Expanding Learners' Perspectives Towards a Sustainable Society

Using Government-Authorised English Textbooks with a Soft CLIL Approach¹

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Abstract

This study explores the efficient use of government-authorised English textbooks in Japan to nurture students' sense of commitment towards the Sustainable Development Goals (SDGs), incorporating a Soft content and language integrated learning (CLIL) approach in lessons. While SDGs are often included as topics in textbooks, research on effectively using the textbooks to encourage students' active engagement with SDGs remains insufficient. The research comprised three stages: first, textbooks for upper-secondary schools were analysed; second, an original series of lessons was created based on the textbooks; and third, the lessons were taught at an upper-secondary school. To determine the lessons' impact, questionnaires were administered before and after the lessons along with class observations and student writings. The results indicated that the lessons significantly increased the students' confidence in speaking English, whereas their confidence in other skills did not show statistical differences. However, the students' comments indicated that the lessons were received positively and raised their interest in preserving a sustainable society.

Keywords: Textbooks, CLIL, SDGs, Japanese upper-secondary schools, Engagement

¹ An earlier version of this paper was presented at the 32nd MELTA International Conference 2024, held on September 21-22, by Sugiura and Imai (2024b).

Introduction

The Japanese National Curriculum Standard (NCS) formulated in 2018 states that educating students to be responsible contributors to realising a sustainable society is a critical objective (Ministry of Education, Culture, Sports, Science and Technology [MEXT], 2018). In line with this objective, government-authorised English textbooks in Japan often include the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 as learning topics. However, the extent to which students internalise and engage with SDGs in their daily lives remains unclear. Therefore, it is important to explore how English classes can nurture students' sense of commitment to these goals. In particular, this study focuses on government-authorised textbooks, which are a compulsory element of Japanese school education. These textbooks were chosen because of the growing importance of SDGs in global education, and the recognition that integrating SDG-related topics into English classes can foster not only language skills, but also students' awareness of global issues. However, despite the inclusion of SDG-related content in textbooks, there has been insufficient discussion regarding how these materials can be effectively used to nurture students' active engagement with SDGs.

While textbooks are important resources for students, educators must also consider approaches for the effective usage of these textbooks. Various approaches, such as task-based language teaching (TBLT) (Ellis, 2003), content and language integrated learning (CLIL) (Coyle et al., 2010), and others, have been introduced in English language teaching in order to actively engage students in various activities. Accordingly, teachers need to consider not only content, but also linguistic support to facilitate learners' comprehension and production in English, alongside 'scaffolding' that fosters critical thinking and collaboration (Izumi, 2024). Cognitive dimensions, such as lower-order thinking skills (LOTS: remembering,

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understanding, and applying) and higher-order thinking skills (HOTS: analysing, evaluating, and creating), are necessary when devising student activities (Coyle et al., 2010; Dale & Tanner, 2012). Given the importance of helping students develop essential skills for today's global society, this study explores an efficient and practical approach for fostering HOTS in English classrooms.

The research questions for this study are as follows:

- (1) Does engaging in SDG-focused lessons based on government-authorised textbooks improve students' interest in SDGs?
- (2) Does engaging in SDG-focused lessons improve student attitudes towards English learning?
- (3) What features of effective lessons enhance students' engagement in English classes?

In the next section, research related to education for sustainable development, and government-authorised English textbooks for upper-secondary schools will be reviewed.

Following the literature review, the methodology and results of the empirical study will be presented. Based on the results, important features for effective English lessons incorporating a Soft CLIL approach will be discussed.

