EFFECTS OF TOP-DOWN APPROACH ON UPPER SECONDARY STUDENTS' READING PERFORMANCE

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Abstract: This study aimed to determine the effects of top-down approach on an upper secondary students' reading performance and explore students' attitudes towards top-down approach in improving their reading skill. The participants of this study were 69 students, including 35 students in the experimental group taking top-down reading strategies and 34 students in the control group with conventional strategies. Reading comprehension test, summary writing test and a questionnaire were employed to measure students' reading performance and students' attitude towards their learning to read. The findings indicated that both groups gained a higher level of reading performance as well as a positive attitude toward reading. However, compared to the control group, the experimental group made a sharper increase in reading comprehension. Additionally, the results of students' summary writing revealed that the top-down reading strategies contributed to the students' quality of summary writing. Thus, the study strongly recommended that top-down reading strategies should be frequently taught and used to improve students' reading comprehension.

Key words: Top-down reading strategies, reading performance, summary writing, upper secondary students

1. Introduction

Reading is a complex process made up of several connecting skills, cognitive and meta-cognitive processes working together (Goodman, 1988; Tankersley, 2003). The process required the central role of a reader in interacting actively and productively to deal with information presented in a written text (Wardhaugh, 1968). According to Anderson (1991) and Nunan (2003), reading was a fluent process of readers connecting information from a text and their own background knowledge to build meaning from the text. Richards et al. (1985) defined reading as the perception of a written text in order to understand its content. Grabe (2009) stated reading is a strategic process with several skills involved such as selecting keywords, organizing, summarizing information, predicting, guessing, or inferring information from a text to match a reader's goals.

Nguyen (2010) argued that reading is a challenging skill that most Vietnamese students encounter in learning English. Students' low level of basic comprehension reading skills, background knowledge and reading motivation are the main concerns of teachers and educators in the educational setting. In fact, many students in an upper secondary school in the Mekong Delta of Vietnam feel bored with their English reading session because they do not know how to deal with reading passages about difficult topics and many unknown words. Moreover, many students supposed that reading comprehension is a perfunctory subject; therefore, they usually skip the part of reading comprehension or choose the answers randomly when taking English

multiple-choice tests in the class and in the high school national examination. This leads to poor results of English reading and makes them more dissatisfied with learning English.

Many teachers of English at the school have been using the conventional method to teach reading comprehension for a long time, but there is a reality that they could not help their students overcome the challenges of reading comprehension. In reading lessons, explanation or translation of vocabulary and grammar points of text were emphasized, followed by comprehension questions from the textbook (Nguyen, 2010). Most of the students form the habits of word-by-word reading, overemphasis on forms rather than meaning, excessive focus on details rather than main ideas (Tran, 2006). Moreover, students' low proficiency in English also makes them rely on dictionaries to translate their reading texts into Vietnamese. This makes them spend more time on translating than on studying English. As a result, Miller & Beebecenter (1958) stated that students comprehended the reading texts mechanically and may be discouraged to read.

Obviously, investigating an appropriate teaching method is necessary for teachers to help students overcome the challenges in reading comprehension. The objective of this research is to examine whether the implementation of top-down approach, via top-down strategies, will yield positive effects on EFL upper secondary students' reading comprehension skill. On that basis, some solutions are suggested to aid students in enhancing positive attitudes in learning to read and in their quality of reading comprehension. The study concentrates on answering two questions:

1. What are the effects of top-down approach on students' reading performance?

2. How are students' attitudes towards the role of top-down approach in improving their reading skill?

2. Literature review

**2.1 The context of learning and teaching reading in Asia**

The way of teaching reading in many Asian countries is almost the same as before. In other words, almost always, the approach adopted is the conventional method. It means that reading is done for detailed comprehension of short, difficult texts under carefully organized guidance by teachers. In fact, the short passages in the textbook contain a lot of strange words, idiomatic expressions that students are forced to look them up in the dictionary. Shih and Reynolds (2015) described a typical reading class in the Asian ESL or EFL setting as follows. The students read new words aloud, imitating the teacher. The teacher explains the entire text, sentence by sentence, analyzing difficult grammar structures, lexical meanings, and style for the students, who listen, take notes, and answer questions. They study new words, do grammar drills, answer comprehension questions, and do textbook exercises on pronunciation, grammar, spelling, sentence-making, and translation. It can be concluded that the main goal for teachers is to make the students understand the meanings of the sentences with lexical and grammatical knowledge, to gain linguistic knowledge via various exercises in the textbooks rather than constructing meaning from the text and understanding the writer's message by the readers' reading comprehension strategies. From the definition of Oxford and Shearin (1994), a foreign language is a language learnt only during formal education. English in Vietnam is more likely to be taught and learnt only as a foreign language; it is not commonly used in daily life. English language

teaching and learning in Vietnam has faced challenges. In many classes, the approach used in EFL classrooms is still a conventional method.

2.2 Top-down approach in teaching and learning reading comprehension

According to Swaffar, Arans and Byrnes (1991), a top-down model focused on the importance of background knowledge and personal experience to build global comprehension while Pearson (2016) stated that the top-down approach stimulates students to understand the main ideas of a passage rather than understanding every single word. In other words, Goodman (1988) confirmed that the top-down model of reading stressed on the readers who interact with the text and showed that comprehension starts from the top to the bottom of the reading text. Likewise, Anderson (1999) also stated that top-down concentrated on readers taking advantage of their background knowledge to make predictions and inferences, and search the text to confirm or reject the predictions that are made. Treiman (2001) confirmed that the top-down model of reading was considered as a whole language approach in which readers pay attention to the context and manage to build up meanings in the text. Additionally, other researchers supposed that the top-down model of reading will enhance a reader's metacognitive capacity via the process of connecting past experiences and new knowledge from a text to (re)construct what he or she has already known (Lipson & Wixson, 1986). The top-down model of reading is based on the schema theory of Anderson and Pearson (1984) that suggested the acquisition of knowledge and the interpretation of text are through the activation of prior knowledge, called schemata, which placed the role of a filter for incoming information.

