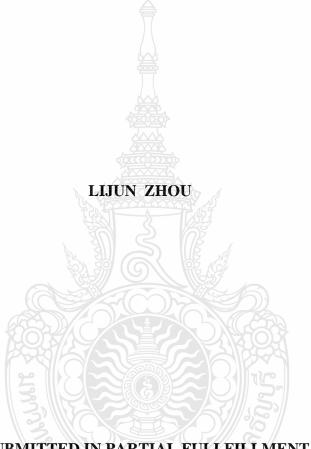
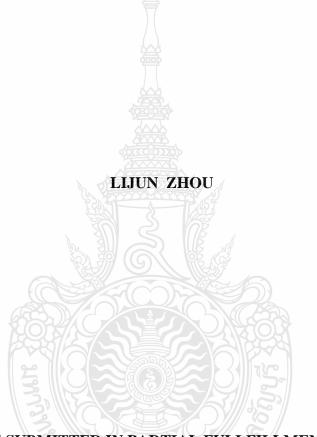
THE USE OF STUDENT TEAMS ACHIVEMENT DIVISIONS TECHNIQUE TO IMPROVE VOCATIONAL ENGLISH SCORE: A CASE STUDY OF JINCHANG SECONDARY VOCATIONAL SCHOOL OF TECHNOLOGY



A THESIS SUBMITTED IN PARTIAL FULLFILLMENT OF THE
REQUIREMENT FOR THE DEGREE OF MASTER OF EDUCATION
PROGRAM IN LEARNING TECHNOLOGY AND INNOVATION
FACULTY OF TECHNICAL EDUCATION
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI
ACADEMIC YEAR 2022
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คณะครุศาสตร์อุตสาหกรรม
มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี

Thesis Title The Use of Student Teams Achievement Divisions Technique to Improve Vocational English Scores: A Case Study of Jinchang Secondary Vocational School of Technology Name - Surname Miss Lijun Zhou Program Learning Technology and Innovation Thesis Advisor Assistant Professor Metee Pigultong, Ph.D. **Academic Year** 2022 THESIS COMMITTEE Chairman (Assistant Professor Tiamyod Pasawano, Ed.D.) (Associate Professor Nattaphon Rampai, Ed.D.) (Miss Naruemon Thermuan, Ph.D.) Committee (Assistant Professor Metee Pigultong, Ph.D.) Approved by the Faculty of Technical Education, Rajamangala University of

Approved by the Faculty of Technical Education, Rajamangala University of Technology Thanyaburi in Partial Fulfillment of the Requirements for the Master's Degree

Dean of the Faculty of Technical Education
(Assistant Professor Arnon Niyomphol, M.S.Tech.Ed.)

Date 1 Month October Year 2022

หัวข้อวิทยานิพนธ์ การใช้เทคนิคการเรียนรู้แบบร่วมมือ (STAD) ของนักเรียนมัธยมศึกษา

ตอนต้นเพื่อปรับปรุงคะแนนภาษาอังกฤษอาชีวศึกษา: กรณีศึกษาของ

Jinchang Secondary Vocational School of Technology

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ปีการศึกษา 2565

บทคัดย่อ

นักเรียนมัธยมศึกษาตอนต้นหลายคนขาดประสิทธิภาพในการเรียนรู้คำศัพท์ภาษาอังกฤษ และขาดความคิดริเริ่ม การเรียนรู้แบบมีส่วนร่วมได้รับการยอมรับว่าเป็นหนึ่งในรูปแบบกระแสหลักของ การปฏิรูปการศึกษาระหว่างประเทศ การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ 1) เปรียบเทียบผลสัมฤทธิ์ทาง การเรียนคำศัพท์ภาษาอังกฤษ และ 2) ศึกษาความคิดเห็นของนักเรียนหลังจากใช้เทคนิคการสอนแบบ การเรียนรู้แบบร่วมมือ (STAD)

ประชากรที่ใช้ในการวิจัย ได้แก่ นักเรียนในโรงเรียนอาชีวศึกษา Jinchang Secondary Vocational School of Technology จำนวน 60 คน ผู้วิจัยใช้การเลือกแบบเจาะจง โดยแบ่งออกเป็น 2 กลุ่ม ได้แก่ กลุ่มทดลองโดยใช้เทคนิคการสอนแบบการเรียนรู้แบบร่วมมือ (STAD) ส่วนกลุ่มควบคุม ใช้วิธีการสอนด้วยวิธีปกติ สถิติที่ใช้เปรียบเทียบวิธีการสอนที่มีความแตกต่างกัน ระหว่างสองชั้นเรียน ได้แก่ การทดสอบค่า t แบบอิสระ ส่วนความคิดเห็นของนักเรียนใช้วิธีการวิเคราะห์ข้อมูลเชิงคุณภาพ

ผลการวิจัยพบว่า 1) ผลการจำคำศัพท์ของนักเรียนในชั้นเรียนที่ใช้เทคนิคการสอนแบบการเรียนรู้แบบร่วมมือ (STAD) สูงกว่าชั้นเรียนที่ใช้วิธีการสอนแบบปกติ อย่างมีนัยสำคัญทางสถิติที่ ระดับ .05 ส่วนความคิดเห็นของนักเรียนจากการสังเกตุพฤติกรรมการเรียน พบว่า กลุ่มนักเรียนที่ใช้ เทคนิคการสอนแบบการเรียนรู้แบบร่วมมือ (STAD) มีความสนใจในการเรียนรู้สูงกว่านักเรียนที่ใช้วิธีการ สอนแบบปกติ นอกจากนี้ส่งผลให้นักเรียนชอบเรียนภาษาอังกฤษมากขึ้น รวมทั้งนักเรียนสามารถท่อง คำศัพท์ได้อย่างมีประสิทธิภาพ โดยภาพรวมบรรยากาศ การเรียนภาษาอังกฤษของกลุ่มที่ใช้เทคนิคการ สอนแบบการเรียนรู้แบบร่วมมือ (STAD) เป็นไปอย่างมีชีวิตชีวา

คำสำคัญ: รูปแบบการเรียนรู้แบบร่วมมือ (STAD) คำศัพท์ภาษาอังกฤษ วิธีการสอน การเรียนรู้แบบร่วมมือกัน **Thesis Title** The Use of Student Teams Achievement Divisions Technique to

Improve Vocational English Scores: A Case Study of Jinchang

Secondary Vocational School of Technology

Name - Surname Miss Lijun Zhou

Program Learning Technology and Innovation

Thesis Advisor Assistant Professor Metee Pigultong, Ph.D.

Academic Year 2022

ABSTRACT

Many secondary school students are inefficient in learning English vocabulary and lack initiative. Cooperative learning has been widely recognized as one of the mainstream modes of international education reform. This study aimed to: 1) explore and compare learning achievement in English vocabulary teaching and 2) examine students' opinions after using The student teams achievement divisions (STAD) teaching technique.

The population of this study was 60 students in Jinchang Secondary Vocational School of Technology. The researcher selected two classes by purposive sampling, including 60 students. The student teams achievement divisions (STAD) teaching technique was used in one class and the usual method in another class. Independent t-tests were used for interpretation by comparing the different teaching methods used in the classes.

The research results were found that the vocabulary of the student teams achievement divisions (STAD) teaching technique was higher than that of the class taught using regular teaching techniques at a statistical significance level of .05. It was also found that in regard to the learning interest and learning efficiency of the students, using The student teams students preferred achievement divisions (STAD) teaching technique to learn English, students recited words more efficiently, and they had a better English learning atmosphere.

Keywords: student teams achievement divisions (STAD), vocabulary, teaching methods, cooperative learning



Acknowledgements

The happy and busy graduate student life is fleeting. This period of full study and life makes me have mixed feelings. My final student career is coming to an end. I will apply my two years of theoretical study in practice to my students in my future work. Today, I feel very grateful to everyone who appears in my life.

First, I am grateful to my Assistant Professor Dr. Metee Pigultong, a good advisor and instructor in leading this research to success. He is so kind and patient. He is a rigorous scholar. He strives for academic excellence and pays attention to every detail. He is a sincere friend. He can selflessly help me on any issue, and give me advice, support and encouragement. He is also a person who loves life. He is open-minded and cheerful in life, and always calm and resolute. A good teacher is difficult to meet. He is a selfless fearless, full of talented good teacher and helpful friend! In addition, I would like to thank all my teachers and classmates at RMUTT. Thanks for your help and companion. I am grateful to Assistant Professor Dr. Tiamyod Passawano. He is a good professor who is respectable and has good morals for all students. He always encouraged us and supported us as well. Assistant Professor Dr. Thosaphorn Sangsawang, Assistant Professor Dr. Thidarat Kulnattarawong, Dr. Naruemon Thephnuan for hard instruction and for giving good advice and knowledge.

Next, I am extremely grateful to my parents for giving me a good life, for your caring, support, and love, and for preparing me for the future. Thank you for your silent support, from my decision to postgraduate entrance examination, postgraduate studies to graduation, you have been the strongest backing for your daughter. I also would like to thank my brother for supporting and helping me whenever I need. My family is my biggest motivation.

Finally, I would like to thank all my friends. Especially my best friend Tuan, you give me encouragement and strength. Every time I want to give up, you will give me the light. Of course, I also want to thank myself for my effort and persistence in the past two years. I want to say to myself: "The process is hard, but the result is good." In short, I am very grateful for your support, encouragement and help, thank you, I will try to be a better myself.

Lijun Zhou

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CHAPTER 1 INTRODUCTION

1.1 Background and Importance of the Problem

1.1.1 Poor English foundation and low interest in learning

The formation of interest in learning is closely related to the degree of knowledge mastery. The more and more solid students' knowledge, the more likely they are to have interest. However, students' English foundation is weak, and there are various difficulties in learning, such as poor spelling, poor grammar, poor reading comprehension, poor oral expression ability and so on. It is not difficult to understand the lack of interest in English learning because of the lack of understanding and learning. Many students do not have good learning habits, such as unable to independently preview before class and review after class, time after entering the secondary vocational school, which leads to their difficult to accept and understand what they learn, poor learning effect, unable to achieve satisfactory results. Interest in learning comes from the virtuous cycle of learning, but secondary vocational students often fall into a vicious cycle of "not understanding-not interested-not learning", which can not produce a sense of achievement and pleasure in English learning.

1.1.2 Low sense of self-efficacy and insufficient confidence in learning

Self-efficacy refers to an individual's expectation of his ability to perform a behavior in a particular context. The belief, judgment or subjective feeling that an individual has about the level at which he or she can complete a behavior before performing it. Individuals with high self-efficacy will try harder when they feel there is a gap between their performance and their goals, while those with low self-efficacy will try less. Some students are willing to study English seriously, but lack the confidence to learn English well. There are two main reasons for this. One is that the frustrated experience in English learning in junior middle school makes them feel inadequate. The second is the lack of reasonable and effective learning strategies, but not satisfactory results. Both of these will make students have a low sense of self-efficacy, lack of learning willpower, fear and negative attitude towards English learning. Attitudes affect how one acts towards things, people and events. These secondary vocational students' negative attitude towards

English learning will lead to their lack of confidence, and then affect their learning behavior, such as not listening to the teacher in class, perfunctory homework, and even give up learning English.

1.1.3 Unclear learning objectives and weak learning motivation

Learning motivation contains two components: learning need and learning expectation, which is the internal motivation that directly triggers and promotes individual learning. Learning motivation is divided into long-range motivation and nearrange motivation. Long-term motivation emphasizes the results and value of learning activities, and can work over a long period of time to maintain the stability of learning activities. Secondary vocational students generally fail in cultural courses and cannot enter ordinary high schools, but choose to enter vocational schools. Its purpose is to master a skill, help later employment. They see English as irrelevant to their future careers and have little chance to use it in their lives. Most secondary vocational students think English is useless as long as they learn their major courses well. That is to say, they do not see the value of English learning for their future development and personal life, and lack long-term motivation to learn English. Therefore, secondary vocational students think that they do not have the need to learn English, and there is no clear behavioral goal without the need. Motivation is the choice of a goal to pursue and the degree of effort to achieve that goal. Because secondary vocational students do not set clear English learning goals, lack of internal motivation.

Certainly not with any effort. They are more willing to devote their time and energy to professional study. In English class, their participation is low, and they do not take the initiative to contact English after class, so their English level cannot be improved.

As mentioned above, students' learning state is affected by learning interest, learning attitude, learning confidence, learning motivation and other aspects; And these negative psychological factors also affect their learning state in turn. As secondary vocational students lack interest and motivation in English learning, which leads to negative learning attitude and deviation in English learning concept, it is easy to have various problem behaviors in English class, such as sleeping in class, playing with mobile phones and absentminding. After class, they will not seriously review and

consolidate, which is not difficult to understand why their English learning is always difficult to improve.

