divided into 6 parts. Each person in each group is responsible for one part.
3.2 Task design

The teacher introduces each part of the teaching material to the students and names them Parts 1 to 6 according to the order. At the same time, the teacher writes the number to make sure that each student has a number in his or her hand. Students in Group a should be a1, a2…… The task materials from Part 1 to Part 6 should correspond to the number of students in each group, that is, student 1 is responsible for Part 1, student 2 is responsible for Part 2, and so on. The tasks in this study are as follows:

Part 1: (1) Answer the questions: What happened? When and where did it happen? (2) What is the main idea of the passage by looking at the title and the picture? Divide the paper into three parts and summarize the main idea of each part.

Part 2: (1) Read the first paragraph of the passage and summarize the general idea of the first paragraph. (2) Answer the question: What strange things happened before the earthquake in Tang Shan? (3) Understand the sentences. For example: Come out of, burst, Farmers noticed that the well walls had deep cracks in them, etc.

Part 3: (1) Read the second paragraph and organize the main idea of it. (2) Read the second paragraph and fill in the blank: _____of the nation felt the earthquake. A huge crack that was _____kilometers long and____ meters wide cut across houses. (3) Understand the key phrases and sentences. For example: At an end, in ruins, the number of people who were killed or injured reached more than 400,000.

Part 4: (1) Read the third paragraph and find the main idea. (2) Answer the questions: How the army helped the people in Tangshan? What does the last sentence “Slowly, the city began to breathe again” mean? (3) Understand the key words and sentences: Electricity, disaster, then, later that afternoon, another big quake which was almost as strong as the first one shook Tangshan.

Part 5: (1) Read the fourth paragraph and find the main idea. (2) Answer the questions: How the army helped the people in Tangshan? What does the last sentence “Slowly, the city began to breathe again” mean? (3) Understand the key words and sentences: Shelters, dig out, the army organized the teams to dig out those who were trapped and to bury the dead.

Part 6: Talk: What would you do if there is a earthquake.

3.3 Discussion in groups

After students know their task, they will form a group of experts. Students begin the discussion according to the task they have been given. Take Part 1 as an example of how to conduct the panel discussion. They need to find the main idea of main idea through reading the title and pictures. Then the members in this group need to give their understanding of this question. Finally, they can concise the common idea of this question and give their understanding.

3.4 Member test

After the panel discussion, the teacher needs to test the members. Students are required to complete the test independently. Part 1 has three questions, which are as follows:

Q1: What happened? When and where did it happen?
Q2: This passage mainly talked about in 1976.
Q3: Matching
   Part 1 (para1) Rescue work after the earthquake.
   Part 2 (para2-3) Great damages during the earthquake.
   Part 3 (para4) Strange things before the earthquake.

3.5 Group learning

After the panel discussed, they came up with the final answer. At this point the expert group should return to the original group for discussion. After each member read the teaching materials quickly, the group members explained the content they were responsible for to other members in the order of number. Take Part 1 as an example. The leader of the group should first make sure that the group members read the passage quickly and then summarize the main idea of the passage. The group leader should guide the other members to guess the general idea of the text based on the title and pictures. In this process, each student should speak up and finally find the answer.

3.6 Group test

After learning the passage, the teacher needs to test the whole class. The test questions are made according to students' existing level and the text characteristics of the article. According to the PPT, the students will answer the questions by raising their hands. The students who answer the questions will score one point.
3.7 Supplement
After the test is completed, the teacher should supplement the text and make up the content that the students have not mastered. In this text, there are many difficulties, especially the grammar part. Therefore, teachers need to add many examples to help students understand and grasp.

3.8 Evaluation
After learning the lesson, the teacher should evaluate students’ performance. The problems in the process should also be reminded. Students can realize their own shortcomings and achieve better learning results.

4. The advantages of jigsaw method in English reading teaching class

According to the above design and the characteristics of the jigsaw teaching method, it can be seen that there many advantages of the application of this method in high school English reading teaching.

4.1 It can improve teaching efficiency and be suitable for large class teaching.
Cooperative learning theory holds that teaching is a process of information interaction (Zhu Xiayun, 2017). If the class size is too large, the interaction will be influenced. According to the Jigsaw method of grouping, teaching is not limited by the total number of students. The application of Jigsaw in high school English reading classes provides students with the opportunity to think independently, explore collaboratively and speak extensively. This meets the need of English reading class and can adapt to the situation of large classes teaching in our country at the same time. In addition, Jigsaw could significantly improve classroom efficiency because of its grouping and parallel activities.

4.2 It can develop students’ participation and emphasize collaborative leaning.
In class, the relationship between classmates has a more powerful influence on a student than any other factor (Huang Juan, Yuan Zhibing, & Fu Lin, 2017). Classmates are good resources for students to learn. If you don't listen carefully to others, then the task is impossible to complete. If I do not speak carefully and explain clearly the part you are responsible for, the whole team will not be able to complete the task. Therefore, groups require team members to cooperate with each other, encourage each other, and promote each other.

4.3 It can cultivate students’ confidence and develop their communicative ability.
The tasks in Jigsaw are not just individual tasks, but tasks that a group needs to complete together. In contrast, there are only a few successful students in traditional teaching. But in a classroom where jigsaw is used, it is possible for anyone to experience success and a sense of accomplishment. Therefore, it can increase students' self-confidence. In such a class, it is easier for students to develop healthy mental qualities. At the same time, Jigsaw pedagogy requires each student to have the responsibility of listening and explaining (Gong Hefa & Xu Jingbo, 2020). Students need communication skills to express both sympathetic and conflicting views. Otherwise, they will not be able to complete their task successfully. In addition, students need to explain their tasks accurately, clearly, logically and succinctly. All these are very helpful to the improvement of students' communicative skills.

4.4 It can promote students’ self-learning ability and create a harmonious learning atmosphere.
In the classroom where the Jigsaw method is applied, the teacher is no longer the only source of information, but the student's helper, guiding and assisting the student to complete the task. Such teacher-student relationship is no longer an "authority-obedience" relationship in the traditional sense, but a "instruction-participation" relationship. Under the guidance of teachers, students can learn independently, explore and discover, and meet the requirements of society on learners (Li Kang, 2012). At the same time, the relationship between students is no longer the traditional sense of competition, but mutual cooperation. In face-to-face interaction, they communicate with each other, argue with each other, complement each other and improve together. Such a classroom is conducive to creating a democratic and harmonious classroom learning atmosphere, but also conducive to the formation of solidarity and mutual help in the class atmosphere.

5. Conclusion
As an effective teaching mode, the jigsaw method can improve students' enthusiasm and participation in English reading, and enhance their self-confidence and independent learning ability. In group cooperative learning, students'
comprehensive English ability has been improved, and their dominant position has been emphasized. This method can make up for the deficiencies of reading teaching in senior high schools reading class and meet the requirements of the society for learners. However, there are also some shortcomings of this method. For example, not all reading materials are suitable for this method. Therefore, teachers should adopt different teaching methods according to different reading materials. This method can be improved and innovated according to the actual situation, so as to maximize the efficiency of English reading teaching and help students improve their reading ability.

References