



ผลของวิธีการสอนอ่านแบบเน้นกลวิธีที่มีต่อความสามารถด้านการอ่านภาษาอังกฤษและการรับรู้
 ความสามารถของตนเองด้านการอ่านของนักเรียนมัธยมศึกษาตอนต้น
 EFFECTS OF STRATEGY-BASED READING INSTRUCTION ON ENGLISH READING ABILITY AND
 READING SELF-EFFICACY OF LOWER SECONDARY SCHOOL STUDENTS

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บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาผลของการสอนอ่านแบบเน้นกลวิธีที่มีผลต่อความสามารถด้านการอ่านของนักเรียน 2) ศึกษาผลของการสอนอ่านแบบเน้นกลวิธีที่มีผลต่อการรับรู้ความสามารถของตนเองด้านการอ่านของนักเรียน และ 3) ศึกษาความสัมพันธ์ระหว่างความสามารถด้านการอ่านและการรับรู้ความสามารถของตนเองด้านการอ่านของนักเรียน กลุ่มตัวอย่างประกอบด้วยนักเรียนชั้นมัธยมศึกษาปีที่ 3 ภาคเรียนที่ 2 ปีการศึกษา 2556 โรงเรียนกระเทียมวิทยา จังหวัดสุรินทร์ จำนวน 30 คน การทดลองใช้เวลาทั้งสิ้น 10 สัปดาห์ ได้รวบรวมข้อมูลเชิงปริมาณ โดยสถิติที่ใช้ในการวิเคราะห์คือ paired sample t-test และ correlation coefficient

ผลการวิจัยพบว่า 1) คะแนนเฉลี่ยจากแบบทดสอบการอ่านหลังการทดลองของนักเรียนสูงกว่าคะแนนเฉลี่ยก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ $p < 0.05$ 2) คะแนนเฉลี่ยจากแบบรับรู้ความสามารถของตนเองด้านการอ่านหลังการทดลองของนักเรียนสูงกว่าคะแนนเฉลี่ยก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ $p < 0.05$ และ 3) ความสามารถด้านการอ่านและการรับรู้ความสามารถของตนเองด้านการอ่านของนักเรียนมีความสัมพันธ์กันในระดับสูง ผลการวิจัยยังพบบอกว่านักเรียนทุกกลุ่มที่มีผลสัมฤทธิ์ด้านการอ่านแตกต่างกันมีคะแนนด้านการอ่านภาษาอังกฤษสูงขึ้นหลังการทดลอง โดยสรุปพบว่าการสอนอ่านแบบเน้นกลวิธีช่วยพัฒนาความสามารถด้านการอ่านภาษาอังกฤษและการรับรู้ความสามารถของตนเองด้านการอ่านภาษาอังกฤษของนักเรียนมัธยมศึกษาตอนต้น

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Abstract

The objectives of this study were to: 1) investigate students' reading ability improvement following the implementation of strategy-based reading instruction; 2) investigate the effects of the strategy-based reading instruction on students' reading self-efficacy; and, 3) examine the relationship between students' reading ability and reading self-efficacy. The sample consisted of 30 grade-9 students who were studying in semester 2 of the academic year 2013 at Krathiamwittaya School in Surin province. The experiment lasted 10 weeks. Data was analysed quantitatively using t-test and correlation coefficients.

The results revealed: 1) for reading ability, students' post-test mean score was significantly higher than that of the pre-test, at a level of $p < 0.05$; 2) for reading self-efficacy, students had a significantly higher mean score from the post-questionnaire than from the pre-questionnaire at a level of $p < 0.05$; and, 3) students' reading ability and reading self-efficacy had a strong positive relationship. The results also showed that all groups of students from different reading achievement levels gained higher scores for their English reading ability following implementation. In conclusion, strategy-based reading instruction improved the reading ability and reading self-efficacy of lower secondary school students.

