The Study of Reading Achievement and Satisfaction on English Reading Comprehension Using STSD Cooperative Learning Technique for Freshmen Majoring in International Trade of Guangxi Vocational Institute of Technology

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Abstract

The objectives of this research were to 1) compare the learning achievement between pretest and post-test, post-test with a 75 percentage criterion on English reading comprehension using STAD cooperative learning technique 2) study the satisfaction on English reading comprehension using STAD cooperative learning technique. The research method was one group pretest posttest design. The sample was one class of 30 International Trade major students in the second semester of academic year 2022 at Guangxi Vocational Institute of Technology, which was selected by cluster sampling. The research instruments included 1) English reading teaching plan using STAD cooperative learning technique together with a reading activity set on English reading comprehension. 2) 30 multiple choices learning achievement test. 3) 20 items with 5 rating scales of satisfaction questionnaires. The statistics used for data analysing were mean, percentage, standard deviation and t-test.

The results of the research were as follow：1）The post-test achievement was statistically higher than that of pretest at 0.01 level, and the post-test achievement was significantly higher than the criteria of 75 percent criterion at 0.01 level. 2）The students were satisfied with the learning activities. Overall, all aspects had a mean of 4.51 with the highest satisfaction level（$\bar{x}$ =4.51, S.D.=0.58）.

Keywords: STAD cooperative learning techniques, learning achievement, students satisfaction, English reading ability

Introduction

English reading comprehension ability plays a significant role in the academic success and professional development of students majoring in International Trade. Proficiency in reading comprehension enables students to comprehend and analyze complex texts related to international trade, economics, finance, and business management. It allows them to extract relevant information, make informed decisions, and effectively communicate their ideas in the global business arena.

English reading comprehension ability is a critical skill for students majoring in International Trade at the Guangxi Vocational Institute of Technology. As an academic discipline that focuses on the global business environment, International Trade requires students to understand and analyze various written materials in English, including textbooks, research papers, business reports, and international trade agreements. Proficiency in English reading comprehension is essential for these students to effectively navigate the complexities of the field and excel in their future careers. Students who study International Trade in Guangxi Vocational Institute of Technology have various levels of English language proficiency and diverse educational backgrounds.

According to the final exam results of Guangxi Vocational Institute of Technology in the first semester of school year 2022-2023, the test result of College English for students majoring in International Trade is not very satisfying, especially for English reading section. The average score of English reading is only 20 points (out of 40 points), below the average performance based on the analysis of students' past examinations.

For many freshmen majoring in International Trade at Guangxi Vocational Institute of Technology, English is a second language that they have been studying for a relatively short period. While they may have received English language instruction during their previous education, the emphasis may have been more on basic communication skills rather than the specific academic language required for higher education. As a result, these students may have limited exposure to the rich vocabulary, intricate grammar structures, and nuanced expressions found in academic texts.

The Student Teams Achievement Division (STAD) learning technique is a cooperative learning technique developed by Robert Slavin in the 1980s. It offers a potential solution to enhance English reading comprehension ability among freshmen

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majoring in International Trade. STAD is a cooperative learning approach that encourages active student participation, collaboration, and peer support. In the context of English reading comprehension, the STAD technique can provide a structured and interactive learning environment, fostering student engagement and facilitating the development of reading skills.

Research Questions

Research Questions

1. Is learning achievement on English reading of first-year international trade students after studying using the STAD cooperative learning technique higher than before and higher than 75% criteria?

2. Is the students' satisfaction on English reading of first-year international trade students after studying using the STAD cooperative learning technique at high level?

Research Objectives

1.To compare learning achievement on English reading of first-year international trade students after studying using the STAD cooperative learning technique between pretest and post-test and posttest with 75% criteria.

2.To study the students' satisfaction on English reading of first-year international trade students after studying using the STAD cooperative learning technique

Research Hypothesis

1. The learning achievement on English reading of first-year international trade students after studying using the STAD cooperative learning technique higher than before.

2. The students' satisfaction on English reading of first-year international trade students after studying using the STAD cooperative learning technique is at high level.

Research Benefits

1. Teachers learn to use STAD cooperative learning technique.

2. To improve students' English reading ability and learn to cooperate in learning.

3. The students can improve their thinking skills and group process.

4. The students can improve their reading skills to use for advance learning

5. The teachers can apply theories of discourse analysis to other learning

Scope of Research

1. Population and sample

1.1 Population: The population is International Trade majors students in the second semester of academic year 2022 at Guangxi Vocational Institute of Technology, 5 classes, total 150 students. All the students were divided into 5 classes by hierarchical grouping according to their entrance examination. So all classes are with similarity proportion of high and low performance.

1.2 Sample group: The sample is one class of 30 International Trade majors students in the second semester of academic year 2022 at Guangxi Vocational Institute of Technology. Students are selected by cluster sampling.