1.1.4 The problem of Jinchang Secondary Vocational School of Technology

Most secondary vocational students have problems with English, so do our students. In our school, in order to have a better development of students, the implementation of stratified teaching. The school selects the best students in each grade and subject to form a top class. The rest of the students are divided into equal classes. This is conducive to the cultivation of top students, but it also has the problem of good and better and worse and worse. English is a basic subject, so in the process of English teaching, such problems are more obvious. In the top class, most of the students' English scores are ok, can be normal classes. The students were also willing to listen and learn, and did well in their homework. However, in some classes, students' English foundation is so poor that there are many problems in class. These students have poor cultural literacy and Poor English foundation. Some students do not know phonetic symbols, cannot recite words, do not know common English words, cannot read texts, and even cannot write letters. As a result, students are unable to understand what the teacher explains when teaching, which makes them hate and fear English. Under this kind of psychology, students are unwilling to listen to the teacher, and even give up learning English on their own initiative. As time passes, students are unwilling to listen to lectures and cannot understand the teaching content, resulting in the failure to improve their comprehensive English level. The poor English foundation of these students is not formed in a short period of time, but there are problems in the process of Learning English since childhood and they have not been timely solved.

Due to different parts of English enlightenment education before the time is not unified, different elementary school start English teaching time, primary school in grade one, grade three, five grade English teaching are widespread, and different primary school of English curriculum requirements, some as a required course, some as an elective course, and differences in the levels of primary school English teachers themselves, most of the students said, Just started to learn English does not exclude the language, but at once to the difficulty of the junior middle school stage, the students' ability of language to accept differences become obviously, and junior high school English teacher

influenced by examination the baton, have to catch up, often pay more attention to student's written test, while ignoring the oral English training, part of the students is becoming self give up because did not understand. Many students in our school started English late in primary school, and many students gave up in junior middle school because they could not understand the teacher's classroom instructions. They don't have the vocabulary to express their ideas. Or, your brain may have just a few scattered words and not be able to use the grammatical structure to put them together into a sentence or sentences. Therefore, they cannot feel the sense of achievement and pleasure brought to them by English learning in class. In class, students can only lower their heads to avoid teachers' questions. Students in secondary vocational schools are mostly learners with instrumental motivation. They regard foreign language learning as a tool to achieve some specific goals, such as passing academic exams or getting a good job. Without the pressure and direction of college entrance examination, most students except those majoring in preschool education think that English learning is of little help and need for their future work. They do not understand the teacher's English teaching, and are not willing to work hard to learn English well, the status quo of English learning in secondary vocational schools is not optimistic.

1.2 Research Objectives

- 1.2.1 To compare learning achievement in English vocabulary teaching after using the STAD teaching technique.
- 1.2.2 To study students' attitude of learning after using the STAD teaching technique.

1.3 Research Hypothesis

The research hypotheses are as follow:

- 1.3.1 The vocabulary memory results of the class students using the STAD teaching technique were significantly higher than that of another regular teaching class.
- 1.3.2 The student's opinion also found that the learning interest and learning attitude of the students using the STAD teaching technique was higher.

1.4 Scopes and Limitations of the Study

We selected two classes by purposive sampling, a total of 60 students. STAD teaching technique is used in one class and the usual method in another class. Independent T-tests were used for interpretation by comparing different teaching methods between the two classes.

1.4.1 Research scope

The population of this study was 60 students in Jinchang Secondary Vocational School of Technology. It focuses on the vocabulary of the English. The researcher will select some parts of units to integrate with the teaching process. The learning activities and more relevant content will be related to maintain the unit from the course book.

1.4.2 Effective time

The researcher works in Jinchang Secondary Vocational School of Technology located in Jinchang, Gansu Province, China. The researcher will collect the data between March to July 2022.

1.5 Research Framework

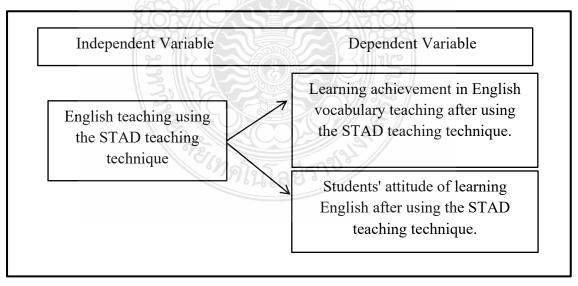


Figure 1.1 Research framework

1.6 Expected Benefits

The author hope the vocabulary memory results of the class students using the STAD teaching technique were significantly higher than that of another regular teaching class. And the learning interest and learning attitude of the students using the STAD teaching technique was higher. STAD is a solution to solve the problems of the English learning for the students in Jinchang Secondary Vocational School of Technology. This is a good way to improve the students' English score. Other teachers can also apply it to the classroom to improve students' interest in learning English. We can think that the school is a case to prove the way. And the way also can improve the score in this school.



CHAPTER 2

REVIEW OF THE LITERATURE

This chapter is a supplement and description of aspects the literature relevant to the study. This section is divided into pieces as follows:

- 2.1 STAD Cooperative Learning
 - 2.1.1 Definition of the STAD Cooperative Learning Mode
 - 2.1.2 Teaching elements of STAD Cooperative Learning Mode
 - 2.1.3 Teaching process of STAD Cooperative Learning Mode
 - 2.1.4 Notes on STAD Cooperative Learning Mode
- 2.2 Rote Learning
- 2.3 Role Playing
- 2.4 Cooperative Learning
 - 2.4.1 Definition of Cooperative Learning
 - 2.4.2 Cooperative Learning Mode
- 2.5 Peer Learning Theory
- 2.6 Cognitive Learning Theory
- 2.7 Summary

2.1 STAD Cooperative Learning

2.1.1 Definition of the STAD Cooperative Learning Mode

STAD cooperative learning mode, all called Students Team Achievement Division, Chinese names are also various, can be called the group score division method, the group score sharing method. In this paper, the STAD cooperative learning model is unified. Founded in the United States in 1978, it was proposed by Professor Slavin R.E. of John Hopkins University, a cooperative learning method of group sharing tasks and group scoring. It is considered one of the earliest developed, most widely used, and simpler methods of cooperative learning. At present, the STAD cooperative learning model has been applied in many fields, including teaching, social research and language art.

Students are divided into four groups of students, generally the epitome of a class. After the teacher teaches in class, the group will cooperate, exchange and discuss, digest the course materials, and then test the mastery of the group members, and praise and reward the group with excellent performance. STAD specific implementation elements include 'classroom instruction, group building, testing, individual improvement scores, and group recognition'. The STAD cooperative learning mode skillfully integrates cooperative learning and learning evaluation. No longer assessing their academic success, but contrary to traditional teaching, students evaluate their academic progress.

2.1.2 Teaching elements of STAD cooperative learning mode

Compared with other cooperative learning methods, the learning group achievement division division method is relatively easy to implement, but the learning effect is extremely remarkable, although common, it is not less than ordinary.

Classroom teaching first shows the teacher the learning task of cooperative learning, the process of demonstration is not limited to form, it is possible to carry out in various ways. STAD cooperative study groups are usually composed of four to five students, and should be formed based on the principle of "homogeneity between groups and ogeneity within groups", taking into account the adaptation of cooperative learning tasks to students. Team members should make it clear that the group is closely related, and taking responsibility for the achievements of others in the collective is an unshirkable task. The test is to strengthen and test the cooperative learning tasks that students should master, which should be timely after group activities. It should be noted that the test should be done independently by the student. The improvement score is the part of the student exceeding the basic score in the test. Individual improvement score emphasizes the progress of each student, and better grades than previous individuals can increase the score for the group. The STAD collaborative learning takes the group performance as the evaluation criterion, and the rewarded group should be the group with the maximum group score improvement and the high group score. The overall improvement score of the collective and the individual obtained of the individual, the larger the improvement score, the higher the total improvement score of the group.

2.1.3 Teaching process of STAD cooperative learning mode

One often has to experience 3-5 class hours to complete a cycle of teaching by using the STAD cooperative learning mode. Before launching the activity, educators need to explain several points to the educated person: First, make the educated person understand the meaning of STAD. Secondly, make the students understand the content that they will learn and its importance. Finally, make the students understand that the group members can only complete the cooperative task through cooperative learning and joint efforts.

The teaching process of STAD cooperative learning mode mainly includes: teaching activities, group learning, testing, group recognition and evaluation.

Good cooperative learning tasks can ensure the orderly development of cooperative learning. In cooperative learning, teachers need to give special consideration to establishing reasonable cooperative learning tasks. In the process of group learning, all students should understand that only everyone helps the other members of the group to complete the learning task without reservation. Encourage students to help each other and enhance their self-confidence and motivation. Test is conducted after STAD, the purpose is to test the educated on the STAD task, to estimate the effect and educators STAD cooperative learning mode advocates "competition between group members, group members cooperation", in the calculation of high scores of the students, as long as the students study hard, can get higher points for the group. After STAD cooperative learning, teachers need to guide the learning to reflect on their own shortcomings and improper in the activities at appropriate times, self-examination and self-examination, understand the gains and losses, and prepare for the next cooperative learning activities. For teachers, in order to improve the effect of cooperative learning, it is necessary to reflect on the establishment of teaching tasks, planning content, application methods, design tests in the teaching process of STAD cooperative learning, the effectiveness of STAD, and how to encourage students to continue to work hard.

 Table 2.1 Teaching mode of STAD cooperative learning mode

 Teaching mode

| Step | Teaching activities | Teaching intention |
|-----------------|--|---|
| Forming a group | According to the ranking from high | Ensuring that the level of students in |
| | to low, one high student, one low student, | the group is different, and the principle |
| | and two medium students form | of heterogeneity and complementarity |
| | a group of four | |
| Calculating the | Taking the average score of | The basic for calculating the |
| basic score | previous tests as the basic score | improvement score and rewarding |
| | | the group |
| Preparing | Preparing an in-class discussion | Class work sheet is discussed in |
| auxiliary | work sheet, answer and test | groups, the answers are self-checked and |
| material | | feedback, and the test determines |
| material | | individual and group scores |
| Classroom | Basic knowledge points, important | Helping students to master the |
| teaching | and difficult points and vocabulary | basic, as the guarantee for follow-up |
| teaching | related learning material are taught | group cooperation |
| | through blackboard writing and | |
| | multimedia | |
| Group learning | Discussing and helping other | Mastering learning material and |
| | members of the group to master the | completing cooperative learning tasks |
| | learning content and complete work | |
| Testing | Students complete the test | Testing the students' mastery of |
| | independently | what they have learned |
| Group | Calculating improvement score | As a basic for reward |
| recognizing | and group score | |
| Evaluating and | The teacher evaluates group | Avoiding ineffective cooperation |
| summarizing | cooperation situation, students feedback, | and improving efficiency |
| 8 | reflection and summary | |

2.1.4 Notes on STAD cooperative learning mode

A series of problems will arise in the implementation of the STAD cooperative learning model. In order to avoid some problems, teachers should pay attention to the following matters:

- 1) Before the beginning of teaching practice, teachers must explain the learning task and success criteria to students, that is, to the previous extent, clearly explain the form of group reward, especially to emphasize the significance of progress score: personal score will directly affect the performance of the whole group. The chance of success for everyone, only everyone tries their best, to ensure the success of the group. And the teacher to the whole class teaching time should not be too long, to explain the vocabulary in the shortest time, so that students have more sufficient time to cooperate and communicate.
- 2) When students conduct cooperative learning, teachers should go back and forth in the whole class to check the situation of students' cooperative learning situation. If you find that the students with a bad foundation do not study, do not cooperate; a good person to do all the tasks, you should timely guide and stop, and encourage the students with a poor foundation to participate in the cooperative learning activities.
- 3) It is an important part for the whole team to evaluate the process. The students should find the reasons for the efficiency or efficiency of the group, and give them timely feedback combined with the teachers' own opinions and findings. With these feedback, students can think and summarize, determine the goals of the next cooperation, and learn from the experience of excellent groups, avoid meaningless practice, and achieve the real effect of cooperative learning.

2.2 Rote Learning

Rote (formula) learning is a learning method that does not require reasoning, also known as injection learning. Obviously, rote learning is a general phenomenon in most of the schools in China. Many students in our school assert that it is the most efficient learning method. Yet, I do not support this view.

Indeed, rote learning enables these students to memorize all the knowledge in a very short time and get a high score on the test. Their classmates will certainly envy them for their perfect scores after the results of the exam are announced. Besides, praise from their parents and teachers also satisfies their vanity. The consequence of rote learning makes some students look quite intelligent and smart.

However, this practice is by no means perfect. First and foremost, memorization by repetition prevents us from developing our own ideas. Regardless of their academic performance, most of these students who are used to learning everything by rote emerge as dependent adults who are incapable of thinking for themselves and adapting to our changing times. As a result, those people who learn by rote do not have the audacity to question other people's opinions. Certainly, the courage to doubt existed "truths" is a quality requisite to all the scientists, inventors and scholars.

