

A Graduation Thesis Presented to the Graduate School of Language and Culture

Hiroshima Jogakuin University

In Partial Fulfilment of the Requirements for the Degree of Master of Arts

*The Application of CLIL into EFL
teaching practice at a Japanese junior
high school*

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Introduction

1.1 Context of the Current Study

Education in Japan is changing, including English education. Students are, it seems, being required to do more and more, and there is a need for more effective ways to learn English, not only to help students reach their goals, but to ensure that English education can be delivered effectively in the real settings faced by teachers throughout the country. Japan, unfortunately, is not generally considered to be a success story when it comes to English education. For this reason, many people are looking for new solutions to the problem of how to educate students in an effective way. One possible solution is Content and Language Integrated Learning (CLIL). It is a common idea in writing and research about language education that the best way to learn a second or foreign language (L2) is to use it rather than to study it in an abstract way. Whereas traditional methods separate target language from non-language content, CLIL provides both the cognitive foundation for language learning and the motivation for purposeful communication in a way that effectively and ambitiously develops verbal literacy and academic competence. CLIL, in various forms, has been and is being used in Japan, and there has been a lot of research related to CLIL. However, almost without exception, these approaches require special classes or special teaching materials. The author works as an English teacher at a high school. It is very important for schools to meet the expectations of students and parents, which is often measured by test scores rather than content. A lot has to be taught in a limited amount of time, and at the same time, teachers have to think about how CLIL to

be an effective way for students to learn English, there are often time, teacher-related, institutional, and even workplace cultural barriers to implementing it.

Given the above, the main purpose of this research is to look at the implantation of CLIL in a real teaching context, rather than as an idealised approach. It is difficult to implement all the methods in one class. So, by subdividing the elements of CLIL and incorporating them step by step, the benefits of CLIL could, potentially, be given to the students. To investigate the potential benefits of this approach, this research will analyse what students have learned by incorporating the CLIL method into the author's own classes. First, the suitability of the existing textbooks for CLIL will be investigated. The textbooks to be analysed will be those used by junior high school students. In order to confirm the universality of CLIL, it is desirable to analyse textbooks that are used by a larger number of children. However, when the author teaches, she uses the textbooks used by the students in the classes she teaches. This is because using other textbooks would violate the research policy of no special materials.

1.2 Research Questions

To investigate the above, the following research questions will be used:

- Research Question 1: *What is CLIL and how appropriate is it for Japanese English-language teaching?*
- Research Question 2: *To what extent are the existing textbooks suitable for CLIL?*
- Research Question 3: *How effective were the attempts to incorporate CLIL into the classes researched in this thesis?*

1.3 Thesis Structure

Including this chapter, the thesis is divided into five chapters: Introduction, Literature Review, Methods, Results and Analysis, and Conclusions.

The Literature Review (Chapter 2) contains five sections. First, basic information about CLIL is explained (2.1). The differences from other very similar methods (2.2) the various elements of CLIL (2.3), the appropriacy of CLIL in English education in Japan (2.4) and some information about relevant previous studies (2.5) are also explained.

The Methods chapter (Chapter 3) is divided into five sections, beginning with an explanation of the methods of analyses used (3.1). Following this, the system used for textbook analysis is explained (3.2), as well as the overall scoring system (3.3) and the system for evaluating the suitability of textbooks for CLIL-oriented classes (3.4). In the final section (3.5), we look at the plans for the classes taught as part of this research.

Chapter 4 (Result and Analysis) has five sections, beginning with the result of the overview analysis of books 1 to 3 (4.1). Following this, the results of the textbook analyses are given (4.2). Then, the results of the suitability of the texts for CLIL classes is shown (4.3). In the final sections (4.4 and 4.5), results from classroom activities and writing samples are provided.

In the final chapter (Chapter 5: Conclusions), we will turn to finally answer the research questions, and to reflect on the implications of the research.

1.4 Acknowledgements

I would like to express my deepest appreciation to my supervisor, Robert Dormer for his invaluable patience and feedback. I am also deeply indebted to Doctor Izumi g, who generously provided me with his knowledge and expertise. Additionally, this endeavour would not have been possible without the generous support from Hiroshima gg High school. I am also grateful to librarians, my classmates and peers, and especially my partner for both their moral support and inspiration. Lastly, I would be remiss in not mentioning my family, especially my parents. Their belief in me has kept my spirits and motivation high during this process.

