

ENHANCING ENGLISH READING COMPREHENSION ABILITY USING
COLLABORATIVE STRATEGIC READING OF
MATTHAYOMSUKSA 3 STUDENTS

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Abstract

The purposes of this research were to study and compare Matthayomsuksa 3 students' English reading comprehension ability using Collaborative Strategic Reading before and after the instruction and to investigate Matthayomsuksa 3 students' attitude towards learning English reading comprehension using Collaborative Strategic Reading. The sample consisted of 45 students of Matthayomsuksa 3/4 Students at Udonpichairakpittaya School, Udon Thani under the Secondary Educational Service Area Office in the first semester of the academic year 2024. They were selected through cluster sampling. The research was a one group pretest – posttest design. The research instruments included 12 lesson plans, an English reading comprehension ability test and an attitude questionnaire. The experiment lasted 12 weeks, a total duration of 24 hours. The mean, percentage, standard deviation, One Sample t-test and t-test for Dependent Samples were used for data analysis.

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The findings of this research were as follows:

1. The students' pretest and posttest mean scores on English reading comprehension ability were 12.04 or 30.11 percent with a standard deviation (S.D.) of 2.16 and 30.67 or 76.67 percent with a standard deviation (S.D.) of 2.09, respectively. The students' posttest mean score on English reading comprehension ability was higher than the set criterion of 70 percent and the students' English reading comprehension ability after the experiment was significantly higher than that the prior one.

2. The students' attitude toward teaching English reading comprehension using Collaborative Strategic Reading was at a good level with a mean score of 4.32 and a standard deviation of 0.59.

Keywords: Collaborative Strategic Reading, English reading comprehension, Collaborative Strategic Reading (CSR)

Introduction

English reading comprehension ability is important for studying and working life in the progression of innovative societies. People who know how to read can educate themselves in any fields of study to effectively gain the new and updated knowledge and innovation information, besides to other aspects, English reading comprehension plays a major role in enhancing students' overall language proficiency, as it provides them with the tools to fully engage with academic texts and develop critical thinking skills. In addition, Harmer (2001) states that English serves as a globally essential means of communication, connecting to people with others worldwide.

According to the Ministry of Education (2008), the Ministry of Education defines that learning foreign languages, especially English, is very important. This is because English plays a crucial role in personal development, communities, society, and the nation. Therefore, English is an essential tool for communication, education, and career development.

Reading is a crucial skill for acquiring information, news, and insights, making it essential for teachers to promote effective reading habits for students. Anderson (1999) describes reading as a process of constructing meaning through interaction between the reader, text, strategies, and fluency. Stoller and Grabe (2001) emphasize that effective reading involves more than decoding letters, which means it requires cognitive engagement to connect prior knowledge and experiences, facilitating a deeper understanding of the text and enhancing language proficiency.

Reading skills are fundamental abilities that enable students. Individuals need to comprehend, interpret, and analyze written text, which is essential for academic, professional, and lifelong success. Fulcher (2007) highlights the importance of English communication skills in education, society, and business. Miller (1990) notes that these skills extend beyond academic contexts, aiding in understanding various texts encountered in daily life. Williams (1994) emphasizes that reading is central to learning and is a lifelong skill that helps learners continuously gain knowledge in various languages, including Thai and English. For Thai learners studying English, reading skills are especially beneficial as they help expand their vocabulary, improve comprehension, and enhance overall language proficiency. Strong reading skills also enable them to access a wider range of academic and professional materials, supporting both their education and career development. Nuttal (1996) advocates extensive reading as a critical method for improving language proficiency and achieving learning goals.

Udonpichairakpittaya School comprises students from Matthayomsuksa 1 to 6 students. Matthayomsuksa 3 students faced challenges in English performance in 2022, averaging 27.18% on the O-NET, which was below the school's standard. In 2023, students in course E20205 had an average score of 38% on the final exam, which was well below the passing criterion of 70%, due to the need for more diverse teaching approaches that align with the current educational context, taking into account the varying learning styles and needs of students. However, the researcher has adapted Collaborative Strategic Reading on English language teaching to address challenges in English reading instruction developed by Klingner and Vaughn (1999) presenting four steps of reading as follows: 1) Before the Reading: Preview 2) During the Reading: Click and Clunk. 3) During the Reading: Get the Gist 4) After the Reading: Wrap Up. From the above mentioned, the researcher aims to enhance English reading comprehension ability at Udonpichairakpittaya School of Matthayomsuksa 3 students using the collaborative strategic reading.