คำสำคัญ: การสอนอ่านแบบเน้นกลวิธี/นักเรียนมัธยมศึกษาตอนต้น/ความสามารถด้านการอ่าน/การรับรู้ความสามารถของตนเองด้านการอ่าน

KEYWORDS: STRATEGY-BASED READING INSTRUCTION/LOWER SECONDARY SCHOOL STUDENTS/READING ABILITY/READING SELF-EFFICACY

Introduction

In Thailand, English was made a compulsory subject for education in 1996 (Watanapokakul, 2006). Reading ability is a fundamental skill as it is a foundation that affects other learning skills, and underpins a child's success in opportunity and beyond (Anderson, *et al.*, 1985; Nampaktai, *et al.*, 2013) Reading ability accounts for approximately 50 per cent of the Ordinary National Education Test (O-NET) concerning reading comprehension and vocabulary acquisition (Training and Educational Services, 2012); and, the 2012 O-NET achievement score identified that the national average score of grade 9 Thai students was relatively low at 28.71% (Educational Service Area, 2013). Research has shown that the majority of Thai students have some difficulties in English reading and understanding passages because they do not apply the correct reading strategies (Jamornmarn & Ruangtakul, 1995, cited in Language Institute Thammasat University, 2012; Munsakorn, 2012; Oranpattanachai, 2010).

According to Piaget (1896-1980, cited in Huitt & Hummel, 2003), children above the age of 12 should be able to think logically, abstractly, and reason theoretically; and that reading-related activities are linked with cognitive processes (Keat & Ismail, 2011). Therefore, teaching students to become more efficient at reading would both increase their cognitive

ability and help raise their learning achievements. Based on Chamot and O'Malley (1994), when faced with new information, the cognitive model of learning indicates that learners select and process information using an active and dynamic process. Within this process, and by retaining or remembering what is deemed to be important, learners can then apply this information at the correct time—this also applies to reading strategies.

Reading strategies that support the dynamic learning processes are vital for students (Chamot & O'Malley, 1994); and, when students are taught to use learning strategies, this reduces the level of their anxiety and can assist them to obtain the confidence they need to do the task best (Khalidieh, 2000). Furthermore, Huang (2006) identified that teaching reading skills is one of the three vital factors in motivating students to read efficiently.

If students possess negative feelings about reading, then teaching will be less efficient and any reading efficacy benefit reduced (Casteel, Isom, & Jordan, 2000). All strategies can be learned, and these strategies equip students with the necessary skills to become successful readers through not only knowing which strategy to use for a particular reading task, but also how best to apply it (Chamot & O'Malley, 1994). Strategic readers are active and effective readers (Pang, 2008); and, as reading strategies can be transferred to different tasks, readers can apply different skills to construct correct meaning, and “It is essential that learners make individual choices about which strategies to use” (Wright & Brown, 2006, p. 23).

Research has shown that strategic readers are effective learners and will learn, retain, and use information effectively (Chamot, et al., 2002). Also, being mentally active, they analyse and reflect on their own learning activities and, when faced with new information, assess the best approach using a combination of known learning strategies and their own background knowledge. Furthermore, effective strategic readers will possess a wide gamut of skills including: comprehension; knowing how to anticipate the language structure; knowing how to search, evaluate, and analyse the text; being able to meaningfully agree or disagree with text; reading with fluency and expressions; text prediction; problem solving; using verbal and non-verbal clues; connecting ideas; and synthesizing (Grow, 1996). When strategic readers approach any given task, they know they can accomplish and succeed as they have the strategies, the skills, the self-belief and the confidence to do so—*self-efficacy*.

Self-efficacy has been linked to an increase in the level of academic achievement. It has been shown that readers who have high self-efficacy—the belief in oneself—can read more efficiently than those who do not (Scott, 1996). By training students to be more efficacious, and to have belief and confidence in their ability, helps to develop student reading comprehension (Schunk, 2003). Therefore, and as a direct result, as this level of

student self-belief improves, so will their self-efficacy and, ultimately, their reading ability. As their reading ability rises, so will their self-efficacy and their confidence in their learning ability (Smithson, 2012). Casteel, Isom, and Jordan (2000) stated that in order to become an active reader, an individual must have a higher reading self-efficacy. In addition to positive responses from teachers, Schunk (2003) found that modelling, where students try to mirror the success of their mentor; goal-setting, where they aim for a particular objective; and student self-evaluation, assessment of personal progression; are three instructional methods that help to raise reading self-efficacy. There are a number of different reading strategy instructions available to assist students to develop their reading ability and self-efficacy, each offering an alternative approach.

