

การใช้กลยุทธ์ PQ4R เพื่อเพิ่มพูนความสามารถการเขียนภาษาอังกฤษของ  
นักเรียนชั้นมัธยมศึกษาปีที่ 1 ของโรงเรียนมัธยมในหมู่บ้านหลัวจาง

ตำบลพันโหลง เมืองคุนหมิง สาธารณรัฐประชาชนจีน

THE USE OF PQ4R STRATEGY TO IMPROVE ENGLISH WRITING ABILITY  
OF GRADE-7 MIDDLE SCHOOL STUDENTS IN LOUZHANG VILLAGE,  
PANLONG DISTRICT, KUNMING, PEOPLE'S REPUBLIC OF CHINA

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### บทคัดย่อ

วัตถุประสงค์ของการศึกษาค้นคว้าครั้งนี้ ได้แก่ 1) เพื่อเปรียบเทียบความสามารถการเขียนความเรียงภาษาอังกฤษระหว่างนักเรียนที่เรียนการเขียนความเรียงภาษาอังกฤษโดยใช้กลยุทธ์ PQ4R และนักเรียนที่เรียนการเขียนความเรียงภาษาอังกฤษโดยใช้วิธีการตามปกติ และ 2) เพื่อศึกษาความคิดเห็นของนักเรียนที่มีต่อการเรียนการเขียนความเรียงภาษาอังกฤษโดยใช้กลยุทธ์ PQ4R เพื่อเพิ่มพูนความสามารถการเขียนภาษาอังกฤษ กลุ่มตัวอย่าง ประกอบด้วยนักเรียนจำนวน 100 คน ซึ่งได้จากการสุ่มแบบกลุ่ม โดย กลุ่มตัวอย่างกำลังศึกษาในชั้นมัธยมศึกษาปีที่ 1 โรงเรียนมัธยมหลัวจาง อำเภอปานลอง เมืองคุนหมิง สาธารณรัฐประชาชนจีน เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูลได้แก่แบบทดสอบก่อนและหลังการใช้กลยุทธ์ PQ4R แบบสอบถามและแบบสัมภาษณ์เชิงลึก สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และ T-test

ผลการวิจัยพบว่า ก่อนการทดลองพบว่านักเรียนกลุ่มทดลองและกลุ่มควบคุมมีคะแนนเฉลี่ยความสามารถการเขียนภาษาอังกฤษเท่ากับ 6.43 และ 6.45 ตามลำดับ ซึ่งไม่มีความแตกต่างอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 แต่หลังการทดลองพบว่านักเรียนกลุ่มทดลองและกลุ่มควบคุมมีคะแนนเฉลี่ยความสามารถการเขียนภาษาอังกฤษเท่ากับ 7.36 และ 6.62 ตามลำดับ ซึ่งมีความแตกต่างอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 นอกจากนี้ นักเรียนส่วนใหญ่ในกลุ่มทดลองยังมีทัศนคติเชิงบวกต่อกลยุทธ์ PQ4R โดยมีความพึงพอใจในระดับสูง ( $X = 3.86$ ,  $SD = 0.967$ ) และคิดว่ากลยุทธ์นี้มีประโยชน์และมีประสิทธิผลมากกว่าวิธีการสอนทั่วไป นอกจากนี้ยังพบว่าขั้นตอน “การอ่าน” และ “การท่องจำ” เป็นขั้นตอนที่มีประโยชน์ที่สุดสำหรับนักเรียนในระหว่างการเขียน

**คำสำคัญ:** กลยุทธ์ PQ4R, ความสามารถในการเขียนภาษาอังกฤษ

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## Abstract

The objectives of this study were 1) to compare the English composition writing abilities between the experimental group using the PQ4R strategy, and the control group using the conventional teaching method and 2) to explore their opinions about the use of the PQ4R strategy in English writing classes. The sample group was 100 grade-7 students at Luozhang Middle School in Panlong District, Kunming City, Yunnan Province, People's Republic of China, obtained by applying the cluster sampling method. The research instruments were composed of the pre- and posttest, a questionnaire, and an in-depth interview. The data were statistically analyzed by using percentage, mean, standard deviation, and t-test.

