

A STUDY OF THE USE OF THE KWL STRATEGY TO IMPROVE READING COMPREHENSION AMONG KINDERGARTEN STUDENTS

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Abstract

This survey research aimed to study students' attitudes toward the use of KWL strategy to improve reading comprehension among the kindergarten students. The participants were 67 kindergarten students at an international school in Nonthaburi, selected through a purposive sampling method. The research instrument was a three-point rating scale questionnaire designed to explore students' attitudes toward the use of the KWL strategy. It was divided into two aspects: (1) enjoyment and interest, and (2) understanding and learning. Data were analyzed using descriptive statistics, including mean, percentage, and standard deviation. The results revealed that, overall, students' attitudes in both aspects were at a high level ($M = 2.70$ and $M = 2.61$, respectively), indicating that the KWL strategy positively influenced their attitudes.

Keywords: KWL strategy, students and attitudes

Introduction

Reading is a vital foundation for lifelong learning and intellectual growth. It enriches knowledge, improves language proficiency, and develops cognitive and critical thinking skills (Daily Library, 2024; Nair & Said, 2020). Students engage with various texts such as academic, fiction, or non-fiction based on personal interests, which enhance motivation and learning success (Dabrowski & Marshall, 2018).

In early childhood education, storytelling introduces reading through colorful illustrations and engaging narratives that foster imagination, language, and comprehension (Haven & Ducey, 2007). Shared reading also builds emotional connections and positive attitudes toward learning (Sheldon-Dean, 2024).

International schools often use shorter “carpet time” sessions and emphasize learning through play in kindergarten. This approach keeps children engaged, builds social skills, and promotes active, meaningful learning as they explore and make sense of the world (Rice, 2009). However, young learners’ short attention spans make reading and storytelling challenging, limiting their focus, comprehension, and vocabulary growth in EFL contexts.

To address these challenges, teachers can apply the KWL strategy (what students know, want to know, and have learned) to enhance motivation, attention, and understanding (Sasson, 2008). Integrating this strategy into storytelling helps maintain engagement, foster positive attitudes toward reading, and build a strong foundation for literacy development.

Research Question

1. What are students’ attitudes toward the use of the KWL strategy in improving English comprehension?

Research Objective

1. To investigate students’ attitudes toward the use of the KWL strategy in improving English comprehension.

Research Methodology

This study employed a survey research design with a questionnaire to examine students’ attitudes toward the use of the KWL (Know–Want to know–Learned) strategy in improving English reading comprehension.

Population and Sample

1. The population consisted of 70 kindergarten students from five classes in international school, Nonthaburi.
2. The sample included 67 Thai-English bilingual students selected through purposive sampling.

Research Instrument

A questionnaire was developed to measure students' attitudes toward the KWL strategy.

Part 1: Three items on students' background information

Part 2: Two sections on students' attitudes toward the KWL strategy

(1) enjoyment and interest (9 items)

(2) understanding and learning (10 items)

The questionnaire was reviewed by three experts to assess content validity using the Index of Item-Objective Congruence (IOC) (+1 high degree of congruence, 0 low degree of congruence or uncertainty, and -1 no congruence). The IOC value was 1.00, confirming all items were valid and aligned with the study objective.

Consequently, a pilot test of the questionnaire was conducted with six students having similar characteristics with the main study showed a Cronbach's alpha of 0.91, indicating high reliability.

Data Collection

In this study, data were collected using a questionnaire, with assistant teachers present during the process. The study was conducted between September and October 2025.

Data Analysis

Part 1 Students' Information

This part presents the analysis of general information of the sample group including age and gender.

Table 1*Age and Gender of the Participants*

Variable	Category	Number	Percentage (%)
Age	4 years old	38	56.7
	5 years old	29	43.3
Gender	Male	31	46.3
	Female	36	53.7
Total		67	100.00

As shown in Table 1, 56.7% of the respondents were 4 years old, while 43.3% were 5 years old. In terms of gender, 53.7% were female, while 46.3% were male.

