

## THE DEVELOPMENT OF ENGLISH READING ACTIVITY SETS USING THE STORYLINE METHOD THROUGH VISUAL STORYTELLING COMBINED WITH THE THINK-PAIR-SHARE TECHNIQUE FOR PRIMARY 6 STUDENTS

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Received: April 4, 2024 / Revised: August 27, 2024 / Accepted: September 18, 2024

### Abstract

This study aims to 1) examine the components and assess the effectiveness of English reading activity sets using the Storyline method through visual storytelling combined with the Think-Pair-Share technique and 2) investigate the outcomes of utilizing these English reading activity sets with the use of the following activities: 2.1) comparing the learning achievements after using the English reading activity sets with those of conventional teaching methods; 2.2) studying the English reading skills of Primary 6 students; and 2.3) evaluating students' satisfaction with these activity sets. The research tools included 1) achievement tests, 2) activity sets, and 3) satisfaction questionnaires. The sample consisted of 60 Primary 6 students from Wat Muang Wan School (Under the Prachasunthon Military Strategy). Quantitative data were statistically analyzed using the mean, standard deviation, and t-test; while qualitative data were analyzed with the use of content analysis.

The research findings reveal that 1) the activity sets comprise 5 components: (1) activity guidebook, (2) content, (3) teaching media, (4) tests, and (5) evaluation forms; upon the creation and quality assessment of the activity sets, 4 sets were developed; the third set had the highest rating mean of 4.40 with a standard deviation of 0.58; the second set followed with the rating mean of 4.30 and a standard deviation of 0.72; the fourth set had the rating mean of 4.23 with a standard deviation of 0.67; and the first set had the lowest rating mean of 4.18 with a standard deviation of 0.74; the activity sets created by the researcher had a process effectiveness (E1) of 81.58 and an outcome effectiveness (E2) of 83.78, indicating that the English reading activity sets using the Storyline method combined with the Think-Pair-Share technique were highly effective, exceeding the set criterion of 80/80. 2) results of the usage of the activity sets indicated that 2.1) the academic performance of Primary 6 students who utilized the English reading activity sets with the Storyline method and Think-Pair-Share technique was higher than that of students who experienced conventional teaching; 2.2) the English reading skills of Primary 6 students using the activity sets were found to account for 81.75 percent effectiveness; 2.3) the students expressed high satisfaction with

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the learning process using the English reading activity sets, with an overall rating mean of 4.82, indicating a very high level of satisfaction.

**Keywords:** Activity Set Development, Storyline Teaching Method through Visual Storytelling, Think-Pair-Share Technique

## Introduction

Thailand has stepped onto the international stage, filled with communication and competition among various countries. However, the English proficiency level of the Thai population does not seem to have developed accordingly. The EF English proficiency index (EF EPI) for the year 2020 has indicated that the English language skills of Thai learners are ranked very low, specifically at 89<sup>th</sup> out of 100 countries (Techatanan, 2021). This is attributed to the fact that the education system in Thailand still lacks quality and standards at all levels. The quality of education and learning in Thailand remains relatively low. Although Thai have increasingly gained access to education, the scores from the national basic education test (O-NET) indicate that there is a low average in all learning groups (Office of the Basic Education Commission, 2018). This aligns with the views of Charoenkul (2021), who mentioned the low quality of education, referencing the national test results of 2020, which showed that the national average score for English was 39.22 out of 433,055 candidates, indicating a low level of achievement (National Institute of Educational Testing Service, 2021).

The Ayutthaya primary education area office, zone 2, has compiled a report on the results of the national basic education test for primary 6 (O-NET), comparing English test scores between the 2021 and 2020 academic years. It was found that the average score for 2021 was lower than for 2020 (National Institute of Educational Testing Service, 2021). Based on this comparison, the Ayutthaya primary education area office, zone 2, recognized the urgent need to improve student outcomes and has set policy guidelines for schools to follow. Strategy 2 aims to enhance the quality of students so that every student can improve their English communication skills, teaching outcomes, and academic performance (PhraNakhon Si Ayutthaya Primary Educational Service Area Office 2, 2022). Effective English language teaching requires theories, learning models, teaching methods, and techniques to guide the improvement of teaching management. This aligns with Herbart's theory of teaching, which suggests teaching should begin by reviewing prior knowledge before introducing new information, helping learners connect old and new knowledge to reach the desired conclusion. Learners are then encouraged to apply these conclusions to new situations or

problems (Khaemmanee, 2021). Therefore, current English language teaching emphasizes practical practice for real-world use, aiming to create opportunities for learners to practice the language with activities related to their immediate surroundings to motivate and satisfy their learning experience in English.