Literature Review

The aim of this chapter is to provide readers with key background information on CLIL, including an introduction to what CLIL is and the context in which it emerged, how it differs from similar teaching approaches, the fundamentals of CLIL as practice (the ‘4 C’s’), as well as some information related to the issue of whether CLIL is an appropriate approach in Japanese teaching contexts.

2.1 CLIL: A Brief Introduction

According to the Japan CLIL Education Society, CLIL is an abbreviation for Content and Language Integrated Learning (Japan CLIL Education Society, n.d.). It is a general term for learning that combines content learning and language learning in subjects and themes. The origins of CLIL are to be found in 1994, in Europe. At that time, the Council of Europe decided to actively promote this strategy. It is an educational method that cultivates the four elements of subject content, language skills, thinking skills, and cooperative learning in a well-balanced manner by learning subjects in a non-native language (British Council, n.d.). In Japan, the use of the term and awareness of the method are gaining ground. CLIL tends to be used to describe a form of learning in which students learn about a theme or subject (mathematics, science, social studies, music, physical education, home economics, etc.) in a non-native language, usually English. The main characteristics of CLIL are that it focuses on the understanding of the learning content, on the learner's thinking and learning skills, on the development of the learner's

communication skills, and on the learner's awareness of cultural or intercultural aspects. It is possible to associate content that is not directly related to English, and if the associated content is something of interest or liking to the learner, or something that is highly relevant to his or her daily life, the learner may be more satisfied or have new motivation.

2.2 Distinguishing CLIL

Of course, there are many other approaches to content-based learning, and so it is important to be able to distinguish the specific characteristics that define and distinguish CLIL. CLIL-based teaching is often cross-curricular, and collaboration with teachers and classes in other subjects is essential. At the same time, teachers themselves need to be aware of social topics. To solve this, most Japanese schools delivering CLIL-oriented classes have two teachers in one class, one teacher who teaches subject matter, and one English teacher (Suzuki et al., n.d.). CLIL is often equated with immersion education and Content-based instruction (CBI). Strictly speaking, however, they are not the same. CBI is characterized by a content-oriented curriculum, in which content learning and language learning occur simultaneously. This seems identical to CLIL, so CLIL and CBI are sometimes considered to be the same. However, CBI is interpreted as “Content-oriented teaching methods”. It is based on the thought that language development requires both thinking and language skills. CBI was developed in the U.S. In the 1980s, when the communicative approach with its emphasis on meaning was popular in language education. Therefore, CBI is considered part of the communicative approach. The focus of CBI lessons is on the topic or subject matter. Learners learn about the topic using the

language they are trying to learn, not their native language, and this approach is seen as a tool to deepen their knowledge and to improve their linguistic competence in the target language. This is considered a more natural way to develop language skills and is similar to the way we originally learn our first language. In this way, CBI and CLIL were developed in different countries, and therefore have different developmental backgrounds (Nihongo-Applied Linguistics, n.d.). Immersion education and English as Medium of Instruction (EMI) focus on teaching subjects; CLIL aims at both subject education and language teaching, so it is about teaching subjects and foreign languages. In this light, CLIL falls somewhere between CBI/CBLT and immersion education/EMI. However, CLIL and immersion education have one thing in common: they are both student-centered learning methods, which means that children must be able to actively participate in the class in order for it to be successful. Therefore, it is important to be able to attract children's attention and interest in the class (IBS, 2021). In Japan and elsewhere, CLIL and other forms of content-based instruction are not well understood and/or distinguished from EMI. However, this is not such a big problem because a change in the definition will be beneficial. On the other hand, there are some things that should not be changed, and changing definitions can undermine the significance of the method (Lyster, 2018).

2.3 The '4 C's' of CLIL

According to the basic precepts of CLIL, four points, the so-called 4Cs, are important: Content, Communication, Cognition and Community/Culture (Watanabe et al., 2011).

Content refers to new knowledge, understanding and skills. It refers to the content of subjects studied by learners in CLIL classes. Communication is a linguistic component.

It is noted that most CLIL-based teaching programs place emphasis on actually using the language, such as through communicative activities. However, unless students know either precise grammar or enough vocabulary to express themselves and their views, this method does not work well. Therefore, it is often argued that the approach of “the three languages” is important, which includes: language of learning, language for learning, and language through learning. Language of learning is about important words and essential grammar items that relate to or are necessary to know in order to understand the topic being learnt. Language for learning is about expression and the study skills needed for learning, such as how to hold discussions or how to write papers. Language through learning is about combining and repeating language materials and study skills that have already been learnt over and over again. By reading materials, listening to lectures, discussing them, and then compiling them into reports and making presentations, students can combine the language and learning skills they have already learned and repeat them over and over again, and this will accelerate their language acquisition.