Literature Review

The purpose of education involves equipping students with twenty-first-century skills necessary for living in a rapidly changing society. Binkley et al. (2012) define the following ten skills in four categories as twenty-first-century skills: Ways of thinking (1. creativity and innovation, 2. critical thinking, problem solving, and decision making, 3. learning to learn and metacognition); Ways of working (4. communication, 5. collaboration (teamwork)); Tools for working (6. information literacy, 7. ICT literacy); Living in the world (8.

citizenship—local and global, 9. life and career, 10. personal and social responsibility—including cultural awareness and competence) (pp. 18–19). As maintaining a sustainable world has become an urgent issue globally, providing high-quality education is fundamental. UNESCO (2017) has promoted Education for Sustainable Development (ESD), stating that "ESD aims at developing competences that empower individuals to reflect on their own actions, taking into account their current and future social, cultural, economic and environmental impacts, from a local and a global perspective" (p. 7). ESD is explicitly listed under SDG's Target 4.7 within Goal 4 Education. UNESCO (2017) promotes ESD by providing learning objectives, suggested topics, and examples of learning approaches and methods for each goal of the SDGs.

In practice, educators and researchers in various contexts have implemented SDG-related education. Zgiur et al. (2021) explore how ESD can be integrated within Qatar by discussing different curricula models of ESD in various contexts such as Spain, the USA, and the UK, and conducting a systematic quantitative literature review regarding how ESD emerged in educational system worldwide. They also examine ESD curricula in Singapore and New Zealand as case studies in relation to Qatar. After analysing 89 studies related to ESD in curricula and education policy, Zgiur et al. (2021) conclude that embedding ESD within curricula yields positive influences on students. Such education advances students' attitudes towards the environment and community, assists them in attaining values as global citizens, and provides them with sustainability-conscious mindsets and skills (Zgiur et al., 2021). This conclusion is encouraging for educators and policy makers who plan to incorporate ESD in the national curriculum.

The NCS in Japan clearly states that educating each student to be responsible for the realisation of a sustainable society is essential in a constantly changing global world (MEXT, 2018). Efforts have been made to incorporate SDGs into the Japanese curriculum, and several

issues related to their implementation have been investigated. MEXT (n.d.) introduces best practices for realising SDGs within integrated studies, school festivals, and extra-curricular lessons at the primary, lower-, and upper-secondary education levels on its official website. Okubo et al. (2021) observed SDGs education implemented in an integrated study course for one year at an upper-secondary school, and found that collaboration with outside stakeholders is necessary to deepen students' and teachers' understanding of SDGs. The topic of SDGs has become ubiquitous in education in Japan.

With regard to English education, SDGs have been included as useful topics in government-authorised English textbooks in Japan. These textbooks, which are compiled following the NCS, are important resources for students when learning English. Textbooks play a vital role in English education, as their content significantly shapes students' learning experiences. Previous research investigated the integration of SDGs into English Communication I and II textbooks for Japanese upper-secondary schools. Of the 24 textbooks in English Communication I, 16 incorporate SDG-related content and eight explicitly identify specific SDGs with specific goal numbers, while the remaining eight include SDG-related topics without specific goal indications (Sugiura & Imai, 2023). Moreover, some lessons implicitly cite SDGs through themes such as inequality, sustainability, and innovation (Sugiura & Imai, 2023). Similarly, 14 of the 24 English Communication II textbooks incorporate SDG-related content, of which 11 explicitly connect lessons to SDGs, specifying goal numbers, two include SDG-related content without specific goal identification, and one addresses SDGs in a supplementary reading section (Sugiura & Imai, 2024a).

The analysis of SDG-related content in English Communication I and II textbooks (Sugiura & Imai, 2023; 2024a) identified: (1) multidisciplinary SDG connections to a single unit or chapter; (2) prioritisation of economic SDGs with a focus on industry, innovation, and

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sustainable economic growth over environmental goals²; and (3) indirect SDG-thematic integration in non-aligned textbooks.

Another study by Yamamoto et al. (2023) analysed 12 English Communication I textbooks to assess whether their activities encouraged students to learn about, reflect on, and take action to solve global issues. Although the findings revealed that activities aimed at prompting students to take action were the least represented, the textbooks certainly provide useful resources for learning about and reflecting on SDGs (Yamamoto et al., 2023).

The integration of these resources offers various opportunities to highlight students' engagement with globally relevant topics, consequently developing their language skills. This underscores the role of English-language curriculum textbooks in raising awareness of global issues.