The top-down reading strategies can be summarized in figure 1 below:
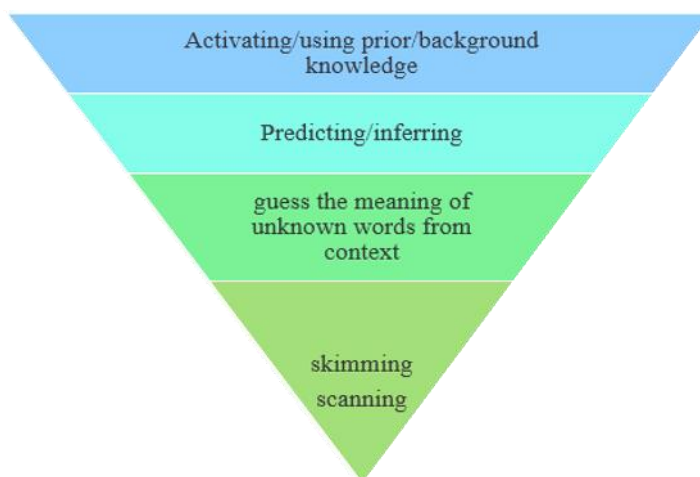
Figure 1. The top-down model adapted from Goodman (1970) and Murtagh (1989)

2.3 Related studies on the top-down reading strategies in teaching reading

Many studies have been done regarding the relationship between background knowledge and reading comprehension (e.g., Grabe & Stoller, 2002; Alptekin, 2006; Ketchum, 2006). The authors reported the ways readers combined their prior knowledge and personal experience in reading for better understanding. Alberto (2013) investigated how top-down approach, based on schema theory, brought about effects in teaching reading. The data were gathered from the result

of pre-test and post-test between the experimental and control groups. The results showed that the use of the top-down approach can increase the eighth graders' reading comprehension.

Similarly, the conclusion from studies by Rumelhart (1980), Anderson and Pearson (1984) emphasized the importance of top-down approach through prior knowledge in reading; through activating prior knowledge of L2 readers, more inferences from the participants were produced. In line with these studies, Melda (2013) conducted the research which focused on teaching reading comprehension through a top-down approach. It was an experimental design with pre and post-tests including 29 students in the academic year of 2012-2013. The data were analyzed by t-test and effect size formula. The results proved that the use of schema activation was very effective to increase students' ability reading analytical exposition text.

More particularly embedded in Asia context, Alberto (2013) and Nagao (2002)' studies showed that top-down approach that focused on linking readers' background knowledge with reading materials led to a more maintained high performance in understanding the whole text than other teaching methods and had more positive effects on reading skills compared to other conventional teaching methods.

Rao (2003) confirmed that top-down strategies could effectively improve English education in China, where teaching practices have conventionally concentrated on formal grammar instruction and other bottom-up decoding strategies. Rao also argued that the process of reading comprehension is instructed by the rule of activating some existing schema and that all aspects of that schema must be compatible with the input information. In other words, the top-down approach depends on readers' adjusting new information to their previous knowledge.

Vietnam is one of the countries that has adopted conventional teaching methods and bottom-up decoding strategies for a long time. There was a scarcity of research on the role of top-down approach on reading comprehension in Vietnamese high schools. Tran (2006) investigated the effects of top-down approach on the first-year English students at Hai Phong Private University. The reading activities examined in the study were activating background knowledge, predicting, guessing, inferring, previewing, pre-questions, vocabulary previews and visual aids. After 6 weeks of applying top-down activities, the number of students who liked reading lessons increased from 32% to 42%. It can be said that the application of top-down activities shows remarkable effects in increasing students' attention and interest in learning to read.

2.4 Related studies in students' attitude towards reading

Attitude towards reading is important for students because it helps them get academic achievement and improve their reading skills. Partin and Gillispie (2005) defined attitude towards reading as an individual's feelings about reading that caused the learner to approach or avoid a reading situation. According to Gardner (1985), attitude included three basic factors of cognitive or knowledge component (the learner's belief, affective or emotional component (a person's feelings of like dislike concerning an object), and cognitive or behavioral tendency component in a certain way (action tendencies towards objects). In the study, the researchers mainly focused on investigating the 2 factors of cognitive and affective components in the reading process of learners. Those factors are very important for the researchers to find out whether students had positive or negative feelings and emotion towards reading skills and reading comprehension. If

learners develop positive attitudes toward reading, they will be willing to read, take pleasure in reading, and become proficient readers (Laurice, 2004).

Students effectively took advantage of cognitive strategies combined with reading strategies to develop their reading comprehension (Brown, 1980; Baker & Brown, 1984; Palinscar & Brown 1984). Many researchers confirmed that if learners have a positive attitude about teachers' teaching method, they will work more effectively and achieve nearly their capacity (Blair, Jones & Simpson, 1975). Moreover, the students will not be bored of their reading lesson, and easily understand the meaning of the reading text. Thus, the use of appropriate methods, techniques, and strategies will bring more positive effects on teaching and learning process. Anderson (1999) stressed on the necessity of suitable strategies in a reading class to make reading more successful and exciting.

3. Research methodology

3.1 Research design

This study used a two-group pretest-posttest design to investigate the effects of top-down approach on the upper secondary students' reading performance. The experimental and control groups were each given a set of participants. The pre-test, post-test, questionnaire and descriptive statistics were used for data analysis. The overall research design of the investigation is displayed in Tables 1 and 2.