The research results revealed that, before the implementation, the mean scores of the experimental and the control groups were 6.43 and 6.45 respectively, which was not statistically significant at the .05 level. After the implementation, the mean scores increased to 7.36 and 6.62, which was statistically significant at the .05 level. Furthermore, the majority in the experimental group showed a positive attitude towards the PQ4R strategy with a high satisfaction level ( $\bar{X}=3.86$ ,  $SD=0.967$ ). This strategy was found to be more useful and effective than conventional teaching methods in English writing classes, especially the "Read" and "Recite" steps which were found to be the most helpful steps during the writing process.

**Keywords:** PQ4R Strategy, English writing ability

## Introduction

Writing has been universally regarded as one of the essential skills in English learning (Yunus & Chien, 2016). According to Luo and Liu (2017), writing in the English language helps to generate ideas, spread knowledge and achieve direct communication in an international area.

However, although English learners are required to practice writing during their English learning process, most of them are not good at writing in English. Laksmi (2006) states that students who study English as a foreign language have difficulties in generating ideas, organizing ideas and developing details, writing grammatically correct sentences, using appropriate words in sentences, and uniting paragraphs. According to Yao and Cao (2012), when writing in the English language, Chinese students have difficulties in making up sentences. Chinglish (Chinese English) often occurs in the students' writing which means their sentences are non-native. Moreover, students' compositions are usually boring and monotonous. Yunus and Chien (2016) also state that students usually cannot convey and transform their ideas by using correct language, diction, and cohesion when they write.

For improving students' writing skills, educators have used many teaching and learning methods in writing classes. Ishaku, Ibrahim, and Alu (2014) point out that the methods to enable the students to write effectively are copying, filling gaps, dictation, matching sentence part, substitution table, jumble sentences, and letter writing.

One of the best-known study strategies that used in English teaching and learning to enhance students' English skills is called the PQ4R strategy. According to Sarimanah (2016), the acronym of PQ4R stands for previewing, questioning, reading, reflecting, reciting, and reviewing, this module encourages students to ask questions, reflect and recite the material that they read, and then they will understand and master in their own ways. In his study, PQ4R was found to be useful to improve students' reading comprehension. Slavin (1997) also points out that PQ4R is a strategy which makes students to focus on organizing knowledge and making knowledge effectively. In Shoab's research (2016), PQ4R strategy effectively increased slow learners' attention level from low to high.

PQ4R could be used in English classrooms to improve students' English writing ability. Laksmi (2006) states that EFL writing classes are still teacher-centered so that learners can only listen and apply and this leads to EFL students' low level of writing proficiency. However, PQ4R tends to be student-centered (Sarimanah, 2016), which will make students really get involved in the writing process. Ou (2020) states that reading and writing are completely related to each other. Middle school students might improve their writing through careful reading of texts. After deeply examining English texts, students would know how to organize a text and could generate their opinions in English. Actually, PQ4R is used widely in reading classes to enhance students reading skills, using it in English writing classes is a new try. According to Cambridge Advanced Learner's Dictionary (2013), "review" means to study again something have already learned while "revision" is a process in writing of rearranging, adding, or removing paragraphs, sentences, or words. To make the PQ4R strategy appropriate to the learning process in the writing class, in this study, the "Review" step was modified into the "Revision" step, and the PQ4R strategy was used in the experimental group as the pre-writing stage to improve their English writing ability. The results of this research can be useful in teaching English writing in middle schools, especially in the EFL context. Moreover, it can inspire the teachers to be creative and innovative in teaching writing classes. In addition, the result of this research can become a reference for the school to enhance teaching quality, especially in English writing skills.

## **Objectives of the study**

1. To compare the English composition writing abilities between the experimental group using the PQ4R strategy, and the control group using the conventional teaching method.
2. To explore the students' opinions about the use of the PQ4R strategy in the English writing classes.

## **Research hypothesis**

Before the implementation, there was no difference in English composition writing scores between the students who were taught by using the PQ4R learning strategy and those who were taught by using the regular method. After the implementation, the English composition writing scores of the students who were taught by using the PQ4R learning strategy and those of the students who were taught by using the regular method were significantly different.

## **Research scope**

### **1. Scope of content**

This study used the PQ4R strategy which was connected with writing processes to improve English writing proficiency. The writing lessons were developed into eight classes, for the experimental group: one class for the pretest and orientation of the PQ4R strategy, six classes for implementing the strategy to write English composition, and one class for wrapping up, summary, the posttest and the interview. Each class lasted 80 minutes. For the control group, the time of the classes was the same, but the contents were different: one class for the pretest and orientation of the lesson, six classes for English composition writing practices without the use of the PQ4R strategy, and one class for wrapping up, summary and the posttest.