Considering that textbooks play an important role as compulsory elements in Japanese school education, utilising these resources is crucial. Regarding the effective use of textbooks in order to develop students' twenty-first-century skills, CLIL is a promising approach which originated in Europe, and is defined as "a dual-focused approach in which an **additional** language is used for the learning and teaching of both content *and* language" (Coyle et al., 2010, p.1). According to Ikeda (2022), CLIL is intended to assist students in developing multiple competences necessary for the twenty-first-century. Therefore, incorporating CLIL into textbook-based instruction is worth serious consideration.

In terms of practical application, Izumi (2016) introduced CLIL lesson concepts based on government-authorised English textbooks for lower- and upper-secondary schools in Japan. The lessons presented detailed ideas and tips for planning CLIL lessons, encouraging teachers to employ CLIL in their classes. In practical research, Sugiura et al. (2022)

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² Goal 8: decent work and economic growth; Goal 9: industry, innovation, and infrastructure; and Goal 10: reduced inequalities were frequently treated as topics compared to other goals.

conducted a series of lessons based on a government-authorised textbook with second-grade students at an upper-secondary school. The study found that students' perceptions of a lesson's difficulty could be greatly influenced by the topic (Sugiura et al., 2022). When applying the CLIL approach to textbooks, teachers must consider topics that attract students' interests. Their role in CLIL is to appropriately devise teaching resources that suit students' knowledge, skills, and language proficiency (Sasajima, 2011).

CLIL is widespread not only among subject teachers in Europe, but also language teachers in other areas. While originally aimed at helping subject teachers teach their students both language and the subject, more language teachers are now involved in CLIL (Ball et al., 2015). Influenced by the spread of CLIL in different contexts, two terms, 'hard' and 'soft', have been introduced to identify variations. According to Ball et al. (2015), 'hard' CLIL is referred to as "subject-based aims and objectives, where subjects from the conventional curriculum are taught in an additional or foreign language" (p. 27). Bentley (2015) states that in 'hard' CLIL, "About half of the curriculum is taught in the target language" (p. 6). Conversely, 'soft' CLIL is described as "the broad linguistic aims that a language teacher brings to the classroom" (Ball et al., 2015, pp. 26–27), and "Some curricular topics are taught during a language course" (Bentley, 2015, p. 6). Ikeda (2022) defines Soft CLIL, using capital 'S' as follows:

Soft CLIL is a language teaching approach with heavy reliance on content where students develop their language proficiency, subject-matter understanding, and transferable multi-purpose skills while they are engaged in verbally interactive, cognitively demanding, and culturally enriched activities with their peers in the target language. (p. 16)

The above definition clearly states that Soft CLIL is 'a language teaching approach'.

The current study was conducted in English classes in Japan, the form of CLIL implemented aligns with Ikeda's (2022) definition of Soft CLIL.

Methodology

Class Activities and Data Collection

This study explores an effective approach for nurturing students' sense of commitment towards SDGs based on government-authorised textbooks in English classes. The methods were designed to investigate if a series of lessons created for this study would influence 'students' interest in SDGs', 'students' attitudes towards English learning', and 'student engagement in English classes'. This study was approved by the research ethics committee at the principal author's university. Although the lessons were conducted during regular English classes, only data and comments from students who consented to participate in this study were included in the analysis.

First, three lessons on SDGs were conducted with first-year students in an upper-secondary school in February 2024. Lesson 10 of a government-authorised textbook, *Panorama*, published by Taishukan, was used as a resource since it was taught in ordinary English classes at the school by an upper-secondary school teacher. The lead author observed the class. Figure 1 shows the study schedule. Three lessons were taught over one week. The first and second lessons were conducted for 50 minutes, and the third lesson for 15 minutes. The final task for students was to propose actions that would help create a better world. In the first lesson, basic information about SDGs was taught. In the second lesson, students were asked to research ideas on how SDGs can be achieved. In the third lesson, students were asked to share ideas about activities that they could conduct to achieve SDGs.

