

Effects of Activities Incorporating Spiral Learning in an Active Learning English Reading Class

—An Attempt to Enhance the Effect of Active Learning—

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抄録

あらゆる学校種の教育に対して、目に見える学習の成果を示すよう求める文部科学省の要求を受けて、全国の教育機関でアクティブラーニングが導入されている。本研究は、アクティブラーニング型英語リーディング授業の効果を高めるために導入した、スパイラル学習を組み込んだ活動の効果がどのようなものかを調査することを目的としている。この活動を導入したのは、ある国立大学の2年次の選択必修の英語科目である。受講した16名の学生は、グループワークを通して、現代の日本に関する様々な事象をテーマとする英文を読み、内容に関する質問に英語で答えたり、パラグラフを英語1文で要約したりする課題に取り組んだ。また、彼らは授業外での課題として、ユニット全文を英語3～4文で要約する課題にも取り組んだ。これらの取り組みは、スパイラル学習の考え方に基き、学生たちが英文を繰り返し読み、理解を深めていくことを意図したものである。スパイラル学習を組み込んだ活動の効果は、事前・事後の質問紙調査の結果および英検やTOEICの結果をもとに分析した。質問紙調査では学生たちの学習実態の変化や取り組みの課題を明らかにし、英語能力試験の結果をもとに英語力の伸びを調査した。分析の結果、学習実態において、授業外の英語学習時間および教科書本文の読み返し回数の増加が確認できただけでなく、キーワードや前後関係から内容を理解する「内容把握力」、文の構造から英文の意味を理解する「読解力」、および自分で伸ばしたいと思っている英語力の伸びを大部分の受講者が実感していることが確認できた。また、取り組みについての意見・感想では、要約課題の難しさ（ポイントの絞り込みおよび3～4文にまとめること）が指摘され、授業についての意見・感想では、受講者の英文の読み方の変化、教員の説明・支援の有効性、および要約課題の有効性が明らかになった。さらに、英語能力試験の結果から、大部分の受講者の英語力の伸びも確認することができた。

Keywords: spiral learning, active learning, learning habit, English reading

1. Introduction

In order to meet the requirement by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) to show clear learning outcomes of the students, universities and colleges in Japan are trying hard to improve their teaching methods and introduce new approaches. Active learning plays a central role in these endeavors because the learning outcome is expected to encompass skills and attitudes rather than just

knowledge, and active learning is believed to serve well for that purpose.

There is some degree of variation in the way active learning is defined. The Central Council for Education (中央教育審議会) (2012) defines active learning as a generic name for teaching and learning methods which, unlike traditional didactic lectures, incorporate learners' active participation in learning. In active learning, learners develop generic skills by actively learning through various instructional methods such as discovery learning, problem/project-based learning (PBL), experiential learning, and exploratory learning in addition to group discussion, debate, and group work. The Central Council for Education, however, does not give further definitions of active learning, and therefore, in designing an active learning English reading class, definitions by Bonwell & Eison (1991), Mizokami (2014), and Matsushita (2015) were referred to.

Bonwell & Eison (1991) stated that involving students in “doing things and thinking about the things they are doing” is essential in active learning. Mizokami (2014) pointed out that the traditional style of learning can be turned into active learning by integrating it with output activities such as writing, speaking, and presenting. According to Matsushita (2015), acquisition of knowledge and comprehension of the process of learning by the learner, part of which can be covered by scaffolding or adequate explanation by the teacher, is prerequisite for the success of active learning. To sum up, preceding guidance with the necessary input of knowledge and integrating tasks that require the actual use of English and focus on output are key elements for ensuring the success of active learning English classes.