Table 1. Research design

Panel			
Group	Pre-test	Intervention	Post-test
EG (35)	O1	Top-down approach	O2
CG (34)	O1	Conventional method	O2

Note: EG = experimental group; CG = control group; O1 = Pre-test; O2 = Post-test

Table 2. Stages of research activities for both groups

Time 2.5 months	Research activities	
	Control group	**Experimental group**
Stage 1 (week 1)	The pre-test of 45 minutes was used for both groups. The purpose of giving students a pretest was to check the student's level of reading comprehension.	
Stage 2 (week 2)	Pre-questionnaire would be delivered to the control group and the experimental group before conducting the top-down approach in teaching reading comprehension. The purpose of delivering pre-questionnaire is to measure students' attitude towards their learning to read, their cognitive ability in the reading process and their teacher's teaching method before the intervention.	
Stage 3 (week 3)	Orientation on how to read a text; what to do in before-reading, while-reading, and after-reading stages; the teacher's expectations. The purpose of this stage is to help students easily follow and understand the teacher's teaching method.	
Stage 4 (weeks 4-7)	Students in the control group learn to read a text with conventional methods.	Students in the experimental group learn to read a text with a top-down approach.
	There are 2 topics in the textbook that will be taught for the 2 groups: Unit 10: NATURE IN DANGER (week 4) Unit 16: THE WONDERS OF THE WORLD (week 7) The purpose of the intervention stage was to improve students' reading comprehension performance	

Stage 5 (weeks 8-9)	The 45-minute posttest was used for both groups to compare the quality and effect of two methods (conventional method and top-down approach). The purpose of the posttest was to examine whether implementing the top-down reading strategies can improve students' reading performance.
Stage 6 (week 10)	The post-questionnaire would be distributed to the control group and experimental group. The purpose of delivering post-questionnaire was to measure students' attitude towards their learning to read, their cognitive ability in the reading process and their teacher's teaching method after the intervention.

3.2 Research participants

This study was conducted at an Upper Secondary School of Kien Giang Province, Vietnam. **The participants included 69** students (39 females and 30 males) of the 11th grade whose ages ranged between 17 and 18. These participants were supposed to have a similar level of English proficiency, pre-intermediate level because they had been learning English as a foreign language for more than eight years. They are now using the same textbook "English 11" for a seven-year program of Vietnam's Ministry of Education and Training. Therefore, they are suitable participants who are willing to provide information for the study. There are 34 students in the control group (using the conventional method) and 35 students in the experimental group (using the top-down approach). Table 2 detailed the number of research participants in the study.

Table 2. Research Participants

Research participants	Questionnaire		Intervention	
	Students in Experimental Group	Students in Control Group	Students in Experimental Group	Students in Control Group
N = 69	35	34	35	34

3.3 Research instruments

In order to collect the data for the study, two kinds of research instruments were applied. The first instrument is the questionnaire with 36 questions, including a pre-test and a post-test (Appendix 1) for both groups. The second instrument is reading tests including one pre-reading (Appendix 2), and one post-reading tests (Appendix 3) for the two groups which received the same pre-test and the same post-test.

3.3.1 Questionnaire

The items from 1 to 6 were to check students' attitude towards reading in general to find out whether students had positive or negative feelings and emotion towards reading skills and reading comprehension. Items from 7 to 31 aimed to check students' self-assessment towards their reading skills such as prediction, skimming and scanning, activating background knowledge, guessing, paraphrasing, summarizing, translation and using dictionary. Items from 32 to 36 checked students' attitude towards their teacher's teaching method. The respondents read the questions and answered them by ticking in the scale box (from 1 to 5 in order, from Strongly Disagree to Strongly Agree).

3.3.2 Reading comprehension tests

Pre-reading test

The pre-reading comprehension test was designed by the researchers and delivered to all the participants in both the experimental group and the control group before the intervention. The pre-reading comprehension test was chosen from the *Basic IELTS Reading* textbook by Zhang (2010). The length of the reading topics of the textbook is about 330 to 400 words. The topic of the pre-reading comprehension test was related to the topics of unit 10 and 16 in the students' textbook *Tieng Anh 11*. The level of the pre-reading test was for a low intermediate level. The reading passage for the pre-test comprises 330 words. The pre-test has 4 parts comprising 16 questions to check students' reading comprehension and a task of summary writing.

Post-reading test

The post-reading comprehension test had the same format as the pre-reading test that is appropriate for students' level and researchers' research purposes. It was delivered to all the participants in both the experimental group and the control group after the intervention. The post-reading comprehension test was also chosen from the "Basic IELTS Reading" textbook by Zhang (2010).

3.4 Research procedures

First, the researchers designed the questionnaire adapted from Lac (2018), Mokhtari et al. (2008), Nguyen (2010). There were 36 items in this questionnaire, mainly focused on the learners' attitude towards learning to read, learners' awareness of reading skill and reading comprehension, and learners' feelings towards the teacher's teaching method. Since the participants are Vietnamese students in the upper secondary school, the questionnaire was written in both English and Vietnamese. The aims of the study were clearly explained and the participants were shown how to complete the questionnaire. Finally, the completed surveys were collected by the researchers for data analysis.

3.5 Data processing method

The authors utilized the SPSS software to analyze the responses. In this study, the information on Cronbach's alpha reliability of the questionnaire, Descriptive statistics of questionnaire and tests will be reported. The scores collected from the reading comprehension tests and questionnaire were compared in order to investigate whether there was any significant difference before and after the implementation of the top-down in reading comprehension class, and to assess whether the students had positive attitude towards their learning to read, their cognitive ability in reading process and their teacher's teaching method via this learning procedure.