Cognition is thinking about an issue, and it can be divided into two ways of thinking: shallow/surface learning and deep learning. Shallow/surface learning means the understanding and memorization of knowledge, while deep learning means to connect or reflect critically on what has been learned with prior knowledge and experience. To explain the difference between these, Bloom’s Taxonomy is often used. In its revised form following Anderson’s adaptation, this theory proposes a system that classifies cognition into 6 aspects: Memory, Comprehension, Application, Analysis, Evaluation, and Creation. The first three of these (Memory, Comprehension, and Application) are called low-order thinking skills (LOTS), while the latter three (Analysis, Evaluation, and

Creation) are called high-order thinking skills (HOTS), and it is regarded as important to achieve a balance between them. For example, learning important words and phrases related to the topic and reading articles on the topic is a part of the LOTS, and analyzing the effects of policies on a topic or discussing new solutions is a part of the HOTS. As LOTS and HOTS indicate, there are different types of learning; it goes without saying that both LOTS and HOTS are important. Activities classified as HOTS are mostly acts of outputting knowledge and skills. Therefore, inputting more knowledge in activities classified as LOTS will lead to better success in activities classified as HOTS. On the other hand, if they do a lot of LOTS activities but do not have the opportunity to use the knowledge they have gained, they will forget it. Therefore, it is important to maintain a good balance between LOTS and HOTS.

Community/culture is about communities at various levels and the cultures that are rooted in them, and learning with an awareness of them is considered necessary. The word "community" can also be thought as an ability to work with others. Based on this interpretation, group work and other activities also fit into this category (Watanabe et al., 2011).

2.4 The Appropriacy of CLIL for Japanese Teaching Contexts

At present, Japanese society has no choice but to rely on foreign workers. In order to support the Japanese economy, young workers are being brought in from abroad, as there are simply not enough younger people in Japan to enter the workforce and fill many roles. According to the Ministry of Health, Labor and Welfare, the total number of foreign

workers in 2021 was 1,727,221, which represented the record high so far, and despite the COVID-19 situation (Ministry of Health, Labor and Welfare, 2022). As a result of flows of immigration, 2% of children born in Japan today have at least one foreign-born parent. This may seem small, but in 1987, when the Ministry of Health, Labor and Welfare began recording this data, the number was just 0.7% (e-Stat, 2020). This means that the proportion of children with at least one foreign-born parent has more than doubled in the past 30 years. This number is expected to increase further in the future, and therefore, Japan is expected to become a much more linguistically diverse society. This will make Japan more similar to Europe in some ways, where the CLIL method was developed. As has been mentioned, CLIL was born as part of the EU's language policy, which was based on bilingualism, and while it is understandable that the underlying philosophy of the CBI as a means of learning a second language is easier to incorporate into English classes, in the long run it is more likely that students will choose to learn a language other than English. Therefore, it is worthwhile to dare to incorporate CLIL, a learning method that can be applied to languages other than English. According to Lyster, preferred conditions for the introduction of CLIL methods are: teacher training and support, educational resources, and both teacher and student having a threshold level of proficiency (Lyster, 2018). However, compared to the expectations of the government and universities, the English language skills of students, teachers, and others involved are insufficient. Indeed, decisions regarding education policy in Japan are often made by top-down management styles that do not reflect the opinions of teachers and students. Many school board members, in fact, no longer actually teach in the field of education. However, policies in other countries are unlikely to reflect 100% of teachers' and students' opinions, and this may not be an issue unique to Japan.

In the first place, whole lectures do not necessarily have to be given in English. It would clearly be beneficial to supplement their L1 language in the lecture, and CLIL would be suitable to such a flexible approach. Moreover, for many Japanese schools, CLIL may not be a brand new teaching method at all. In Japanese classes, students may be assigned to read an expository essay on a subject that may also be connected to other subjects. According to Japan Educational Press, the most adopted Japanese textbook in Hiroshima public junior high schools in FY2021 was a textbook from Mitsumura Book Publishing (Japan Educational Press, 2020). The author counted the number of expository texts in these textbooks for grades 1 through 3 that could be connected to subjects other than Japanese. The results showed that 14 of the essays had topics that could be connected to science, social studies, IT, and other subjects (Kai, 2020). In class, students learn about the subject matter that the essays cover. In this way, cross-curricular learning is already taking place in the students' native languages. CLIL does these things in a language that is not the students' native language, so there may be some language difficulties. However, since cross-curricular teaching methods have already been established, CLIL is not an entirely alien teaching method to Japanese education.