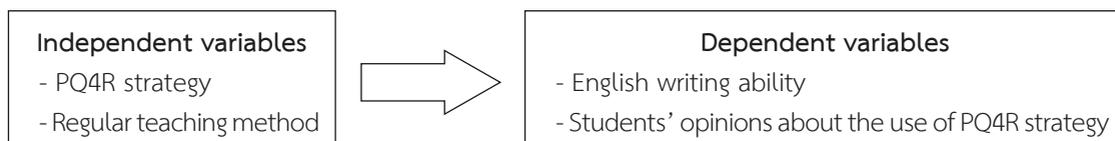
### **2. Population and sample group**

The population of this study was 180 grade-7 students in Luozhang Village, Panlong District, Kunming City, Yunnan Province, People's Republic of China in the 2021 academic year. The sample group consisted of 100 grade-7 students which were selected from the population using the group random sampling method.

### **3. Scope of time and place**

The participants were assigned to use the PQ4R strategy when they wrote English compositions within two months in the first semester of the academic year 2021-2022 at Kunming Luozhang Middle School.

## Conceptual framework



**Figure 1** The conceptual framework

## Population and sample group

The population consisted of 180 grade 7 students in Luozhang Village, Panlong District, Kunming City, Yunan Province, People's Republic of China. There were two private middle schools in Luozhang Village: Kunming Luozhang Middle School (100 grade-7 students) and Longquan Yucai School (80 grade 7 students).

The 100 participants from Kunming Luozhang Middle School were obtained by the group random sampling method. There were two classrooms (50 students for each) in this school and they were randomly divided into two groups: one being assigned as the experimental group and the other being assigned as the control group. The experimental group was taught writing by incorporating the PQ4R strategy while the control group was taught writing by using the regular method without the use of the PQ4R strategy. All the participants took eight writing lessons for a two-month period. Then the students in the experimental group were required to take the questionnaire and an interview.

## Research instruments

There were two kinds of research instruments in this study: instruments for experiment and instruments for data collection. The instruments for the experiment consisted of eight lesson plans for the experimental group and eight lesson plans for the control group, whereas the instruments for data collection included a pretest for testing participants' existing writing ability, a posttest for determining whether and how learners have improved their writing ability, a questionnaire to explore the students' opinions on using PQ4R strategy in English writing classes, and an interview to investigate their opinions about the use of PQ4R strategy.

### 1. Lesson plans

The lesson plans of totally sixteen classes (eight classes for each group, one class per week) were designed according to the issues of the New English Curriculum for Chinese Junior/Senior Middle Schools, and the teaching materials were based on the compulsory education textbooks of the People's Republic of China-Grade 7 English-Volume One and Volume Two. The lesson plans

contained learning outcomes, activities, achievements, and learning materials for both teachers and students.

To ensure the validity of the lesson plans, other three English teachers who had had more than 10 years of experience in teaching English were involved in validating the lesson plans. The evaluation result of the lesson plans which used the index of item-objective congruence (IOC) indicated that all items in the lesson plan received IOC scores as 1.00 meaning that they were acceptable.

## **2. Writing assessment**

In this research, a holistic scoring rubric was used to assess the students' English composition writing which was adapted from Gray's (1982, p. 351) scoring rubric. Moreover, the scoring was conducted by the researcher and the other two experienced teachers and then the average handout score is counted as the final grade. Furthermore, students' names were anonymous to avoid bias of the raters.

## **3. Pretest and posttest**

A paragraph writing test was used as the pretest and the posttest to assess students' writing skills. The test was conducted based on the school curriculum and the topic taught and learned. The students took the writing test before and after the experiment on the same topic to describe their family. Students wrote the paragraph at least 50 words within 20 minutes. When finished, all the compositions were marked with numbers instead of the students' true names to avoid bias. All the paragraphs were graded by the researcher and the other two experienced teachers based on the scoring rubric mentioned before.

Before giving the scores to the students in the experiment, the three raters practiced the scoring of writing assignments of students from the other classes who were not in the sample group to make sure that the scores given by the three raters are statistically consistent and reliable.

The formula to calculate the scoring congruence is as follows:

$$\text{scoring congruence} = 100 \left( 1 - \frac{A-B}{A+B} \right)$$

Description:

A = Researcher

B = Experienced teachers

The scores are considered consistent if the scoring congruence is more than 0.75 (Borich, 1994).