Another equally vital point to be considered is that the theoretical knowledge we cram into our minds can not be applied to the tasks of real life. We cannot derive great pleasure from using skills we learn in our daily lives if we learn by rote. Imagine the absurdity of a biologist who cannot comprehend photosynthesis while looking at an actual plant. Yet those who learn by rote will never be able to use what they have learned on anything besides writing a test.

The last factor to be presented is that mechanical memorizing extinguishes our thirst for knowledge. The tedious theoretical writings required for rote learning bore us to death. If we only memories the formulas when learning how to calculate the area of a circle and not see the wheels of our bicycles, we can hardly understand what the variables in the formula represent. As a result, teachings which do not relate to our lives convince us that the knowledge is useless and we will have no interest in learning it.

In the final analysis, rote learning can help raise test scores, but can not be the best way to improve our overall qualities and promote the development in an all-round way. High marks in exams represent only good test-taking skill. The phenomenon of most student learning by rote is a national tragedy. Any hope left to vitalizing the whole nation lies in education, and cramming can easily kill the hope.

2.3 Role Playing

From the perspective of pedagogy, I think the role-play method is a kind of created by teachers teacher situation, simulate real language situation of foreign language classroom teaching method, students by play their own imagination, ponder characters 'psychology, experience the emotions of the characters, finally will understand the characters through language, action, expression, improve the students' comprehensive use of language ability.

According to the degree of control and freedom of teachers, the role-play method is divided. Role-play method is mainly divided into four kinds: complete control, semi-control type, complete freestyle and semi-freestyle.

Fully controlled role-playing method means that the content, language and movements of the performance are all designed in advance, and students only need to perform according to the teacher's requirements. In the fully controlled role playing, students do not have to worry about language, action or other performance content. For students, this role playing method is less difficult and more controllable, which is more suitable for students with higher language difficulty or lower grades.

Semi-controlled role-playing method means that teachers will help students to design a good part of the performance content. In the process of role-playing, students' language and actions can be played freely, according to the changes of the situation and the language of their collaborators. The biggest advantage of this role-playing method is that it can stimulate students 'imagination and exercise students' independent adaptability. At the same time, in the process of consolidating and practicing the new sentence patterns and words, we will review and consolidate the knowledge that has been learned, and improve the students' ability to use the language comprehensively. However, this role-playing method is easy to give students greater challenges, more suitable for easy to master situations or middle and senior students.

Semi-freestyle role-playing method refers to what the teacher creates a certain situation according to the teaching content, but does not design the performance content for the students, but only provides the students with some prompt information. This role-playing method requires students, requiring students to have a certain knowledge base and life experience. However, this role-playing method can not only play the students

'independent ability, but also cultivate the students' ability to communicate and cooperate with others.

Fully controlled role-playing method means that teachers only create relevant performance situations and assign performance tasks. The processes of props preparation, scene layout, role allocation and role playing are all played and arranged by students. Compared with the first three methods, this role-playing method provides students with greater autonomy and can maximize their imagination and creativity according to the situation. It can not only improve students 'ability to comprehensively use language comprehensively, but also cultivate students' independent learning ability, communication ability and leadership ability.

Role-playing method conforms to students 'cognitive law and development level, it can make the rigid, mechanical classroom into a vivid and lively classroom, make students become the center of the classroom, stimulate interest in learning, ensure students' autonomy. Role-playing can create a learning situation, so that students have the free room to play, so that they can flexibly use the knowledge learned before, and improve their comprehensive use of language knowledge ability. Students can cultivate their confidence in English learning in the role performance, increase communication and cooperation, so that students can express themselves more boldly and more confidently, so as to cultivate students' awareness and ability of active communication in life and learning.

2.4 Cooperative Learning

2.4.1 Definition of Cooperative Learning

Cooperative learning is a teaching theory and strategy that emerged in the United States in the early 1970s and made substantial progress from the mid-1970s to the mid-1980s. It mainly emphasizes the cooperative relationship with the language learning process (Richards, J. C. & Rodgers, T. S. 2001). In different development periods, many scholars have given some different classical definitions of cooperative learning.

Professor Slavin, R. E. (1980) of Johns Hopkins University in the United States, as one of the main representatives of cooperative learning, he puts forward that cooperative learning is the basic organizational unit of group, guiding and organizing

students to fully participate in and implement in related cooperative activities in their respective study groups, and finally recognizing and rewarding as a classroom teaching method based on the overall learning effect and achievement of the group.

Johnson, D.W. and Johnson, R. T. (1990) of the University of Minnesota, as one of the research scholars of cooperative learning, they state that cooperative learning is not only the implementation of cooperation within the group and interactive learning in classroom teaching, but also affirm the positive effects of this mode, namely students can stimulate themselves and other students' learning activities to a greater extent by developing cooperative learning activities.

Professor Guskey, T. R. (2012) of the University of Kentucky in the United States puts forward that cooperative learning is a teaching method that requires students to cooperate and help each other in heterogeneous groups to complete learning tasks together.

The famous Chinese scholar Wang Tan (2001) proposes that cooperative learning is based on the study group as the basic organizational unit, and the group achievement as the evaluation standard, to achieve the established teaching goals through a series of efficient and pleasant teaching activities.

Liu Yujing and Gao Yan (2011) propose that cooperative learning is a related activity that takes the study group as the basic organizational form in the classroom, and bases on the scores or performance of the group as the evaluation standard, and jointly achieves the established teaching goals.

Based on the above-mentioned definitions of cooperative learning by domestic and foreign scholars, the author defines cooperative learning as a heterogeneous group as the basic teaching organization unit in the classroom, the members of the group communicate with each other and help each other to complete the learning goals and make progress together, it is a teaching method that cultivates students' cooperation skills and improves their overall quality.

2.4.2 Cooperative Learning Mode

Since the birth of cooperative learning, many learning modes have emerged. Wang Tan (2007) summarizes four main cooperative learning modes:

The first one is teacher-guided learning mode. It emphasizes the guiding role of teachers in teaching activities. Among them, the STAD (Student Teams-Achievement Divisions) proposed by Professor Slavin, R. E. is a typical representative that is widely used in various subject field. Its main concept is to inspire students to help and encourage each other, learning in groups is its main feature. Students need to do their utmost to help group members to master the knowledge and skills taught by the teacher, so that their group can be rewarded. STAD also emphasizes individual responsibility. students are not only responsible for their own learning, but also for group members. It proposes a special scoring method-basic score and improvement score, so that students of different learning levels have the opportunity to contribute to the group, which is the biggest difference between STAD and conventional teaching mode.

The second one is the process learning mode. It emphasizes the teacher-student process and the development of students' social skills. Among them, the most famous is LT (Learning Together) proposed by Johnson, D. W. and Johnson, R. T. (1987). From the basic elements of cooperative learning such as interdependence, individual responsibility, heterogeneous grouping, social skills and group reflection, it can be applied to any object or child of any age. LT is based on the theory of social interdependence believes that competition can weaken interpersonal interaction and independent learning can weaken human interdependence, only cooperative learning is the best way to promote competition and cooperation between students.

The third one is a structured learning mode. Kagan, S. (1985) first proposes a structured learning mode and identifies seven basic structures: classroom construction, group construction, communication constructor, master construction, concept formation, division of labor and cooperative projects. As a kind of structured teaching mode, Aronson, E. proposes the Jigsaw, and then in 1986, Slavin, R. E. further proposes the Jigsaw II that can be applied to all written teaching materials. Similar to STAD, in the class of Jigsaw II, students work in groups, and the teacher only gives them a part of the learning textbook in a class. First, the group members who have the same textbook in different groups discuss to thoroughly master the textbook, and then teach this part of the content to other members of your group and ensure that each member can master it proficiently. Such cooperative learning is not only in one's own group, but also

between different groups. The rest is the test and reward part similar to STAD.

The last one is inquiry learning mode. It emphasizes the independence of students and also involves their inquiry process. The main representatives are the GI (Group Investigation) proposed by Professor Sharan and his wife base on Dewey,s constructivist learning theory. In the class using the GI, all group members working together to design research subjects, discussing together, summarizing the research results and presenting them to the class.

In this paper, the author uses the STAD cooperative learning mode to carry out applied research.

2.5 Peer Learning Theory

Peer learning is an open, independent and diversified learning form based on classroom teaching practice and the relationship between teaching elements, fully mobilizing the role consciousness of teaching leader and the role of learning subject, aiming to solve the practical problems of learning and improve the quality of learning. It has a variety of ways to perform in the teaching practice, such as: sharing peer learning, game peer learning, graffiti peer learning, report peer learning, task peer learning, problem peer learning and so on. It is based on "cooperation", with "group" as the unit, and is different from the traditional sense of "group learning" and "cooperative learning". Its main features are as follows:

1) Normal and independent learning methods. In modern society, students have more ways to know the world, and their horizons are expanded, but their personal knowledge reserve is limited. Teachers can mobilize different sources of knowledge to make student peers become "little gentlemen" and help the development of peers. Different from fixed groups and groups, dynamically formed "peers", their activities can be in space (classroom, school, field, society) or time (in class and outside); learning content can be both disciplinary learning or interdisciplinary learning; in the organization, it can be a class peer, or community... "peer" breaks the traditional sense of "group" and "discipline" boundary, broaden the boundary of learning, make learning more "normal" and "autonomous".

- 2) Dedicated to cultivating students' ability and accomplishment. The instrumental view of "learning what you use" and the moral view of "learning as adults" need to be integrated in modern education. With peers as the group, in order to share the common task, experience the process of hands-on practice, exploration and communication, to achieve the purpose of equality and mutual assistance, mutual appreciation, mutual coordination, and common growth. While accumulating knowledge, students' ability to listen, express, communicate and cooperate is constantly cultivated.
- 3) Focus on emotional communication. Because of the same value orientation and vision, the mutual assistance and cooperation between peers are warm. If the formal cooperation and contact point to the solution of specific "problems", then peer learning is the "normal" to help solve problems, so that members can get the ability to solve problems. In the process of learning, the emotional connections such as understanding and sharing make the "peership" relationship become stronger.

Nowadays, the rich and diverse modern "interactive" learning has gradually replaced the one-way knowledge transmission. It not only breaks the dull atmosphere of the classroom, but also more fully stimulates the potential of students, highlights the main body position of students, guiding students from the passive "I want me to learn" to "I want to learn" and "I am happy to learn" initiative. However, a series of problems in the interactive learning modes such as solidified group learning and cooperative learning have also emerged in the process of practice, thus limiting the practice of modern education.

In peer learning, each student can only cooperate effectively with other members of the group to ensure that their learning purpose can be realized. In such a process, learning has become a process of active mutual dependence, mutual promotion and common progress. Equality and cooperation have become two mutually reinforcing factors, which jointly promote students to actively engage in learning. The ultimate goal of equality and cooperation is to make students get better development, to make the learning of students' academic knowledge and skills and the training of social ability naturally integrated, so that "learn to learn" can truly become a quality of students.

After careful thinking, it is not difficult to find that the process of peer learning is just the process of inspiring, guiding and encouraging students to learn to learn, and

also the process of cultivating the core quality of "learning to learn". peers to take "equality", "cooperation" and "development" as the basic ideas. Equality is the ideological motivation generated by peer learning, and it is the premise for learning to really happen. Students enjoy equal opportunities to participate in the classroom, equal cooperation, equal opportunities to speak and equal opportunities to success. Mr.Tao Xingzhi, a famous educator in China, once said, " True education is a heartfelt activity, only from the heart, can hit the depths of the heart."So, education is not a commanding lesson, but an equal communication. Through continuous practice, we found that "peer culture does not construct peer education situation in school education". In the process of teaching, we still need to further build equal and democratic classroom culture, this to form a good relationship between teachers and students, develop students 'potential, stimulate students' thinking, cultivate students 'interest in learning, promote students' independent development, and cultivate citizens with equality consciousness and democratic consciousness, etc., is of great significance.

2.6 Cognitive Learning Theory

Cognitive learning theory and behaviorism learning theory are opposite, derived from the gestalt school, after a period of silence, recovery again. Since the mid-1950s, with the great creative work of a number of cognitive psychologists such as Bruner and Osubel, the study of learning theory has entered a brilliant period since Thorndike. They believe that learning is the process of facing the current problem situation and going through positive organization in the heart, thus forming and developing cognitive structures, emphasizing that the connection between stimulus responses is mediated by consciousness and emphasizing the importance of cognitive processes. Therefore, the cognitive theory of learning began to dominate in the study of learning theory.