4. Findings

## 4.1 The effects of top-down approach on students' reading performance

4.1.1 Performance of both groups on the pre-test

Before the experiment, the students of the two groups did the pre-test to check whether the students' level of reading performance in the two groups was the same or different. Therefore, the determination of students' input level would help the researchers easily carry out the study.
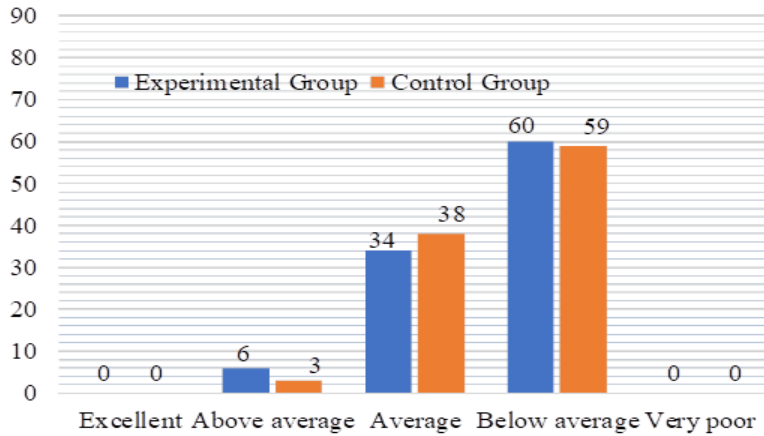
Figure 1. Description of levels of students' reading comprehension performance on the pre-test

The results of the pre-reading comprehension test from figure 4.1 showed that no students in both control and experimental groups reached the excellent level. The above average level in the control group was only 3% while the one in the experimental group made up 6%. By looking at the below average level of the students' reading comprehension performance, the control group attained 59 % whilst it was a little bit higher with 60% in the experimental group. There was no poor level of pre-reading comprehension performance for 2 groups.
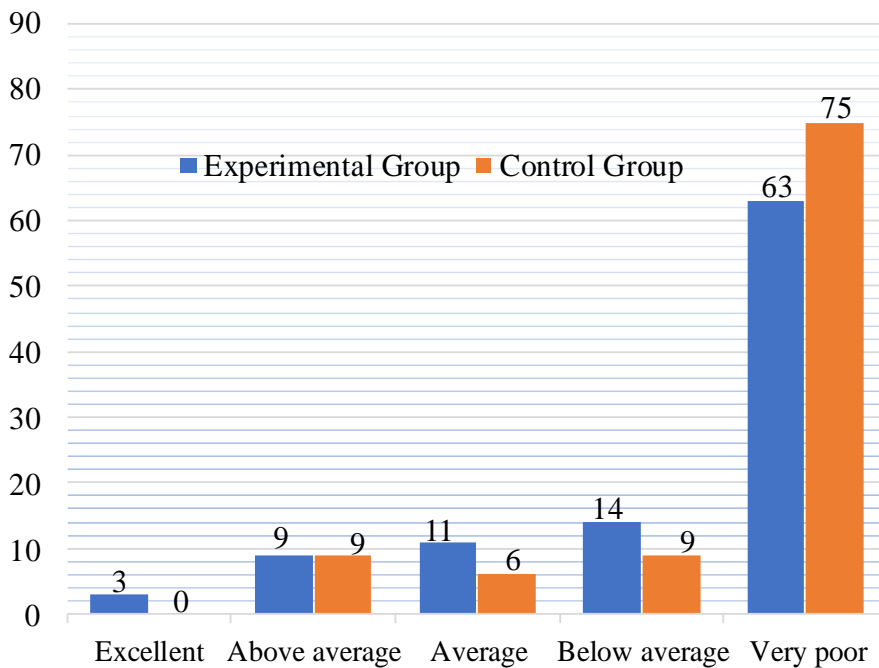
Figure 2. Description of levels of students' summary writing performance on the pretest

Figure 4.2 showed that 3% of the students attained an excellent level of summary writing in the experimental group while that was zero percent in the control group. The above average level in the two groups was equal, making up 9%. Obviously, the highest percentage of the summary writing performance's very poor level reached 63% for students in the experimental group and 75% for students in the control group.

In order to compare the mean scores of two groups, the Descriptive Statistics Test and Independent Samples T-test were employed to analyze the data obtained from the students' reading comprehension test before carrying out the intervention. Table 3 showed descriptive statistics of the pretest of two groups.

Table 3. Descriptive Statistics of the pre-reading comprehension test

Group		Test	Min	Max	Mean	SE	SD	Sig (2.t)	T	Df
Experimental	35	Pre-test	2.5	6.5	3.869	.1487	.8794	.832	.213	67
Control	34	test	2.5	6.5	3.826	.1300	.7581			

Table 3 demonstrated that the mean score of the pre-test in the control group was 3.826 while it reached 3.869 in the experimental group. The Min. and Max. scores in the two mentioned groups were equal with 2.5 and 6.5 respectively. The results showed that there was no statistically significant difference in the mean scores of the two groups, indicating that students of the two groups had the same level of reading comprehension.

Quality of summary writing at the pre-test of two groups

Table 4. Descriptive Statistics of the pre-summary writing test

Group		Test	Min	Max	Mean	SE	SD	Sig (2. t)	T	Df
Experimental	35	Pre-test	0	9.5	2.986	.4146	2.4527	.191	1.321	67
Control	34	test	0	7.0	2.259	.3602	2.1002		1.324	

It could be seen in Table 4 that the mean scores of the summary writing of the experimental and control groups were 2.986 and 2.259 respectively. The min score of the two groups was zero; the max score of the experimental group was 9.5 and of the control group was 7.5. There was no statistically significant difference in the mean scores of the two groups. Therefore, it could be confirmed that the students' level of summary writing of the two groups was identical.