The scoring congruence between the researcher and teacher No.1 was 86.59% (n=25), and that between the researcher and teacher No.2 was 90.42% (n=25), which showed that the score

congruence of the three raters was higher than 75%, and it means that the inter-rating procedure was consistent and reliable.

In addition, the tests were evaluated by three experts using the IOC form and adjudged as being valid for the subject and class. The evaluation result of the writing tests which used the index of item-objective congruence (IOC) indicated that all items received IOC scores as 1.00 meaning that they were valid.

#### 4. Questionnaire

The use of questionnaire in this study was to explore students' opinions about using the PQ4R strategy in English classes to improve their English composition writing ability. The questionnaire consisted of two main parts. Part 1 was the general information of the students: sex and age. Part 2 was the 5-point rating statements about the students' opinions on using PQ4R strategy in the English writing classes. The levels were interpreted as follows.

Strongly agree	= 5
Agree	= 4
Neutral	= 3
Disagree	= 2
Strongly disagree	= 1

The evaluation result of the questionnaire which used the index of item-objective congruence (IOC) indicated that all items received IOC scores as 1.00 meaning that they were acceptable.

The questionnaire was rated according to the five levels of satisfaction: highest, high, moderate, low, and lowest, in order to measure the students' satisfaction with the PQ4R strategy. The levels were interpreted as follows (Best, 1986).

4.50 – 5.00	Highest
3.50 – 4.49	High
2.50 – 3.49	Moderate
1.50 – 2.49	Low
1.00 – 1.49	Lowest

#### 5. Interview questions

The interview was conducted to obtain the data about the problems related to the English teaching and learning process in the class in order to gain deeper opinions and responses from the students. Totally ten students were purposively selected for the interview after completing the post-test; and they were eight students whose score improved in the posttest, one whose score remain unchanged, and one whose score declined since in the posttest.

Combines the research objectives and questions, there were 5 questions designed for the interview: “What have you learned about English writing these two months?”, “Do you think you have made progress in English writing?”, “In which aspects have your English writing improved?”, “What do you think of English writing with using the PQ4R strategy, whether it is becoming easier or still difficult?”, “which step of the PQ4R strategy helped you to improve your writing ability.”

The evaluation result of the interview questions which used the index of item-objective congruence (IOC) indicated that all items of the interview questions received IOC scores as 1.00 meaning that they were acceptable.

### Content validity and reliability assessment of the research instruments

To examine the quality of the instruments, the validity and reliability of the questionnaire, pretest, posttest and interview questions were assessed by three experts (one was from Thailand and the other two were from China) for appropriateness and clarity of the language. The experts’ scores came from the index of consistency between the questions and the objectives (Index of Item Objective Congruence: IOC). The score of 1 indicates that the statement is acceptable. The score of 0 indicates that the statement is questionable and the score of -1 indicates that the statement is unacceptable, and they need to be revised. The evaluation result of each instrument indicated that the IOC value derived was 1.00 meaning that the instruments had a high validity and they were accepted.

### Findings of the study

#### 1. Students’ improvement of writing ability

This research was based on the two-group pretest-posttest design. At the beginning of the experiment, the pretest was administered in order to investigate the existing writing ability of the students. To examine their writing ability, a common topic (My Family) was chosen for both groups to write. The results of the pretest mean scores of both the control group and the experimental group were shown below.

**Table 1** The difference in the pretest mean scores between the experimental group and the control group

Group	N	Mean	SD	t	df	p(Sig.2-tailed)	Remark
Control group	50	6.45	1.073	0.207	98	0.837	Not significant
Experimental group	50	6.43	1.113				

Sig. (2-tailed) < 0.05

Table 1 shows the mean scores and standard deviation in the pretest of both the experimental group and the control group. According to the results, the mean score of the control group was 6.45 with the standard deviation of 1.073; while the mean score of the experimental group was 6.43 with the standard deviation of 1.113. The p value was 0.837 higher than the significance level of 0.05. This shows no significant difference between the mean scores of both groups before the experiment.

After having conducted the experiment, the post-test was administered in order to evaluate and find out about their English writing ability. An independent t-test was conducted to compare the students' writing scores in the control group and the experimental group and the results were shown below.