In this paper, then, on the basis of these definitions provided by active learning researchers, “active learning” refers to a form of learning which, without relying on specific approaches or methods, enables learners to internalize knowledge and acquire skills effectively through direct involvement in the learning process. This kind of learning is considered to be effective for practical application and the reinforcement of previously acquired knowledge and skills. Previous research on active learning includes that of Yasunaga (2016) and Sekita (2016), who stated that the effect of active learning can be enhanced through cooperative learning. Also, Nakai et al. (2015) introduced a variety of useful techniques in active learning classes, while Kamekura (2016) showed potential problems in active learning by analyzing failure cases. Active learning is used in English education primarily to increase input efficiency, motivation, and a sense of achievement among learners, as seen in Watari (2012) and Erikawa (2012). Watari (2012) reported a case of low proficiency students gaining a sense of achievement by working on the challenging task of reading articles in *National Geographic* and *TIME* in groups. Erikawa's (2012) report is about a task where students make fifteen-minute movies in English and a listening comprehension task, both of which require collaboration in groups and contributions by individual students. These examples suggest that requiring students to complete challenging tasks by pooling resources and to produce output through both group collaboration and individual effort are effective techniques for the incorporation of active learning. They also allow us to infer that the outcome of such efforts can be enhanced if the learning habits of individual students are improved.

The target of this research was an English reading class which incorporated active learning in order to

promote the actual use of English. With the aim of enhancing the effect of this class by improving comprehension of the learning contents and reinforcing learning habits of the learners, activities based on the principle of spiral learning were incorporated. In this paper, “spiral learning” refers to an approach that helps learners improve comprehension of lesson contents by incorporating learning opportunities, such as class activities and assignments, that require them to go over the contents repeatedly.

Spiral learning is based on Bruner’s (1960) cognitive theory. At present, this theory is introduced in curriculum design. The current mathematics and arithmetic Courses of Study designated by MEXT adopt spiral learning in the curriculum in order to foster deeper understanding of the learning content. Some researchers also report the effectiveness of curricula incorporating spiral learning (Sakamoto et al., 2007; Oshima et al., 2010; Schuetze, 2010; Veladat & Mohammadi, 2011).

Although current application of spiral learning is concentrated on the curriculum-design level, Bruner stated that “any subject can be taught in some intellectually honest form to any child at any stage of development” (p.33) and that “what matters is that later teaching build upon earlier reactions... to create an ever more explicit and mature understanding” (p.53). Therefore, it follows that Bruner’s theory can also be applied to instruction, that any learner at any developmental level can learn any subject if the contents are appropriately structured and presented repeatedly in a comprehensible form, and that the learner’s understanding becomes deeper and deeper as he/she goes through the spiral learning process.

The purpose of this study is to investigate whether spiral learning can be used in an active learning English reading class in a practical way, and to investigate the effects of an active learning English class incorporating spiral learning on the learning habits and English proficiency of learners.

2. Method

2.1 Participants

A total of sixteen (fourteen female and two male students from nineteen to twenty years old^[1]) non-English-major sophomores agreed to participate in this study. They were enrolled in the Regional Cooperation Course offered by the International and Regional Studies Department of a national university, and by the time of this study, they had taken two required English subjects: “Foreign Language (English) I,” worth four credits, and “Foreign Language Communication (English),” worth two credits. “Advanced Foreign Language (English),” the target of this research, was the only English subject offered to them.

At the beginning of the semester (April 2015), a questionnaire survey was conducted in order to investigate the learning styles and habits of the students. The primary purpose of this questionnaire was to obtain information as a reference for modifying the teaching approach as needed for a better learning outcome. As a result, it was found that the average out-of-school English study time was 109 minutes per week. Regarding the skills students wished to improve, 7 students answered “reading,” 5 students answered “listening,” 3 students answered “speaking,” 2 students answered “writing,” and 4 students answered “other.” In order to obtain more detailed information about study content, the students were asked directly, in a subsequent lesson, how often they had read the prescribed textbook in previous classes, such as “Foreign

Language (English) I,” which they had taken as a required class as freshmen. The average number of times students read the textbook was found to be 0.61. The students who answered that they had read the textbook in “Foreign Language (English) I” said they did so very quickly right before the class.