2. Content scope

The content used in this research was College English course, Unit 1 to Unit 4. consists of different reading content as follows:

Unit1 Corporate Culture and Mission: The Key to Huawei's Success

Unit 2 Green Development: Environmental Protection Begins With Us

Unit 3 Volunteer Activities: How Chinese Firms Fulfil Social Responsibility in the Fight against COVID-19

Unit 4 Technological Development: How Will We Live in 2045

of the English coursebook edited by Ding Guosheng.

3. Variables to be studied

3.1 Independent Variable : STAD cooperative learning technique.

3.2 Dependent Variable: Students' learning achievement and satisfaction on English reading using STAD learning technique.

4. Duration of the study

The duration of this research was conducted in the second semester of the academic year 2022. The experimental period was 6 weeks, 1 day per week, 2 hours per day, totally 12 hours (including pretest and post-test).

5.Statistics used in data analysis

5.1 Comparison of students' learning achievement on English reading between the post-test and the pretest used mean ($\bar{X}$) and standard deviation (S.D.) and t-test dependent.

5.2 Comparison of students' average score of post-test on English reading using STAD cooperative learning technique with 75% of the full score used mean ($\bar{X}$) and

standard deviation (S.D.) and t-test dependent.

5.3 Studying students' satisfaction on English reading using STAD learning technique used mean ($\overline{X}$) and standard deviation (S.D.)

Terminology Definition

STAD cooperative learning technique is known as student-group-achievement cooperative Learning. It is initiated by Professor Slevin in the United States and is very popular in the United States as a cooperative learning type. This type of cooperative learning advocates that students of different genders and levels are divided into multiple learning groups. Teachers present a learning topic, and students learn this topic and master relevant skills together in their respective groups. In this learning process, team members cooperate with each other to ensure that everyone can master relevant knowledge. After that, students can take traditional tests independently.

Learning achievement refers to students' ability on English reading using STAD learning technique. Measured by a 30-question, 4-choice multiple-choice academic achievement test.

Satisfaction refers to feeling or opinion or positive thinking on English reading using STAD cooperative learning technique. Measured by 20 satisfaction questionnaires with 5 rating scales.

Research design

This research design was one-group pretest posttest design (Cambell and Stanley, 1969).
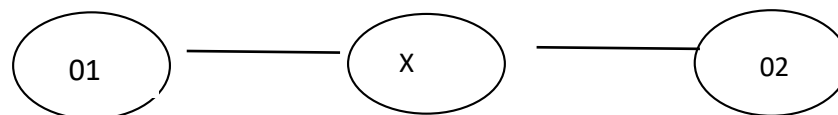
X   is the STAD cooperative learning technique

01   is a pretest

02   is a post-test

Data analysis results

1.The result of learning achievement on English reading using STAD learning technique for 1st year students of International Trade major at Guangxi Vocational Institute of Technology, as shown in table 1.

Table 1 shows comparison between pretest and post-test score on English reading using STAD cooperative learning technology.

test score	n	$\overline{X}$	S.D.	df	t
Pre- test	30	8.9	3.01	20	22.45
Post- test	30	22.6	5.76		

** Statistical significance at the .05 level , t (0.05 ; 29) = 1.6991.

Table 1 shows that the comparative results of the learning performance of freshman students before and after using STAD learning technology for English reading test. The average score of pretest was 8.9, and the standard deviation was 3.01. The post-test mean score was 22.6, and the standard deviation was 5.76. When the differences were analyzed using a t-test of 22.45, the differences were found to be statistically significant at the 0.01 level, based on the hypothesis.

2.The result of students' average score of post-test on English reading using STAD learning technology with the standard of 75% full marks for the freshman students majoring in International Trade of Guangxi Vocational Institute of Technology, as shown in table 2.

Table 2 show the comparison of students' average score of post-test on English reading using STAD cooperative learning technique with the standard of 75% full marks.

test score	n	Full Score	Threshold score	$\overline{X}$	S.D.	%	t
Post- test	30	30	22.5	22.60	5.76	75.3	4.38

** Statistical significance at the .05level , t (0.05 ; 29) = 1.6991.

As can be seen from Table 4.3, the average and standard deviation of students in the first grade are 22.60 and 5.76, respectively, when STAD cooperative learning technology is used for English reading test and the full score of 75% standard is compared.

The t-value formula (t-test) was used to test the academic performance, and the t-value was 4.38, indicating that the post-test academic performance of Grade 1 students in sample class was higher than the threshold of 75% and reached the significant level. 01. This is based on assumptions.

    3.The result of students' satisfaction on English reading using STAD cooperative learning technique as shown in table 3.

    Table 3 Show the students' satisfaction on English reading using STAD cooperative learning technique.