The background and significance of the problem highlight the quality of English language instruction for learners in Thailand, where English language skills are essential for life and the modern work world. The study, analysis, and synthesis of the aforementioned data reveal that the quality of English language teaching for learners is relatively low, stemming from a lack of reading skills and understanding among students. Additionally, the varied learning needs of students result in a lack of motivation to learn. Therefore, the researcher seeks to find a solution to improve English language teaching and enhance student achievement. This interest led to the study and research on the development of English reading activity sets using the storyline method through visual storytelling combined with the Think-Pair-Share technique for Primary 6 students.

### Objectives

1. To study the components and effectiveness of English reading activity sets using the storyline method through visual storytelling combined with the Think-Pair-Share technique for Primary 6 students.

2. To investigate the outcomes of using the English reading activity sets employing the

storyline method through visual storytelling alongside the Think-Pair-Share technique.

2.1) To compare the academic achievements of Primary 6 students after utilizing the English reading activity sets with the storyline method through visual storytelling combined with the Think-Pair-Share technique against conventional teaching methods.

2.2) To examine the English reading skills of primary 6 students who have used the English reading activity sets with the storyline method through visual storytelling alongside the think-pair-share technique.

2.3) To explore the satisfaction of primary 6 students with the learning activities facilitated by the English reading activity sets using the Storyline method through visual storytelling combined with the Think-Pair-Share technique.

### Literature Review

The storyline method of teaching

Step 1: Set an appropriate storyline path.

Step 2: Conduct teaching-learning activities.

Step 3: Conclude the lesson.

The Think-Pair-Share teaching technique

Step 1: Think-students think individually about a question or problem.

Step 2: Pair-students form pairs to discuss their thoughts or solutions.

Step 3: Share-pairs share their ideas or solutions with the larger group or class.