Particular aspects of summary writing at the pre-test of the two groups

Table 5. Descriptive Statistical features of aspects of pre-summary writing of the two groups by the Independent Samples T-test

	Content					Word count				
Group	Min	Max	Mean	Sig (2.t)	T	Min	Max	Mean	Sig (2.t)	T
E-G (35)	0	5.0	1.731	.155	1.437	0	53	25.43	.336	.969
C-G (34)	0	3.5	1.306		1.439	0	43	22.44		.971

Table 5 showed the descriptive statistics of two particular aspects of summary writing including content and text length in the two groups. It could be seen that the mean score of the content for the experimental and control groups were 1.731 and 1.306 respectively, and text length of the experimental group accounted for 25.43 and of the control group made up 22.44. The Min score of the content and the word count in the two groups were zero. For the experimental group,

the Max score for content was 5.0 and for the control group 3.5. The Max scores of text length for both groups were 25.43 and 22.44 respectively. However, the p value was .155 in the content and .336 in text length, which were bigger than *p* .05. It could be concluded that there was no statistically significant difference between the two groups in terms of the content and text length. In other words, the students' quality of summary writing was the same for the two groups at the time of the pre-test.

4.1.2 Performance of both groups on the post-test

The main aim of this part is to answer the question whether the two groups have improved the two variables including reading comprehension and summary writing after two reading lessons. In the stage of post-test, the Descriptive Statistics test was also employed to measure and compare the difference of the two groups and the development tendency of each group.

Quality of reading comprehension at the post-test

In order to compare the mean scores of two groups, the Descriptive Statistics Test was used to analyze the data collected from the students' reading comprehension test after the intervention.

Table 6. Descriptive Statistics of the post-reading comprehension test

Group		Test	Min	Max	Mean	SE	SD	Sig (2.t)	T	Df
Experiment	35	Post	3.0	7.1	4.657	.1340	.7927	.025	2.296	34
Control	34	test	2.5	6.1	4.176	.1615	.9420		2.290	33

As seen in table 6 above, the mean score of the post-test of the experimental group on the reading comprehension performance was larger than that of the control group after a seven-week intervention. The mean score of the posttest in reading comprehension in the experimental group reached 4.657 whereas it was 4.176 33 in the control group. In addition, the Sig. two-tailed .025 was much smaller than the *p* = .05. It could be determined that there was a statistically significant difference in the mean score of the two groups at posttest moment, in particular, the experimental group scored significantly higher than that of the control group.

Table 7. Descriptive Statistics of the post summary writing test

Group	Test	Mean	SE	SD	Sig (2. tailed)	T	Df
EG (35)	Posttest	5.040	.3960	2.3425	.000	3.958	34
CG (34)	Posttest	2.821	.3969	2.3141		3.959	33

Table 7 showed that the mean score of the post-test in summary writing test in the experiment was 5.040; on the contrary, it was 2.821 in the control group. This exposed that the mean score of the experimental group was strongly higher than the mean score of the control group. In addition, the Sig. two-tailed was .000. It could be concluded that there was a statistically significant difference in the mean scores of the two groups at post-test moment.

To look at the quality of summary writing in detail, the researchers assessed the two aspects of content and text length of the written summary

Comparison of the mean scores of summary writing in detail of two groups

Table 8. Descriptive Statistical features of aspects of the post-summary writing of two groups by The Independent Samples T-test

	Content					Word count				
Group	Min	Max	Mean	Sig (2.t)	T	Min	Max	Mean	Sig (2.t)	T
E-G (35)	0	4.0	3.011	.001	3.609	0	65	40.63	.008	2.725
C-G (34)	0	4.0	1.862		3.600	0	50	32.41		2.200

Table 8 showed the descriptive statistics of 2 aspects of the post-summary writing including the content and the word count in the two groups. It was clear that the mean scores of the content 3.011 and the word count 40.63 in the experimental group were much higher than the content 1.862 and text length 32.41 in the control group. The Sig two-tailed value of the content was .001 and of word count was .008, which were smaller than *p* .05. It indicated that there was a statistically significant difference between the two groups in terms of quality of content and text length. In other words, the students' aspects of summary writing were much more improved in the experimental group and were slightly enhanced in the control group after the intervention.

After the intervention, the percentage of average students of the experimental group increased from 40 % at the pretest to 91% at the post-test in terms of the reading comprehension while it increased from 41% to 62% in the control group; the percentage of very poor students decreased from 60% to 9% whereas it was from 59% to 38%. Moreover, the percentage of average students of the experimental group increased from 23 % at the pretest to 63% at the posttest in terms of the summary writing while it increased from 15% to 21% in the control group; the percentage of very poor students in the experimental group decreased from 77 % to 37% whereas it was from 85% to 79% in the control group. In conclusion, both groups had improvement in terms of reading comprehension and summary writing. However, the experiment group had much more improvement than the control group. This also showed that the student's reading skill in the experimental group was more progressive than the control group. The figure 4.3 and 4.4 described students' reading performance at the post test.
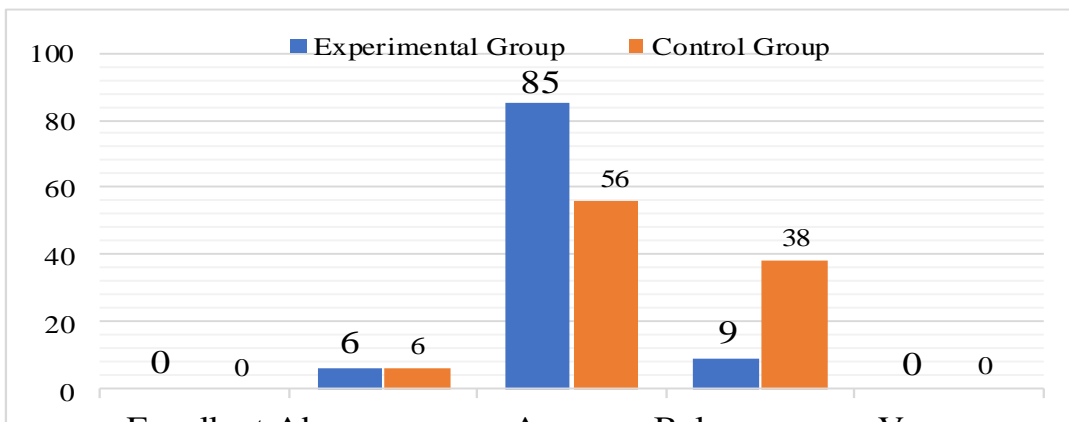