Questionnaires were administered before and after the lessons to measure any changes in students' interest in SDGs, attitudes towards English learning, and classroom engagement. The questionnaires included both closed- and open-ended items. A 14-item closed questionnaire was provided to evaluate each lesson's impact on students. Initially written in Japanese and subsequently translated into English for this paper, the questionnaire was divided into three categories: enjoyment, confidence, and SDGs (Table 1). Before answering questions about SDGs (Q12-Q14) in the pre-questionnaire, students were asked whether they had heard of the word 'SDGs', and students who had heard of it answered the questions. All students who participated in this study had heard of the word. Participants rated their responses on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Figure 1. Schedule of the Study

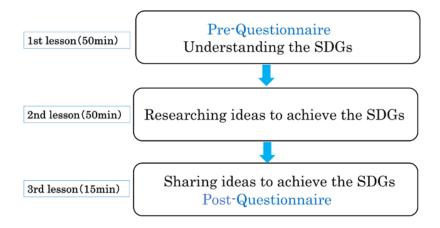


Table 1. Questionnaire Items (Based on Imai & Sugiura, 2022)

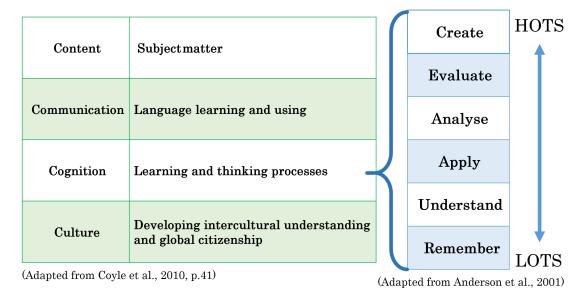
Q	Category	Questionnaire Items		
1		Speaking English in class is fun.		
2	Enjoyment	Reading English in class is fun.		
3		Listening to English in class is fun.		
4		Writing English in class is fun.		
5		Pair and group activities are necessary to improve English skills.		
6		Pair and group activities in English class are fun.		
7		Interacting with others in English in class is fun.		
8	Confidence	I am confident in speaking English.		
9		I am confident in reading English.		
10		I am confident in listening to English.		
11		I am confident in writing English.		
12		I am interested in the issues raised by the SDGs.		
13	The SDGs	I want to learn more about the SDGs.		
14		I want to actively engage with the issues related to the SDGs.		

In the post-questionnaire, students were asked the open-ended question: 'What skills do you think improved in the lessons?', in order to gain qualitative insights into their perceptions of their learning. Responses were analysed using the text-mining software KH Coder (Higuchi, 2016). This software identified frequently used words and visualised co-occurrence relationships, revealing patterns in students' reflections regarding both language development and awareness of SDGs.

Lessons

The CLIL concept was referred to when creating the teaching and learning materials. Coyle et al. (2010) state that CLIL has four different components called 4Cs: "content (subject matter), communication (language learning and using), cognition (learning and thinking processes), and culture (developing intercultural understanding and global citizenship)" (p. 41). As Figure 2 illustrates, the CLIL framework has 4Cs and the cognitive process dimensions consist of LOTS and HOTS (Anderson et al., 2001; Coyle et al., 2010). This framework was referred to when creating the content materials for this study.

Figure 2. 4Cs Framework of CLIL



In Lesson 10 of the English Communication I textbook, students learned about the world's problems and the fact that people have started to take action to fix them. In the first lesson, English words and phrases that the students learned in the textbook were reviewed. For example, students were asked, 'What problems do we face in the world according to the textbook?' English phrases such as 'the dangers of chemicals', 'polluting the land and seas', and 'upsetting the balance of nature' obtained from the textbook were reviewed in the first lesson. Additionally, the sentences students learned from the textbook, such as 'The carbon we have put into the air is warming the planet', 'There is a monstrous patch of plastic garbage in the sea', and 'Many animals and plants have become extinct' were also reviewed.