2.5 Previous Research

This research refers to an existing (Mukundan et al., 2011) textbook evaluation checklist, which was designed to rectify the problems identified in the existing checklists for the evaluation of ELT materials, which were found to be problematic in terms of validity, reliability, and utility. A new checklist that overcame those problems was devised as a response. In addition, they also developed a checklist for the University Putra Malaysia's

(UPM) Teaching English as a Second Language (TESL) PhD students (four women and two men) and asked them to evaluate the checklist for clarity and comprehensiveness based on their extensive experience in teaching English. Then, based on their input, new items were added to or deleted from the checklist. The resulting checklist is presented in Appendix A. This checklist consists of two parts: general attributes and learning/educational content.

Methods

3.1 Analysis Overview

Before providing a detailed analysis, an overview analysis will be provided, covering the key aspects of face validity and content validity. Face validity is about whether a test appears to measure the intended aspects. This type of validity is related to whether the measurement is suitable for what it is assessing (Bhandari, 2022), meaning that face validity refers to physical characteristics such as appearance. It is how the textbook looks to the user and includes the pictures, fonts, and font size used in the textbook. Content validity assesses how effective it is. This is often qualitative since it focuses on aspects such as concepts and ideas (Nikolopoulou, 2022). Content validity is about the learner's interests, physical and mental development, and stage of growth. It is also about emotional growth, which increases cognitive load with development, and its relevance to learning goals and prior learning also includes some aspects of predictive validity.

Content validity will be explored from three elements: learning content/subject matter, learning style, and theme/topic. Learning content/subject matters refers to the learning content and language materials, and what kind of language and grammatical matters are dealt with. Learning style is about the form of learning and language activities. It is about which of the four skills (reading, listening, writing, and speaking) the task is based on, and whether it can be done by one person or is intended to be accomplished in collaboration with two or more people. Theme/topic is about the subject matter. It is about

what topics are covered in the passage and whether or not the textbook is appropriate for the level of the students who are expected to use it and their sentiments.

3.2 Textbook Evaluation

Table 1 below provides a summary of the title, goals, and key sentences of each unit of Books 1-3. Since Goals are written in Japanese in the textbooks, they have been translated into English. In this thesis, textbooks are also analyzed using two sets of evaluation criteria: affinity with CLIL; and evaluation of textbooks themselves. The reason for using two sets of evaluation criteria is that this is an effective way to realize the research goals of this thesis, since the research is to be conducted in a regular classroom, and so it will be useful to evaluate the materials in the teaching context as well as in terms of their general suitability for CLIL.

Table 1*Textbook: Key Information (Book 1)*

Unit	Title	Goals	Key Sentence(s)/grammar focus
1	“New School, New Friend” 中学校生活の始まり (Beginning of Junior High School Life)	Able to tell people what they usually do well and what they can do 自分が普段よくすることや、できることを伝えることができる。	I am... I like... Are you...? Do you...? I can...
2	“Our New Teacher” ALTのクック先生 (Meet Ms. Cook, the new ALT)	Able to introduce and ask about people and things around them 身近な人やものについて紹介したり、たずねたりすることができる。	This (that) is... He (she) is... What...? Who...? How...?
3	“Club Activities” 部活動 (Joining and introducing club activities they belong to)	Able to ask when and where, and ask for numbers いつ、どこなのかをたずねたり、数をたずねたりすることができる。	Where...? When...? I want to... How many...?
4	“Friends in New Zealand” ニュージーランドの中学校生活 (Life of middle school students in New Zealand)	Able to give directions to others, ask about time and their favorite things 相手に指示したり、時刻や好きなものをたずねたりすることができる。	Be... Come... Don't... What time...? What + 名詞...?
5	“A Japanese Summer Festival” 夏祭りの思い出 (A memory of summer festival)	Able to talk about places they've been and the things they've enjoyed there 行った場所や、そこで楽しんだことなどについて話すことができる。	前置詞 like... ing be good at...ing went, ate, saw, had, was