Within this present study, three different explicit instructional frameworks have been synthesised to form one single reading strategy instruction, which are: Patterson's (2010), Rosenshine's (1997), and the Cognitive Academic Language Learning Approach (CALLA) proposed by Chamot and O'Malley (1994). Patterson's framework consists of *Getting Ready for Learning, Modelling, Coaching, Scaffolding and Fading*, and *Applying Knowledge and Strategies in New Contexts*. Rosenshine's framework consists of *Review, Presentation, Guided Practice, Corrections and Feedback, Independent Practice*, and *Weekly and Monthly Reviews*. Last, is the CALLA framework, which consists of *Preparation, Presentation, Practice, Self-evaluation*, and *Expansion*. Each of these individual instructions offers certain benefits and proposes to assist students to read more effectively and independently. The reading strategies instruction proposed in this study consist of the following 5 phases:

Phase 1: Reviewing. The teacher assists students to activate their prior knowledge and identify what they already know about the topic. The reading strategy used here is *Using Background Knowledge*.

Phase 2: Modelling. New information is presented and explained. The reading strategies used here are *Skimming, Using Context Clues, Scanning*, and *Goal Setting*.

Phase 3: Coaching. The teacher's role is to monitor and coach while students perform tasks independently, apply reading strategies, attend discussions, and give and receive feedback. The reading strategy used here is *Feedback*.

Phase 4: Evaluating. Students check their performance to understand what has been learned. The reading strategy used in this phase is *Self-evaluation*.

Phase 5: Expanding. Students integrate new information and skills with their existing knowledge by applying reading strategies independently outside of the classroom.

Research showed that explicit strategy instruction can affect students' reading comprehension both significantly and rapidly; in fact, it can have such a positive effect that even students who received less-explicit strategy instruction, such as the control-group, demonstrated higher reading self-efficacy scores at the post-test readings (Nelson & Manset-Williamson, 2006). Kitsantas, Zimmerman, and Cleary (2000), found that the observation and practice of a modelled skill increases self-efficacy and interest. They also stated that modelling a skill to learners before they attempt to master a task plays an important role in motivation and the development of self-regulated learners. A study by McCrudden, Perkins, & Putney (2005) explored whether explicit strategy instruction in reading strategies (including modelled strategy use) and practice would affect students' self-efficacy and interest in the use of reading strategies. The findings revealed that students' self-efficacy and interest did increase following explicit strategy instruction and practice. Furthermore, their findings also suggested that the modelling and practice of cognitive skills, such as reading strategies, can increase students' self-efficacy and interest in using strategies to learn; and, according to Zimmerman & Kitsantas (1997), these are vital components of motivation and task persistence. Nevertheless, students with different reading achievement levels might need different methods in order to help improve their reading more effectively.

Research by Duke (2013) has identified that many high achievers in US schools slip over the course of their schooling; that one-third of all states showed a decline in high achievers between 2002-2009; and, that though low achievers made significant progress, high achievers stagnated (Center on Education Policy, 2011). A report by Slavin, Lake, Davis, and Madden (2009) showed that though the provision of high-quality classroom instruction has a positive and strong effect on all students, it is particularly beneficial—and perhaps the best approach—for low, or struggling achievers. However, Torgesen (2004) identified that there is no 'one size fits all' model and that students with lower levels of reading skill may benefit from smaller-group instruction; and that different instruction is provided to different groups and classes based on specific needs. Indeed, Pfeifer (2006) identified that students with a lower social background require better family and institutional support and that discipline, structure and reading strategies can contribute to their achievement.

Objectives

This study has explored the strategy-based reading instruction on reading ability and reading self-efficacy of lower secondary school students, and the relationship between the two dependent variables. The three research objectives were: 1) To investigate the improvement of students' reading ability following implementation of the strategy-based reading instruction; 2) To investigate the effects of the strategy-based reading instruction on

reading self-efficacy; and, 3) To examine the relationship between reading ability and reading self-efficacy.

Methodology

Research Design

This study employed an experimental research method using one group, pre-test and post-test, and the data was analysed quantitatively. Descriptive and inferential statistics were used to investigate the improvement of reading ability and reading self-efficacy as well as the relationship between reading ability and reading self-efficacy. The sample group of this study was selected by using purposive sampling design, then randomly selected to sit in groups of five during the period of implementation.