Objectives

1. To investigate and compare students' English reading comprehension ability using collaborative strategic reading before and after the instruction, and
2. To investigate the students' attitude towards teaching English reading comprehension using collaborative strategic reading.

Research hypothesis

1. The students' posttest mean score on English reading comprehension ability after studying English reading comprehension using collaborative strategic reading was higher than the set passing criterion of 70%.
2. The students' posttest mean score on English reading comprehension after studying English reading comprehension using collaborative strategic reading was higher than the pretest score.

Research methodology

1. Population and Sample

The population in this study was 440 Matthayomsuksa 3 students of 14 classrooms enrolled in Additional English course in the first semester of the academic year 2024 at Udonpichairakpittaya school.

The sample in this study are 45 Matthayomsuksa 3/4 students. These students are selected by cluster random sampling using classrooms as the sample unit.

2. Research Instrument

2.1 Twelve lesson plans were used, each designed for a 2-hour session per week. The total was 24 hours, consisting of 12 lesson plans. The reading passages were chosen based on specific criteria to ensure their appropriateness and effectiveness for student learning. To ensure the validity of the lesson plans and reading passages, expert evaluation was conducted using the Index of Item-Objective Congruence (IOC), with all materials achieving an IOC score of 1.00, indicating perfect alignment with learning objectives. Additionally, statistical measures such as item difficulty (p-value) and discrimination index (D) were used to assess the quality of comprehension tasks.

2.2 The English reading comprehension test consisted of 40 multiple-choice items used as both a pretest and posttest. Each item achieved an IOC score of 1.00. Statistical validation indicated difficulty values between 0.40 - 0.67, discrimination values from 0.22 - 0.52, and a reliability score of 0.83.

2.3 Attitude Questionnaire consisting of 20 items was designed to evaluate students' attitudes towards learning English reading comprehension using collaborative strategic reading using five point of Likert's rating scales Likert's (1932)

3. Data Collection

3.1 The students completed a 40 - item English reading comprehension pretest within 60 minutes before starting Collaborative Strategic Reading.

3.2 Teaching followed 12 lesson plans over 12 weeks, with 2 hours per week, totaling 24 hours.

3.3 After completing the lessons, students took the same 40 – item posttest within 60 minutes.

3.4 An attitude questionnaire assessed students' perceptions of learning English reading through Collaborative Strategic Reading.

3.5 Pretest, posttest, and attitude data were analyzed and interpreted statistically.

4. Data Analysis

4.1. The process of data analysis

The following steps were implemented to analyze the data:

4.1.1 The researcher analyzed the scores to examine the teaching English reading comprehension of Matthayomsuksa 3 students using mean (\bar{x}), percentage (%), and Standard Deviation (S.D.).

4.1.2 The researcher analyzes the data to compare the teaching English reading comprehension ability from the pretest and the posttest scores.

4.1.3 The researcher analyzes the data to investigate the students' attitude towards teaching English reading comprehension using Collaborative Strategic Reading using mean (\bar{x}) and standard deviation (S.D.) to interpret the meaning of the criteria's average.

4.2. Statistics Used in the study

The data obtained from the English reading comprehension ability test and the attitude questionnaire towards teaching English reading comprehension Collaborative Strategic Reading were analyzed using three types of statistics as follows:

4.2.1 The basic statistics used to analyze the data were mean percentage and standard deviation (S.D.)

4.2.2 The statistics used to evaluate the quality of the instruments:

1) The Index of Item Objective Congruence (IOC) (Rovinelli & Hambleton, 1977).

2) Difficulty Index (p) of the English reading comprehension ability test using Test Analysis Program (TAP).