Part 2 Attitudes Toward the Use of KWL Strategy

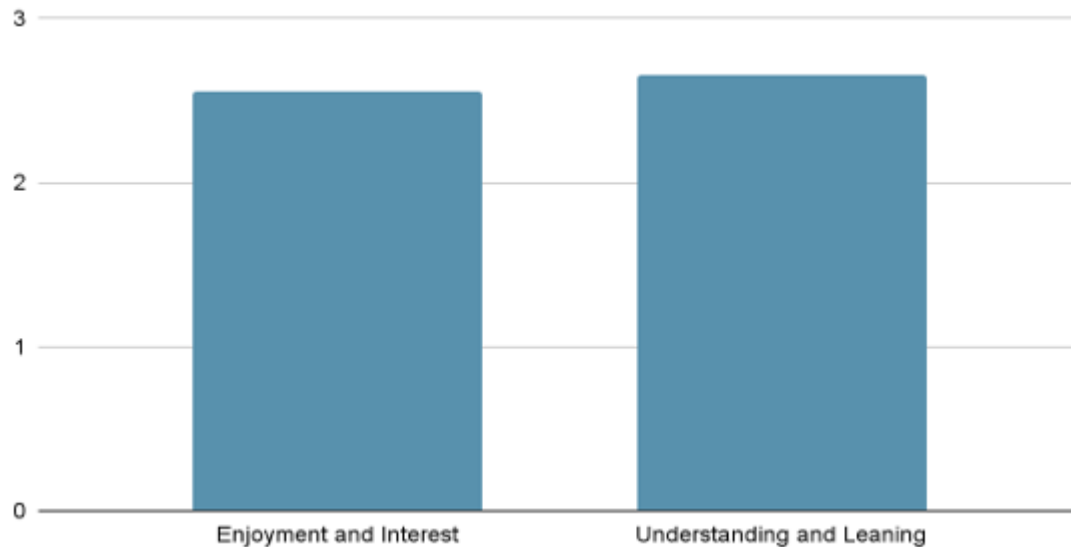
Students' attitudes toward the use of KWL strategy are presented in two aspects: (1) enjoyment and interest, and (2) understanding and learning.

Table 2*Mean, Standard Deviation, and Level of Students' Overall Attitudes Toward the Use of the KWL Strategy in Improving Reading Comprehension*

Attitudes toward the use of the KWL strategy	M	S.D.	Interpretation
Enjoyment and interest	2.55	0.60	High
Understanding and learning	2.66	0.51	High
Total	2.61	0.56	High

Figure 1

Mean Scores of Students' Overall Attitudes Toward Each Aspect of the Use of the KWL Strategy in Improving Reading Comprehension



As shown in Table 2 and Figure 1, overall, students' attitudes toward each aspect of the use of the KWL strategy in improving reading comprehension were at a high level ($M = 2.61$). Among the two aspects of attitudes, understanding and learning received the highest mean score ($M = 2.66$) and enjoyment and interest ($M = 2.55$).

When considering each aspect separately, there are two aspects as follows:

1) Enjoyment and Interest

Table 3

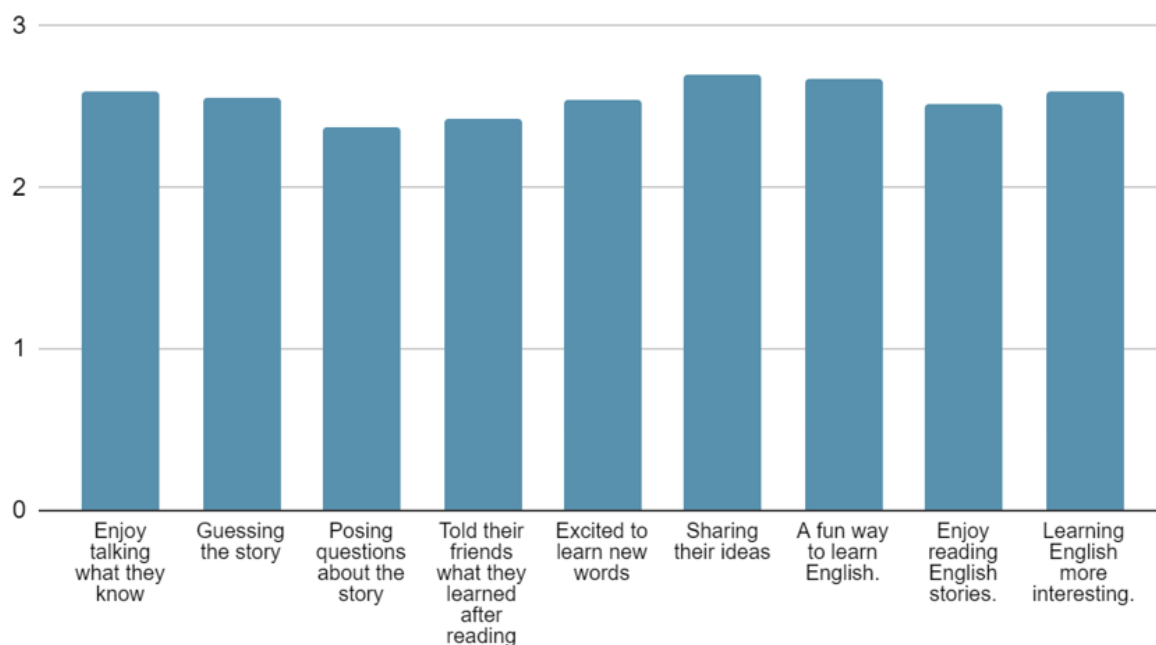
Mean, Standard Deviation, and Level of Students' Attitudes Toward the Use of the KWL Strategy in Improving Reading Comprehension Students: Enjoyment and Interest

Enjoyment and Interest	M	S.D.	Interpretation
1. I enjoy talking about what I already know about the topic before reading.	2.60	0.60	High
2. I like guessing what the story will be about.	2.55	0.58	High
3. I like posing questions about the story that I am going to read.	2.37	0.59	High

Enjoyment and Interest	M	S.D.	Interpretation
4. I like telling my friends what I learned after reading.	2.43	0.65	High
5. I feel excited to learn new words with KWL.	2.54	0.58	High
6. I like sharing my ideas during the KWL activity.	2.70	0.60	High
7. KWL is a fun way to learn English.	2.67	0.56	High
8. KWL helps me enjoy reading English stories.	2.52	0.61	High
9. KWL makes learning English more interesting.	2.60	0.60	High
Total	2.55	0.60	High

Figure 2

Mean Scores of Students' Attitudes Toward the Use of the KWL Strategy in Improving Reading Comprehension: Enjoyment and Interest



As shown in Table 3 and Figure 2, the overall mean score of students' attitudes toward the use of the KWL strategy in improving reading comprehension in the aspect of enjoyment and interest was at a high level ($M = 2.55$). It was found that sharing their ideas during the KWL activity was the most beneficial factor and had a positive impact on students' enjoyment

and interest ($M = 2.70$), followed by seeing KWL as a fun way to learn English ($M = 2.67$). They also enjoyed talking about what they knew before reading and found learning English more interesting when using KWL ($M = 2.60$). They liked guessing what story will be about ($M = 2.55$), felt excited to learn new words ($M = 2.54$), enjoyed reading English stories ($M = 2.52$), told their friends what they learned after reading ($M = 2.43$), and liked posing questions about the story that they are going to read ($M = 2.37$).