The new knowledge gained from this research is the integration of the learning

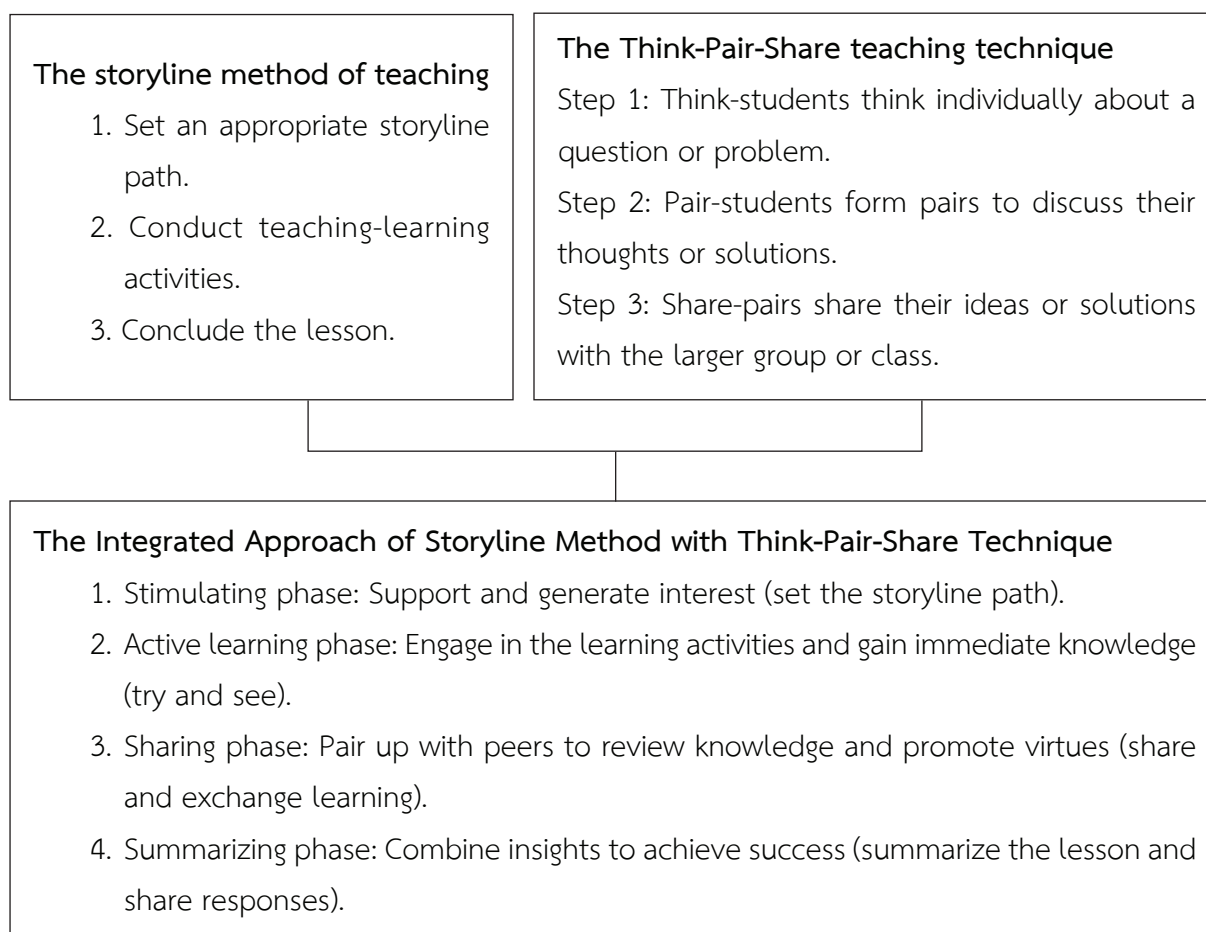
management process using the Storyline method combined with the Think-Pair-Share technique, which involves a 4-step process as follows:

Step 1: The stimulating step to support and create interest (setting the storyline) is where students and teachers together stimulate and create interest in the topic being studied.

Step 2: The try and see step (learning activities) is where students get hands-on with the learning activities.

Step 3: The sharing step with peers to review knowledge and uphold virtues (peer exchange learning) is where students pair up to exchange knowledge with their partners and classmates, guided and positively reinforced by the teacher to motivate participation in the activities.

Step 4: The summarizing step towards success (summarize the lesson and share answers) is where students and teachers together summarize the lessons learned and the activities conducted in class.



**Figure 1** A Diagram of the Integrated Learning Management Process Using the Storyline Method through Visual Storytelling Combined with the Think-Pair-Share Technique

## Methodology

The research on developing English reading activity sets using the storyline method through visual storytelling combined with the Think-Pair-Share technique for Primary 6 students is a quasi-experimental study. It includes pre-testing and post-testing (One-Group Pretest-Posttest Design). The research was conducted as follows:

### Identifying the Population and Sample

1. The population consists of primary 6 students in the primary education area office, Ayutthaya Zone 2, Bang Ban district, Ayutthaya province, in the first semester of the academic year 2023, with 176 schools totaling 4,126 students across 208 classrooms (based on DMC system data, academic year 2022, primary education area office, Ayutthaya zone 2).

2. The sample was specifically chosen from primary 6 students of Wat Muang Wan School (part of the Prachasunthon military strategy) for the first semester of the academic year 2023, with 2 classrooms totaling 50 students. The purposive selection was used to identify a control group of 30 students from primary 6/1 and an experimental group of 30 students from primary 6/2. This setting was chosen based on the actual classroom conditions provided by the school, where students of various abilities (advanced, intermediate, and beginner) were mixed. One classroom was randomly assigned as the experimental group and the other as the control group.

