The Impact of KWL Strategy on College EFL Students' Reading Comprehension Achievement

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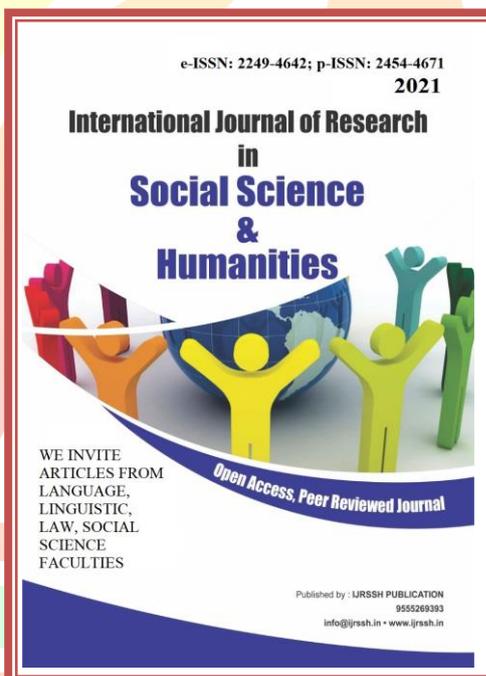
ABSTRACT

Iraqi EFL learners face difficulties in comprehending English language reading texts. It is well-established that the teaching strategies focusing on the nature of reading comprehension process are more effective than traditional methods when seeking to achieve a better comprehension of foreign language texts. This study investigates the impact of the KWL strategy on the college EFL students' reading comprehension achievement. KWL (Ogle, 1986) is an instructional reading method utilized to guide students while reading a text. Students brainstorm the whole thing they Know about a topic. This information is written down in the K column of a K-W-L chart. A list of questions about what they Want to Know about the topic is then developed. These questions are set out in the W column of the chart. During or after reading, students answer the questions that are in the W column. This new information that they have Learned is recorded in the L column of the K-W-L chart. To achieve the aim of this study, a sample selected randomly from the first-grade students, the department of English, Al-Imam Al-Kadhum Private University College, Misan, Iraq. Ninety-two males and females participated in the study and were distributed equally to an experimental group and a control group. Both groups were pretested to determine their achievement level and make sure that they are homogenous. The students in the experimental group were taught reading comprehension by the K.W.L strategy, while the control group were taught by a conventional method. Pre- and post-reading comprehension tests were managed to collect data. The data were analyzed using a two-sample t-test. The findings reveal the superiority of the experimental group students in the reading comprehension post-test over their peers in the control group. Therefore, the strategy can be beneficial for students' reading comprehension.

This study is a call for teachers to utilize new strategies and techniques for teaching reading comprehension. Moreover, it urges curriculum designers to develop new reading comprehension textbooks coping with such beneficial strategies, e.g., WKL strategy.

1. INTRODUCTION

Reading is a key skill to any language. It is widely accepted that the more you read, the more you learn, especially in learning foreign language as reading opens up opportunities. It enables learners to gain new knowledge, from different sources whether printed or online, through reading literature, newspapers, vacancy posts, training brochures, charts, advertisements …etc. In addition, reading improves the learner's knowledge of vocabulary, grammar, spelling and punctuation.

However, reading foreign language texts are usually difficult. Factors such as insufficient vocabulary and grammar knowledge, ineffective learning strategies, lack of prior knowledge and failure in grasping the main idea contribute to such difficulty (Ismini, 2003; Hart & Risely, 2003; Koda, 2007; Nor & Rashid, 2018). Moreover, reading is a complex mental process and involves many critical skills such as thinking, evaluating, judging, imaging, reasoning and problem solving (Hoover & Gough, 1990, p.127).

Nunan (2003:68) explains that in reading the readers combine the text information and their knowledge to construct meaning. Hence, the ultimate goal of reading is comprehension. Block (1986, p.465) argues that comprehension involves thinking and creativity processes in which the readers engage with the text. Therefore, they need strategies to help them understand the text. Reading comprehension strategies guide readers to know the task, detect linguistic indications, understand what they read and what they do when they do not understand. According to Taylor (2006, p.77) enhancing the comprehension of the text requires the readers to use these literary strategies before, during and after reading process.

There are numerous teaching and learning strategies that may help EFL learners develop reading skills. However, KWL strategy is one of the most compatible with the nature of comprehension process. Ogle (1986) asserts that it supports the readers recall prior knowledge of the core topic of the text, give a reason for reading, check and evaluate their comprehension with the text and develop ideas beyond the text.

KWL strategy develops autonomous learning (Usman et al, 2018) and this what we need in our Iraqi schools especially at university level where there are large classes. Large classes consume much time and efforts. Using KWL strategy may save a lot of time and effort and lead to create more learner-centered instruction and autonomous learners.