No	List	Satisfaction		Interpret
		$\overline{X}$	S.D.	
1	I like the way my English teacher is teaching me.	4.60	0.50	the most
2	My group consists of 4-6 people.	5.00	0.00	the most
3	My group includes students of all academic levels.	4.70	0.47	the most
4	If there is a group work session in the classroom, my group has both boys and girls in my group.	4.55	0.51	the most
5	I think STAD learning helps with my reading skills.	4.65	0.49	the most
6	By using STAD learning, my interest in learning English reading has increased.	4.55	0.51	the most
	STAD learning technique can help to increase my motivation to learn English reading independently.	4.65	0.49	the most
8	By using STAD learning technique, teacher and classmates' recognition increased my confidence in English reading.	4.35	0.75	a lot
9	I think it is important to work with other students in a group to solve problems.	4.50	0.61	the most

No	List	Satisfaction		Interpret
		$\overline{X}$	S.D.	
10	In group work, I will pay attention to what other members are learning.	4.50	0.51	the most
11	In group work, I can often get help from other members or help other members.	4.55	0.51	the most
12	When the group achieves something, the teacher always rewards everyone in the group.	4.45	0.60	the most
13	My group assigns tasks with equal opportunity and division of labor.	4.50	0.61	the most
14	Each member has an inescapable responsibility for the success of the group.	4.40	0.60	a lot
15	In the English reading class, I am willing to work with my classmates to fulfill the tasks assigned by the teacher.	4.00	1.12	a lot
16	I want to be the representative speaker in the English reading class.	4.30	0.73	a lot
17	In my studies, I often ask for help from my teachers and classmates when I encounter difficulties.	4.40	0.75	a lot
18	In group discussions, if I have new ideas, I am happy to share them.	4.25	0.85	a lot
19	In group discussions, I was able to listen with an open mind when others criticized my views or disagreed with me.	4.75	0.44	the most
20	I will always use polite language when asking my classmates for advice or making comments.	4.55	0.51	the most
Together		4.51	0.58	the most

As can be seem from table 3, students are very satisfied with the use of STAD learning technique in all aspects, with the mean of satisfaction level at 4.51 and standard deviation was 0.58, it was indicating that students are the most satisfied.

Discuss the results

Through the study of STAD cooperative learning technique used by freshman students majoring in International Trade of Guangxi Vocational Institute of Technology, the study results of English reading and student satisfaction were discussed as follows:

1.The freshman students' academic performance after using STAD learning technology in the course of English reading was higher than that before the test, and the difference was statistically significant (0.01), which was higher than the threshold of 75%. The STAD learning technique is used in the teaching plans or teaching activities of the freshman students majoring in International Trade of Guangxi Vocational Institute of Technology, which effectively improves their scores, encourages students to learning in group and improves their interest in English reading. Through the principle, concept, theory and related research of the academic performance test, the achievement test and the teaching plan are designed. Content scope is clearly defined and easy to understand.

Through the study, the conclusion is drawn that the experimental class after the implementation of STAD learning technique, compared with using ordinary learning method, the average score is improved, indicating that the experimental class students using STAD learning technique can significantly improve students' academic performance of English reading. Their interest of English learning was significantly improved compared with that of before. There is a significant difference in the learning satisfaction of the sample class compared with that of the ordinary class. It can be seen that STAD learning technique can significantly improve students' learning satisfaction.

2. First year International Trade students are satisfied with their learning using STAD learning techniques. The satisfaction evaluation results are excellent. The results of the questionnaire showed that the students in the sample group made progress in many areas through the STAD learning method and they were satisfied with this method of learning. First of all, the students helped each other in group learning and contributed their efforts to the total group achievement. They learned how to communicate with group members politely and effectively in the process of communicating with them. Secondly, the STAD group learning method enabled the students to improve their English reading ability in learning from each other and stimulated their interest in active reading. The improved

reading scores made the students in the sample group more confident. Thirdly, the STAD learning method made the students in the sample group realize the power of teamwork, experience the sense of team honor, and experience the joy of progress.

It can be seen that the use of STAD learning technique in improving English reading of 1st year students in Guangxi Vocational Institute of Technology can encourage students to learn more actively and gain greater satisfaction. Students' satisfaction level is assessed as the most satisfied and passes the criteria set by the researcher.

Recommendations

Suggestions for applying the research results

According to the above analysis, the conclusion of this study is that STAD is beneficial to teachers and students, but there are still some deficiencies that need to be solved. In view of the above limitations, the author puts forward some suggestions on the implementation of STAD in English reading learning.

First of all, it is necessary for future scholars who study STAD to expand the research scope and combine it with different teaching methods or teaching models.The scope of research objects should also be expanded so that we can get more reliable and holistic research results. At the same time, because there are few cases of the combination of STAD and vocational college English reading, the research hopes to have more research in this field in the future. Secondly, the experimental cycle should be as long as possible. Since the research cycle of this study is only two month, in order to obtain more reliable data, the research suggests that future research should extend the experimental cycle as much as possible in order to obtain more reliable research statistics.

The current research results show that Student Teams Achievement Divisions has a certain impact on students' English reading ability and cooperative skills. It is hoped that, in the future, there will be more research on the combination of STAD and practical teaching, so that it can be more scientifically and effectively applied in teaching.

All in all, there is still broad space for further experiments on STAD in the future. This research is only a small step in this field, which still needs constant exploration by scholars and teachers. In the future, the author as a teacher will also strive to integrate it

with English teaching and applied this model to teaching and contribute to the development of cooperative learning in English teaching.

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