2) Understanding and Learning

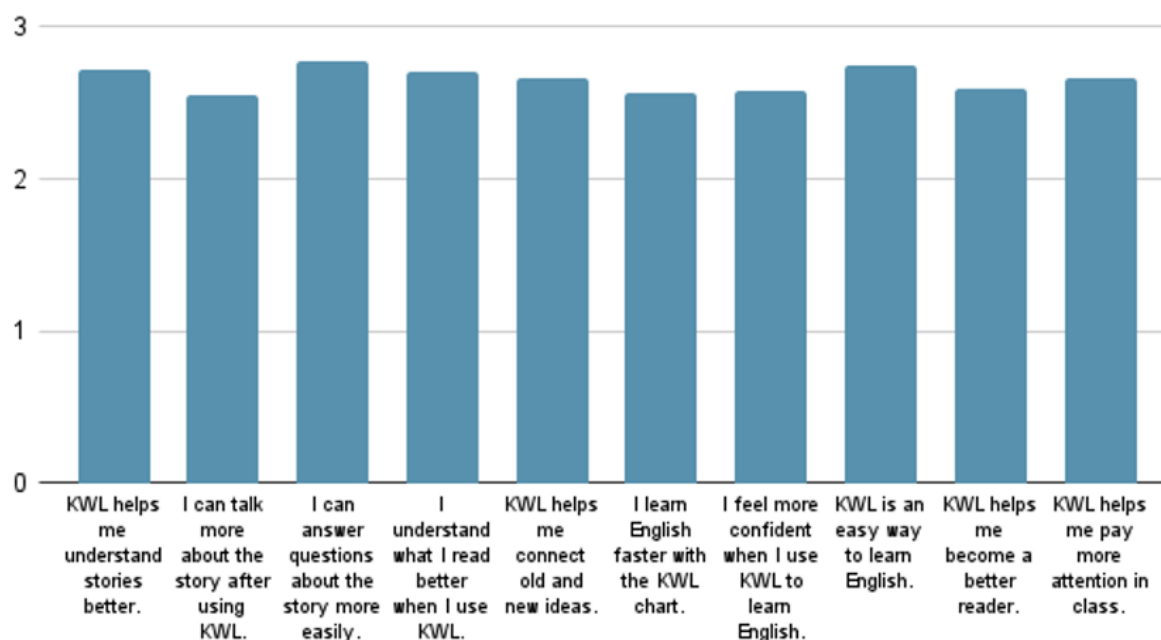
Table 4

Mean, Standard Deviation, and Level of Students' Attitudes Toward the Use of the KWL Strategy in Improving Reading Comprehension Students: Understanding and Learning

Understanding and Learning	M	S.D.	Interpretation
1. The KWL chart helps me understand stories better.	2.72	0.48	High
2. I can talk more about the story after using KWL.	2.55	0.55	High
3. I can answer questions about the story more easily.	2.78	0.45	High
4. I understand what I read better when I use KWL.	2.70	0.49	High
5. KWL helps me connect old and new ideas.	2.66	0.51	High
6. I learn English faster with the KWL chart.	2.57	0.52	High
7. I feel more confident when I use KWL to learn English.	2.58	0.58	High
8. KWL is an easy way to learn English.	2.75	0.47	High
9. KWL helps me become a better reader.	2.60	0.52	High
10. KWL helps me pay more attention in class.	2.66	0.56	High
Total	2.66	0.51	High

Figure 3

Mean Scores of Students' Attitudes Toward the Use of the KWL Strategy in Improving Reading Comprehension: Understanding and Learning



As shown in Table 4 and Figure 3, the overall mean score of students' attitudes toward the use of the KWL strategy in improving reading comprehension in the aspect of understanding and learning was at a high level ($M = 2.66$). It was found that being able to answer questions about the story more easily was the most beneficial factor and had a positive impact on students' understanding and learning ($M = 2.78$), followed by seeing KWL as an easy way to learn English ($M = 2.75$). The KWL chart helps them understand stories better ($M = 2.72$). They understand what they read better when using KWL ($M = 2.70$). KWL helps them connect old and new ideas ($M = 2.66$), pay more attention in class ($M = 2.66$), and become a better reader ($M = 2.60$). When using KWL, they felt more confident to learn English ($M = 2.58$), learn English faster ($M = 2.57$), and can talk more about the story ($M = 2.55$).