Cognitive learning theorists believe that learning lies in the change of internal cognition, and that learning is a much more complex process than the S-R connection. They focus on explaining the intermediate processes of learning behavior, namely purpose, and meaning, believing that the cognitive theory that controls learning originated from the gestalt theory of the German gestalt psychologist. The founders of gestalt psychology are the German psychologists Weimer (M.Wertheimer), Coffka (K.Koffka) and Koehler. Based on the results of 18 experiments with chimpanzees, and the author of "Gorilla Wisdom", he developed the

gestalt theory and offered the Epiphany. Main points: First, learning is about organizing and constructing a gestalt, rather than a simple connection between stimuli and reactions. Second, learning is about epiphany, not through trial and error. Epiphany emphasizes the role of organization between stimulus and response, seen as a sudden reorganization of the old organizational structure (gestalt) in perceptual experience or an epiphany of new structures.

The cognitive school learning theory provides the theoretical basis for the teaching theory, enriches the content of educational psychology, and makes great contributions to promoting the development of educational psychology. The main contribution of the cognitive school learning theory is as follows: First, it attaches great importance to the main value of people in learning activities, and fully affirms the conscious initiative of learners. The second is to emphasize the important position and role of cognitive activities such as cognition, meaning understanding and independent thinking in learning. Third, it attaches importance to the person's state of preparation in learning activities. Fourth, pay attention to the function of strengthening. Because the cognitive learning theory regards human learning as an active process, it attaches great importance to the internal motivation and the internal reinforcement brought about by the learning activity itself. Fifth, we advocate the creativity of people's learning.

The deficiency of cognitive learning theory is that the theory does not reveal the psychological structure of the learning process. We believe that learning psychology is composed of the psychological structure of the learning process, that is, intellectual factors and non-intellectual factors. Intellectual factor is the psychological basis of the learning process, which plays a direct role on learning; the non-intellectual factor is the psychological condition of the learning process, which plays an indirect role in learning. Only when intelligence factors and non-intelligence factors are closely combined, can we make learning achieve the expected purpose. And the cognitive learning theory does not pay enough attention to the study of non-intellectual factors.

2.7 Summary

This chapter analyzes STAD Cooperative learning, Rote Learning, Role playing, Cooperative learning, Peer learning, and Cognitive learning. These several theories support the implementation of cooperative learning activities, which are not mutually exclusive, but complement each other, laying the theoretical foundation for this study.

CHAPTER 3

RESEARCH METHODOLOGY

Research methods are a part of vital academic writing in researching. This paper mainly studies the solutions to the above problems. The numerous parts of the research approach that the researcher used are discussed in this chapter. It contains a thorough description of the research design, population, sampling methodologies, research instruments, and data collection and analysis procedures. This chapter will be presented in the following sections:

- 3.1 Study Objectives
- 3.2 Research Questions
- 3.3 Study Subjects
- 3.4 Study Data
- 3.5 Research Tools
- 3.6 Study Steps

3.1 Study Objectives

This study aims at teaching English vocabulary learning in vocational middle schools through STAD cooperative learning mode, improve the current situation of English vocabulary learning, improve students 'English vocabulary learning performance, and improve students' interest in English learning.

3.2 Research Questions

This study specifically answers the following two questions:

- 1) Is there a significant difference between the students who use the STAD cooperative learning mode to learn the English vocabulary and those who use the traditional teaching methods?
- 2) Does the STAD cooperative learning model help to improve students' attitude towards English vocabulary learning?

3.3 Study Subjects

The study consists of computer science classes (1) and (2) classes, a total of 60 students. Both classes are parallel classes in the second grade of the school. The final English exam in the first half semester of 2021-2022 and the average score of the author's previous test are equal, and the English level is equal. Therefore, the author selected these two classes as the research objects, and one class was the control class(CC) and the other class was the experimental class(EC). Both classes are taught by the author, and the English class is the same. The unified English textbooks (the 2nd edition of the English textbook compilation Group in 2015) and teaching reference materials are adopted. In the experimental class, the STAD cooperative learning mode was used for vocabulary teaching, and the ordinary vocabulary teaching method was adopted in the control class.

3.4 Study Data

The experimental data of this study are mainly composed of pre-test experimental data and post-test experimental data, with 60 anterior and posterior test volumes each, for a total of 120 copies. The test paper includes four parts: word spelling, phrase translation, sentence translation and filling in the blanks. The test time is 40 minutes. Each test paper is corrected by the author, and the average score is included in the experimental data.

3.5 Research Tools

3.5.1 Survey and Questionnaire

A total of two questionnaires were distributed in this study.

The first questionnaire was in line with the vocabulary ability of science and technical school students and was distributed in experimental class and control class. The questionnaire included 15 small questions designed to understand the current status of students' vocabulary learning. The first part is to test students 'current vocabulary learning status; the second part is to reflect students' current vocabulary learning strategies; and the third part is to test students' attitudes towards English vocabulary learning.

The second questionnaire was written according to the vocabulary ability of the students in the technical secondary school, and was only distributed to the students in the experimental class after the practice. This questionnaire contains 20 small questions. The first part tests the influence of STAD cooperative learning mode on student English vocabulary learning; part 2 tests the changes in student psychology and attitude after English vocabulary learning using STAD cooperative learning mode; part 3 reflects the development of student learning ability and cooperative ability; and part 4 tests the influence of STAD cooperative learning mode on classroom atmosphere. The purpose of implementing this questionnaire was to understand whether the STAD cooperative learning model was effective in improving learning attitudes, students' psychology, and classroom behavior.

3.5.2 Pre-test volumes and post-test volumes

In this study, the first test paper is based on the vocabulary level of the senior two students of vocational high school in previous years, and the post-test paper is made according to the vocabulary and teaching materials learned in the development module of the English textbook writing group of secondary vocational schools. Both papers have a full score of 100 and a time limit of 40 minutes. Both papers used the same type of questions. The pretest was conducted on 5 March 2022, and the post-test occurred on 6 July 2022.

3.5.3 Vocabulary learning materials

The vocabulary learning materials in the teaching experiment of this study are 8 units in the expansion module textbook of the secondary vocational school English textbooks uniformly purchased and used by the school. The textbooks are uniformly ordered by the school to meet the English learning needs of grade two students in vocational middle schools.

3.5.4 Group score calculation table

The group score overview table is the group score calculated by the improvement score of each group member after each STAD cooperative study, including the group rewards, group total score, group average score, group members, competition times, etc.

In order to calculate the progress score of the team members, the progress score calculation table proposed by Slavin is required:

 Table 3.1 Improvement score calculation table

| Test score | Improvement score |
|---|-------------------|
| 10 points or more below the basic score | 0 |
| 1-10 points below the basic score | 10 |
| Within 10 points above the basic score (including basic | 20 |
| 10 points above the basic score | 30 |
| Completely correct test paper (regardless of the basic | 30 |

In order to give the group rewards, the average group score is also divided to give different rewards (Slavin, 1978), as shown in the table below:

 Table 3.2 Group reward standard

| Standard (group average) | reward |
|--------------------------|-----------------|
| 15 | Good group |
| 20 | Excellent group |
| 30 | Super group |

According to the average group score, the group after each test can be divided into good group, excellent group and super group. To stimulate students' motivation and interest in cooperative learning, teachers can tell students about the group score of 1 super group or the highest score group to add credit once before conducting the teaching practice.

3.6 Study Steps

3.6.1 Questionnaire distribution

The first questionnaire survey was conducted in Jinchang Secondary Vocational School of Science and Technology in March 2022. Two parallel classes of class (1) and class (2) of computer majors were randomly selected for self-study classes.

A total of 60 questionnaires were issued, 60 were recovered, and 60 were valid questionnaires were distributed. Throughout the questionnaire, all answers were completed by the students, anonymous, without any other interference factors.

The second questionnaire was distributed in the experimental class after the teaching practice around July 6,2022, with the aim to test whether the STAD cooperative learning model can effectively improve the learning attitude, students' psychology and classroom behavior.

3.6.2 Pre-test and determination of shifts

The author conducted the English vocabulary level test for the students in two parallel classes in grade two of Jinchang Secondary Vocational School of Science and Technology, which was conducted in March 2022. The previous test had a full score of 100 to test whether there were significant differences in English vocabulary learning. The test paper consists of four parts, word spelling (20 points), phrase translation (40 points), sentence pattern transformation (10 points), and single-sentence translation (30 points).

To ensure the authenticity of the data, I told the subjects that before the test had nothing to do with their final performance, but was only used to test their English vocabulary level. When conducting this experiment, the subjects must complete the test paper within 40 minutes, and they cannot be prepared for the test. After the test, the author personally collected the subjects' examination papers, counted the results, and made an evaluation. Finally, one of them was randomly determined as the control class and one as the experimental class.

3.6.3 Experimental design

3.6.3.1 Group of experimental class

In this research, the author uses the STAD cooperative learning mode to teach English reading in the experimental class.

Before implementing classroom teaching, the teacher needs to do a good job of preparation.

The first step is forming a group. In order to appropriately improve the effect of group cooperative learning and enhance the sense of responsibility of group members, it is necessary to reasonably divide the composition of the group and

assign roles to group members according to the number of groups. Group members generally include students with three different levels of academic scores: high, medium, and low. Each group is not fixed and can be rotated regularly after 5 to 6 weeks, basic score of students is recalculated and regrouped to avoid the emergence of "hitchhiking", and mobilize every student's learning enthusiasm as much as possible.

According to Rogers' research results, the relationship between the number of group members and the effect of participation is shown in Table 3-3. It can be seen that the effect is best when there are three to six members in the group. After determining the composition of the number of team members, we can set up group leaders, recorders, rapporteurs, liaison officers, and inspectors in each team, the specific roles are as showing in Table 3-4, which member assumes which role in the group is up to the group members to discuss and decide. Of course, the division of roles is not fixed and can be rotated periodically and adjusted according to the actual situation to let students know that each role is indispensable for group cooperative learning. In this research, the author divides the students into groups of five according to the class size, and sets four roles for each group member: group leader, recorder, rapporteur and liaison officers. At the same time, students should be trained in appropriate cooperative learning skills, such as patiently listening to other students' speeches, observing discipline, modestly asking others for advice, being active and enthusiastic, helping each other, smiling and agreeing with others' views, politely questioning and explaining for a certain point of view, maintain a sense of individual responsibility and collective honor, and contribute to groups, etc.

Table 3.3 Group size and the participation

| Group Size | Participation of the Group Members |
|--------------|---|
| 3to6 | Everyone has a chance to speak. |
| 7to 10 | Nearly everyone talks. A quiet student may speaks less, |
| 710 10 | while there maybe 1or2 students who don't say anything. |
| 11 to 18 | 5or 6 students talk a lot, or may be3 or4 more. |
| 19 to 30 | 3or4 students may take up all the communication time. |
| More than 30 | Almost no one communicates. |

Table 3.4 Role division of team members

| | Responsible for organizing the learning activities of this group, | | | | |
|------------------|---|--|--|--|--|
| Group leaders | division of tasks, coordination and management, and ensuring the | | | | |
| | orderly development of activities. | | | | |
| Recorders | Responsible for organizing and recording the learning situation of the | | | | |
| Recorders | group, the process and results of cooperative discussions. | | | | |
| D | Responsible for summarizing and refining the group's learning results, | | | | |
| Rapporteurs | and showing them to the whole class. | | | | |
| | | | | | |
| Liaison officers | Responsible for the liaison between the group and the teacher, and | | | | |
| | regularly report the progress of cooperative learning to the teacher. | | | | |
| | Responsible for checking the participation of all members in activities | | | | |
| T., 4 | | | | | |
| Inspectors | and urging all members to actively participate in group discussions | | | | |
| | and learning. | | | | |

3.6.3.2 Control class experiment

The control class experiment adopts the common vocabulary teaching method for teach. At each unit, the teacher first reads new words and phrases, then asks the students to follow new words and phrases, and tries to remember the pronunciation and spelling form of each word. After the teacher leads the reading, the teacher let the students read the articles in the textbook and translate them word for word by paragraph. Later, the teacher presented the correct translation and explained the usage of the new vocabulary. If students are able to read new words and phrases correctly, the teacher asked them to memorize and consolidate the new words. If the student can not fully grasp the pronunciation of the new vocabulary, the teacher will play the recording of the new word list and ensure that the student can pronounce it correctly. Students were tested before class to know how well they had learned in the class. The English teaching in the control class is normally taught by the English teacher of the class.

 Table 3.5
 Control the class of vocabulary teaching steps

| Procedure | Teaching method | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| First Step | Teachers read new words, students follow them, and try to | | | | | | | |
| remember the pronunciation and spelling form. | | | | | | | | |
| Second Step | The teacher let the students read the article and then translate it word | | | | | | | |
| | by word. | | | | | | | |
| Third step | The teacher translated the article correctly and explained the | | | | | | | |
| | Chinese meaning and usage of the new vocabulary. | | | | | | | |
| Fourth step | Consolidate the word pronunciation and spelling | | | | | | | |
| Fifth step | Instant test | | | | | | | |

3.6.3.3 Experimental class experiment

In this study, the teacher teaching practice of STAD cooperative learning mode--group cooperative learning-teacher explanation-group recognition-teacher evaluation summary is taken.