## Research Instruments

The instruments used in the research include a learning achievement test with 30 items, an English reading skill assessment utilizing the storyline teaching method combined with the Think-Pair-Share technique, four sets of activities, and a student satisfaction questionnaire. The development of these instruments is divided into three phases as follows:

Phase 1: Studying the components and effectiveness of the English reading activity sets using the storyline method combined with the Think-Pair-Share technique for primary 6 students under the primary education area office, Ayutthaya zone 2. This phase includes the following activities:

1. Investigating the basic information, principles, concepts, and theories related to the components and effectiveness of the English reading activity sets using the storyline method combined with the Think-Pair-Share technique, from documents, textbooks, academic articles, and related research. Then, synthesizing this information to study the components and effectiveness.

2. Developing four sets of English reading activities using the storyline method combined with the Think-Pair-Share technique. The learning management for these activities spans 6 weeks, with 4 hours per week, totaling 24 hours, as shown in Table 1.

**Table 1** English Reading Activity Sets Using Storyline Method Combined with Think-Pair-Share Technique

Activity Set No.	Title	Number of Hours
1	Short Story Funny Good	5
2	Aesop's Fun Fable	5
3	Amazing Food	5
4	Day of Celebrations	5
Total		20

3. Studying the documents related to assessing the effectiveness of the English reading activity sets using the storyline method combined with the Think-Pair-Share technique. Determining the suitability of the activity sets. Designing and creating research instruments, including a suitability assessment form. Submitting the suitability assessment form to experts for evaluation and then analyzing the data. Using the purposive sampling technique to select five experts with the following qualifications: 1) two individuals

with at least a master's or doctoral degree in education, specializing in higher education curriculum and teaching with at least five years of experience; 2) one individual with at least a Master's or Doctoral degree in measurement and evaluation with at least five years of experience; and 3) two English teachers with at least a master's or doctoral degree and five years of experience in the field. The results of the suitability assessment based on the components of the activity sets are shown in Table 2.

**Table 2** The Results of Evaluating the appropriateness of the English Reading Activity Set Using the Story Line Method through Visual Storytelling Combined with the Thinking-sharing Technique

Activity Set No.	Title	Average Suitability Score	Number of Hours
1	Short Story Funny Good	4.18	5
2	Aesop's Fun Fables	4.30	5
3	Amazing Food	4.40	5
4	Day of Celebrations	4.38	5
Total Suitability Score			20

Phase 2: Studying the outcomes of using the English reading activity sets employing the Storyline method combined with the Think-Pair-Share technique for Primary 6 students under the Ayutthaya primary education area office, zone 2.

1. Collect data from documents, principles, concepts, theories, and research related to the creation of learning achievement tests and English reading skill assessments. Then, use the data to create research instruments for this phase, which are the learning achievement test and the English reading skill assessment. Once created, evaluate the quality of these research instruments by determining the IOC value, which was found to be 0.912, allowing for the use of 32 items, from which 30 items are selected. The difficulty level value is 0.41, the discrimination power is 0.27, and the selected questions have a reliability value of 0.875.

Phase 3: Studying the students' satisfaction with learning using the English reading activity sets employing the Storyline method combined with the Think-Pair-Share technique for Primary 6 students under the Ayutthaya primary education area office, zone 2.

1. Study the data from documents, principles, concepts, theories, and related research concerning the creation of satisfaction questionnaires. Then, use this information to construct a research instrument for this phase, which is a satisfaction questionnaire regarding the organization of learning activities using English reading activity sets taught with the storyline method combined with the

Think-Pair-Share technique. After the questionnaire has been developed, assess the quality of this research tool by calculating the Index of Item-Objective Congruence (IOC), which has a value of 1.1, indicating that all questions can be used, and the suitability score is 4.4, which means the suitability is at the highest level.

### Data Collection

The researcher collected data over a period of 4 weeks, with 5 hours per week, totaling 20 hours in the second semester of the academic year 2023. This research is an experiment in actual classroom conditions, studying both the experimental and control groups, measuring knowledge before and after the experiment, recording scores, and documenting information during the learning activities.