**Table 2** Comparison of post-test scores between the experimental group and the control group

Group	N	Mean	SD	t	df	p(Sig.2-tailed)	Remark
Control group	50	6.62	1.047	-4.724	98	0.000*	Significant
Experimental group	50	7.36	1.068				

Sig. (2-tailed) < 0.05

Table 2 shows the comparative test scores of both the experimental group and the control group in the posttest. As can be seen from the table, the results of the post-test showed a statistically significant difference in the mean scores between the two groups. In the control group, the post-test mean scores were 6.62 with the standard deviation of 1.047, while those of the experimental group were 7.36 with the standard deviation of 1.068. The p value was 0.000 less than the significance level of 0.05. This shows the significant difference between the mean scores of the control group and the experimental group. Therefore, the mean scores of the experimental group were higher than those of the control group, and the gap of the gained scores between the two groups was 0.74 which was significantly different. After using the PQ4R strategy, it could be concluded that students from the experimental group had a better English writing ability than the students from the control group who was taught by regular method.

**Table 3** Comparison between the pretest and the posttest mean scores of the control and the experimental groups

Group	Test	N	Mean	SD	t	df	p(Sig,2-tailed)	Remark
Control group	Pretest	50	6.45	1.073	-1.610	49	0.114	Not significant
	Posttest	50	6.43	1.113				
Experimental group	Pretest	50	6.62	1.047	-4.724	98	0.000*	Significant
	Posttest	50	7.36	1.068				

Sig. (2-tailed) < 0.05

Table 3 above shows the comparative result of English writing pretest and post-test scores of the students from the control and experimental groups. A paired-sample t-test was conducted to compare the students' writing scores between the pretest and post-test in the control group and the experimental group and the results were that in the control group, the average mean scores of the pretest and the post-test were 6.43 with the standard deviation of 1.073 and 6.62 with the standard deviation of 1.113 respectively. The p value was 0.114 higher than the significance level of 0.05. This shows no significant difference between the mean scores of the pretest and post-test of the control group. In the experimental group, the average mean scores of the pretest and the post-test were 6.62 with the standard deviation of 1.047 and 7.36 with the standard deviation of 1.068 respectively. The p value was 0.000 less than the significance level of 0.05. This shows the significant difference between the mean scores of the pretest and the post-test of the experimental group, and it means that the students' English writing ability increased significantly after using the PQ4R strategy.

## 2. Students' opinions about the use of PQ4R strategy in English classes

The questionnaire in this study aimed to explore students' opinions about using the PQ4R strategy in English classes to improve their English composition writing ability. There were a total of 50 participants from the experimental group selected to administer the questionnaire. The questionnaire consisted of two main parts. Part 1 was the general information of the students: sex and age; and Part 2 was concerned with the 5-point rating statements about the students' opinions on using the PQ4R strategy in the English writing classes. The statements were 1. This is the first time that I use the PQ4R strategy. I think this strategy is useful for my English composition writing. This strategy is easy to use. My English writing skills are enhanced by using this strategy. I think PQ4R strategy is better than the strategies that I have used in my English writing before. I'm willing to use this strategy in my later English writing. The results are shown as follows.

**Table 4** Numbers of the students and their opinions about the PQ4R strategy

No	5	4	3	2	1	Mean ( $\bar{X}$ )	SD	Level of satisfaction
1	42 (84%)	8 (16%)	0	0	0	4.68	0.367	Highest
2	10 (20%)	31 (62%)	3 (6%)	4 (8%)	2 (4%)	3.86	0.959	High
3	8 (16%)	18 (36%)	10 (20%)	10 (20%)	4 (8%)	3.32	1.191	Moderate
4	12 (24%)	30 (60%)	3 (6%)	3 (6%)	2 (4%)	3.94	0.947	High
5	13 (26%)	20 (40%)	5 (10%)	4 (8%)	3 (6%)	3.42	1.090	Moderate
6	20 (40%)	19 (38%)	2 (4%)	5 (10%)	4 (8%)	3.92	1.246	High
Total						3.86	0.967	High

5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree

Table 4 shows an overall mean of the students' satisfaction with the use of the PQ4R strategy in the writing classes which was at a high level ( $\bar{X} = 3.86$ ,  $SD = 0.967$ ), which means the students' attitude towards the PQ4R strategy was positive. According to the results, the students had a high level of satisfaction in Item1, Item 2, Item 4 and Item 6; whereas Item 3 and Item 5 received a moderate level from the students.