In summary, then, the data showed that students did not spend much time on English study and some students did not read the prescribed textbook at all. It was also found that the English language skills the students wished to improve through this subject were diverse. The results of the questionnaire indicated that an appropriate teaching approach would be one that helps students develop learning habits and includes multi-skill tasks. Modifications in the planned teaching approach were made accordingly. These modifications were based on the concept of spiral learning, taking the diversity of the students into account.

2.2 Features of the designed class

The designed class was an elective subject which was offered as one of several “Advanced Foreign Language (English)” classes. A translation of the outline, purpose, and goals published in the university syllabus is shown below.

Outline

In this class, students develop the basic ability to link their English proficiency to learning and research in the field of their major by reading a variety of informative texts (such as university textbooks, newspaper articles, and academic papers) in English, striving for accurate comprehension of the texts, and summarizing the contents.

Purpose

Based on the knowledge and skills acquired through “Foreign Language (English) I” and “Foreign Language Communication (English) I,” this class aims to help students improve reading comprehension and applied skills by familiarizing them with a variety of informative texts in English.

Goals

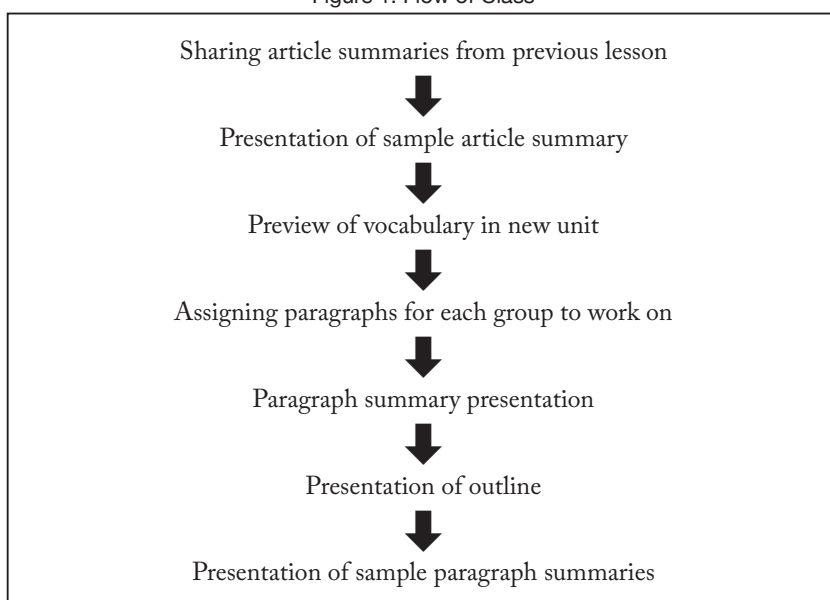
To be able to read a variety of texts extensively, and comprehend and summarize the contents accurately.

To develop a reading ability good enough to read academic literature.

This study was conducted in the first semester (April through July) of the 2015 academic year. Because this was the only English class the students took that semester, what they learned in this class was assumed to be the main influence behind changes in the students’ English learning habits and their English proficiency.

This class was designed to provide students with opportunities to read English passages on various topics and help them develop their ability to grasp the contents of English passages and summarize them succinctly in either Japanese or English. In this study, one unit was covered per class, and after five units were covered and a review session was given, a review test was conducted. Evaluation for each student consisted of review tests (40%), summary assignments (40%), and class participation (20%). In the class, students worked on assigned paragraphs in groups, summarized a paragraph in one English sentence, and shared the summaries with other groups. The teacher provided an outline of the article, commented on the summaries, and presented sample summaries. After every unit, each student was given the assignment of summarizing the whole article in three to four English sentences. The flow of the class is illustrated in Figure 1.