### Data Analysis

The details of data analysis include the following:

1. Comparing the learning achievements of Primary 6 students using the English reading activity sets with the storyline method and Think-Pair-Share technique against students taught with conventional methods.

2. Studying the English reading skills of primary 6 students using the English reading activity sets with the storyline method and Think-Pair-Share technique.

3. Studying the satisfaction of primary 6 students with the learning process using the English reading activity sets with the storyline method and Think-Pair-Share technique using the mean and standard deviation for interpreting the average values of data according to the Likert method.



## Results

The development of English reading activity sets using the Storyline method combined with the Think-Pair-Share technique for Primary 6 students under the Ayutthaya primary education area office, zone 2, can be summarized as follows:

Objective 1: To study the components and determine the effectiveness of the English reading activity sets using the Storyline method combined with the Think-Pair-Share technique for primary 6 students of the same educational service area. The learning activities were undertaken covering 4 weeks, with 5 hours per week, totaling 20 hours. The components include 9 elements: 1) instructions for using the learning activity sets, 2) teacher's manual, 3) student's manual, 4) learning objectives, 5) content, 6) task cards, 7) teaching media,

8) measurement and evaluation tools, and 9) lesson plans. The synthesis related to the storyline teaching method combined with the Think-Pair-Share technique was integrated into a learning plan for teachers, with a 4-step learning process: 1) Stimulate, support, and generate interest (setting the story path); 2) Try and see (teaching activities); 3) Share and review knowledge and virtues (pairing for knowledge exchange); and 4) sum up to success (lesson summary). The activity sets created by the researcher had a process effectiveness (E1) of 81.58 and an outcome effectiveness (E2) of 83.78, indicating that the English reading activity sets using the storyline method combined with the Think-Pair-Share technique were highly effective, exceeding the set criterion of 80/80. The details are shown in Table 3.

**Table 3** The Effectiveness Results of the English Reading Activity Sets Using the Storyline Method through Visual Storytelling Combined with the Think-Pair-Share Technique

Method	N	Maximum Score	Total Score	Average	Percentage
During Learning	30	40	973	32.43	81.58
After Learning	30	30	754	21.13	83.78

Objective 2: To study the outcomes of using the English reading activity sets employing the storyline method through visual storytelling combined with the Think-Pair-Share technique.

2.1 The comparison of learning achievements before and after the intervention for Primary 6 students using the English reading activity sets taught with the storyline method

through visual storytelling combined with the Think-Pair-Share technique, against conventional teaching methods. It was found that the mean score of learning achievement before the intervention was 22.60, and after the intervention was 25.13. The t-value was 29 with a Sig. (significance) value of .000, which was less than the statistical significance



level of .05. This indicates that the students who learned using the Storyline method through visual storytelling combined with the Think-Pair-Share technique significantly

improved their post-learning outcomes compared to the pre-learning scores at the statistical significance level of .05. This is illustrated in Tables 4 and 5.

**Table 4** Comparison of Pre-learning and Post-learning Achievement Scores of the Experimental Group of Primary 6 Students Using the English Reading Activity Sets with the Storyline Method through Visual Storytelling Combined with the Think-Pair-Share Technique

Experiment	N	Maximum Score	Mean	S.D.	df	t-test	Sig
During Learning	30	30	22.60	1.196	29	16.128	.000*
After Learning	30	30	25.13	1.429			

\*Statistically significant at the .05 level

**Table 5** Comparison of Pre-learning and Post-learning Achievement Scores of the Control Group of Primary 6 Students Taught with Conventional Learning Methods

Experiment	N	Maximum Score	Mean	S.D.	df	t-test	Sig
During Learning	30	30	10.07	1.143	29	-11	.000*
After Learning	30	30	12.63	1.426			

\*Statistically significant at the .05 level

2.2 To study the English reading skills of primary 6 students who used the English reading activity sets employing the storyline method through visual storytelling combined

with the Think-Pair-Share technique, with the Mean During Learning of each activity set being 10.07, After Learning of each activity set being 12.63 as shown in Table 6.