**Figure 3.** Description of levels of students' reading comprehension performance on the post-test
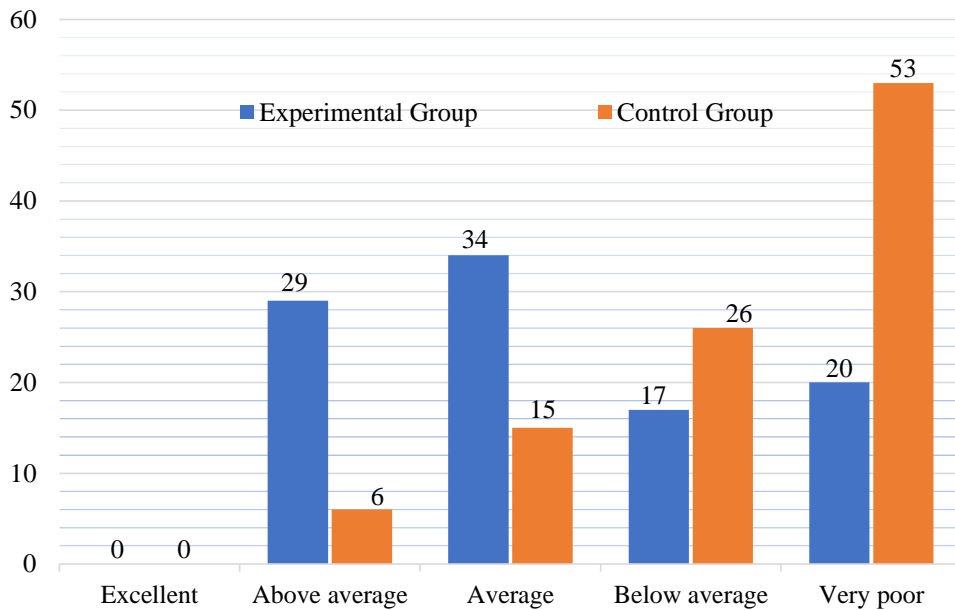
Figure 4. Description of levels of students' summary writing performance on the post-test

In short, the two groups had a significant improvement of the reading skill in terms of reading comprehension and summary writing after receiving two different teaching methods: the conventional and top-down. However, the results showed that the experimental group with top-down approach got more intensive enhancement than that of the control group with the conventional method. The figure 4.5 and 4.6 would present students' reading performance below.
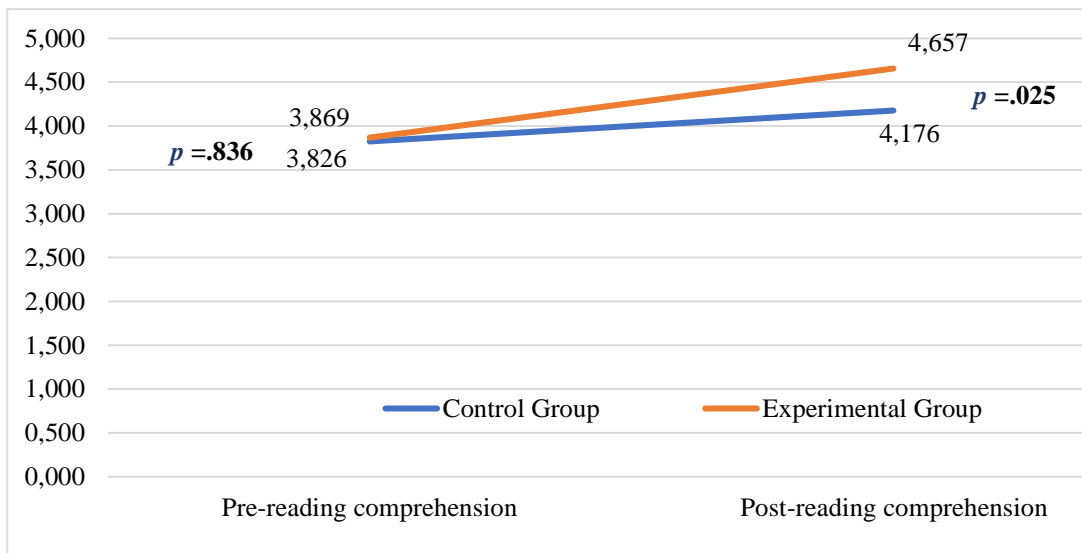
Figure 5. The students' reading comprehension with the mean scores of the pretest and the post-test
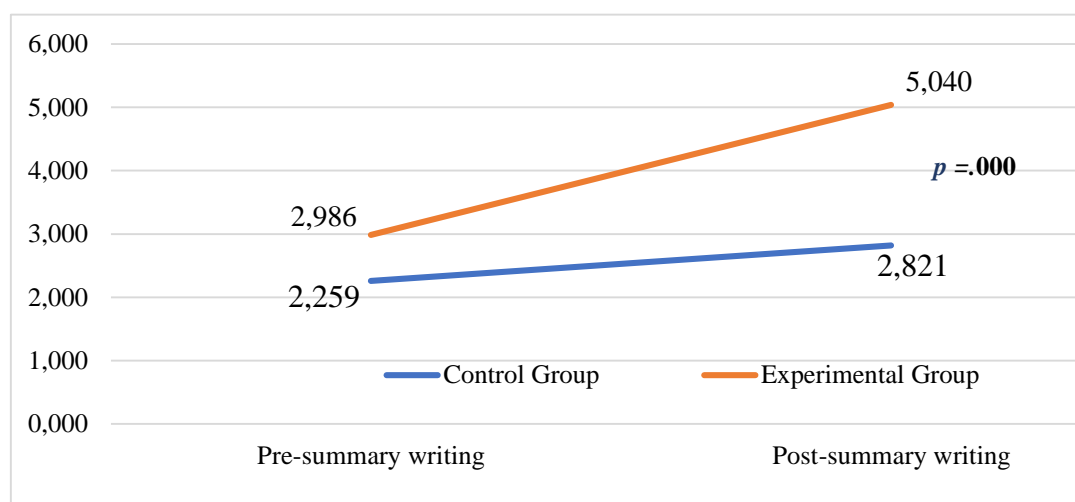
Figure 6. The students' summary writing with the mean scores of the pretest and the post-test