6	<p>“A Speech about My Brother” 兄の卓也の紹介スピーチ (An introduction speech by Takuya)</p>	<p>Able to ask about and tell about things and people except yourself and the other person 自分と相手以外の人やものなどについて、たずねたり伝えたりすることができる。</p>	<p>Takuya lives... Takuya does not... Does Takuya...?</p>
7	<p>“Foreign Artists in Japan” 日本に暮らす外国人アーティスト (International artists who lives in Japan)</p>	<p>Talk about someone except yourself and the other person, and ask which or whose it is 自分と相手以外の人について話したり、どちらなのか、だれのものかをたずねたりすることができる。</p>	<p>Do you know him (her) ? Which...? Who’s ticket...? mine (yours)</p>
8	<p>“A Surprise Party サプライズ誕生日パーティー” (Having a surprise birthday party for Meg)</p>	<p>Able to explain or ask about what you are doing 今していることについて説明したり、たずねたりすることができる。</p>	<p>I am watching... Are you taking...? What are you doing? How (What)...!</p>
9	<p>“Think Globally, Act Locally” 国際支援、水問題 (International cooperation and water issues (sanitation of water))</p>	<p>Able to explain and ask about what they want to do, and what they need to do したいことや、する必要のあることなどについて説明したり、たずねたりすることができる。</p>	<p>She wants (tries) to... What do you want to...? The children look happy.</p>
10	<p>“Winter Vacation” クック先生のロンドン旅行 (A new year vacation in London and in Japan)</p>	<p>Able to explain and ask about events in the past 過去の出来事について説明したり、たずねたりすることができる。</p>	<p>I visited... I saw... Did you...?</p>
11	<p>“This Year’s Memories” 一年の思い出 (Memories of 7th grade)</p>	<p>Able to describe past states and feelings and what they were doing at some moment in the past 過去の状態や気持ち、過去のある時点にしていたことについて説明することができる。</p>	<p>I was... Were you...? There is (are)... I was playing...</p>

(Kasajima et al., 2020a)

Textbook: Key Information (Book 2)

Unit	Title	Goals	Key Sentence(s)/grammar focus
0	“My Spring Vacation” 一年生のふり返し (A memory of spring break)		People are looking at the Tyrannosaurus.
1	“A Trip to Singapore” シンガポールへの旅行 (Sightseeing in Singapore)	Able to ask about and tell about vacation and weekend plans 休暇や週末の予定について、たずねたり伝えたりすることができる。	There are many good restaurants in Fukui.
2	“Food Travels Around the World” 食文化の歴史や変化 (A history and its change of worldwide food culture)	Able to write an introduction about their favorite foods and why they like them 好きな食べ物やその理由について、紹介文を書くことができる。	I am going to visit...
3	“My Future Job” 職業体験と将来の夢 (A career experience and a dream for the future, and a future of career with an improvement of Technology)	Able to ask about and tell others about their experiences and what they have learned 自分が体験したことや学んだこと等について、たずねたり伝えたりすることができる。	Are you going to visit...?
4	“Homestay in the United States” ホームステイでの国際交流体験 (International interaction experience through homestay)	Able to ask and tell about customs and manners 習慣やマナーについて、たずねたり伝えたりすることができる。	I will make...

- | | | | |
|---|--|---|-------------------------------------|
| 5 | “Universal Design”
ユニバーサルデザインの意義
(History and an importance of Universal Design) | Able to explain and express their own ideas about how to use and do about things that are familiar to them
身近なもの・ ことについて、使い方ややり方を説明したり、自分の考えを述べたりすることができる。 | I will show you... |
| 6 | “Research Your Topic”
好きなトピックについての調査と発表
(Survey and presentation about a genre of classmates’ favorite movie) | Able to explain about familiar things by comparing their characteristics
身近なことについて、特徴を比較しながら説明することができる。 | People call it the Singapore Flyer. |
| 7 | “World Heritage Sites”
世界遺産の特別な価値
(World Heritage Sites in the world and a special value of them) | Able to introduce World Heritage Sites in various location
各地の世界遺産を紹介することができる。 | When I watch TV,... |

(Kasajima, et al. 2020b)

Textbook: Key Information (Book 3)