This study aims to investigate the impact of KWL strategy on college EFL

students' reading comprehension achievement.

2. LITERATURE REVIEW
2.1 Reading Comprehension

Achersold and Field (1997, p.15) define reading as "what happens when people look at text and assign meaning to the written symbols in that text". Nunan (2003, p.68) sees reading as an act that can be defined in combining the elements of text, reader's knowledge and strategies. Brown (2007, p.299) states that "the background knowledge is information, knowledge, emotion, experience and culture" recalled by the readers to construct the meaning of the text. Chou (2011) asserts that the background knowledge is useful in allowing the reader to realize the links between the text information and previous knowledge so that the knowledge can be joined together with the facts of the text to yield a meaningful output. According to Duckworth (2009, p.41) the background knowledge represents the "schema" which is all the information that is already stored in our memory. Kitao (1990) states that the" schema theory" entails a collaboration between the text and the knowledge of the reader which leads to comprehension. Then, readers link the new information driven from the text with their prior relevant information. The incorporation between the prior knowledge and the new information results in comprehension. Remarkably have been noted that the more the schema the readers get, the more comprehension they achieve. According to Li et al (2007, pp. 18-19) schemata can be of three types. First, linguistic schemata refer to the phonological and morphological competence accompanied with the syntactic competence. As a prerequisite for comprehension, linguistic competence is a significant tool to understand the text. Without basic language knowledge, no reading strategy can function effectively. Therefore, the readers become more effective when they compile and acquire more linguistic schemata. Second, formal schemata refer to the knowledge of rhetorical patterns and the organizational forms in which the information in the text is written. Carrel (1984) suggests that familiarity with text structures influences the speed at which the reader processes the text. Third, Content schemata are the reader's background knowledge of the topic being read and familiarity of the topic from previous experience, or whether it is related to socio-cultural settings of the reader. Studies (Al-Issa, 2006; Jahwari & Humaidi, 2015; Alhaisoni, 2017) proved that content schemata affect

comprehension and remembering more than formal schemata do for text organization. Readers remembered the most when both the content and rhetorical forms were familiar to them while unfamiliar content may cause more difficulties in correct comprehension.

Comprehension process goes under six levels. First, literal level which requires a reader to be able to retell or recall (Brassell & Rasinski,2008, p. 17). Second, reorganization level which requires the reader to classify, outline, summarize and synthesize information presented in a text (Abu Humos,2012, p. 778). Third, inferential level at which the reader pursues the intentions of the text originator. The readers combine the explicit information taken from the with their background knowledge to hypothesize (Mamugudubi, 2014, pp. 43-44). Fourth, readers foresee or expect what will occur next by linking their understanding of the text, their background knowledge of the topic and relevant contextual indications (Day & Park,2005, p. 63). Fifth, evaluative level at which the reader plays the role of critic. The literary quality of the work, the proficiency of the writer, the morals of the persons and their behaviors and actions are subject to the reader's judgments (Brassell & Rasinski ,2008, p.17). Sixth, appreciation level which

covers all the above-mentioned cognitive levels because it involves the aesthetical and emotional react to the writer's product. Pleasure, passion, love, hate, fear and joy may be the react of the readers to the text (Vora,2006, p.104).

2.2 KWL Strategy

KWL strategy was developed by Ogle (1986). It is a teaching-learning reading strategy devised to guide readers through a text. First, learners brainstorm their prior knowledge of a topic. Their experiences are written down in the K column of a K-W-L chart. Then, they produce a list of questions to collect specific information on the topic. These questions are written down in the W column of the chart. The learners respond the questions, recorded in the W column, throughout or after reading. The newly learned information is documented in the L column of the K-W-L chart.

On the side of the learners, this strategy according to Ogle (1986) helps them elicit prior knowledge of the topic of the text; set a purpose of reading; monitor and assess their comprehension; expand ideas beyond the text; enhance the memory of the reader to retain information and boost the reader's ability to link different types of information;

motivate them to get interested in reading and developing their own inquiries.

On the side of the teachers, KWL strategy is very beneficial. According to Opp-Backmen and Klinghammer (2006), KWL strategy allows the teachers to evaluate learners' prior knowledge and interests. In addition, it allows them to evaluate what have been learned. Moreover, KWL strategy stimulates the background knowledge and provides an opportunity for teachers and learners to evaluate whether this previous evidence is reliable and valid or not. According to (Holmes & Roser, 1987, p. 646) developing effective reading lessons is highly dependent on the teacher's awareness of what his/her students know and don't know about the subject of the text. Therefore, they should provide specific information about the topic to be read to compile and construct a background on the topic. Scott (2008, p.364) highlights another advantage of KWL strategy. Accessing students'

previous experiences helps teacher encourage students to have objectives for reading text. Attached to the above-mentioned advantages of KWL strategy, Fritz (2002) confirms that the use of KWL strategy improves the quality and quantity of connections between teacher, learner and the text.