4.1.3 Students' attitudes towards top-down approach in improving their reading skill

Reliability of the pre-test and post-test questionnaire

Table 8. The reliability of Cronbach's Alpha before and after the intervention

Stage	Cronbach's Alpha	N of Items
Pre-test	.982	36
Post-test	.984	36

It can be seen that the reliability of the questionnaire at pretest and posttest moments was ensured with Cronbach's Alpha .982 and .984 respectively, indicating strong connection between the pre-questionnaire and post-questionnaire before and after intervention.

Comparison of the mean scores of the students' attitudes towards their reading performance between two groups at the pre-questionnaire

Table 9. The pre-questionnaire of two groups by the Independent Samples T-test

Group	Test	Mean	SE	SD	Sig. (2. t)	T	Df
E-G (35)	Pre-Q	2.2532	.12404	.73384	.128	1.542	34
C-G (34)	Pre-Q	1.9918	.11521	.67179		1.544	33

Table 9 showed that the mean score of the pre-questionnaire in the experimental group was 2.2532 while it was 1.9918 for the control group. The Sig. (2 tailed) was .128, which was bigger than .05. Thus, there was no statistically significant difference in the mean score of the two groups. It could be concluded that the two groups had the same level of attitudes towards *their learning to read before the intervention.*

Comparison of the mean scores of the students' attitudes towards their reading performance approach between two groups at the post-questionnaire

Table 10. The post-questionnaire of two groups by the Independent Samples T-test

Group	Test	Mean	SE	SD	Sig. (2. t)	T	Df
E-G (35)	Post-Q	3.5444	.09567	.56600	.000	7.433	34
C-G (34)	Post-Q	2.4886	.10523	.61360		7.424	33

Table 10 demonstrated that the mean scores of the post-questionnaire in the experimental group was 3.5444 and 2.4886 in the control group. The Sig. (2-tailed) was 0.00; therefore, it could be concluded that there was a statistically remarkable difference of the mean score of the post-questionnaire. The two groups had a different level of attitude towards their reading performance after the intervention. The students in the experimental group had a higher level of positiveness towards their reading performance than the ones in the control group.

In conclusion, the results obtained from the questionnaire at the pretest moment of the two groups showed that there were no significant differences on the mean scores between the two groups. After the treatment course, there was a considerable difference on the mean scores of the questionnaire between the two groups although the improvement was observed in both groups. This could make a conclusion that both groups had changes in attitudes towards their learning to read. However, the students in the experimental groups had more positive attitudes towards their reading performance via top-down approach than the ones in the control group with conventional method. The figure 4.7 described the students' attitudes towards reading skills.
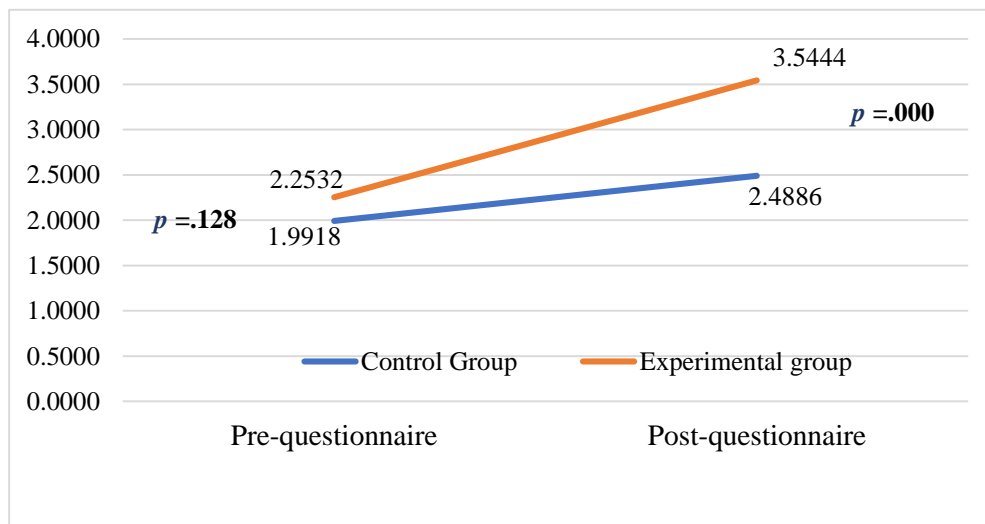
Figure 7. The students' attitudes towards their reading performance in the two groups from the pretest to post-test questionnaire

4.2 Discussion

4.2.1 The effects of top-down approach on student's reading performance

It could be seen from the results that students' reading performance in the two groups before the intervention was identical. Their reading performance was at below average level in the two groups, accounting for 59% of reading comprehension and 81% of summary writing. It seemed that the students had the tendency to use other reading strategies such as grammar

translation, dictionary, random options rather than the top-down reading strategies before the intervention, leading to the same level of reading performance of all the students. After 10 weeks of applying the top-down reading strategies and conventional method, both groups attained remarkable improvement in their reading performance. However, the results of the summary writing at post-test in the experimental group proved that many students summarized the paragraph better than that at the pretest moment. They reported more accurate contents and longer text. This confirmed that the students in the experimental group had known how to take effective advantages of top-down strategies such as activating background knowledge, predicting, guessing, inferring, scanning, skimming, paraphrasing, and summarizing to apply for their reading comprehension as well as summary writing. By contrast, students in the control group reported lower quality of summary writing than the experimental group. That is why they did not perform well and even some of them got lower scores than those before the intervention.