Unit	Title	Goals	Key Sentence(s)/grammar focus
0	“Three Interesting Facts about Languages” 1・2年生の振り返り (Languages in the world)		About 7000 languages are spoken in the world.
1	“Sports for Everyone”人々を結びつけるスポーツ の力 (Technologies and players for challenged sports)	Able to tell the right plan for the person based on what they have experienced before これまでに経験したことにもとづいて、相手に合っ たプランを伝えることができる。	I have seen... Asami has never seen... Have you ever seen...? ... Makes me happy. Athletes show us that...
2	“Haiku in English” 俳句の魅力と英語の俳句 (A charm of Haiku and Haiku in English)	Able to tell about what they have always loved and what they have been working on. ずっと好きなことや、これまで取り組んできたこと について伝え合うことができる。	I have just finished... Have you finished... yet? I have lived... How long have you lived...? I have been reading...
3	“Animals on the Red List” 絶滅のおそれのある動物たち (protecting endangered Animals)	Able to write articles adding their own opinions and ideas 自分の意見や考えを加えて記事を書くことができ る。	It is important for us to understand... I want everyone to know... Let us give you... People helped Toki live...
4	“Be Prepared and Work Together” 災害時の外国人支援 (Support for international residents in Japan in times of disaster)	Able to explain what the signs mean 標識が何を意味しているかを説明することができ る。	I know where the local shelter is. Tell me what you have done. A police officer passing by instructions given in English

- 5 “A Legacy for Peace”
ガンディーの功績と受け継がれる理念
(A life of Gandhi and his Philosophy)
- 6 “Beyond Borders”
国を越えて助け合う大切さ
(A campaign about sending Japanese school
backpacks to children in Afghanistan)

Able to add detailed information about people and things and describe them
人や物について詳しい情報を加えて説明することができる。

Describe fictitious situations and express thoughts and opinions
架空の状況について説明したり、感想や意見を述べたりすることができる。

This is a picture I found...
Gandhi is a man who has...
A movie that (which) makes...
A picture that (which) I found...

I wish I could go...
I wish I had...
If I were you, I would ask...
If I had..., I would donate~.
Many things that we see every
day come...

(Kasajima, et al. 2020c)

Table 2
Evaluation Criteria

Evaluation Criteria (1)

1	Practicability	How many of the 7 areas of the Courses of Study topics are included in the subject matter and input material?
2	Language Form	What is the pattern of the form of the language (input) material and textual information (discourse) in the textbooks, such as dialogue, narrative, expository, or critical essays?
3	Compatibility	How CLIL oriented is it? Why?

Evaluation Criteria (2)

1	Principle	1-1 It meets the specifications of the syllabus (the Course of Study by MEXT)
2	Tasks	2-1 Learner-friendly and clear instructions are provided. 2-2 Tasks can be simple to complex. 2-3 The time necessary for task completion is assumed. 2-4 Cultural considerations are taken into account.
3	Topics	3-1 The language in the textbook is authentic. 3-2 The situations created in the dialogues sound authentic. 3-3 The materials are up-to-date. 3-4 Topics in a variety of fields are covered. 3-5 Pre-activity vocabulary is appropriately provided and explained.
4	Contents	4-1 Fun elements are included. 4-2 The level of difficulty of the English vocabulary and grammar used is appropriate. 4-3 The load (number of new words in each lesson) is appropriate for the level. 4-4 The example sentences are interesting. 4-5 It contains practical content.
5	Grammar Explanation	5-1 Grammar is explicitly introduced. 5-2 Grammar is reworked implicitly. 5-3 Grammar is spirally reworked.
6	CLIL Orientation*	6-1 Contains content that can be connected to other subjects. 6-2 There are elements that suit 4Cs, Content, Communication, Cognition and Community (the beliefs of CLIL)- 4 aspects: <ul style="list-style-type: none"> • The chapter can be linked to two or more other subjects • The chapter has speaking activities • The chapter incorporates both LOTS and HOTS aspects • The chapter mentions Japanese or world cultures

*New Horizon series only

3.2.1 Evaluation 1

For assessing affinity with CLIL, each chapter will be evaluated in terms of 3 criteria, as shown in Table 2. The first is measured by how well the topics in each chapter relate to the seven areas specified in the study guide. The Course of Study says the following with regards to teaching materials, “pick up proper and various topics about everyday life, manners and customs, stories, geography, history, traditional culture and natural science, etc. of the people of the world, mainly people who use English and Japanese people, in accordance with the developmental stages and interests of the students” (MEXT, 2022b). One point is given if one area can be related, and four points if it can be related to six or more.