The study focused on SDG Goal 3, 'Ensure healthy lives and promote well-being for all at all ages' (United Nations, 2015), because it relates to all people; it is easier for students to relate to the SDGs they perceive as personal. There is a possibility that all other goals must be achieved to feel healthy and happy, as people require shelter, food, education, and clean water. Subsequently, students were asked, 'What problems must be paid attention to in the world for everyone to feel healthy and happy?' Students were asked to form groups and list examples on sticky notes.

Real-life examples relevant to the students were also introduced, such as the question: 'What actions are being taken to achieve a better world?' Students were encouraged to think about the 'who, what action, for whom, and where', to help them write English sentences. This framework of writing an English sentence followed the English word order of subject, verb, object, and prepositional phrase. For example, an answer shown to the students was: 'Tokai University students shovel snow during winter for older people in Minamisawa area' (Figure 3). By presenting a real example of actions undertaken by university students, the aim was to help learners recognise that even younger individuals—not only adults—can contribute to their communities.

More examples of actions taken by countries, companies, and individuals to achieve SDGs are presented in Figure 4. For example, 'People support students as volunteer teachers when they need Japanese instruction at school', or 'Companies try to reduce food loss at their shops for the sustainability of the environment'. After writing down their ideas, the students exchanged this information with their classmates.

What actions are being taken to achieve a better world?

Who What Action For Whom Where

Tokai University students

shovel snow
older people
Minamisawa

Figure 3. An Example Action Taken by Students Related to SDGs

Figure 4. Examples of Actions



In the second lesson, the students collected relevant information to determine what actions they could take to achieve SDGs. Some websites written in English or Japanese were introduced to identify national, corporate, and individual actions. To maximise understanding of the content, students were encouraged to research both in English and Japanese. One particularly useful resource was the United Nations' 'The Lazy Person's Guide to Saving the World' (2023), which offers practical examples of how ordinary individuals can contribute—even from the comfort of their own homes. This helped students realise that they, too, could take meaningful action towards creating a better world.

After completing the research, students exchanged information with their peers and took notes. Again, many examples were provided to assist them in creating ideas. After sharing them, students wrote good examples of national, corporate, and individual actions taken to achieve SDGs, and wrote about 'what you can do' to ensure that everyone lives a healthy and happy life. To assist students in English writing, an example of a child's cafeteria was read aloud (Figure 5). The cafeterias are organised by a nonprofit organisation in Japan. Since there are similar types of cafeterias in the city where the students live, it was assumed that the example was familiar to them. The students could refer to this example when writing

down their ideas; they then shared their notes in groups. In the third lesson, their ideas were published on an online platform called 'LoiLoNote School'. They also read their English writing aloud.

Figure 5. An Example Script

Many children cannot eat at home. For these children, a non-profit organization (NPO) called Musubie supports children's cafeterias all over Japan. At these cafeterias, children can enjoy meals for free or at a lower price, and they can also connect with people in their neighborhood. I believe that it is important to have someone who can support you in leading a happy life. The example of Musubie gave me an idea of what I could do for the SDGs. I want to be a person my friends can rely on in school.

As previously explained, the CLIL concept was referred to when creating the materials. In Figure 6, the table on the left presents the features of the lessons used in this study in relation to CLIL's 4Cs (Coyle et al., 2010). In this study, content was concerned with SDGs, specifically Goal 3 'good health and well-being'. As for communication, key vocabulary from the textbook, and question-and-answer activities were emphasised. The table on the right in Figure 6 shows cognitive skills (Anderson et al., 2001) and activities required for the lessons. The intention was to employ all students' cognitive skills through the lessons. Whether all students used HOTS as planned could not be guaranteed; however, it is important to design lessons encouraging students to employ HOTS, such as proposing creative solutions to achieve SDGs (create), evaluating if actions taken to achieve SDGs are successful (evaluate), and collating actions taken to achieve SDGs (analyse). Finally, culture involved raising awareness of actions they can take by themselves, thereby encouraging them to achieve SDGs at a personal level.