In more details, all the students used the PQ4R strategy for the first time in this class (Item1:  $\bar{X} = 4.68$ ,  $SD = 0.367$ ). That means the students were completely new to this strategy before taking the treatment. For the aspect of the usefulness of the PQ4R strategy, 31 students (62%) agreed and 10 (20%) strongly agreed that this strategy was useful for enhancing their English composition writing ability, while only six of them did not think so; four (8%) disagreed and two (4%) strongly disagreed, this means students believed that the PQ4R strategy was helpful to improve their English writing ability (Item2:  $\bar{X} = 3.86$ ,  $SD = 0.959$ ). Moreover, the effectiveness of the PQ4R strategy was statistically high ( $\bar{X} = 3.94$ ,  $SD = 0.947$ ), 32 students (84%) thought that his/her English writing skills were enhanced by using this strategy, three of them (6%) were neutral and five students (20%) disagreed with that. Meanwhile, students rated Item 6 as high ( $\bar{X} = 3.92$ ,  $SD = 1.246$ ). The majority of the students, totally 39 students (78%) were willing to use the PQ4R strategy in later English writing while two (4%) were neutral and nine (18%) students did not think so.

As for the difficulty of using the PQ4R strategy, 26 students (52%) thought that this strategy was easy for them to use; ten of them (20%) were neutral, ten students (20%) thought the strategy was a little bit difficult for them to use and four students (8%) thought that it was really hard for them to apply this strategy. Students had an overall moderate level about this, which means this strategy was a little bit difficult for students to use ( $\bar{X} = 3.32$ ,  $SD = 0.191$ ). Furthermore, as for

Item 5 ( $\bar{X} = 3.42$ ,  $SD = 1.090$ ), students' had a moderate satisfaction level: 20 students (40%) agreed and 13 (26%) strongly agreed that the PQ4R strategy was better than the strategies that they had used in English writing before, while only seven of them disagreed with that; four (8%) disagreed and three (6%) strongly disagree.

The interview was conducted to gain additional information. It aimed at the outcome of the following aspects: the learning situation of students and students' opinions about the PQ4R strategy. Totally, ten students were selected for the interview; and they were eight students whose score improved in the post-test, one whose score remain unchanged, and one whose score declined. There were five questions designed for the interview: "Do you think you have made progress in English writing?", "What have you learned about English writing these two months?", "In which aspects have your English writing improved?", "What do you think of English writing with using the PQ4R strategy, whether it is becoming easier or still difficult?", "Which step of the PQ4R strategy helped you to improve your writing ability?" The first three questions were designed to check the participants' learning situation during these two months and the last two questions aimed to find out their attitudes and opinions about the PQ4R strategy. The details were shown as follows.

Firstly, the PQ4R strategy enabled them to improve their writing ability and harbor a positive feeling toward the use of the strategy. Nine participants evinced that their English writing ability had been improved. According to their posttest scores, eight of them got a higher score than their pretest, another one had an unchanged score. The student whose score remain unchanged indicated that although he didn't get a higher score, he got more ideas about how to write an English composition and he knew more vocabulary and sentence patterns through the lessons, he strongly believed that he would do better in the future writing class. However, one student pointed out that he didn't get progress, and he indicated the reason that this strategy was complex and he didn't follow the teacher at first since he was inattentive in the class.

Secondly, the strategy enabled the students to acquire and know how to write a good English composition. According to the responses, all the students learned some things during the eight classes. Most students knew more about how to write an English composition and grasp the basic steps of the PQ4R strategy and some students knew more about vocabulary. One student stated that, after the lessons, he knew how to predict before reading and how to use the information from the reading material in the writing process, he also knew some native sentences like 'She is good at English'. One student made progress on sentence combination, he said that he knew how to make sentences to be a composition, and he could also combine the sentences by using 'and', 'but', 'then'. The student who knew more vocabulary indicated that he learned some new words like 'finish', 'fragrant', 'easy-going'. Moreover, according to the responses from the students

who grasped the writing steps, students have more ideas about the pre-writing stage, for example, they can make some questions before writing and they can read some materials before writing. In addition, the majority of the respondents believed that they knew more about vocabulary and sentence combination. One of the participants knew more about English grammar; another student pointed out that she could improve her English writing speed, and the other one made progress on word choice. Furthermore, a student said that he can write native English sentences after the classes.

Thirdly, the majority of the students thought that the strategy enabled them to feel that English writing was easier and more manageable. They expressed that, by using the PQ4R strategy, they could read, think, reflect, get more ideas, and then write, it's easier than writing directly after seeing the title only. However, two students thought that English writing was still difficult. They thought the steps of the PQ4R strategy were a little bit complex and it was hard to follow the teacher.