KWL strategy serves as a tool assessment for both teachers and students. Moreover, it scaffolds the low achievement readers to reach the upper levels of performance.

3. METHODOLOGY

3.1 Experimental Design

This study followed the experimental design of pretest- posttests equivalent groups in which subjects are randomly assigned to experimental group (henceforth, EG and control group (henceforth, CG) (see Table 3.1). This design, as (Best & Kahn, 2006, p.181) argue, is the strongest type of design.

Table 3.1 Experimental Design: Pretest-Posttest Equivalent Groups

Group	Test	Treatment	Test
EG	Pretest	KWL strategy	Posttest
CG	Pretest	Conventional Method	Posttest

3.2 Population and Sample

The study was conducted at Department of English, College of Education, Al-Imam Al-Kadhum University College in the second semester of 2019. The population was the 1st grade students of the departments of English in University of Misan, University of Imam Jafar Al-Sadiq Private University College and. The primary participants of the study were 98 students from Al-Imam Al-Kadhum University College, selected randomly and divided equally into two groups – EG and CG. However, 6 students were excluded because they were repeaters. The final sample was 92 students (see Table 3.2). The sample composed 70 females and 22 males. The 1st grade students were chosen for two reason. First, because they came from the same academic background (namely, 6th preparatory grade). Second, they are at the first level of studying English language and they are likely to face difficulty in comprehending English texts. Third, they may make use of training in WKL strategy and overcome reading comprehension difficulties in upcoming grades.

Table 3.2 The Number of Subjects Before and After Excluding Repeaters

Group	Section	No.	Repeaters	Final No.
EG	B	50	4	46
CG	A	48	2	46
Total		98	6	92

To make sure that the two groups were homogeneous before starting the experiment, the subjects in each group were tested on a reading comprehension pretest. The pretest results revealed that they were homogeneous (see Table 3.3).

Table 3.3 The Mean, Standard Deviation and T-value of the Subjects' Achievement on the Pretest

Group	No.	Mean	STD	DF	T-value	
					Calculated	Tabulated
EG	46	26.587	19.924	90	- 0.596	1.98
CG	46	29.217	22.333			

3.3 Instructional Materials

The instruction material was taken from Alexander (1970). Six passages were chosen: Daniel Mendoza, A Skeleton in the Cupboard, A Lost Ship, Modern Cavemen, The Power of the Press and Instinct or Cleverness? The experiment lasted nine weeks. The lessons were arranged for both groups on Mondays, two hours per week. The participants shared the same learning conditions except in one aspect namely: the use of KWL strategy for teaching reading comprehension for the EG; whereas the conventional method was used with the CG.

3.4 Training and Implementation Phases

As KWL strategy is totally new for Iraqi students, supporting and training the EG for the task becomes a priority. The researcher used Ogle's teaching model (1986) to train and teach the EG. A detailed lesson plan was prepared for this purpose (see Appendix A). Moreover, the students were equipped with a KWL checklist to remind them of the steps of KWL (see Appendix B). The CG was taught according to the conventional method prescribed in Alexander (1970).

3.5 Achievement Test

To collect the data for this study, the researcher used two reading comprehension tests. The first was used as a pretest and the second as a posttest. They are identical in structure but different in content. Both tests were validated by a nine-member jury from universities of Misan, Al-Imam Al-Kadhum and Imam Jafar Al-Sadiq. Then both tests were checked in a pilot study by the end of the first semester of 2019 to figure out their reliability. The reliability coefficients of the test-retest were 0.92 and 0.93. The first test was used as a pretest at the beginning of the study to makes sure of the homogeneity of the study groups (see Table 3.3). The second test was used as a posttest. The idea of using two tests was to overcome the possibility of learning transfer that may occur if one test was used as pretest and posttest. The reliability coefficient of the pretest-posttest was 0.91.

4. FINDINGS

4.1 Comparison between EG and CG in the Posttest

A T-test for independent samples was used to compare the mean scores of the CG and EG on the posttest (see table 4.1). The results indicate that there is a statistically significant difference between both groups, i.e., the achievement of the EG who were taught by KWL strategy is higher than that of the CG who were taught by the conventional method.