**Table 6** Study of English Reading Skills of Primary 6 Students Using the English Reading Activity Sets with the Storyline Method through Visual Storytelling Combined with the Think-Pair-Share Technique

English Reading Skills	N	Maximum Score	Total Score	Average	Percentage
Read the story correctly, can give ideas and understand main points from books and magazines.	30	10	250	8.3	83.33
Read short stories and tell the sequence of events and comment on articles about the situation.	30	10	246	8.2	82
Read the food names and understand food list both at home and abroad, the list of foods ingredients and cooking methods that interest you and be able to answer questions.	30	10	234	7.8	78
Read and understand short stories and proverbs about important dates both at home and abroad and read basic conversations and interact with classmates.	30	10	231	7.7	77
<b>Total English Reading Skills</b>	<b>30</b>	<b>10</b>	<b>961</b>	<b>8</b>	<b>80</b>

2.3 To study the satisfaction of primary 6 students with the learning activities organized using the English reading activity sets employing the storyline method through visual storytelling

combined with the Think-Pair-Share technique. It was found that, overall, the average satisfaction level is at the highest level, as shown in Table 7.

**Table 7** Study of the Satisfaction of Primary 6 Students with Learning Activities Using the English Reading Activity Sets with the Storyline Method through Visual Storytelling Combined with the Think-Pair-Share Technique

Assessment Item	Average Suitability Score	Interpretation
Learning Management	5	Most Suitable
Classroom Atmosphere	4	Most Suitable
Instructor	4	Most Suitable
Teaching Materials	5	Most Suitable
Assessment And Evaluation	4	Most Suitable
<b>Total Suitability Score</b>	<b>4.4</b>	<b>Most Suitable</b>

## Discussion

The research on developing English reading activity sets using the Storyline method through visual storytelling combined with the Think-Pair-Share technique for Primary 6 students under the Ayutthaya primary education area office, zone 2, was aimed at discussing key findings as follows:

The results from the research on objective 1, which was to study the components and effectiveness of an English reading activity set using the storyline teaching method through pictorial narratives combined with the Think-Pair-Share technique for primary 6 students in the Ayutthaya primary education area, zone 2, revealed the following: There were four sets of activities that took place over four weeks, with five hours allocated each week, totaling twenty hours. The activity set comprised nine components: 1) instructions for using the learning activity set, 2) teacher's manual, 3) student's manual, 4) learning objectives, 5) content, 6) task cards, 7) teaching media, 8) evaluation tools, and 9) a lesson plan.

The synthesized methodology of storyline teaching was integrated into a learning management plan for teachers, which entailed a four-step process for conducting learning activities alongside the Think-Pair-Share technique. These steps included: 1) the motivation and engagement phase (setting the story path), 2) the active participation phase (conducting learning activities), 3) the sharing and reviewing phase (peer exchange for learning), and 4) the conclusion phase (summarizing the lesson and sharing responses). The research found that the set of English reading activities, which the researcher developed, was highly suitable because it was academically correct and consistent with the components required to create an activity set for developing English reading activities using the Storyline method through pictorial narratives combined with the Think-Pair-Share technique. This is in line with research by Lokanuwsatarn et al. (2020), which investigated the English listening and speaking skills of Primary 5 students using the Storyline learning method. The findings

indicated that 1) the comparison of English listening skills of Primary 5 students taught through the Storyline method had significantly higher post-learning average scores compared to pre-learning scores at a statistical significance level of .01, and 2) the comparison of English speaking skills showed similar results with post-learning scores significantly higher than pre-learning scores at the .01 level of statistical significance.

Objective 2, the study on the effectiveness of the set of English reading activities using the Storyline teaching method through pictorial narratives combined with the Think-Pair-Share technique showed that

2.1 the comparison of learning achievement before and after using the set of English reading activities for Primary 6 students revealed post-learning scores significantly higher than pre-learning scores at the .05 level of statistical significance. Meanwhile, the traditional teaching methods also showed significant improvements but to a lesser extent. Furthermore, the comparison between the experimental group using the developed set of English reading activities with the Storyline method and the control group taught through traditional methods demonstrated that the experimental group had significantly higher learning achievement scores than the control group at the .05 level of statistical significance.