Finally, the students found that the "Read" and "Recite" steps were most helpful and useful for them during the writing process. According to answers from the last interview questions, during the "Read" step, students had more input knowledge, got more ideas, knew more sentence patterns which were helpful for their writing, and the "Recite" step helped familiarize with the writing topic and remember more vocabulary in their mind that they could use in their own sentences.

## Conclusion

English writing skill is essential for Chinese students at all levels, especially for the students who have an English class as their compulsory course. This skill also influences to a greater extent over the mastery of English at any level. To investigate whether the PQ4R strategy could improve students' writing ability and their opinions toward the use of the PQ4R strategy, the researcher designed this study, set out a two-group pretest-posttest research design, and administered the pre- and posttest, as well as the questionnaire, and conducted the interview. After that, both the quantitative and qualitative data were statistically and descriptively analyzed to find out the study results. During the learning process, the teacher required the students to use the PQ4R strategy every classes, and wrote totally six compositions under the different topics as their assignments. There were 100 students taking part in this study with 50 students being assigned to be in the control group and the other 50 students being assigned as the experimental group. According to the results of the pretest and post-test, the students in the experimental group increased their scores by 0.93 points on average which was higher than that of students in the control group. The result of the t-test was -7.189, it might be therefore concluded that the learning achievement of

the students' posttest was higher than the pretest at a significance level of 0.00, which was lower than 0.05, meaning that the students' English writing ability increased significantly after using the PQ4R strategy.

After the eight-week treatment, the questionnaire was administered to 50 students in the experimental group. The results showed that the majority of the students' attitude towards the PQ4R strategy was positive with a high satisfaction level ( $=3.86$ ,  $SD=0.967$ ). They agreed that the strategy was useful and efficient for their English composition writing ability, and they were willing to use this strategy in the future studying. However, some of the students thought that this strategy was difficult for them to use because of the complexity of the steps in the PQ4R strategy.

Finally, ten students in the experimental group were purposively selected for the interview. They were eight students whose scores improved in the post-test, one whose scores remain unchanged, and one whose scores declined. There were five questions designed for the interview. As can be seen from the results, a large number of the students knew more about how to write an English composition and grasp the basic steps of the PQ4R strategy after the treatment. Many students made progress in different aspects, such as vocabulary, sentence combination, grammar, and writing speed. Furthermore, the "Read" step and "Recite" step were found to be the most helpful steps for the students, due to the fact that, during the "Read" step, the students were able to have more knowledge input, get more ideas and know more sentence patterns which could be used and incorporated in their writing. Additionally, the "Recite" step enabled them to be more familiar with the writing topics and remember more relevant vocabulary items that could be used to compose their own sentences.

All in all, the PQ4R strategy led to the enhancement of students' English writing ability, and it was obvious that the strategy was more useful and efficient than the regular method in English writing classes, since this strategy is student-centered and it enabled students to focus on organizing and implementing their knowledge effectively. Most of the students' attitudes toward the implementation of the PQ4R strategy in their English classes were positive, and the majority of them intended to apply this strategy in the future because it was able to help them master their writing skills.

## **Discussion**

This present study investigated the effect of the PQ4R strategy in the English writing classes of grade-7 students. The results of the study are discussed as follows.

According to the results of the research, 84% of students thought that their English writing ability had been enhanced by the strategy. By comparing the mean scores of the control group

and the experimental group in the pretest and the post-test, the results revealed that there was statistical significance between the achievements of the both groups due to the PQ4R strategy. Before the experiment, the pretest scores of all students were relatively similar. The mean scores of the control group were 6.45 and those of the experimental group were 6.43. However, after the experiment, it was revealed that the learning performance of the experimental group was better than that of the control group. The mean scores of the control group were 6.62, whereas those of the experimental group were 7.36 respectively. Moreover, after the treatment, the number of the students whose scores were in the range of 7 to 10 points in the English writing test increased from 21 to 36. This was clear evidence that the PQ4R strategy positively affected the students' English composition writing ability. Thus, it can be concluded that the application of the PQ4R strategy could improve the students' writing ability and the hypothesis of this study was confirmed. One of the reasons that led to the successful learning was that the PQ4R strategy provided the students a chance to learn systematically by themselves. Mangal (2005) mentioned that, by using the PQ4R strategy, the students could adopt a systematic approach to learn the desired material involving sequenced steps. Bibi (2011) also pointed out that the PQ4R strategy enhances students' metacognitive skills which help students to be independent and manage their learning process. Moreover, it is useful to assist them to improve their own capabilities at their own pace. During the treatment in this research, the students in the experimental group had an opportunity to learn English writing in a systematic way, and this enabled the learners to understand writing processes better. That was the main reason why the students got higher scores after using the PQ4R strategy.