Population and Participants

The population for this study were lower secondary school students studying in 2nd semester of grade 9 in the academic year 2013 at Krathiamwittaya School in Surin Province. All grade 9 students from the four different classes were taught how to read based on strategy-based reading instruction. However, one class of grade 9 students, which had high learning achievement scores in all subjects, was selected purposively to be the sample of this study. This is because most of these students always attended class and therefore would not miss out on the opportunity to practice how to apply the different types of strategies for reading. In addition, they are very active and enthusiastic learners, apply more effort, and try harder than other classes in learning English. The total number of the sample group was 30, with 25 female and 5 male students, ranging from 14 to 15 years old.

Research Instruments

To collect the quantitative data, a pre-test and post-test were used for reading ability, and pre- and post-questionnaire for reading self-efficacy. The questionnaire called the Reader Self-Perception Scale (RSPS) was adopted from Henk and Melnick (1995) and translated into Thai. The RSPS questionnaire consists of four aspects, including progress, observational comparison, social feedback, and physiological states. Lesson plans were used as a treatment instrument. A needs analysis, based on the Basic Education Core Curriculum 2008, including Strand 3—Language and Relationship with Other Learning Areas, was constructed to survey the reading topics that students wanted to learn. The strategy-based reading instruction was implemented in the classroom of the core course for 8 weeks, plus 2 weeks for pre-test, post-test, and pre- and post-questionnaire. The instruments, pre-test, post-test, pre- and post-questionnaire, and lesson plans, were developed and validated by appropriate experts before being piloted and used with the sample group. The pilot results

presented that the reading ability test is suitable for use with the participants and would ensure that extraneous variables, such as the difficulty or prior knowledge of the passages, would not affect students' test scores.

Data Collection Procedures

The data collection consists of three phases: before, during, and after implementation. In phase I, before the implementation, participants were informed that they were going to learn how to use different reading strategies for two periods of 100 minutes per week, for a duration of 8 weeks. They were then asked to take the pre-test for reading ability (Week 1). The objectives and instructions of the test were explained to the students in Thai; it contained 30 items and the students had 60 minutes to complete it. During week 1, in the second period, they took the pre-questionnaire for reading self-efficacy. The pre-questionnaire contained 33 items and the students had 20 minutes to complete it. In phase II, during the implementation, the students participated in the reading classes using the strategy-based reading instruction for 2 periods per week for a total of 8 weeks (Weeks 2-9). In phase III, after the implementation, the post-test for reading ability was comprised of the same test and duration as the pre-test for reading ability, and was distributed to the students (Week 10). The post-questionnaire was then distributed in the second period of the same week. The same questionnaire and conditions were used for reading self-efficacy.

Data Analysis

Analysis of the quantitative data of the pre-test and post-test for reading ability and pre- and post-questionnaire for reading self-efficacy was done with a computer program. For research objective 1, in order to ascertain the extent to which the strategy-based reading instruction helped improve students' reading ability, a two-dependent sample t-test was used to find mean scores, standard deviations, and whether there was a significant difference between the pre-test and the post-test scores for reading ability. For research objective 2, in order to investigate whether or not the strategy-based reading instruction used in this study helped enhance students' reading self-efficacy, the arithmetic mean and standard deviation were calculated for each item of the questionnaire and a two-dependent sample t-test was then used to determine the differences between pre- and post-questionnaire for reading self-efficacy. For research objective 3, a correlation coefficient was employed to find the relationship between reading ability and reading self-efficacy for the purpose of gaining information as to whether or not they were related; and, if so, whether this relationship was positive or negative.

Results

Research question 1: To what extent does the strategy-based reading instruction improve students' reading ability?

The reading ability test was used to evaluate students' reading ability in the aspects of vocabulary and comprehension, and promoted students' comprehension process levels: memory, understanding, application, analysis, evaluation, and creation, based on Bloom's Taxonomy. Table 1 shows the results of the pre-test and post-test for reading ability of all participants.

Table 1: Results of Pre-test Post-test for Reading Ability of All Participants

Reading ability	N	\bar{X}	S.D.	Mean differences	t.	df.	Sig.
Pre-test	30	12.70	3.84	8.83	61.13	29	.000*
Post-test	30	21.53	3.84				

* $p < .05$

The results from Table 1 show that the post-test mean score ($\bar{X} = 21.53$, S.D. = 3.84) was significantly higher than that of the pre-test mean score ($\bar{X} = 12.70$, S.D. = 3.84) at a level of .000 ($p < .05$) with a mean difference of 8.83, t-value of 61.13, and degrees of freedom of 29. The results indicate that the strategy-based reading instruction helped to improve students' English reading ability.