Second, the input material in the textbook is measured by the form of writing it uses. Conversational texts are not useful in a CLIL-style class. If it contains text in a style other than conversation, 2 points will be given; if it includes more than 3 different types of texts, 4 points will be given.

The third measure looks at whether the student was suited to the CLIL method of teaching from an overall perspective, which was evaluated based on the total score calculated from 1 and 2. If the total score was 2 or less, 1 point is given; if the total score was 7 or more, 4 points are given.

3.2.2 Evaluation 2

Based on the criteria introduced in the previous research conducted by Mukundan, Nimehchisalem and Hajimohammadi, this thesis also made some criteria to evaluate the textbooks as shown in Table 2.

The scoring for Assessment 2 is mostly as written, but also, a special criterion item will be described. *Principle* measures whether the goals of the Courses of Study are being met. However, the Courses of Study have a wide range of contents, and it is difficult to be sure that it matches everything in the Courses of Study. Therefore, we examined whether there are activities to cultivate the "zest for life" that the Courses of Study seek to foster, i.e., independent and interactive learning and the ability to think, judge, and express oneself. Proactive and interactive learning can be achieved through pair work. Thinking, judgment, and expression skills can be fostered by using what has already been learned to express one's own opinions and arguments. One point is given for an activity that is designed for or can be used as pair work, two points are given if the instructions call for pair work, three points are given for an opportunity for students to think independently, in addition to pair work, and four points are given for an activity in which the students express their own ideas in writing.

The fourth item in the task, *Cultural Considerations* can be interpreted in a variety of ways. In this study, we anticipated an increase in the diversity of students' backgrounds, and we are trying to see if students can make connections to a number of backgrounds and identities. Chapters that have difficulty doing so are given 1 point, while Chapters in which it is clear that cultural diversity is warranted are given 4 points.

The CLIL-orientated items are divided into two sections. The first of these, 6-2, measures whether the chapter is consistent with the "4Cs" of CLIL, and so it looks at whether:

1. The chapter can be linked to two or more other subjects
2. The chapter has speaking activities
3. The chapter incorporates both LOTS and HOTS aspects
4. The chapter mentions Japanese or world cultures.

This is very similar to Evaluation 1, but the main focus here is on whether or not it includes content that is either intercurricular or cross-curricular.

The total number of "yes" answers to these four categories is given as the score.

3.3 Scoring System

For both Evaluation 1 and Evaluation 2, a 4-point scale is used. Items that do not have concrete measurable numerical results are called constructs, and are calculated using the rating scale method (a format in which two words with opposite meanings are placed at both ends, and the respondents are asked to answer in a format with a 5- to 7-point scale separating the two words). There are two types of scales: a 5-point or 7-point scale with "neither" or "don't know," and a 4-point or 6-point scale without such items, in which the results are obtained in both directions. When the scale is expressed numerically rather than verbally, there is a vulnerability in that it is not clear whether the number 0 means

"neither" or "don't know". Basically, the nature of the object to be measured should be taken into consideration when deciding which scale to measure. In order to prevent confusion between "neither" and "don't know," a four-step method with no intermediate value was used for this measurement. If a result corresponding to "don't know" is measured, it will be marked as such (Haebara, 2001).

3.4 The Textbooks & CLIL Classes

There are a lot of texts made especially for CLIL-oriented classes. In this thesis, two of them that are appropriate for junior high school students are going to be examined.

In this paper, the CEFR criteria will be used to select materials appropriate for the English level of Japanese junior high school students. The CEFR is currently widely used as an international guideline for determining the level of proficiency of learners of a foreign language (4 skills, 2018). According to the 2021 English Education Status Survey conducted by the MEXT, 47.0% of junior high school students were at or above the equivalent of CEFR A1 level (Eiken Level 3), and 46.1% of high school students were at or above the equivalent of CEFR A2 level (Eiken Level 2) (MEXT, 2022a). Based on these results, it can be said that selecting A2 level materials is appropriate for the English level of Japanese junior high school students. From this, this thesis will compare New Horizon and two textbooks assuming CLIL-oriented classes, and find some similarities and differs. The following table shows the chapter titles and topics for each of the two texts analyzed, *Breakthrough to CLIL for Biology* and *Wider World American Edition*. *Wider World American Edition* has a category called CLIL type on its Table of Contents page, which is also shown in the table below (Zervas et al., 2019).