3) Discrimination Index (r) of the English reading comprehension ability test using Test Analysis Program (TAP).

4) Reliability of English reading comprehension ability test using Test Analysis Program (TAP) and the Kuder-Richardson Formula 20 (KR-20).

4.3 Statistics used for testing the hypotheses

4.3.1 The first hypothesis compared the students' posttest scores with the criterion of 70% using a one-sample t-test, analyzed by using SPSS program for Windows.

4.3.2 The second hypothesis compared between the students' pretest and posttest scores using t-test for Dependent Samples. The hypothesis was analyzed by computer program for Windows.

4.4. Criteria in Data Interpretation

The criteria used for interpreting the scores of students' attitude questionnaire towards teaching English reading comprehension using Collaborative Strategic Reading was analyzed in order to conclude and interpret the data as below (Saiyos, L. and Saiyos, A., 2000). Interpretation of score was shown as follows:

The average scores 4.50 - 5.00 means Very good

The average scores 3.50 - 4.49 means Good

The average scores 2.50 - 3.49 means Fair

The average scores 1.50 - 2.49 means Poor

The average scores 0.50 - 1.49 means Very poor

Conclusion

The Comparison of the Students' English Reading Comprehension Ability using Collaborative Strategic Reading before and after the instruction.

Table 1 The Comparison of the Students' English Reading Comprehension Ability before and after Teaching English Reading Comprehension Using Collaborative Strategic Reading

Test	n	\bar{X}	S.D.	t
Pretest	45	12.04	2.16	
Posttest	45	30.67	2.09	95.77**

** $p \leq .01$

From table 1 presented the students' pretest mean score on English reading comprehension was 12.04 and the posttest mean score was 30.67. The students' English reading comprehension ability after teaching English reading comprehension using Collaborative Strategic Reading was significantly higher than prior at the 0.01 level.

Table 2 Comparison of the Students' English Reading Comprehension Ability After Studying English Reading Comprehension Using Collaborative strategic reading and Set Criteria of 70 Percent.

Criterion of 70 percent (28 point)				
	\bar{X}	Percentage	df	t
Posttest	30.67	76.67		
The set criterion	28	70	44	7.95*

* $p \leq .01$

From table 2 presented the students' posttest mean score on English reading ability was 30.67. The results explain that the students' English reading

comprehension ability after studying English reading comprehension using Collaborative Strategic reading was significantly different at the .01 level. The posttest score was significantly higher than a set criterion of 70 percent.

Result of the students' attitude towards teaching English reading comprehension using Collaborative Strategic Reading

Table 3 An attitude of the students' attitude towards teaching English reading comprehension using Collaborative Strategic Reading

Attitude Test	n	\bar{X}	S.D.	Interpretation
Student's attitude towards teaching students' English reading comprehension using Collaborative strategic reading.	45	4.32	0.59	Good

From Table 3, after teaching English reading comprehension using Collaborative strategic reading, the mean attitude score of the 45 students was 4.32. The students' attitude toward teaching English reading comprehension ability using Collaborative Strategic Reading was at a good level.

Discussion

The findings were presented and discussed as follows:

1. Results of the study and comparison of English reading comprehension ability of Matthayomsuksa 3 students at Udonpichairakpittaya School before and after studying English reading comprehension using Collaborative Strategic Reading.

1.1 It was found that teaching English reading comprehension using Collaborative Strategic Reading could improve students' reading comprehension

ability. The mean scores for the pretest and posttest were 12.04 (30.11%) with an S.D. of 2.16, and 30.67 (76.67%) with an S.D. of 2.09, respectively. This finding supports the second hypothesis, as students' posttest scores in English reading comprehension improved significantly compared to their pretest scores. Initially, the students had low scores due to limited skills in literal comprehension, interpretation, and critical analysis, which hindered their ability to effectively understand and organize written text. After participating in Collaborative Strategic Reading, students improved by identifying main and supporting ideas, linking prior knowledge, and completing worksheets. The collaborative strategic reading activities, including group discussions and summarization, enhanced their comprehension at literal, interpretive, and critical levels, enabling precise text analysis and summarization,

1.2 The students' English reading comprehension ability after studying English reading comprehension using Collaborative Strategic Reading was significantly improved with a mean score higher than the set criterion of 70 percent. This finding supports the first research hypothesis of the study. This might be because of the following results.