 Table 3.6 Experimental framework for the STAD cooperative learning mode

| Procedure | Teaching activities |
|-------------|--|
| Teacher | 1. Teachers read new words and ask students to follow them. |
| teaching | 2. After the students roughly master the pronunciation, the teacher asked: What are the |
| | keywords in these new words? |
| | 3. Student Group discussion and answers. |
| | Teacher distributed two printed key words word lists (work sheets) to each group. |
| Group | 1. Teachers began to time, students through group cooperation, through the dictionary, |
| cooperative | reading books and other ways, to find out the key words related nature of words, root, |
| learning | word structure (prefix and suffix), Chinese and English meaning (you can consult the |
| | dictionary to find out the meaning except in this lesson), phrases and write next to the |
| | key words just issued. Using new words to make sentences can imitate books or based |
| | on the vocabulary and grammar learned in the past. |
| | 2. The teacher chooses a member of a group to introduce one or two key word s, the |
| | relevant nature of words, the root of words, the word structure, the Chinese and |
| | English meaning. After the introduction, ask the other groups if they have additional |
| | content. Until all of the key words have been introduced. |
| | 3. For one minute of group discussion, the best quality and most innovative sentences |
| | were selected. The teacher ordered several groups, the group members read them in |
| | front of the whole class, and the teacher wrote the sentences on the blackboard. |
| Teacher | Teachers and students negotiate after discussion, in each group of each key word, |
| explained | make sentences to choose the most innovative or best quality, the most teaching |
| | demonstration of a sentence, and select in addition to make the sentence of other team |
| | members to explain, why good sentences, good, with group members can help add tips. |
| | Finally, the teacher makes a supplementary summary of the sentence and analyzes it in |
| | detail, such as the application method of key words in the sentence, deformation and |
| | so on. |
| Test | 1. Each student prepares a book as a test book, which includes the key words in |
| | Chinese and English meaning, part of words, root, related phrases, etc., and lets the |
| | students make their own sentences with the key words. |
| | Teacher takes back the test book and corrects it after class. |

Table 3.6 Experimental framework for the STAD cooperative learning mode Procedure Teaching activities (Cont.)

| Procedure | Teaching activities | | | | | |
|-------------|--|--|--|--|--|--|
| Group | 1. The teacher calculated the improvement score of the student based on the score of | | | | | |
| recognition | the test and the basic score of each student, and calculated the total score and the | | | | | |
| | average score of the group accordingly. | | | | | |
| | 2. Announces the best performing group in the next class and rewards them (the group | | | | | |
| | members will avoid doing their homework once this weekend and recalculate next | | | | | |
| | week). | | | | | |
| Teacher | After a week of study, the teacher commented on and summarized the performance, | | | | | |
| evaluation | performance, and the cooperative study of each group, and encouraged the backward | | | | | |
| summary | group to continue to work hard. | | | | | |

The teaching experiment of this study is 12 weeks, that is, from March 5 to July 6,2022, with three English classes per week. The vocabulary teaching of the experimental class is taught by the author himself, always around the STAD cooperative learning mode. The first two weeks are the preparation stage of the experiment, mainly conducting pre-test grouping and explaining to the students the importance of STAD cooperative learning. Only the group cooperation can achieve success. Every member of the group has the responsibility to cooperate with the team members to complete the tasks given by the teacher. The optimal group can be awarded with extra credit. Formal teaching begins in week 3.

3.6.4 Teaching Plan

3.6.4.1 A Teaching Plan in Experimental Class

Unit 2: The United Kingdom

Teaching Aims:

- 1. Let students know about the background information about the UK.
- 2. Enable the students to comprehend and memorize some basic words and expressions related to the UK.
- 3. Help develop students' cooperation and teamwork.

Teaching Key Points:

- 1. How to help students have a command of the words and expressions related to the UK.
- 2. How to help the students master the use of the key expressions and sentence structures via cooperation. Teaching difficult points:
- 1. How to assist students to convey their ideas in English.

2. Help students master some High-frequency words: unite; attract; divide; leave out; convenience; to one's credit;

Preview work (8 minutes)

- 1. Before class, students work in groups of six, learning to pronounce the target vocabulary, the captain of the team takes charge of the preview work.
- 2. Each group is assigned certain tasks of explaining the use of the vocabulary, which they will present in the class, Group1 and Group 2 are responsible for brainstorming the words related to the UnitedKingdom. Group 3 need to find some background information of this country. Group 4 summarize the usage of the key language points of the text, etc. Group 5 figure out the usage of some key phrases.
- 3. In the morning class, the teacher selects one student from each group to read the target words, in the meanwhile, the rest of the class read after them. After that, the teacher will correct the wrong pronunciation, give comments on the performance of each group and check the preview work.

(This teaching sample is carried out following the procedures of the STAD teaching mode)

Step 1 Presentation: (7 minutes)

- 1. Presentations in forms of groups. One student from each group is selected to demonstrate their preview work. One student from Group 3 plays a video of the UK showing the general background information and the other students are required to recall what they saw. (to motivate students to know more about this country). The reporter provides students with a certain context on PPT, aiming to motivate them to know more about this country:
- 2. Students from Group 1 and Group 2 guide the other students to brainstorm the vocabulary related to the U.K. and then show the word list to the class.
- 3. Students from Group 3 to Group 4 are responsible for summarizing the usage of the key language points of the text by giving some examples. Group 5 explain the usage of some key phrases.
- 4. While listening, the teacher should make some supplements to what the students have presented. The groups make self-evaluation and mutual evaluations. The extension of vocabulary functions as the preparation for further text reading.

Step 2 Group work (15 minutes)

The main task of this part is the text explanation:

- 1. Students are required to go through the passage and try to have a better understanding of the passage by explaining it to group mates. Each group takes charge of one or two paragraphs, dealing with the language points. (While students are working in groups, teacher reminds them to underline the vocabulary and sentence structures which they find difficult to understand and summarize the problems while learning about the text.)
- 2. After 15 minutes, the teacher collects the difficulties of the whole class, sorts out the difficulties and assigns the difficult points for other groups to solve. The teacher may offer guidance to each group. Each group is assigned certain tasks to finish in groups in given time.

- 3. Cooperative practice ensures that the students have more opportunities to convey their ideas, exchange ideas and settle the disagreements.
- 4. One reporter from each group will explain the difficulties, after that, the teacher should make some comments and necessary explanation.

Step 3 Test (10 minutes)

Timely test is essential. The students are supposed to consolidate what they have just learned in time through finishing certain tasks like blank-filling; sentence making with the target vocabulary.

- 1) Fill in blanks with the vocabulary learned today within 10 minutes.
- 2) make sentences with some phrases:

Sample:

- 1. How many countries does the UK consist of?
- 2. Nowadays many people living in the city are trying to break away from their busy life and trying to seek peace in the countryside.
- 3. They may use a credit card for convenience when travelling around the world.
- 4. Our class is divided into 8 groups when participating group activities.

Step 4 Score Calculation and Group Rewarding

After class, the teacher will assess students' test papers and add up the scores. The captains of the groups will calculate the progress scores of each group member and rank the groups: Good team, Better team or Best Team. In the next class, the teacher will announce the rank of each group and give rewards (some small gifts) to those who have done a good job, and encourage students to work harder for group honor.

Step 5 Homework

- 1. Review the passage and try to retell it.
- 2. Give a brief introduction of China to a foreign student.

Notes:

- 1. Assessment should be done after class as soon as possible, rewards to the good team, better team and best team is conducted during the next period.
- 2. Make a summary of the students' performance and stress the rules of group work.

3.6.4.2 A Teaching Plan in Control Class

Unit 2: The United Kingdom (Vocabulary)

Teaching Aims:

- 1. Students need to Grasp 4 words, 4 phrases and 1 sentence pattern in this period; learn to express themselves by using them.
- 2. Learn to read the new words.
- 3. Master the usage of the key word.

Teaching Key Points:

- 1. How to use" unite, consist of, puzzle, clarify, convenience, divide...into, break away from, leave out ".
- 2. How to help students apply the vocabulary into practice.

Teaching difficult points:

- 1. Put them into practice to express themselves in English.
- 2. High-frequency words: unite, consist of, puzzle, clarify, convenience, divide..into, break away from, leave out

Teaching procedures:

Step 1 Presentation

- 1. Let students read the new words after the teacher to master the pronunciation of each word.
- 2. The teacher plays a video showing the general background knowledge of the UK, after that students are asked to do some exercises shown on PPT.
- T: Not bad, you have done a good job, now in this class we will learn about some words and expressions in this unit. Teacher explains the language points with the aid of the textbook and blackboard.

Step 2 Practice

The students are asked to do some relevant exercises about the target vocabulary in the textbook. (Students are given certain time to finish the task, which is intended to check students' preview work.)

- T: After learning about the language points, it is time to practice. You are required to finish this quiz within 10 minutes. Let's start.
- 1) Please make sentences with the following phrases:

Samples:

- 1. How many countries does the UK consist of?
- 2. Nowadays many people living in the city are trying to break away from their busy life and trying to seekpeace in the countryside.
- 3. They may use a credit card for convenience.
- 4. Our class is divided into 8 groups.

Step 3 Test

Let students finish a small quiz in certain time.

Fill in blanks with the vocabulary learned today within 10 minutes.

After doing the exercises, some students from different groups are required to report their answers, then teacher checks the answers with students. The teacher will check students' memory work of the words and expressions by means of dictation.

Step 4 Homework

- 1. Translate the text after class.
- 2. Make sentences with the key expressions learned today.

3.6.5 Post-test

After 12 weeks of teaching experiment, the two classes were tested again as a post-test. The post-test is based on the word list and teaching materials of the expansion module. The purpose of the post-test is to test whether the post-test score of the experimental class is higher than that of the pre-test score, and whether the post-test score through the STAD cooperative learning mode is higher than that of the control class, so as to explore the effective ways to improve the students' vocabulary learning ability and performance.

The post-test volume contains four parts with a total score of 100. The first was a word spelling with a total score of 20. The second part is a phrase translation, with a total score of 40 points. The third part is the appropriate form of filling, with a total score of 10 points. The fourth part is divided into a single-sentence translation, with a total score of 30 points.

3.6.6 Analytic procedure

This study intends to use a combination of qualitative and quantitative methods, On the one hand, the questionnaire was used to investigate the current situation of English vocabulary learning in vocational secondary schools and the effect after using the STAD cooperative learning model, And do descriptive statistical analysis; on the other hand, teaching experimental research, With the "STAD cooperative learning mode" used as the independent variable, Collect front and post test volumes for two classes, Comparative analysis of the two vocabulary tests by SPSS statistical software, Significance-level localization of p <0.05, The aim is to examine whether the STAD cooperative learning model can improve students' vocabulary learning ability and performance.

CHAPTER 4 RESEARCH RESULT

In this chapter, the answers to the research questions will be given in the form of data analysis and presentation. This paper focuses on analyzing the influence of STAD on students 'vocabulary use ability, and the influence of STAD on students' learning attitudes. The findings will be analyzed and discussed below.

- 4.1 Analysis on the Effect of STAD on Students' Lexical Competence
- 4.2 Analysis on the effect of STAD on Students' Learning Attitudes
- 4.3 Discussions

4.1 Analysis on the Effect of STAD on Students' Lexical Competence

4.1.1 Data Analysis of Pre-test

Data were collected from the EC and CC. No significant difference between CC and EC was ensured before the experiment. The present study was divided into four types of questions, with a total score of 100 points. The number of students in the control class is 30, with the same number of students in the experimental class. To test whether these two groups of students had similar levels of English language, the authors conducted an independent sample test between EC and CC using SPSS to ensure the validity and scientificity of the experiment.

Table 4.1 Statistic comparison of the pre-test on vocabulary between EC and CC

| | | 13 | | | Standard | | |
|-----------|-------|----|-------|--------|----------|-------|------|
| | Group | N | Mean | SD | error of | t | P |
| | | | ไปเปล | 182,10 | mean | | |
| Due to et | CC | 30 | 55.72 | 18.03 | 2.54 | | |
| Pre-test | EC | 30 | 56.31 | 15.46 | 20.6 | 0.105 | 0.08 |

From the above Table 4.1, we can see that the mean scores of the pre-test of the CC and EC are 55.72 and 56.31 respectively. Obviously, the mean score of EC (56.31) and CC (55.72) are nearly the same. Besides, the standard deviations of the two classes are close. As can be seen from the table, the Sig. is 0.08 (>0.05), which suggests that no significant difference exists in the pre-test scores between CC and EC. Even though the mean scores of the pre-test in EC and CC are close, it is still necessary for us to analyse the results of the independent samples test.