Figure 6. Lessons and the 4Cs Framework

Content	The SDGs: Goal 3 Good health and welbeing		Create: Propose creative solutions to achieve the SDGs	
	Goar 5 Good nearth and werdeing		Evaluate: Evaluate if actions taken to achieve the SDGs are successful	
Communication	Key vocabulary learned in the textbook Asking and answering questions		Analyse: Collate actions taken to achiev the SDGs	
Cognition	Learning and thinking processes		Apply: Write own ideas referring to a given format	
	Become aware of what actions can be taken to achieve the SDGs as their own issue		Understand: Understand example actions t	
Culture			Remember: Remember key vocabulary	

Results

Questionnaire Results

This section presents the results of the questionnaire administered before and after implementing the lessons. Data from 34 students were analysed. Although 47 students participated in at least one lesson, only those who attended all the required lessons, appropriately answered all the closed-ended items in the questionnaires, and agreed to provide data, were considered.

Table 2 summarises the results for the 14 questionnaire items. The analysis concentrated on the three categories (enjoyment, confidence, and SDGs) of the questionnaire items to assess the lessons' impact on students' perceptions and understanding. Based on a six-point Likert scale, the average value was set at 3.5. Because the data from the closed-ended items did not follow a normal distribution, a nonparametric statistical test, Wilcoxon signed-rank test, was applied to analyse the differences between the pre- and post-questionnaire results (Mizumoto & Takeuchi, 2008; Takeuchi & Mizumoto, 2014). Among

the 14 questions, only Q8 showed a statistically significant difference between the pre- and post-questionnaire results. Table 2 presents the means, standard deviations, p-values, and effect sizes (r) for each item in the questionnaire.

Table 2. Results of the Questionnaires

	Pre		Post		Pre-Post	r
item	M	SD	M	SD	p	
1	3.62	1.35	3.50	1.16	.470	.09
2	3.62	1.30	3.71	1.17	.681	.05
3	3.44	1.24	3.56	1.26	.419	.10
4	3.21	1.23	3.41	1.10	.205	.15
5	4.47	1.11	4.41	1.02	.808	.03
6	3.71	1.38	3.76	1.21	.790	.03
7	3.91	1.26	3.71	1.29	.127	.19
8	2.50	1.42	2.85	1.40	.005*	.34
9	2.59	1.37	2.76	1.35	.244	.14
10	2.59	1.37	2.76	1.35	.134	.18
11	2.50	1.29	2.62	1.16	.227	.15
12	3.74	1.14	3.82	1.17	.635	.06
13	3.59	1.33	3.82	1.19	.112	.19
14	3.91	1.16	3.88	1.07	.782	.03

Note. * denotes statistical significance (p < .05).

The analysis revealed that the enjoyment-related questions (Q1–Q7) showed no statistically significant differences between the pre- and post-questionnaires, implying stability in students' perceptions of enjoyment throughout the lessons. Among these items, the responses generally indicated that students found the lessons engaging, although no notable changes were observed in their enjoyment levels over time.

A notable finding emerged in the confidence category. Responses to Question 8 (I am confident in speaking English) demonstrated a statistically significant improvement (z = -2.83, p = .005, r = .34) with alpha being set at the .05 level, indicating the lessons' important contribution to the development of the students' confidence in speaking English. The effect

size (r = .34) indicated that the effect was moderate. Conversely, other confidence-related items (Q9–Q11) that focused on reading, listening, and writing skills showed no significant changes. The scores for these items remained slightly below the average value of 3.5, reflecting a low level of confidence among Japanese English learners (Figure 7). Nevertheless, the observed improvement in speaking confidence highlights the potential effectiveness of these lessons.

The SDG-related questions (Q12–Q14) did not exhibit statistically significant differences between the pre- and post-questionnaires. Nonetheless, the responses indicated student engagement in SDG-related themes during lessons. The inclusion of SDG themes appears to have fostered awareness, despite no substantive change in their understanding of these goals.