By investigating the students' answers in the questionnaire and the interview, the students in the experimental group got benefits from using the PQ4R strategy to improve their writing skills in which they were able to learn some new words and sentence patterns as well as how to connect the sentences naturally, and the ultimate result was that they were able to enhance their writing styles and abilities. According to Harley (2001), the PQ4R strategy brings attention to identify the key points of what students read which enables them to understand the materials more profoundly. Slavin (1997) also pointed out that PQ4R is a strategy that makes students focus more on organizing knowledge and implementing knowledge effectively. Since the PQ4R strategy is regarded as a student-centered approach and students are required to participate in each step, their learning becomes more efficient and effective after applying the strategy in the writing procedures. The finding of this study also confirmed the views of Reddy and Ramar (2006) in that concentration and short-time activities are essential for increasing attention and effective learning.

As for the results from the questionnaire, it was revealed that 82% of the students thought that this strategy was useful for their English composition writing and 70% of them agreed that

the PQ4R strategy was better than the strategies that they had previously used in their English writing classes. Furthermore, over half of the students pointed out that this strategy was not complicated to use and another 78% of them intended to use the PQ4R strategy in their future writing assignments. During the interview, some students also showed their favor or gratitude to the PQ4R strategy. As cited in Bibi (2011), a new learning strategy might provide more motivation for students to practice further. The students' positive attitude towards the PQ4R strategy was consistent with the study of Syarifah (2015). In that research, the students were interested in the PQ4R strategy and were evidently more attentive during the lesson. Additionally, more students showed strong agreement that the "Recite" step was really useful as well as practical for them, because this step enabled the students to be more familiar with the writing topics, and they were able to remember more new vocabulary items that could be used in their tasks. This finding also agrees with the findings in Syarifah's research in that the students could remember what they read easily through their notes in the "Recite" step. Moreover, the PQ4R strategy is useful to assist students in overcoming some difficulties in their language learning, which is in line with a previous study by Sarimanah (2016) in that the PQ4R strategy-based reading model is an alternative one that can be used to assist students in overcoming various difficulties in improving their reading skills. It was further suggested that the development of this strategy can be tested on writing skills.

According to the results of the interview, it can be found that the students thought more deeply and creatively when they were writing. This finding confirmed the finding of Khusniyah (2018) in that the PQ4R strategy allows the students to comprehend and memorize during the reading process. Through this strategy, the students were able to develop their creative thinking and comprehension skills in order to incorporate their creative ideas into their writing assignments.

Overall, it can be concluded that the PQ4R strategy can be applied in the English writing class. The implementation of the PQ4R strategy can improve students' English composition ability. This is because the implementation of the PQ4R strategy enables the students to gain and generate more ideas, manage them to plan for creative writing, know more vocabulary and sentence patterns, and boost the speed of their writing abilities. In addition, some steps of the strategy have been found to support and improve the students' grammatical mastery and sentence organization which greatly influence their writing contents. It implies that the strategy can actually and practically be applied in classrooms in order to improve students' English writing ability.

## **Recommendations**

After conducting this research, the following recommendations are offered to English teachers and other researchers.

#### **For other researchers:**

1. The sample group of this study was small, thus, future researches need to recruit a larger sample group in order to make the findings more representative.

2. This study investigated the effects of the PQ4R strategy on the English writing ability of grade-7 students in China. Other researchers may investigate the effects of the strategy on English writing ability among students of other ages or in other countries.

#### **For other English teachers:**

1. Since some of the students found that the PQ4R strategy was a little bit difficult for them to use, it is suggested that teachers explain the steps of this strategy in more detail clearly, so that it is easier for them to follow.

2. To master writing skills, repeated practices are essential. As a consequence, teachers should encourage their students to practice English writing by using the PQ4R strategy actively and regularly. Moreover, it is necessary to encourage them to write more English compositions under different topics and keep exploring new strategies to generate novel ideas to incorporate into their writing tasks.

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