4.1.2 Data Analysis of Post-test

Students from both EC and CC are required to take the post-test to make sure that the test results can be compared to figure out the effect of the STAD teaching mode. The data analysis of the post-test results is illustrated in the following part. There would be a comparison of post-test data between EC and CC first. Then the data of the pretest and the post-test of EC is compared to verify the efficiency of STAD teaching mode on students' vocabulary proficiency.

Table 4.2 Statistic comparison of the post-test on vocabulary between EC and CC

| | | | | | Standard | | |
|---------------|-------|----|-------|-------|----------|-------|-------|
| | Group | N | Mean | SD | error of | t | P |
| | | | | | mean | | |
| D = =4 4 = =4 | CC | 30 | 56.55 | 14.51 | 2.05 | | |
| Post-test | EC | 30 | 63.08 | 18.62 | 2.44 | -2.06 | 0.032 |

As is shown in the table 4.2, the total scores of post test experimental class and control class are significantly different (P < 0.05), as we can see, the mean score of EC is 63.08, which is obviously higher than that of CC (56.55) in the post-test.

4.1.3 Data Analysis of the Tests in EC

Table 4.3 Group statistics of the pre-test and post-test of EC

| Group | Test | N | Mean | SD | Std. Deviation | t | P |
|-------|-----------|----|-------|-------|----------------|---------|------|
| EC | Pre-test | 30 | 56.31 | 15.46 | 2.05 | | |
| EC | Post-test | 30 | 63.08 | 18.62 | 2.44 | -2.2881 | 0.02 |

As can be seen in table 4.3, the mean scores of pre-test and post-test of the EC are significantly different (P< 0.05), that is, the mean score of the post-test in experimental class is higher than that of pre-test.

Table 4.4 Paired samples t-test of the pre-test and post-test of EC

| | | į | Paired Differences 95% Confidence Interval of the difference | | | | | | | |
|-------------------------------|---------|----------------|---|----------|----------------|----|-------------------|--|--|--|
| | Mean | Std. Deviation | Std. Error of Mean | Lower | Upper t | df | Sig. (two-tailed) | | | |
| Paired 1 pre-test & post-test | -6.8077 | 20.55603 | 2.8506 | -12.5305 | 084856 -2.2881 | 51 | 0.02057426 | | | |

According to the results of the paired sample t-test in Table 4.4 that there is significant difference between the scores of the two tests, which suggests that the application of STAD Cooperative Learning mode in Senior High School English classroom teaching has indeed improved the students' competence of using vocabulary to a certain extent.

To sum up, the statistics show that applying STAD teaching mode to senior school vocabulary class is more effective in improving students' ability to use vocabulary than using the conventional PPT teaching mode.

4.2 Analysis on the Effect of STAD on Students' Learning Attitudes

The questionnaire consisting of 20 questions based on four aspects was conducted in EC to testify whether the STAD Cooperative Learning model had a positive impact on students' vocabulary skills, learning attitudes and classroom performance. Students in EC were asked to complete the questionnaire within 20 minutes. Thirty respondents were surveyed and 30 questionnaires were recovered, 30 of which were valid.

The first aspect examines the impact of the STAD Cooperative Learning model on students' English vocabulary learning (questions 1, 5, 9, 13, 17). The second aspect is about students' attitude towards English vocabulary learning (questions 2, 6, 10, 14, 18). The third dimension shows students' learning and cooperative abilities (questions 3, 7, 11, 15, 19), and the fourth is about the impact of STAD on the learning atmosphere of the class (questions 4, 8, 12, 16, 20). The questionnaire reads as follows:

Each question contains five options, which represent invalid, basically invalid, uncertain, basically effective, very effective, and the 5 options are assigned 1, 2, 3, 4, and 5 points respectively. The questionnaire is measured by Likert five-level scale, ranging from strongly disagree (1) to strongly agree (5).

Table 4.5 Impact of collaborative learning on english vocabulary learning table

| Items | N | Minimum | Biggest | Means | Deviation |
|-----------------------|----|------------|---------|-------|-----------|
| Q1 | 30 | 1 | 5 | 4.25 | 1.26 |
| Q5 | 30 | 1 | 5 | 4.05 | 1.63 |
| Q9 | 30 | 1 | 5 | 4.15 | 1.35 |
| Q13 | 30 | 1 | 5 | 4.15 | 1.35 |
| Q17 | 30 | a 1 | 5 | 3.58 | 1.63 |
| Effect of STAD on | | | | | |
| students' learning in | 30 | 3.0 | 5.00 | 4.10 | 0.61 |
| vocabulary | | | | | |

Table 4.6 Impact of STAD on students' learning attitudes

| Items | N | Minimum | Biggest | Means | Deviation |
|---------------------|----|--|----------|-------|-----------|
| Q2 | 30 | ************************************** | <u> </u> | 3.90 | 1.57 |
| Q6 | 30 | 3 1 | 5 | 4.50 | 1.18 |
| Q10 | 30 | 1 | 5 | 3.60 | 1.77 |
| Q14 | 30 | 1 | 5 | 4.25 | 1.48 |
| Q18 | 30 | | 5 | 3.75 | 1.68 |
| Change of students' | | | | | |
| learning attitudes | 30 | 2.20 | 5.00 | 4.00 | 0.78 |
| towards vocabulary | 30 | 32.20 | 3.003 | 4.00 | 0.78 |
| learning | | | | | |

Table 4.6 confirms that STAD is helpful to improve students' learning attitudes. As is seen from the table, the mean score of all the entries is 4 points, indicating that the majority of students believe that their attitude towards English vocabulary learning has improved. Among the 5 entries, the highest mean score goes to self-learning ability, which suggests that STAD works best in improving students' self-education ability. While the lowest average score goes to Q10 for group work. But there are still part of the class who do not feel a strong sense of participation, and group cooperation does not improve their interest. This requires teachers to try other ways to mobilize their learning enthusiasm.

To sum up, most of the students' learning attitudes towards English learning have improved a lot after the STAD cooperative learning. We can see that STAD cooperative learning method helps improve most students' learning attitudes to English. After the experiment, their sense of responsibility and self-confidence are greatly improved, thus they are more willing to make contributions for the group's sake.

Table 4.7 Impacts of STAD on students' earning and cooperative capabilities

| Items | N | Minimum | Biggest | Means | Deviation |
|-------------------------|----|---------|---------|-------|-----------|
| Q3 | 30 | 1 | 5 | 3.60 | 1.65 |
| Q7 | 30 | 1 | 5 | 3.30 | 1.73 |
| Q11 | 30 | | 5 | 3.60 | 1.77 |
| Q15 | 30 | 1 | 5 | 4.55 | 1.15 |
| Q19 | 30 | | 5 | 4.10 | 1.57 |
| Students' Learning | | | | | |
| Ability and Cooperation | 30 | 2.20 | 5.00 | 3.83 | 0.88 |
| Ability | | | | | |

According to the statistics in Table 4.7, STAD is effective in cultivating students' learning and cooperation ability. STAD has a certain improvement on students' cooperative ability, the mean score of all the dimensions is 3.83 on average, STAD is most effective in developing students' collective sense of honor (Q15), followed by reading and writing ability (Q19). All in all STAD is helpful for developing students' ability to cooperate, promotion of collective honor and reading and writing ability.

To sum up, most students benefit from STAD cooperative learning model. Most students found that they have formed good learning habits and able to learn in forms of cooperation after learning in a cooperative way. In cooperative class they are more active in group discussion, more willing to express their views, and actively seek the answers to the tasks. In a word, cooperative learning contributes to students learning ability and especially their ability to cooperate with others.

Table 4.8 The impact Of STAD on class atmosphere

| Items | N | Minimum | Biggest | Means | Deviation |
|----------------------|----|------------|---------|-------|-----------|
| Q4 | 30 | 1 | 5 | 4.65 | 1.10 |
| Q8 | 30 | 1 | 5 | 4.25 | 1.48 |
| Q12 | 30 | 1 | 5 | 4.60 | 1.13 |
| Q16 | 30 | 1 | 5 | 4.05 | 1.57 |
| Q20 | 30 | a 1 | 5 | 4.40 | 1.45 |
| Influence of STAD on | | | | | |
| the Atmosphere of | 30 | 2.60 | 5.00 | 4.39 | 0.77 |
| the Class | | | | | |

From Table 4.8, we can see that the mean scores of the four entries related to class atmosphere are high, above 4 points, which indicates that STAD approach is effective in improving the learning atmosphere of the class, among which Q4 shows the highest mean score of learning enthusiasm suggesting that students are willing to share their learning experience and sources with others. Most of the students think cooperative learning creates positive classroom learning atmosphere and promotes their friendship. Statistics from Table 4. 8 shows that cooperative learning has been accepted by most students.

4.3 Discussions

This study was carried out on the basis of Cooperative Theory, Social Interdependence Theory and Motivational Theory. In terms of empirical researches on STAD in foreign language teaching, Wang Bo (2008), Hao Cuipin (2011), Tian Miao (2013), Kong Ning (2016) conducted teaching experiments, all of which have some achievements and showed positive results of STAD in vocabulary teaching. However, most of them are done for College students and Middle School, only Tian Miao's study (2013) is formally carried out in Senior High School and focuses on the change of students' achievements in vocabulary tests.

In this study, the author did some research on STAD for senior high school students and further explored the effect of STAD in English Vocabulary teaching. As is seen from the above data, students in EC achieved higher scores than those in CC in the

post-test, which drew the same conclusion as Tian Miao's study (2013) that there exists significant difference between the class taught with STAD cooperative method and the class who were taught under the conventional PPT model, and further verified the effectiveness of STAD teaching mode in improving students' ability to apply the vocabulary.

Besides, the analysis of the questionnaire showed that STAD cooperative method is effective for improving students' learning attitudes towards vocabulary. We can learn that STAD Cooperative Learning mode helps to promote positive interpersonal communication between students. During the experiment students learn in a cooperative way, in which they worked hard together to brainstorm learning strategies, share information and gained some learning skills at the same time. Students at different levels can obtain certain enthusiasm, sense of achievement and sense of collective honor by setting basic scores. STAD enhanced their academic achievement and increased students' interest in English. The results also give answers to the research questions.



CHAPTER 5

CONCLUSION AND RECOMMENDATION

This study took two classes in Jinchang Secondary Vocational School of Science and Technology as study samples with similar English level. STAD cooperative learning mode adopts experimental class (EC) and traditional teaching adopts controlclass (CC) to verify which mode can significantly improve students 'vocabulary performance and the influence of STAD teaching mode on students' learning attitude, so as to put forward relevant vocabulary teaching suggestions.

- 5.1 Conclusion
- 5.2 Discussions
- 5.3 Recommendation
- 5.4 Suggestion

5.1 Conclusion

After 3 months of S T A D implementation in vocabulary teaching, students' academic performance improved significantly, and the questionnaire results showed that students' overall language ability, English learning attitude, and classroom learning atmosphere were all positive. In summary, the STAD cooperative learning approach has been shown to be effective in promoting a wide variety of positive cognitive, affective, and social outcomes. By comparison with the experimental results, the method answers the following two research questions:

- 1) STAD can effectively improve the vocabulary application ability of the sophomore year of senior high school students.(p< 0.05)
- 2) STAD can effectively improve the attitude of the sophomore year of senior high school students towards vocabulary learning.
 - 5.1.1 Effects on Students' Lexical Competence

As one of the modes of cooperative learning mode, by combining intragroup cooperation and inter-group competition, we set basic scores for students and help students with poor performance to contribute to group cooperation, making them more likely to experience a sense of achievement and learning motivation. In addition, students with higher English skills also need to study hard to make progress.

In conclusion, after 3 months of experiment, we proved that the STAD cooperative learning model has a positive impact on the students 'vocabulary acquisition in high school, and the students' vocabulary performance was significantly improved after the experiment. From the results of the test, we can see that STAD cooperative learning mode is effectively improve students' vocabulary performance, compared with the traditional teaching mode, students with different English levels can contribute their efforts to team cooperation, by improving the scoring rules, students are easier to see their own improvement, which can further stimulate their active vocabulary learning.

5.1.2 Effects of STAD on Students' Learning Attitude

- 1) In addition to vocabulary learning, STAD teaching mode can also effectively improve students' interest in learning. The greatest significance of STAD in English teaching is that it creates a more relaxed and motivating learning atmosphere that enables students to learn without receiving too much pressure from their teacher. When studying with their peers, students tend to be more relaxed without worrying about making mistakes, which certainly helps to build student confidence. In addition, different types of collaborative tasks, such as role playing, spelling contest, story making, are assigned in CC. Unlike traditional classrooms, these tasks can greatly motivate students to learn in a more active and focused way.
- 2) STAD teaching mode helps to cultivate students' sense of teamwork, and also can cultivate a reasonable competitive spirit. In the cooperative learning process of STAD, there is cooperation and competition between both sides. First, the members of the same group strive to work in a collaborative way for the honor of their group. On the other hand, competition is ongoing between different groups to gain recognition in the form of verbal praise or reward. Because team scores are calculated by how much each student improved over their past grades. Everyone has the opportunity to contribute to his group, including poor students. With the help of their team peers, they have a greater motivation to learn, so that the progress of the whole team is not affected. In this model, the whole class trust each other and learns from each other. All in all, everyone in the class gets a sense of accomplishment.