Conclusion

Out of 70 kindergarten students at an international school in Nonthaburi, the sample consisted of 67 kindergarten students, selected through a purposive sampling method, as only bilingual students who use both Thai and English were chosen. Data obtained from a three-scale questionnaire were analyzed using descriptive statistics, including mean (M), standard deviation ($S.D.$) and percentage. The findings revealed that the majority of participants were four years old (56.7%) and female (53.7%). The overall mean score of students' attitudes

toward the use of the KWL strategy was at a high level ($M = 2.61$). Among the two types of attitudes, understanding and learning received the highest mean score ($M = 2.66$), followed by enjoyment and interest ($M = 2.55$).

In the analysis of each of the elements separately, the most impactful factor on students' enjoyment and interest was the fact that they enjoy sharing their ideas during the activity ($M = 2.70$), and the lowest mean was the one that concerned students sharing their ideas during the activity ($M = 2.37$). In the aspect of understanding and learning, the most impactful factor was the fact that students can answer questions about the story more easily ($M = 2.78$), and the lowest mean was the one that concerned students being able to talk more about the story after using KWL ($M = 2.55$).

Discussion

The following discussion, based on the findings of the research question that aimed to investigate the students' attitudes toward the use of KWL strategy improving English reading comprehension.

The overall results from the attitudes questionnaires demonstrated that students had positive attitudes towards KWL strategy on English reading comprehension, which is consistent with the findings of Alsalhi (2020). Moreover, the use of KWL strategy responds and encourages several reading challenges, such as vocabulary, insufficient background knowledge and short attention span (Diasi et al., 2023). To ensure that the learning process is carried out effectively, it is important to consider students' attitudes toward enjoyment and interest as well as knowledge and understanding.

Regarding enjoyment and interest, the findings indicated that students highly enjoyed talking about what they have known about the topic before reading and sharing their ideas during the activity. In line with Churnawan (2025), it is important to understand students' interests for supporting their growth, confidence, and future success. Recognizing students' individual strengths and areas for improvement helps guide them in the right direction, offering the support and encouragement needed to enhance their learning and development.

Regarding understanding and learning, the findings indicated that KWL strategy helped students answer questions about the story more easily. They also perceived KWL as an easy way to learn English, helping them understand stories better. In line with Sayar and Anılan (2021), the students in the experimental group taught using KWL strategy demonstrated better understanding and reported that the activity was both enjoyable and informative.

Implications of the Study

According to the findings in the present study, it can be concluded that KWL strategy is helpful to promote students' reading ability effectively. Therefore, the teachers should employ KWL strategy in improving students' reading comprehension. Furthermore, the teachers should provide meaningful resources, materials or videos to maintain students' interest in learning English.

Limitation of the Study

Although the study revealed positive results of the use of KWL strategy to develop students' reading comprehension ability, the study had some limitations. First, the students were provided with the same storybook selected by the school, which limited the variety of reading materials and may have influenced their interest and comprehension levels. Second, because the participants were young international students, the implementation of the KWL strategy relied heavily on teacher guidance. The teachers' roles in explaining, modeling, and supporting each stage of the activity might have affected the results, making it difficult to separate the effect of the KWL strategy from that of teacher assistance. Finally, the KWL strategy may have different effects depending on each student's attention span, language ability and prior knowledge.

Recommendation for Further Studies

1. Researchers could provide a wider range of storybooks or reading texts instead of using only one storybook. This would help determine whether different types or levels of reading materials affect students' interest, motivation, and reading comprehension.
2. Since young learners required considerable teacher support in this study, future research could develop activities that promote more independent use of the KWL strategy. Incorporating interactive or digital tools designed for kindergarten students may help them apply the strategy with less direct guidance.
3. Future studies could compare students' attitudes toward the KWL strategy with those toward other approaches to determine which one provides greater advantage for reading comprehension.

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