Table 4.1 Comparison between EG and CG in the Posttest

Group	No.	Mean	STD	DF	T-Value	
					Calculated	Tabulated
EG	46	53.587	14.387	90	4.668	1.98
CG	46	36.239	20.694			

4.2 Comparison between EG and EG in the Pretest and Posttest

A T-test for independent samples was used to compare the mean scores of the EG and EG on the pretest and posttest (see table 4.2). The results indicate that there is a statistically significant difference between the pretest and the posttest. Improvement occurred in the achievement of the EG after being taught by KWL strategy.

Table 4.2 Comparison between EG and EG in the Pretest and Posttest

Test	No.	Mean	STD	DF	T-Value	
					Calculated	Tabulated
Posttest	46	53.587	14.387	45	12.143	2.021
Pretest		26.587	19.924			

4.3 Conclusions

In the view of the outcomes of this investigation, the following can be concluded:

1. KWL strategy is an effective strategy for learning and teaching reading comprehension for Iraqi EFL college students.
2. KWL strategy is very effective in terms of providing a great amount of information for teachers about how students approach reading comprehension and their learning strategies. It is a good feedback tool for both the teacher and the learner.
3. KWL strategy contributes to the autonomous learning. Coaching students to practice KWL strategy helps create autonomous learner.
4. KWL forms can be used as checklists for self and peer evaluation. It provides a reflection on what the learner has achieved and what is left to be achieved.

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APPENDIX A. LEESON PLAN OF KWL Strategy

Grade: 1st, Department of English, College of Education, Imam Jafar Al-Sadiq Private University

Material: Developing Skills: An Intermediate Course for Intermediate Students, pp. 114-115 " The Power of Press"; KWL Chart; Whiteboard; Markers.

Length of Time: 120 minutes

Objectives: The students will be able to:

1. Define KWL strategy
2. Know the steps of KWL
3. Practice the steps of KWL
4. Answer the comprehension questions
5. Explain the meaning of the new words.
6. Summarize what they have read and comprehend.

Procedures

The teacher (henceforth, T): Today we are going to read a passage about " The Power of the Press". We will practice KWL strategy to teach reading comprehension. T gives account of KWL strategy (see 2.2. KWL Strategy).

What I know?

1. T brainstorms of what his students (henceforth, Ss) know about the topic of the reading passage. T writes down " The Power of the Press" the title of the reading passage on the whiteboard and a student (henceforth, S) helps T hold a poster of the picture attached to the reading passage.

2. T writes down what Ss know about the topic.

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3. T writes down this information as keywords on the whiteboard.

4. For more discussion, T asks " what types of press do we have?" and " does press impact our lives?".

5. T writes down the answers as keywords on the whiteboard.

6. T asks Ss if they want to add more questions. The more questions are addressed, the more Ss get information about what they don't know.

7. T writes down Ss answers to their peers' questions in form of keywords.

8. T asks Ss " where did you learn that?" and " how could you prove that?" to deepen his Ss thinking. In this way, T provides more information that can be confirmed through the reading.

9. T moves to another step in the process of brainstorming, T asks Ss " before reading The Power of the Press, what kind or categories of information do we have?"

10. T says I may suggest the following categories: types of press, ethics of press and positive and negative impact of press.

11. T then ask Ss " can you add another category from the information we have already collected?".

12. T writes down the final categories on the whiteboard and ask Ss to write down all the collected information in their already handed KWL sheets.

13. Ss now can use these categories of information to save their specific new data about the topic of the passage before starting reading the passage.

What do I want to learn?

1. Ss now have prior knowledge about the topic of the reading passage but not all the collected information is agreed on. Some information is a source of dispute among Ss. This leads Ss to seek answers to their questions and fill gaps in information through reading the passage.

2. T starts reading the passage at low speed and asks Ss to pay attention.

3. T asks Ss to read the paragraph silently to preview the passage to find the extent of matching between their expectations and the actual content.

What I learned?

1. After reading the passage, T instructs Ss to record what they have learned from reading. T asks Ss to check their unanswered questions and gap of knowledge.

Assessment

Before closing down the lesson, T has to make sure that Ss have comprehend the passage. T asks Ss to close their textbooks and make use of their KWL form.

T asks Ss the following questions:

Comprehension

1. How can reporters make ordinary people suffer?
2. What are the reasons behind the fame of the poor family in the South Dakota?
3. What happened the day after the birth of the children?

Vocabulary

Explain the meaning of the following words and phrases as they are used in the passage: "restrict, equally, contention, untold, acquired, perpetual struggle, in obscurity"

Summary

Briefly explain the impact of the birth of the five children on the family and the community. It is preferable to use your own words.

APPENDIX B. KWL Strategy Form

1. K- What we know	W- What we Want to find out	L- What we learned and still want to learn

2. **Groups of information we expect to use**

A.   E.

B.   F.

C.   G.

D.   H.