The findings of the pre- and post-test for reading ability were also analyzed in detail for each reading achievement level in order to investigate the improvement of the instruction Table 2 shows the results of pre-test post-test for reading ability at different reading achievement levels.

Table 2: Results of Pre-test Post-test for Reading Ability at Different Reading Achievement Levels

Reading achievement levels	N	\bar{X}	S.D.	Mean differences	t.	df.	Sig.
High reading achievers	10			8.40	51.44	9	.000*
Pre-test		16.90	2.33				

Post-test		25.30	2.00			
Moderate reading achievers	13			9.39	52.02	12 .000*
Pre-test		12.00	.91			
Post-test		21.38	1.45			
Low reading achievers	7			8.43	28.34	6 .001*
Pre-test		8.00	2.31			
Post-test		16.43	2.70			

*p<.05

The results from Table 2 show that the post-test mean scores of reading ability were higher than that of the pre-test mean scores for high, moderate, and low reading achievers with a mean difference of 8.40 (N = 10), 9.39 (N = 13), and 8.43 (N = 7), respectively; and, the significance levels were .000, .000, and .001, respectively (p<.05). This shows that there were significant differences between the pre-test and post-test mean scores for reading ability across all groups at the level of .05, and indicates that the strategy-based reading instruction helped to improve students' English reading ability.

Research question 2: To what extent does the strategy-based reading instruction improve students' reading self-efficacy?

The reading self-efficacy questionnaire was used to assess the levels of students' reading self-efficacy in the following four aspects: progress, observational comparison, feedback, and physiological states. Table 3 shows the pre- and post-questionnaire mean scores, standard deviations, t-values, and significance levels of all participants.

Table 3: Results of Pre- and Post-questionnaires for Reading Self-efficacy of All Participants

Reading self-efficacy	N	\bar{X}	S.D.	Reading self-efficacy levels	t.	Sig.
Pre-questionnaire	30	2.75	.32	Under Low	44.75	.000*
Post-questionnaire	30	3.70	.35	Low		

*p<.05

The results from Table 3 show the mean scores from the pre- and post- reading self-efficacy questionnaires for all participants. The results revealed that the mean score of the post-questionnaire (\bar{X} = 3.70, S.D. = .32) was significantly higher than that of the pre-questionnaire (\bar{X} = 2.75, S.D. = .35) at the level of .000 ($p < .05$) with a mean difference of .94, and t-value at 44.75. The results indicate that the strategy-based reading instruction helped to improve students' English reading self-efficacy. Before implementation, all participants have scored low levels of reading self-efficacy, which mean that they had an indifferent perception of themselves as readers with respect to the four aspects of reading self-efficacy. However, following implementation, this was re-assessed and raised to a low level of reading self-efficacy.

Research question 3: What is the relationship between students' reading ability and reading self-efficacy?

The reading ability test and reading self-efficacy questionnaire were used to investigate the correlation between students' reading ability and reading self-efficacy. Table 4 shows correlations between reading ability and reading self-efficacy efficacy of all participants.

Table 4: Correlation between Reading Ability and Reading Self-efficacy efficacy of All Participants

Dependent Variables	N	\bar{X}	S.D.	Pearson Correlation	Sig.(2-tailed)
Post-test	30	21.53	3.85	.94	.000*
Post-questionnaire	30	3.70	.35	.94	.000*

* $p < .05$

A Pearson's correlation was run to determine the relationship between reading ability and reading self-efficacy values. The findings revealed a high positive relationship between the two variables, which means there was a very strong, positive correlation between reading ability (\bar{X} = 21.53, S.D. = 3.85) and reading self-efficacy (\bar{X} = 3.70, S.D. = .35) with a correlation coefficient value of .94 ($N = 30$, $p < .05$). The results indicate that reading ability and reading self-efficacy were strongly and positively related. In addition, based upon this sample, a significance test was performed to determine whether or not there was any evidence of a linear correlation present in the population. A computer program reported that the p-value for this test was .000; and, thus it signified a very strong evidence to believe H1: that reading ability and reading self-efficacy were linearly correlated in the lower

secondary school students. Therefore, it can be concluded that there was a statistically significant correlation between the two variables, which means that an increase of reading ability significantly relates to an increase of reading self-efficacy and vice versa.