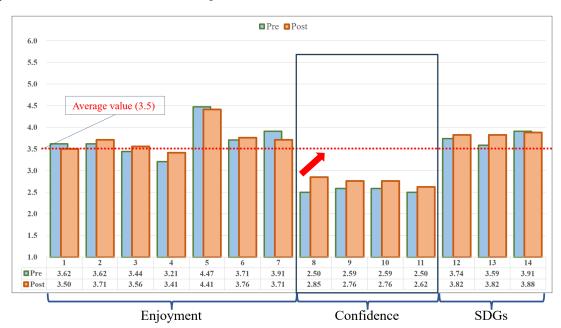


Figure 7. Results of Pre- and Post-Questionnaires

The horizontal line in Figure 7 shows the average value at 3.5. This illustrates that the average scores for the two categories other than confidence remained close to this baseline before and after the lessons. Of the total 14 items, Question 5 (Pair and group activities are

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necessary to improve English skills) garnered the highest scores in both pre- and postquestionnaires, accentuating students' recognition of the value of collaborative learning. Overall, the results suggest that while the lessons had a limited impact on enjoyment and SDG-related understanding, they effectively boosted students' English-speaking confidence.

Comments from Participants

In addition to the closed questions, an open-ended question, 'What skills do you think improved in the lessons?' was included in the post-questionnaire. When asked about skills that improved as a result of the lessons, 21 out of 34 students mentioned that the lessons helped improve their English writing and expression skills. Comments on the post-questionnaire indicated that the lessons were favourably accepted by students. The comments below show that the students felt greater confidence in their English skills after the lessons. Comments by students were originally written in Japanese, but they were translated into English by the researchers for this paper.

- 'I have gained the ability to create English sentences on my own. I thought that if I used what I had learned so far, it would not be too difficult to create English sentences from the beginning.
- ·My writing skill improved a little. It was good to cooperate in a group to edit my writing.

 The following comments mentioned SDGs, suggesting that the lessons encouraged students to view them as personal issues:
 - ·I have gained the ability to think deeply about environmentally-friendly actions around me. I would like to actively take action on SDGs from now on.
 - 'I could learn what we can do and what actions corporations take to achieve SDGs.

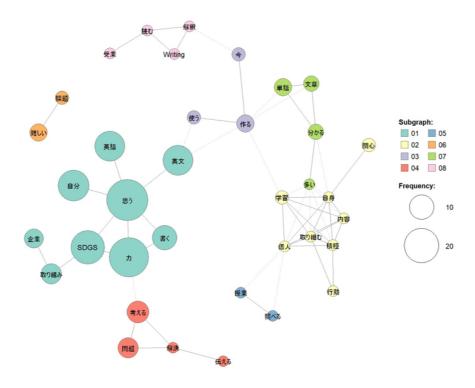
The comments below mentioned both the improvement of English skills and the SDGs.

·I was able to find things around me that were relevant to SDGs, and I improved my ability to create English sentences.

The ability to think about how to solve SDG problems and to try to communicate my ideas in a foreign language.

To examine the comments quantitatively, the text-mining software KH Coder by Higuchi (2016) was applied. Figure 8 shows the KH Coder results, which describes the text's characteristics. The larger the circle, the more frequently the words were used. The lines connecting the circles indicate how closely the words are related. Specifically, the words '思 ' (think)', 'SDGs', '力 (ability)', and '書 〈 (write)' are intimately connected. This indicates that students felt more engaged in writing skills than in other English skills (reading, listening, and speaking).

Figure 8. Results of KH Coder



Discussion

Regarding the first research question, 'Does engaging in SDG-focused lessons based on a government-authorised textbook improve students' interest in SDGs?', the questionnaire data did not reveal any significant differences in students' interest in SDGs. This may be owing to number of lessons being limited as students engaged with SDGs over only three sessions, there was not enough time to raise students' interest. However, students' post-lesson comments indicated a growing interest in the topic, and more students started paying attention to what individuals and companies can do to contribute to a sustainable society after participating in SDG-related lessons.