Figure 1: Flow of Class



As a warm-up, the whole class worked on vocabulary checking. The students were required to look up the meaning of unfamiliar or unknown words in the prescribed text using a dictionary in advance. This process was intended to help students grasp the meaning of sentences efficiently. Then, the class was divided into groups and a paragraph was assigned to each group. Some groups were instructed to summarize the paragraph and some groups were given questions to answer. While students in each group worked on the assigned paragraph to get the outline, the teacher moved around the classroom and answered questions and provided support. Students were encouraged to use English when they asked for the teacher's support, but were allowed to use Japanese in discussions within the group. Later, each group reported on the contents of the assigned paragraph and answered questions from the teacher mostly in English. The teacher gave comments and an explanation on each report mostly in English.

In class, students had to work in groups of three or four and combine efforts to get the general idea of the

assigned paragraph and make an oral report about it in English. At home, each student had to go over the whole article and summarize it in three to four English sentences. These tasks and assignments were intended to induce the students to read the article repeatedly. For each article, each student emailed a summary to the teacher within three days. At the following class, these summaries were shared with the whole class, with student names withheld, and the teacher gave comments, an explanation and a grade for each summary. A model summary by the teacher was presented after that. This summary assignment was set ten times during the semester. Evaluation of the summary assignment constituted a part of the grade. Students who failed to turn in the assignment received a warning email from the teacher. Support that students needed to work on the assignment was provided in class as well as by email.

The key feature of the active learning English reading class in this study was the use of assignments and activities incorporating “spiral learning,” which requires students to read the whole article repeatedly. Features of the designed reading class other than spiral learning included in-class cooperative-learning-based tasks and take-home assignments requiring effort, artifices to make students work on the assignments, and a system to help students develop and reinforce learning habits. These included having students present outlines of paragraphs in English, having students submit weekly summary assignments in English, and incorporating summary evaluations into the grade.

2.3 Evaluation of effects

In this study, data for evaluating the effects of the class was collected by questionnaires at the beginning (April 2015) as well as the end (July 2015) of the semester. These questionnaires, shown in Appendices A and B, consisted of four and nine questions, respectively.

Both questionnaires incorporated a question assessing English proficiency. In answering this question, students were directed to describe what they could do using English (e.g., in the form of a “can-do” list) or provide their latest English proficiency test results. In the questionnaire at the beginning of the semester, students were asked about their English study in the previous academic year. The questionnaire at the end of the semester incorporated questions assessing changes in learning habits, improvements in target skills, the effects of summary assignments, and improvements in inferencing and reading ability. It also asked for feedback on the summary assignments and the actual lessons.

Because all the participants gave their standardized test results as indicators of their English proficiency in the questionnaire at the beginning of the semester, they were encouraged to take either TOEIC or EIKEN to assess improvement in their English proficiency. Because it was found that essentially 100% of the study time was spent on voluntary English study (i.e., no time was spent preparing for lessons) at the beginning of the semester, in answering Question 2 of the questionnaire at the end of the semester, students were directed to exclude the time spent on summary assignments (which is covered by Question 3) in order to allow a meaningful comparison. The effects of the designed class on the participants’ learning habits and improvement in English proficiency were verified by comparing and analyzing the data obtained by these questionnaires.

2.4 Analysis

Data was analyzed, and the results were divided into the following categories: changes in learning habits, improvement in English proficiency, improvements perceived by the student, and students' feedback. A t -test was used to analyze the results of changes in learning habits and improvement in English proficiency. The analysis results were considered significant if the p value was less than 0.05. Trends in improvements perceived by the student and students' feedback were elucidated by consideration of the relative proportions of different answers. Two students were absent on the days when the questionnaire surveys were conducted. The data for three students who did not take an English proficiency test during the semester was excluded from the analysis of improvement in English proficiency but included in the analysis of other questionnaire results.

3. Results

3.1 Changes in learning habits

The questionnaire results concerning students' learning habits included the data on the average out-of-school voluntary English study time, the average number of times whole articles were read in order to complete assignments and the average amount of time the students spent completing assignments. The average total out-of-school English study time was calculated by adding the average out-of-school voluntary English study time to the average amount of time spent completing assignments. Changes in the students' learning habits were identified by comparing the results of the questionnaire surveys conducted at the beginning and the end of the semester. The results are shown in Table 1.