Discussion and Recommendation for Future Research

Reading Ability

Two elements of the findings, different reading achievers and reading strategies, were discussed. With regards to the improvement of reading ability scores for the three different reading achievement levels, the report by Slavin, Lake, Davis, and Madden (2009) showed that though the provision of high-quality classroom instruction has a positive and strong effect on all students, it is particularly beneficial—and perhaps the best approach—for low, or struggling achievers. Though it helps to explain why the moderate reading achievement group achieved a greater level of improvement than that of the higher reading achievement group, the findings do not corroborate with them achieving greater improvement than that of the lower reading achievement group. However, Torgesen (2004) identified that there is no ‘one size fits all’ model and that students with lower levels of reading skill may benefit from smaller-group instruction; and, that different instruction is provided to different groups and classes based on specific needs. Indeed, Pfeifer (2006) identified that students with a lower social background require better family and institutional support and that discipline, structure, and reading strategies can contribute to their achievement. For the higher reading level group, research by Duke (2013) identified that many high achievers in US schools slip over the course of their schooling and that one-third of all states showed a decline in high achievers between 2002-2009; and, according to the Center on Education Policy (2011), though low achievers made significant progress, high achievers stagnated. The second part of the discussion on reading ability concerns reading strategies. Direct, explicit strategy instruction can substantially improve learning achievement especially for reading comprehension (Forness, 2001; Guthrie & Davis, 2003; Swanson, 1999). In this study, students have been taught to use reading strategies explicitly to help improve their reading ability. The reading strategies implemented were: Using Background Knowledge, Skimming, Scanning, Using Context Clues, Goal Setting, Feedback, and Self-evaluation. From the finding, it could be concluded that, based on the strategy-based reading instruction, the seven implemented strategies helped to improved students’ reading ability.

Reading Self-efficacy

The seven reading strategies were used to help enhance students’ reading self-efficacy in this study. As the levels of students’ reading self-efficacy increased, this could indicate that the seven implemented reading strategies had a direct influence on reading

self-efficacy. This finding is consistent with Schunk (2003), who found that instructional methods such as progress feedback, modelled strategies, goal setting, and self-evaluations, are all contributory in improving reading self-efficacy. Furthermore, he stated that by providing positive responses, teachers can help raise the level of students' self-efficacy. In this study, students were praised and were given positive feedback throughout all lessons involving discussion or reading activities.

Relationship between reading ability and reading self-efficacy

From the results, those students who had high reading ability were found to have high levels of reading self-efficacy and those students with low reading ability were found to have low reading self-efficacy: this revealed a relationship between reading ability and reading self-efficacy—they affect each other. Therefore, helping students to improve their reading ability would also improve their reading self-efficacy. These findings were consistent with a study by Scott (1996), who found that there was a relationship between reading achievement and self-efficacy: when students' levels of reading self-efficacy rose, so did their reading proficiency. Furthermore, other studies by Bandura (1977) and Schunk and Pajares (2002) found that students with high self-efficacy performed better than students with low self-efficacy on assigned tasks. Their findings correlate with the results from this present study where high self-efficacy students were found to have high reading achievement and low self-efficacy students were found to have low reading achievement. This might be because, on the one hand, high reading achievers view a reading task as a challenge to be mastered; whereas on the other, the low self-efficacious group merely view it as difficult and as something to be avoided (Schunk, 2003).

Recommendations for further studies

First, as the size of the sample group was small and the contents used in this study were selected based on the context, future research should explore the strategy-based reading instruction on reading ability and reading self-efficacy on a larger-sized group; and, in order to gain better understanding of the instruction, in different contexts. Second, after each lesson in this study students have independently produced a piece of work outside of the classroom; and, it is recommended that further study should include a log for students to document how they approach their work and which reading strategies they used, as this could be very supportive for subsequent qualitative data analysis. Finally, the present study revealed that as students improved both their reading ability and their reading self-efficacy, it is recommended that future research should investigate how effective strategy-based reading instruction is on other learning skills, such as composition.

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