2.2 The results of studying the English reading skills of primary 6 students who used the activity set designed for reading English through the Storyline teaching method in conjunction with the Think-Pair-Share

technique showed that students who engaged with this set of activities had an average English reading skill score of 81.75 percent. This aligns with the description by the Basic Education Commission's English Language Institute (2017), which explains that reading involves the communication of knowledge, feelings, and thoughts between the writer and the reader. The reader understands symbols, marks, images, sentences, texts, and printed or written messages through observation and consideration. This understanding aligns with the communicator's intent, with the process involving interaction and interpretation between the writer and the reader. The level of understanding may vary depending on prior knowledge and predictions about vocabulary meaning, grammatical structure, and the coherence and continuity between sentences.

2.3 The study of the satisfaction of primary 6 students with the English reading activities using the storyline teaching method in conjunction with the Think-Pair-Share technique found that students who utilized the reading activity set developed by the researcher for English reading using the Storyline method combined with the Think-Pair-Share technique had a very high level of satisfaction overall. This corresponds with Thanompong's (2019) explanation of the benefits of cooperative learning - the Think-Pair-Share technique: 1) It is a technique that can be implemented quickly. 2) It is a technique that does not require extensive preparation time. 3) The internal interaction stimulates a great number of students to have a genuine

interest in knowledge. 4) Teachers can pose various types and levels of questions. 5) It consolidates the attention of the entire classroom and allows students who are hesitant to express themselves to answer questions without having to stand up in front of their peers. 6) Teachers can understand students better by listening to different student groups during activities and from collecting responses at the end of the lesson.

### Conclusions

The development of an English reading activity set using the Storyline teaching method through imagery in conjunction with the Think-Pair-Share technique for sixth-grade students in the educational area of Phra Nakhon Si Ayutthaya District 2 is an integration of the Storyline method and the Think-Pair-Share technique to create a set of activities that enable students to develop and enhance their potential and learning outcomes in the

English subject. This activity set focuses on student-centered learning where instructors can design learning activities appropriate for the learners. The diversity of learning activities helps to generate interest and fosters learning, leading to improved English language imagination, thinking, and reading skills. Students can apply English vocabulary and sentence structures to various stories they read, understand meanings, communicate to others, exchange learning with peers through pair activities, and practice the courage to present in front of the class based on the stories they have read. This will be a new experience for learners using the English reading activity set through the Storyline method combined with the Think-Pair-Share technique. The researcher is interested in studying to find answers and to seek ways to develop appropriate and beneficial learning management for learners in the future.

### References

- Basic Education Commission's English Language Institute. (2017). *Information report fiscal year 2017*. Basic Education Commission's Institute. <https://www.obec.go.th/>
- Charoenkul, N. (2021). *Comparative education administration*. Chulalongkorn University Press.
- Khaemmanee, T. (2021). *Science of teaching* (25th ed.). Chulalongkorn University Press. [in Thai]
- Lokanuwasatani, W., Tueyhom, A., Juythong, S., & Phachinkul, T. (2020). Result learn together using the think pair share technique to the ability to reason in mathematics of students for primary 5 at Sarasas Witaed Nakhon Ratchasima School. *Journal of Interdisciplinary Research and Educational Innovation*, 1(2), 91-100.
- National Institute of Educational Testing Service. (2021). *Summary of basic national educational testing results grade6*. <http://www.newonetestresult.niets.or.th/AnnouncementWeb/School/ReportSchoolBySchool.aspx?mi=2>

- Office of the Basic Education Commission. (2018). *Information report fiscal year 2018*. <https://www.obec.go.th/archives/5476>
- PhraNakhon Si Ayutthaya Primary Educational Service Area Office 2. (2022). *Information report fiscal year 2022*. Phra Nakhon Si Ayutthaya Primary Educational Service Area Office, Region 2.
- Techatanan, C. (2021). *Psychology of teaching English*. Namkang Press.
- Thanompong, N. (2019). *Studying study responsibility of students for secondary 3 by cooperative learning management think pair share technique* [Master's thesis]. Keeree Wesratanapian Utpatham School.



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