Table 1: Changes in Learning Habits

Category	At the Beginning		At the End		t	p	Notes
	M	SD	M	SD			
Average Total Out-of-School Study Time (mins.)	109.29	190.69	216.43	129.53	-2.325	0.037*	$N=14$ Beginning min: 0, max: 720 End min: 30, max: 600
Average Out-of-school Voluntary Study Time (mins.)	109.29	190.69	120	128.36	-0.251	0.806	$N=14$ Beginning min: 0, max: 720 End min: 0, max: 480
Average Number of Times the Textbook was Read (per unit)	0.61	0.56	5.21	7.23	-2.401	0.032*	$N=14$ Beginning min: 0, max: 1.5 End min: 2, max: 30

Regarding the average total out-of-school English study time, as shown in Table 1, the time increased from 109.29 minutes per week to 216.43 minutes per week during the semester. Because such an increase was observed, out-of-school English study time at the beginning and the end of the semester was divided into two categories: out-of-school voluntary English study time and time spent on study directly related to English classes. It was established that 100% of the study time was spent on voluntary English study at the beginning of the semester because no student answered that they had spent time on reviewing previous English classes or preparing for the English class discussed in this study. At the end of semester, more than half of the study time (120 minutes per week) was spent on voluntary English study and the rest of the time (96.43 minutes per week) was spent on completing the summary assignments.

Regarding the average voluntary out-of-school English study time, in this study, “voluntary English study time” refers to the time the student spent studying English in whatever way they liked using whatever material they chose, including the textbook. The students were instructed to exclude the amount of time they spent completing the assignments from this figure. Although the result of the voluntary English study time comparison, shown in Table 1, is not significant, it shows a mean increase. Because this result excludes the time spent on completing assignments, it shows that overall study time did not increase simply out of necessity and can be interpreted as indicating a positive contribution of activities incorporating spiral learning to the development of the students’ learning habits.

The average number of times the textbook was read is an important component of this study because, in spiral learning, learners deepen their understanding by repeatedly going through the content. In-class activities and assignments in this study were designed following this basic idea. The students analytically read the assigned paragraph in groups, inferred the contents of the paragraph they read for a presentation, listened to other groups’ presentations on other paragraphs, listened to the teacher’s explanation on the whole article, and read the whole article individually to complete the assignment. The influence of this process is seen in Table 1. The average number of times the textbook was read at the beginning of the semester (i.e., in previous courses) was 0.61, which means some students did not read the textbook at all. In the questionnaire survey conducted at the end of the semester, however, it increased to 5.21. Forcing students to repeatedly read the textbook article in this way may have helped students improve their study habits, which may, in turn, have partially contributed to the increase seen in voluntary out-of-school English study time.

3.2 Improvement in English proficiency

At the university where this active learning English reading class was offered, no placement test was conducted on the students, and therefore the students’ English proficiency based on a common measure was not available. However, the students did give their most recent English proficiency test results in response to the questions in the questionnaire survey conducted at the beginning of the semester asking about their English proficiency. Because most of these results were from the preceding academic year, they were regarded as a reasonable indication of the students’ English proficiency at the beginning of the semester.

While taking this reading class, students were encouraged to take a standardized English proficiency test of some kind so that they could feel their improvement and renew their motivation for learning English. In the latter half of the semester, most of the students reported their English proficiency test results. The results for the class are summarized in Table 2. This table shows the English proficiency test results the students already had at the beginning of the semester as “Beginning” and the results obtained by the end of the semester as “End.” The table indicates English proficiency in terms of TOEIC scores. Scores without asterisks are actual TOEIC scores whereas scores with asterisks (*) are EIKEN results converted into TOEIC scores with reference to the official sites of EIKEN and ETS Europe. According to these sites, EIKEN grade 2 and EIKEN grade pre-2 are regarded as equivalent to TOEIC scores of 435 and 285, respectively. In this study, EIKEN grade 3 was not converted because no TOEIC score officially equivalent to EIKEN grade 3 was available.