The findings illustrated that applying the top-down approach brought better results than using conventional methods in maximizing upper secondary school students' reading comprehension. This result was approved with the majority of experts' opinions about the effectiveness of the top-down approach. Pearson (2017) pointed out that:

> Teachers who use top-down methods of instruction to teach students to learn to read, speak or write a language believe that language as a whole must be understood before individual words and parts of speech will be comprehended. Similar to how young children learn to speak, students are immersed in the whole language. Over time, learners are able to extract meaning from words and context clues.

Similarly, Kelly (1995) reported in his research that the average readers preferred using the top-down strategies. It was obvious that the average readers really enjoyed world knowledge even though they had more challenges in reading comprehension. In addition, the research results of Alberto (2013) confirmed that top-down strategies help learners maintain a steady comprehension performance. Nagao (2002) reported that readers employing their whole world knowledge was better than using their knowledge of the vocabulary that was singly and separately decoded in the reading text. Students could also use context clues to indicate and guess the meaning of words that had more than one use in the dictionary because, in the top-down reading comprehension process, the teacher showed the learners to recognize the importance of reading for the whole meaning rather than reading each word correctly. This meant that it was unnecessary to ask the learners to try to decode a text word by word; they just read the text to understand as a whole. Students did not have to figure out the meaning of every word for comprehension. Therefore, using the top-down approach brought more effect and improvement to students' reading skill in terms of reading comprehension and summary writing, compared to employing the conventional method.

4.2.2 Students' attitudes towards reading

Before the intervention, the students in the two groups had the same level of attitudes towards reading. However, there was a significant change about their attitudes after the intervention for the two groups; the mean score of the post-questionnaire in the experimental group was higher than that of the control group. This proved that students in the experiment had

a higher level of positive attitude towards reading, in particular towards their reading skill, their cognitive ability in reading, and their teacher's teaching method. Via the teaching steps of activating background knowledge, predicting, guessing, inferring, scanning, skimming, and summarizing as effective learning techniques, their reading comprehension and summary writing have been improved, compared to the control group using conventional methods including translation and dictionary.

5. Conclusions

Based on the study's findings, it can be concluded that most of the students enjoyed top-down strategies such as activating background knowledge, guessing, predicting, inferring, scanning, skimming, paraphrasing, and summarizing. The researchers found that the students in the experimental group had a more positive attitude towards the teaching approach in the post-questionnaire in comparison with the control group. The quantitative result also showed that the students in both control and experimental groups could considerably improve their comprehension performance after the intervention, but the experimental group achieved greater than that of the control group. Besides, the results of the current study were also in line with those of other previous studies of Kelly (1995), Angosto (2013) and Pearson (2016) of the positive attitude towards top-down approach and their reading comprehension performance. The findings of the present study are expected to support the researchers' hypotheses and suggest the application of the approach at upper secondary schools.

After doing the experiment with the top-down approach over 2 months, the students' reading performance in the experimental group had been dramatically improved in terms of their reading scores and their attitudes. It could be made a conclusion that using the top-down approach brought more effects and improvement to students' reading skill compared to the conventional method. Therefore, educators should take into consideration the implementation of top-down reading strategies to help students increase their reading performance. It is hoped that the findings of the current study will be helpful for the future research, encouraging an extension of the research for deeper insights of the top-down approach.

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HIỆU QUẢ CỦA PHƯƠNG PHÁP TIẾP CẬN DIỄN DỊCH ĐỐI VỚI VIỆC HỌC ĐỌC HIỂU CỦA HỌC SINH TRUNG HỌC PHỔ THÔNG

Tóm tắt: Nghiên cứu này nhằm khảo sát hiệu quả của cách tiếp cận diễn dịch đến khả năng đọc của học sinh trung học phổ thông và tìm hiểu thái độ của học sinh đối với cách tiếp cận diễn dịch trong việc cải thiện kỹ năng đọc của các em. Khách thể tham gia nghiên cứu này là 69 học sinh, trong đó có 35 em ở nhóm thực nghiệm, áp dụng chiến lược đọc diễn dịch và 34 em ở nhóm đối chứng với chiến lược đọc thông thường. Bài kiểm tra đọc hiểu, bài kiểm tra viết tóm tắt và bảng câu hỏi được sử dụng để đo lường hiệu suất đọc của học sinh và thái độ của các em đối với việc học đọc hiểu. Các phát hiện chỉ ra rằng cả hai nhóm đều đạt được hiệu suất đọc cao hơn cũng như thái độ tích cực đối với việc đọc. Tuy nhiên, so với nhóm đối chứng, nhóm thực nghiệm có sự gia tăng rõ rệt hơn về khả năng đọc hiểu. Ngoài ra, kết quả viết tóm tắt của học sinh cho thấy rằng chiến lược đọc từ tổng thể đến chi tiết góp phần nâng cao chất lượng viết tóm tắt của các em. Vì vậy, nghiên cứu đặc biệt khuyến nghị rằng phương pháp tiếp cận đọc diễn dịch nên được giảng dạy và sử dụng thường xuyên để cải thiện khả năng đọc hiểu của học sinh.

Từ khóa: Chiến lược đọc diễn dịch, hiệu suất đọc, viết tóm tắt, học sinh trung học phổ thông