5.2 Discussions

This study was carried out on the basis of Cooperative Theory, Social Interdependence Theory and Motivational Theory. In terms of empirical researches on STAD in foreign language teaching, Wang Bo (2008), Hao Cuipin (2011), Tian Miao (2013), Kong Ning (2016) conducted teaching experiments, all of which have some achievements and showed positive results of STAD in vocabulary teaching. However, most of them are done for College students and Middle School, only Tian Miao's study (2013) is formally carried out in Senior High School and focuses on the change of students' achievements in vocabulary tests.

In this study, the author did some research on STAD for senior high school students and further explored the effect of STAD in English Vocabulary teaching. As is seen from the above data, students in EC achieved higher scores than those in CC in the post-test, which drew the same conclusion as Tian Miao's study (2013) that there exists significant difference between the class taught with STAD cooperative method and the class who were taught under the conventional PPT model, and further verified the effectiveness of STAD teaching mode in improving students' ability to apply the vocabulary.

Besides, the analysis of the questionnaire showed that STAD cooperative method is effective for improving students' learning attitudes towards vocabulary. We can learn that STAD Cooperative Learning mode helps to promote positive interpersonal communication between students. During the experiment students learn in a cooperative way, in which they worked hard together to brainstorm learning strategies, share information and gained some learning skills at the same time. Students at different levels can obtain certain enthusiasm, sense of achievement and sense of collective honor by setting basic scores. STAD enhanced their academic achievement and increased students' interest in English. The results also give answers to the research questions.

5.3 Recommendation

After 3 months of teaching experiment, the data of the questionnaire were collected and analyzed by comparing the test scores of EC and CC. The STAD vocabulary teaching mode is more effective than the traditional PPT teaching mode to cultivate students' vocabulary use ability. Its influence on English teaching is as follows:

- 1) The student-centered concept should be applied in the classroom to develop students' autonomous learning ability. The advantages of the STAD teaching model gradually emerged during the experiment. The STAD transforms the traditional teachercentered teaching into a student-centered teaching style, in which students play an active role in learning and completing tasks. Teachers are no longer fully responsible for the process of learning. Instead, they became supervisors, and were participants in the learning activities. Under the guidance of teachers, it is the turn of students to fully participate in collective activities. This truly reflects the new concept of the new English curriculum standard, that is, to encourage students to study together, teachers as the guidance, and students are the subject of learning. At the same time, cooperative learning helps to cultivate students' independent learning ability. In the process of cooperative learning, students must consult reference books in order to solve problems and teachers, which strengthens the students' ability to deal with problems. For students with different English levels, they need to adjust their learning strategies to better improve the group honor. Under the STAD teaching model, group activities are the main form of learning a new vocabulary. A team with a strong team spirit is the key to successful learning. The situation of different classes is different. Teachers should fully consider everything when implementing the STAD teaching model, such as students' family, learning background, class size, etc. Thus, appropriate teaching strategies can be selected accordingly.
- 2) We should attach great importance to students' communication skills. In recent years, student-centered teaching has been strongly advocated, where teachers should act as instructors and teachers, rather than as dictators. Various types of activities should show students their learning abilities, which is also important to motivate students. Moreover, students should have more opportunities for independent learning. Appropriate guidance should be given to the students in the cooperative class. In other words, teachers should set clear and practical goals. In addition, teachers are also responsible for guiding

students to actively participate in group activities and guiding students to find solutions to difficult problems. At the same time, teachers should encourage students to express themselves bravely, encourage students to learn vocabulary and praise students through language progress, so as to promote group cooperation. Therefore, it is necessary for teachers to create a real linguistic environment, create opportunities for students to feel their own second language, and encourage students to convey their own ideas. In addition, teachers should also guide students to think deeply and independently from different perspectives. Teachers should actively encourage students to develop good vocabulary learning habits. When there are differences in the group discussions, it is necessary to guide them to consult the data independently and reach consensus conclusions. Students with difficulties in English should be encouraged to study independently, or consult students who get better grades after class. Group points of progress can be used to encourage group members to unite better. When applying STAD methods, teachers can also be flexible and not limited by the fixed model. Interest is the best teacher. When applying STAD teaching, teachers should also explore various ways of group work to encourage students to learn vocabulary, so that learners can experience happiness and a sense of achievement. Under the STAD teaching mode, a relaxed and active learning atmosphere is created, which helps to stimulate learners' interest in learning.

5.4 Suggestions for Further Research

5.4.1 Further research can be focused on vocabulary

As the basis of language, vocabulary is considered an important part of language acquisition. Learners' vocabulary level is closely related to other language skills. Cooperative learning has rich research on education, but few studies on English vocabulary. In order to find ways to improve the efficiency of vocabulary teaching, this study tried to apply the STAD cooperative learning method to vocabulary teaching, which finally achieved positive results, but there is still much to be explored in vocabulary teaching. Future related studies could focus on the STAD cooperative model, combined with more objective and practical reward approaches, to better promote lexical memory. Moreover, it is clarified that in the new English curriculum standard high school, it is far from enough for students to only master the pronunciation, spelling form, and the

meaning of a word is not enough, how it is applied correctly in some cases is important, so studying how to improve students' vocabulary ability.

5.4.2 Further research can be focused on various teaching strategies

Under the STAD model, there is still a lot of room for how to participate more in language learning and how to further develop cooperative learning methods. For example, STAD can be combined with traditional teaching methods to better adapt to the Chinese teaching environment. Many students are tired of memorizing words and find their memory work inefficient. Effective, creative teaching strategies need to be proposed to motivate students' vocabulary learning. At present, collaborative learning is being valued and widely applied, which is also recommended in the new curriculum reform. On this basis, what kind of group activities and group games should be used to improve the efficiency of cooperative vocabulary learning, we must make a more detailed implementation plan, and be implemented carefully to ensure the effectiveness of the experiment. Further research can focus on controllable variables, including the age, gender, and personality of the students in the experimental classes, and can test the correlations between these factors.

In conclusion, the test results and the questionnaire analysis showed that the STAD teaching model does have a positive impact on improving students 'ability to apply the target vocabulary, and can effectively stimulate students' interest in vocabulary learning. In the atmosphere of cooperative learning, students are more active in learning. They worked with the group members to determine the use of the target vocabulary by adopting appropriate learning strategies between each other, which not only could Improve the learning efficiency of each group, but also promote the friendship of students, so that they have cooperative ability and social skills. The STAD collaborative learning approach creatively combines collaboration with competition, enabling students to study together in small groups, while competing with other groups to gain recognition in the form of rewards. In this case, a positive learning atmosphere is formed, which unknowingly affects the performance of students.

Although STAD research has made some achievements, there are still many things to be explored and limitations to be addressed. Students lack scientific vocabulary memory methods, and teachers' vocabulary teaching methods can be improved in many ways. In any case, STAD is certainly a good way to apply to vocabulary teaching.



Bibliography

- Aryani, D. (2016). The Use of Cooperative Learning STAD to Improve Speaking Skills of Accounting Program Students Grade Xi in SMK N 1 Depok in the Academic Year of 2013/2014. (Thesis. Universitas Negeri Yogyakarta).
- Bo Wang . (2008). Effect of STAD Cooperative Learning Methods on College English Word Learning. **Journal of Anshun College**, (10).
- Chunyan Liu. (2008). **The Application of Cooperative Learning in High School English Classroom Teaching**. Northeast Normal University.
- Fitria Sari, Nurul; Asib, Abdul; Asrori, Muhammad. (2013). The Use of STAD in Improving Students' Vocabulary Mastery. **English Education, 2**.
- Ghaith, G. M. (2002). The relationship between cooperative learning, perception of social support, and academic achievement. **System, 30**: 263-273.
- Ghaith, G. M., & H, Yaghi. (1998). Effect of cooperative learning on the acquisition of second language rules and mechanics. **System, 26**: 223-234.
- Ibrahim, I. S., & Adnan, N. H. (2019). Student Teams Achievement Divisions (STAD) in Enhancing Speaking Performance among English as Second Language (ESL) Learners: A Critical Review. **Creative Education, 10**, 2840-2849.
- Ishtiaq, Muhammad; Ali, Zuraina; Salem, Muhammad.(2017). An Experimental Study of the Effect of Student Teams Achievement Divisions (STAD) on Vocabulary Learning of EFL Adult Learners. **Arab World English Journal**, **8**(3): 356-375.
- Johnson, D. W., &Johnson, R. T. (1985). The internal dynamics of Cooperative Learning groups. In Slavin, R., Sharan, S. S., Kagan, S. Lazarowitz, R. H. Webb, C., & Schmuck, R. (Eds.), Learning to cooperate: Cooperating to learn (103–123). New York, NY: Plenum Press.
- Johnson, D. W., & Johnson, R. J., & Hulu bec, E. J. (1990). Circles of Learning: cooperation in the classroom, p.5. [n.p.].

Bibliography (Continued)

- Johnson, D. W. & Johnson, R. T. (1994). Learning Together and Alone:Cooperative, Competitive and Individualistic Learning. Boston:Allyn and Bacon.
- Jolliffe, W. (2007). Cooperative Leaning in the Classroom: Putting It into Practice. London, UK: Paul Chapman.
- Miao Tian. (2013). **Application of Student Division in English Word Teaching**. Shandong Normal University.
- Ning Kong. (2016). **The Application of STAD Cooperative Learning Model in Junior Middle School English Word Teaching**. Xinjiang Normal University.
- Nuan Li. (2017). Study on the Effectiveness of STAD Cooperative Learning Model on English Reading Teaching in High Schools. Harbin Normal University
- Rahayu Fitri; Ninit Alfianika. (2017). Effect of Student Teams Achievement Division and Vocabulary Mastery to Reading Comprehension Ability. **Journal** of Education and Learning, 11(4): 452-458.
- Slavin, R. E. (1978). Student Teams and Achievement Divisions. Journal of Research and Development in Education, 12.
 ... (1983a). Cooperative Learning. New York: Longman.
 ... (1988). Student team learning: An overview and practical guide. Washington, National Education Association.
 ... (1990). Learning together. The American School Board Journal, 177/8: 22-23.
 ... (1995). Cooperative Learning: Theory, Research, and Practice. MA: Allyn & Bacon, A Simon & Schuster.
 ... (1979). Effects of biracial learning teams on cross-racial friendships.
- Stevens, R. J., & Slavin, R. E. (1995). The cooperative elementary school: Effects on students' achievement, attitudes, and social relations. **American Educational Research Journal, 32**: 321–351.

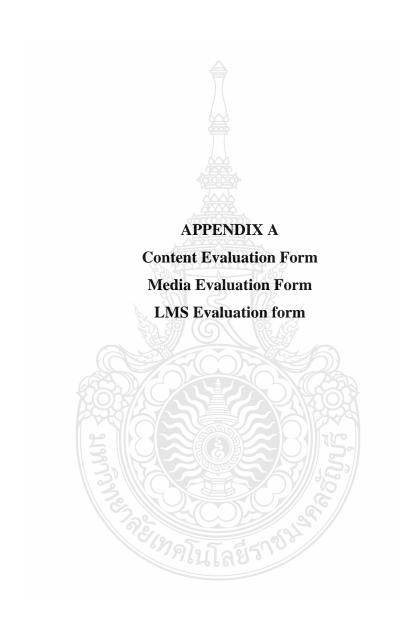
Journal of Educational Psychology, 71: 381–387.

Bibliography (Continued)

- Syaifullah Syaifullah. (2017). Improving Students' Achievement in Speaking by
 Using Students Teams Achievement Divisions (STAD) at Grade VII
 Students of Junior High School3 Pekanbaru. **Lectura: Jurnal Pendidikan, 6**(2).
- Windasari. (2016). Improving English Vocabulary Mastery of Grade VIII Students

 Through Student Team Achievement Division (STAD) Method. **ELTS**, **4**(2).
- Tan Wang. (2007). **An Introduction to Cooperative Teaching**. Jinan: Shandong Education Press.
- Huiyun Zhao. (2020). **Application of STAD Cooperative Learning Model in Secondary School English Word Teaching**. Yili Normal University.