Table 2: Improvement in English Proficiency

Student	Beginning	End
A	435*	560
B	435*	600
C	435*	715
D	400	435*
E	350	435*
F	435*	640
G	435*	640
H	435*	560
I	435*	565
J	285*	550
K	EIKEN grade 3	575
L	285*	not taken
M	435*	not taken
N	not taken	not taken

* Converted EIKEN score

The scores (excluding those for students who had no TOEIC-equivalent score as an indication of proficiency either at the beginning or the end of the semester) were then statistically processed to see if the improvement was significant. As shown in Table 3, the students’ English proficiency improvement based on the English proficiency test results was statistically significant.

Table 3: English Proficiency Test Result Comparison

At the Beginning		At the End		t	p	Notes
M	SD	M	SD			
408	51.27	570	87.43	-6.609	.000**	$N=10$

3.3 Improvements perceived by students

Questions were asked to identify improvements perceived by the students. They focused on improvements in inferencing ability, reading ability, and target English skills. The results are shown in Table 4.

Table 4: Students' Perception of Improvement

Category	Number of Students			Notes
	Improved	Not Sure	Not Improved	
Inferencing Ability (Q. 5)	13	0	1	<i>N</i> =14
Reading Ability (Q. 6)	10	1	3	<i>N</i> =14
Target Language Skills (Q. 7)	9	2	3	<i>N</i> =14

In this study, “inferencing ability” refers to the ability to surmise the overall meaning of the passage from the key words or the context. The students were asked if their inferencing ability had improved. The students' answers to this question are shown in Table 4. This result shows that almost all the students enrolled in this class perceived an improvement in their inferencing ability. This can be considered the most distinct effect of activities incorporating spiral learning.

In this study, “reading ability” refers to the ability to understand the meaning of sentences and the content of the passages by utilizing knowledge of grammar and logic. The students were asked if their reading ability had improved. The students' answers to this question are shown in Table 4. This result shows that most of the students enrolled in this class perceived an improvement in their reading ability. Compared with inferencing ability, however, it seems that students found it harder to improve. This is presumably because it requires a higher command of English.

Regarding target language skills, the students were asked if the skills they named in the questionnaire survey conducted at the beginning of the semester had improved. The students' answers to this question are shown in Table 4. This result shows that more than half of the students enrolled in this class perceived improvement in their own target skills. It suggests that this reading class was effective in improving a variety of English skills. This improvement may be attributable to active learning, the second key feature of this class.

3.4 Students' feedback

The students were asked to give free descriptive feedback on the difficulty of the summary assignments and on the lessons.

The difficulties that the students reported in completing the summary assignments were classified into three types and are shown in Table 5. (Detailed feedback is provided in Appendix C.)

Table 5: Difficulties of Summary Assignment Perceived by Students

Difficulty	Number of Students
Completing a summary in three or four sentences	9 (B, C, D, E, G, I, J, L, N)
Finding the main points of the article	6 (A, F, H, L, M, N)
Writing English	1 (K)

This result may explain why the number of times the textbook was read increased. It was inferred that the students had no other choice but to read the article repeatedly in the process of trying to complete the summary in three or four sentences or to find the main points of the article. Although students said they were not good at writing English in class, the number of students who answered that they found writing English challenging in the survey was very small. This can be explained, however, by the fact that students had received input on the paragraphs they did not work on from other groups' presentations and the teacher's explanation.

Students' feedback on the lessons was classified into five types and is shown in Table 6. (Detailed feedback is provided in Appendix D.)