Firstly, teaching English reading comprehension using Collaborative Strategic Reading develop students' English reading comprehension ability because teaching English reading comprehension using Collaborative Strategic Reading is an effective technique incorporating activities and worksheets to assess understanding. The students are grouped by mixed abilities, with roles assigned to each member, allowing them to collaboratively read, identify unfamiliar words, and summarize main ideas. This approach aligns with Klingner and Vaughn (1999), which enhances comprehension using strategies like previewing, identifying key points, questioning, and summarizing. not only improves reading skills but also fosters an engaging and supportive learning environment. The effectiveness of Collaborative Strategic Reading is reflected in the students'

posttest score of 76.67%, significantly higher than their pretest results. By employing Collaborative Strategic Reading before, during, and after reading such as making predictions, monitoring comprehension, and summarizing content students improved their reading abilities.

Secondly, teaching English reading comprehension using Collaborative Strategic Reading helped the students to improve English reading comprehension ability. The study had conducted the following stages according to teaching English reading comprehension using Collaborative Strategic Reading based on the concepts of Williams (1994), and Klingner and Vaughn (1999). In the Pre-reading Stage, the teacher uses pictures to activate prior knowledge and prompt predictions about the story, followed by a discussion on relevant background information. The students brainstorm and record their thoughts in a Learning Log. In the While-reading Stage, students are grouped by ability and assigned roles. They identify unfamiliar words, discuss their meanings, and work together to find the main ideas and summarize the story. In the Post-reading Stage, the teacher and students summarize the story's main ideas, review key terms, and complete a reading comprehension quiz to reinforce understanding.

These findings were consistent with the idea of Williams (1994) who states that the teaching of reading, when structured around the stages of pre-reading, while-reading, and post-reading, facilitates the effective improvement of reading skills by educators. The results of this research are in accordance with the study of Thongpao (2016) conducted the development of English reading comprehension ability using collaborative strategic reading of Matthayomsuksa 3 students. In the second semester of the academic year 2016 at Nonghuakhupuangprachanukhror School. The student posttest scores reached 70 percent with improved reading comprehension compared to pretest results and also resulted in an improved attitude towards learning English reading comprehension using collaborative strategic reading.

In summary, teaching English reading comprehension using Collaborative Strategic Reading improved students' ability to comprehend texts by guiding them towards clear objectives and providing support in understanding each section of the reading text. As a result, the students were able to grasp the content thoroughly, analyze the text correctly, and effectively summarize the reading based on their literal understanding.

2. Result from an investigation of Matthayomsuksa 3 students' attitude towards teaching English reading comprehension using Collaborative Strategic Reading. The findings showed that students had a positive attitude towards learning English reading comprehension using Collaborative Strategic Reading. This strategy reached the high score of 4.32. The attitude questionnaire revealed that students found the learning environment enjoyable and that their anxiety was reduced, as they were able to discuss and clarify their understanding with peers in groups or with classmates this supports the idea of Brown and Yule (1983), who stated that attitudes encompass both cognitive and affective aspects, involving thoughts as well as feelings and emotions.

Suggestion

1. From the study demonstrated that Collaborative Strategic Reading effectively improved students' English reading comprehension. Activities such as activating prior knowledge through pictures, brainstorming, and assigning group roles allowed students to collaboratively identify unfamiliar words, summarize main ideas, and review content using Quizizz application. The teacher is encouraged to actively monitor group activities, provide feedback, and ensure students understand their roles within the strategy to promote effective collaboration and comprehension.

2. From the study showed that the students expressed positive attitude towards Collaborative Strategic Reading due to its engaging and interactive

approach. Activities like peer discussions, vocabulary identification, and applying affixes to unfamiliar words enhanced their understanding and confidence. Teachers are advised to integrate collaborative strategic reading into their instruction to average its collaborative and enjoyable nature, which supports vocabulary development and reading comprehension.

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