Appendix I Pre-test on Vocabulary

| 一、单词互译 | (40分) | | |
|-------------------|-----------------------|-------------------------|-------------|
| | | | 4.suburb |
| 5.智慧 | 6.dustbin | 7.环境 | 8.temple |
| 9.怀疑 | 10.major | 11.大学 | 12.feast |
| 13.社会 | 14.guideline | 15.方便的_ | 16.mosquito |
| 17.出版1 | 8.community | 19.索价 | 20.check |
| 二、短语互译 | (20分) | | |
| 1.central air-con | ditioning | 2.安排接送 | 3.check in |
| 4.观点;立场_ | 5.put right | 6.属于 | |
| 7.heating system | n8. | 去野餐 | |
| 9.give a lecture_ | | 10.邀请某人做某 | 事 |
| 三、句子互译 | (20分) | | |
| 2.How do you li | ike the new commu | mity? | |
| | | | |
| 3.我非常喜欢中 | 中国食物。 | 100 - 150 N | |
| 4.If you are free | , I would like to inv | rite you to a dinner th | is weekend. |
| 5.我们会在九点 | 点安排接送你。 | | |

四、完形填空(20分)

Food is very important. Everyone needs to __1__ well if he or she wants to have a strong body. Our minds also need a kind of food. This kind of food is __2__. We begin to get knowledge even __3__ we are very young. Small children are __4__ in everything around them. They learn __5__ while they are watching and listening. When they are getting older, they begin to __6__ story books, science books..., anything they like. When they find something new, they love to ask questions and __7__ to find out answers. What is the best __8__ to get knowledge? If we learn by ourselves, we will get __9__ knowledge. If we are __10__ getting answers from others and do not ask why, we will never learn well. When we study in the right way, we will learn more and understand better.

- 1. A. sleep B. read C. drink D. eat
- 2. A. sport B. exercise C. knowledge D. meat
- 3. A. until B. when C. after D. so
- 4. A. interested B. interesting C. weak D. better
- 5. A. everything B. something C. nothing D. anything
- 6. A. lend B. read C. learn D. write
- 7. A. try B. have C. refuse D. wait
- 8. A. place B. school C. way D. road
- 9. A. little B. few C. many D. the most
- 10. A. often B. always C. usually D. something

Appendix II Post-test on Vocabulary

| 一、单词互译(| 40分) | | | |
|---------------------|-----------------------|----------------|---------------|---|
| 1.建议 | _2.tobacco | 3.教堂 | 4.load | _ |
| 5.热切的 | _6.parade | _ 7.包含 | 8.surprise | _ |
| 9.羞愧的 | 10.cancer | 11.欣赏 | 12.install | |
| 13.有创意的 | 14.vase | 15.专家 | 16.concert | |
| 17.平衡的 | 18.avenue | 19.人物 | 20.laptop | |
| 二、短语互译(| 20分) | | | |
| 1.in one's opinion | ɪ2.害忖 | 白3.1 | roller skates | _ |
| 4.把提供给 | 5.clean u | p6.对 | 好奇 | |
| 7.in no time | 8.热切地 | 」.想 | | |
| 9.be similar to | 10 | | | |
| 三、句子互译(| 20分) | | | |
| 1.你昨天去哪了' | ? | | | |
| | | | | |
| | | | | |
| 2 I'd like my child | d to attend this scho | | | |
| 2.1 C 1 C 1 C 1 | | | | |
| | POBILA | | | |
| | | | | |
| 3.你多久打一次 | 网球? | | | |
| | 3 | | | |
| | 72 | | | |
| 4.The booklet exp | lains all the service | s you can get. | | |
| | | | | |
| | | | | |
| 5.我想邀请你和 | 段 | | | |
| | M TAMIM 10 | | | |
| | | | | |

四、完形填空(20分)

There is no more exciting day for a child than his or her birthday. Why? _1__on that day he or she may receive many gifts. However, six-year-old Jilly has been very _2__. It's her birthday today, but she hasn't received any birthday ___3_. A lot of people have sent cards, and a few people have _4__ her a present too, but the postman hasn't delivered anything.

"Where's the __5_ today?" Jilly's mother asked on the phone. "It's my daughter's birthday.

You didn't send _6__ birthday cards!"

"I'm normy!" a postman gold "We don't __7_ today.

"I'm sorry," a postman said. "We don't __7_today.

Jilly's mother _8__, "It's my daughter's birthday today!"

"I see," the postman said. "Sorry, I can't send them to you today, but give me ten minutes. I'll find all Jilly's cards for you. Then you can come and __9_ them. Will that be OK?"

"In this case, in order that my daughter will have a_10_birthday, I'll go to get them in person."

So Jilly's mother is on her way to the post office now. Perhaps Jilly will have a nice time on her birthday.

- 1. A. Because B. Although C. Until D. Unless
- 2. A. excited B. sad C. relaxed D. interested
- 3. A. books B. foods C. gifts D. fruits
- 4. A. made B. given C. sold D. sent
- 5. A. postman B. policeman C. fisherman D. businessman
- 6. A.his. B. her C. my D. your
- 7. A. turn B. try C. work D. show
- 8. A. read B. wrote C. laughed D. shouted
- 9. A. take B. correct C. connect D. complete
- 10. A. busy B. happy C. sad D. lazy

Appendix III Jinchang Secondary Vocational School of Technology

Jinchang Science and Technology Secondary Professional School, formerly known as Jinchang Normal School, is a government-run high school vocational school directly under the Education bureau of Jinchang city, which implements the management system of three brands and one set of institutions, together with Jinchang Vocational and Technical School and Jinchang Teacher advanced Education School. The school has 98 staff members, including 88 full-time teachers, including 35 senior lecturers and 33 lecturers. The school has 17 postgraduate students and has formed a well-educated, high-quality and well-structured teaching team. The school has 1042 registered students.

The school has first-class facilities, complete functions and advanced equipment. The campus covers an area of 210 mu, with a total construction area of 50,200 square meters, including 1 male and female dormitory, 6 comprehensive teaching office buildings and 1 training building. There are 60 ordinary classrooms, 40 piano rooms, 11 computer classrooms, 3 dance halls, 1 multifunctional lecture hall and 13,000 square meters of training workshop.

The school adheres to the concept of "inheriting science and technology, cultivating humanities", highlights the characteristics of "standardization, innovation and education", comprehensively strengthens vocational basic education and skill training, pays close attention to students' cultivation education, and is committed to cultivating students' lifelong development quality for growth, adulthood and talent. Beautiful campus environment, first-class facilities and equipment, excellent teachers, outstanding teaching achievements. In the past five years, 21 students have been admitted by northwest Normal University, Lanzhou City University and other undergraduate colleges, with the higher vocational enrollment rate reaching over 97.2 percent. In the skills competition of secondary vocational students in Gansu Province, 64 students of our school won the first, second and third prizes of the province respectively.

The school adheres to the educational policy of "service-oriented, employment-oriented", based on the future economic and social development of Jinchang, focusing on the economically developed coastal areas, and facing the market, enterprises and society. To "advocate humanistic, spreading science and technology" as the motto,

reasonable setting admissions professional, scientific orientation training target, strengthen the teaching management, actively expand employment channels, in truth, pragmatic, innovative work style, to strengthen the construction of the school "school spirit," teaching and learning, and deepening the reform of classroom teaching, students' general education work a day, Do fine, do fine, do every link of education and teaching work, and strive to build the province's demonstration, Hexi first-class, complete professional vocational and technical school, become the cradle of the city's skilled workers, technicians grow platform, skills training base.

The university earnestly implements the spirit of the National Conference on Vocational Education, does a good job in the integration of middle and higher vocational enrollment, and carries out the "2+2+1" vocational education talent training mode with five colleges and universities inside and outside the province. The school offers six majors: preschool education, Computer Application, NUMERICAL control Technology Application, Mechanical and electrical Technology Application, Electrical Technology Application and computer graphic design.

The development of the school has been strongly supported by provincial and municipal leaders at all levels and relevant departments as well as all walks of life. On April 2, 2013, Jinchang Technical secondary School relocation project started construction in the vocational education Park of Jinchang. The new campus covers an area of 209.62 mu, and the school is located in Jinchang Vocational Education City. The total construction area of the new campus is 23,200 square meters, including 53,400 square meters of road square, 42,600 square meters of green space and 20,500 square meters of sports ground. The planned total construction area is about 70,000 square meters. The estimated total investment is 230 million yuan. The construction of the project is divided into two periods: the first phase of the building area of 50,200 square meters, the second phase of the building area of 9,000 square meters.

The first phase of construction is no. 1, no. 2 comprehensive teaching building, training building, student dormitory building, gate, sports field, road, pavement and external network engineering. The second phase will be a dormitory building for students.

Up to now, No. 1 comprehensive teaching building, No. 2 comprehensive teaching building and the main body of the student dormitory have been completed and the interior decoration works have begun, which is scheduled to be completed in July 2014. The main part of the training building will be completed within a few days and is scheduled to be completed in August 2014. The preliminary design of the gate, sports ground, road, paving and external network engineering has passed the expert review meeting organized by the Municipal Development and Reform Commission, and the project will be reported to the municipal government for approval before construction begins.

After completion, Jinchang Secondary Vocational School of Science and Technology will be the only modern secondary vocational school with first-class facilities, complete functions and advanced equipment in the city, which will provide good conditions for teachers and students to study, practice and life. The school has a maximum enrollment of 3,000 students. In addition, it also undertakes the transfer training of the city's labor force and various short-term training tasks, with more than 1,000 students per year.

Appendix IV Questionnaire

STAD Cooperative Learning Survey for Vocational High Schools

Dear students,

Hello!In the past semester, we have adopted the STAD group cooperative learning method to learn vocabulary. Below, we want to understand the impact of STAD cooperative learning on learning, especially on the effect of English vocabulary learning, so as to better carry out vocabulary teaching in the next stage.

There are five options behind each item of the questionnaire, which represent the degree to which the survey content conforms to my actual situation. The five options are: "Invalid", "Basically invalid", "Unsure", "Basic valid", and "Very valid". Please read each item carefully, and try to choose from your own actual situation in the semester, marking " $\sqrt{}$ " in the corresponding box. This questionnaire is not signed, and your valuable comments will be a reference for the investigation and research. Please answer truthfully. Thank you for your cooperation!

| 1 | In STAD cooperative vocabulary learning, the communication between group members helps you improve the speed of vocabulary memory | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
|---|---|---------|-------------------|--------|----------------|---------------|
| 2 | Learning your vocabulary through the STAD collaboration increases your interest in English learning | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 3 | STAD group collaborative learning prompts you to learn English vocabulary on your own | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 4 | You are willing to share the resources and experiences of vocabulary learning with other students | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 5 | STAD cooperative vocabulary learning enables you to acquire vocabulary learning strategies and skills from other group members | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 6 | STAD group collaborative learning enhances your sense of responsibility | Invalid | Basically invalid | Unsure | Basic valid | Very valid |

| | | 1 | | | 1 | |
|----|--|---------|----------------------|--------|----------------|---------------|
| 7 | STAD group collaborative learning improves your autonomous learning ability, actively exploring in all course | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 8 | In the STAD group vocabulary cooperative learning, the whole group of students worked wisdom and have more opportunities to learn from each other | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 9 | STAD group collaborative learning prompts you to often use the words you have learned to express yourself | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 10 | You are very satisfied and fulfilled in your STAD vocabulary cooperative learning | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 11 | STAD group collaborative learning improves your communication skills | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 12 | In the STAD group vocabulary cooperative learning, the whole group can help each other to encourage and trust each other | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 13 | The STAD group collaboration in learning vocabulary contributes to improved reading and writing skills | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 14 | In the STAD group cooperative learning, you enhance the sense of collective honor through the cooperation and competition inside and outside the group | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 15 | STAD group collaborative learning improves your ability to live in harmony with your classmates | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 16 | In the STAD group vocabulary cooperative learning, the students are very enthusiastic about learning, and the classroom atmosphere is very high | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 17 | For the honor of the group, you are more attentive in class and learn vocabulary more efficiently than ever | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 18 | Through the STAD group collaborative learning, the recognition of students and teachers has increased your confidence in learning English | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 19 | You can actively participate in the group cooperation and improve your ability to cooperate | Invalid | Basically invalid | Unsure | Basic valid | Very valid |
| 20 | Group cooperative learning enhances the friendship, and the class is more united | Invalid | Basically invalid | Unsure | Basic valid | Very valid |

APPENDIX V Some Pictures













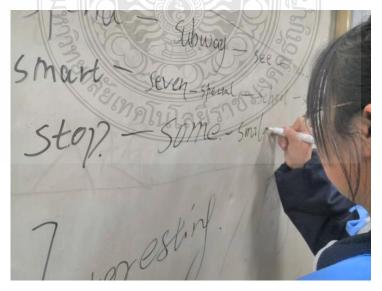




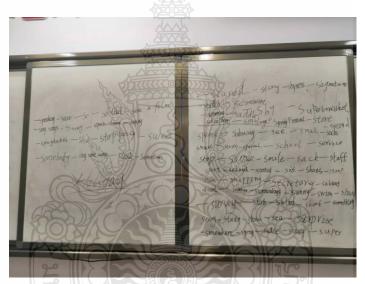














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