Table 6: Students' Feedback on Lessons

Content of Feedback	Number of Students
My way of reading has changed/improved.	4 (A, B, H, N)
The teacher's explanation was useful.	3 (J, K, M)
Article topics were familiar and interesting.	3 (E, G, I)
More guidance on how to summarize an article was needed.	2 (C, D)
Repeated summary assignments had training value.	2 (F, L)

The student's feedback cast light on how the lessons, which incorporated spiral learning, improved their English proficiency. In the feedback, four students mentioned a change in their way of reading. They commented that they came to seek the main points of the article or became more conscious of them. This change seems to have been reinforced by the repeated summary assignments or in-class activities because two students mentioned the training value of the assignments.

As for the explanations or scaffolding provided by the teacher, three students gave positive comments while two students pointed out an insufficiency. This is an important result with respect to active learning, and further consideration must be given to the reported insufficiency.

4. Conclusion

The purpose of this study was to investigate the practical feasibility of introducing spiral learning activities into an active learning English reading class, and to assess their effect on participants' English learning. The results showed that activities incorporating spiral learning had a positive influence on the students' learning habits and their English proficiency.

Regarding learning habits, the amount of out-of-school English study time and the number of times the

textbook was read increased. These changes were reflected in improvements in inferencing ability and in reading ability as perceived by the students. Apart from this, some students' comments indicated the importance of the weekly summary assignments and the explanations or scaffolding provided by the teacher. Because the summary assignment partially constituted the grade, the students had to read the textbook repeatedly in order to grasp the main points of the article, think hard in order to organize the content, and write clear and easy-to-understand English. During the semester, the students repeated this process ten times, which probably helped them develop and reinforce their learning habits, as seen in a mean increase in the voluntary English study time. By tackling activities incorporating spiral learning in the framework of active learning, the students were placed in a learning environment where they had no other choice but to activate all of their language skills helped by explanations or scaffolding provided by the teacher. This process most likely caused the improvement in their target skills.

Regarding English proficiency, improvement was confirmed by the comparison of the English proficiency test scores, and more than 70% of the students showed improvement. Because the English class in this study was the only occasion the students had to learn English for the semester, the activities employed in this class are considered to be the main factor behind the improved English proficiency of the learners.

From what has been discussed above, it can be concluded that the activities incorporating spiral learning employed in the lessons in this study can help learners improve their English proficiency by enhancing learning habits and activating multiple language skills. Incorporating summary evaluation into the grade and employing an active learning framework were also indicated as conditions promoting the effects.

It should be noted that this study was constrained by factors such as the unavailability of uniform English proficiency test results as reliable indicators of participants' English proficiency and the ethical difficulty of conducting a control experiment. Therefore, the findings of this study do not go beyond showing the possible effects of activities incorporating spiral learning on an active learning English reading class. More convincing results may be produced by studies conducted at institutions that require students to take standardized tests or longitudinal studies where the effects of spiral learning can be compared with the effects of previously used instruction methods.

Note

[1] Data on the participants' dates of birth was not available. The participants were all sophomores who had advanced directly to university from high school, and it was assumed they were all nineteen or twenty years old.

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Appendix A: Questions in the Questionnaire at the Beginning of the Semester

①現在の英語力はどのくらいですか？

[What is your current English proficiency level?]

英検： 級 TOEIC： 点 TOEFL： 点 その他：
[EIKEN] [grade] [points] [points] [other]

②前年度の英語学習について聞かせてください

[Please provide information on your out-of-class English study in the previous year.]

1週間あたりの学習時間： 時間

[Average out-of-school English study time per week] [hrs.]

学習内容：

[English study content]

③伸ばしたい英語力は何ですか？

[What skills do you wish to improve?]

④英語による要約の経験はありますか？ 有 無

[Have you ever summarized an article in English?] [Yes] [No]

Appendix B: Questions in the Questionnaire at the End of the Semester

①今学期で英語力に伸びはありましたか？

[Was there any improvement in your English proficiency during the semester?]