Concerning the second research question, 'Does engaging in SDG-focused lessons improve students' attitudes towards English learning?', the results of the questionnaires indicated that students' confidence in speaking English improved significantly, while their confidence in other skills such as listening, reading, and writing did not improve. Surprisingly, although there were not many opportunities for students to speak English during the lessons, only their confidence in speaking improved. When asked to exchange ideas about SDGs in the first and second lessons, the students tended to speak Japanese or read aloud what they had written on the worksheets. However, in the third lesson, when they read their English writing on the LoiLoNote School platform, the students attempted to speak to other students in the group. During the reading aloud activity, they may have felt that they could successfully convey their own opinions orally, which gave them confidence in speaking English. Another possible explanation for the improvement in speaking confidence is the indirect impact of other skills practised during the lessons, such as listening and writing. Writing activities, for instance, may have helped students internalise sentence structures and vocabulary, which were applied to speaking. Similarly, listening to an example script from a children's cafeteria may have exposed students to natural expressions and pronunciation,

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thereby increasing their readiness to use these elements in speaking. These interactions among language skills may have contributed to the observed improvement in speaking confidence.

The answers to the third research question, 'What features of effective lessons enhance student engagement in English classes?', were obtained from students' comments. Students found that writing their research results and ideas in English was beneficial for improving their English skills. In addition, the results of the closed questionnaires indicate that students highly regarded pair and group activities as necessary for improving English skills. This encourages teachers to employ collaborative activities in English classes for active engagement of students.

This study suggests that the following features are important for effective English lessons incorporating a Soft CLIL approach.

- 1. Providing opportunities for output (writing and speaking), with an appropriate level of input to aid students' expressions
- 2. Providing time to collaborate with others to make students engage deeply in class when they were required to express their ideas to each other
- 3. Using knowledge already learned
- 4. Incorporating a problem-solving activity
- 5. Addressing a topic students can think of as their own issue

Although this study suggests features of effective textbook use, it has some limitations. Because the study was class-based, the time spent on lessons was insufficient owing to the constraints of the school curriculum. Although students proposed their own ideas to achieve SDGs, they did not have time to practise them in the real world. If longitudinal project-based lessons could be incorporated into a year's curriculum, students would have the chance to implement what they proposed in class and practically engage in

HOTS. In addition, data analysis of the questionnaires was conducted with only the small number of students who attended all classes and agreed to participate in the study. Therefore, further longitudinal studies with more participants are warranted.

Conclusion

This case study explored a practical approach to using textbooks to nurture students' commitment to SDGs in English classes. The questionnaire results showed that students' confidence in speaking English improved, while students did not have many chances to speak English in the lessons. This indicates that even reading-aloud activities may contribute to improving spoken English if the text read aloud was written by students to express their own ideas to other students. This study found that students regard pair and group activities as necessary for improving English skills; as such, teachers are encouraged to employ collaborative reading-aloud activities in class. By engaging in such activities, students may feel that they are communicating in English, and the activities can serve as good rehearsals for real communication that students will experience in future. Further research is needed to confirm the effects of reading aloud on speaking.

Moreover, this study suggests that expressing one's ideas in English, supported by step-by-step instructions with concrete examples, can actively engage students in class. By using English vocabulary or phrases learned in the textbooks in order to convey their own messages in groups, students appeared to recognise the various ways in which English can be used to express different meanings. Such successful experiences can lead to a sense of self-efficacy for students.

Finally, this study provides insights into the effective use of textbooks with a Soft CLIL approach. When Soft CLIL is applied to English classes, cognitive dimensions such as LOTS and HOTS (Coyle et al., 2010) should be considered. It is necessary to incorporate

language activities and tasks that demand appropriate and varied levels of cognition in English classes. Further classroom practices are needed, particularly longitudinal studies aimed at enhancing students' perspectives of contributing towards a sustainable world.

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