はい いいえ

[Yes] [No]

英検： 級 TOEIC： 点 TOEFL： 点 その他：
[EIKEN] [grade] [points] [points] [other]

②前期の始めと比べて英語の学習に変化はありましたか？ はい いいえ

[Have there been any changes in your out-of-class English study?] [Yes] [No]

はいの場合

[If “Yes”]

1週間あたりの学習時間： 時間

[Average out-of-school English study time per week] [hrs.]

学習内容：

[English study content]

③本文を英語で要約するのにどのくらい時間がかかりましたか？ 時間

[How much time did you spend on your summary assignment?] [hrs.]

④要約をする際に本文を何回読みましたか？

[How many times on average did you read the article to complete the summary assignment?]

回

[times]

⑤読む回数に応じて本文の内容理解は深まりましたか？

[Did your understanding of the content deepen in proportion to the number of times you read the article?]

はい いいえ

[Yes] [No]

⑥本文を英語で要約する課題で読解力が伸びたと思いますか？

[Do you think the summary assignments helped improve your reading comprehension?]

はい いいえ

[Yes] [No]

⑦前期の学習で伸ばしたい英語力は伸びましたか？

[Through your studies this semester, have you improved the skills that you wished to improve?]

はい いいえ

[Yes] [No]

⑧要約の課題で難しかったところはどこですか？

[What was the hardest part of the summary assignment?]

⑨この授業の感想やコメントがあれば書いてください。

[Please write your opinion, and any comments you would like to make, about this class.]

Appendix C: Feedback on Difficulty of Summary Assignment

(Translated from Japanese)

Student	Response
A	As the articles became longer, it became harder to grasp the meaning.
B	We had to summarize the article in three or four sentences, and the hardest part was to choose the article components to include.
C	The hardest part of the article summary was to put core components of the article together in three or four sentences.
D	The hardest part was to summarize the article in three or four sentences.
E	The hardest part was to summarize the article in three or four sentences covering as many components as possible. I also found the usage of commas and conjunctions difficult.
F	It was difficult to choose important parts of the article. I was not able to figure out what components to include in a sentence.
G	It was very difficult to cover the whole article in three or four sentences.
H	The hardest part was to find the important components.
I	The hardest part was to summarize the article in four sentences.
J	The hardest part was to translate a Japanese summary into four English sentences.
K	Usage of words was the hardest part.
L	I could not identify the important points of the article. The hardest part was to summarize the article in three or four sentences.
M	The hardest part was to identify important points and express them in English.
N	The hardest part was to cover all the important points and summarize the article in three or four sentences.

Appendix D: Feedback on Lessons

(Translated from Japanese)

Student	Response
A	Because of the summary assignments, I came to identify important points as I read English articles.
B	It was a good opportunity for me because I had never read English articles with the objective of summarizing them later. Although my summaries were awkward at first, they became better toward the end.
C	I needed more advice on useful expressions such as conjunctions from the teacher.
D	I could not figure out how to put components of the article together into a sentence.
E	It was a good experience for me because I was not used to reading articles in English and summarizing them. I also enjoyed the contents of the textbook, which covered familiar topics and provided useful information.
F	This class was edifying because weekly summary assignments were required. If they had not been required, I would have never touched the textbook or read the article.
G	It was a good class because I was able to gain knowledge in a variety of fields in every unit.
H	This class was new and different because I have never summarized articles in English. I think this class has developed my ability to grasp the outline of an article.
I	The textbook was easy to read because the topics were familiar.
J	The teacher's comments and advice on summaries, even on small mistakes, were useful. I tried to reflect them in my subsequent summaries.
K	The teacher's comments are useful, but giving summary grades in class was embarrassing even though student names were withheld.
L	I found that repeating summary assignments every week had training value. I enjoyed bits of knowledge the teacher told us during class.
M	I enjoyed the teacher's comments.
N	I started to get a better idea of how to summarize articles in English. If I had spent more time on preparation, my English proficiency would have improved more.