Table 3
Unit Titles
 (Biology Textbook)

Unit	
1	Classification
2	Cell structure and function
3	The chemicals of life
4	Animal nutrition
5	Plant nutrition
6	Transport in animals and plants
7	Respiration
8	Coordination and homeostasis
9	Reproduction
10	Inheritance and evolution
11	Ecology

Unit Titles, Topic, CLIL-Type
 (Wider World American Edition)

Unit	Title	Topic (Vocabulary)	CLIL type
1	Family and friends	Talk about family	ART: Families in Art
2	My things	Clothes	GEOMETRY: Shapes
3	In the house	Rooms and things in the house	SCIENCE: Materials
4	Things I can do	Actions	MUSIC: Musical instruments
5	My day	Daily activities	TECHNOLOGY: The internet
6	Animals	Wild animals	SCIENCE: The Environment
7	Love to learn	Classroom objects and school subjects	PHILOSOPHY: The first school
8	I'm playing soccer!	Sports	SPORTS: Sports equipment

3.5 Classes

Following the analysis of textbooks using the system outlined above, a plan was then devised to investigate the implantation of several CLIL-based classes. In order to conduct this stage of the research, data was collected on the implementation of two textbook units, each being used over four class periods of 45 minutes each, meaning that in total, eight 45-minute classes were included in this stage of the research. The textbook used was Crown Logic and Experience I, and the units were Unit 4 (Save our Planet) and Unit 5 (Volunteer for what?) (Yokokawa, 2022). In each case, we begin by watching a short video related to the theme of that unit, after which the students are asked to, in groups, look at graphs/charts and read text containing information related to that unit. Then, they work individually to create sentences reflecting their own understanding and ideas, which they then share with the whole class. Unit 4 is a chapter on environmental issues, a theme that is often covered in CLIL method classes.

Therefore, in order to test the adaptability of this method in a topic that is not generally covered in CLIL-focused classes, I also included Unit 5, which is about volunteer activities, which is not a common theme.

At the end of each unit, a questionnaire was administered to determine how the students felt about the class and what they learned from it. Appendix D shows the questionnaire. Each Questionnaire has 10 questions. In summary, the questions are structured as follows:

- Question 1 asks about the clarity of the reading activities. In the class of Lesson 4, a pie chart in the handout that shows the percentage breakdown of plastic debris found in the ocean was shown. In the class of Lesson 5, the advertisement of summer volunteers for high school students was shown.
- Question 2 asks if the reading activities helped students learn something new.
- Question 3 asks about the clarity of the video related to the topic. In the class of Lesson 4, the video about issues of microplastics were shown. In the class of Lesson 5, the video about volunteering at cats and dogs' shelters were shown.
- Question 4 asks if the video related to the topic helped students learn something new.
- Question 5 asks if the activity of writing a short essay and giving a speech on a given topic helped them learn something new. In the class of Lesson 4, they wrote about an environmental issue that interests the student. 8 major environmental issues were given as a choice, but students were welcome to investigate other issues if they wanted to. In the class of Lesson 5, they wrote about volunteer work that students themselves would like to participate in. Students had to choose 1 volunteer work that actually exists, and that should be a volunteer that high school students are allowed to join.
- Question 6 asks if the activity of writing a short essay and giving a speech helped them to improve their English.
- Question 7 asks those who chose "agree" or "somewhat agree" in the one previous question (the question asked) what specific skills they thought they had gained. Students were asked to choose all five options that applied to them. If there is no option that applies to their idea, they write it in the "Other" section.

- Question 8 asks whether students got the core idea of each topic or not. In the class of Lesson 4, they are asked that their actions were connected to environmental issues and daily life. In the class of Lesson 5, they are asked if they found that they can participate in society even through small activities.
- Question 9 asks if the students would be willing to try something related to the topic. In the class of Lesson 4, they are asked if they have some personal initiatives to protect the earth and the natural environment. In the class of Lesson 5, they are asked if they want to participate in the volunteers students chose as the subject of their essay.
- Question 10 asks students to tell their thoughts and opinions about the activities they did in this lesson.

The answers will be categorized and analyzed in terms of cognitive and affective aspects. Student writing samples were also collected from both units. Students were scaffolded somewhat through being given a preparation sheet (Appendix C), since it is often difficult for students at this level to independently write sentences in English without assistance. The sheet allowed them to plan in the L1, and write a few keywords in English, also, that would assist them when they come to write their own sentences in English. Writings are evaluated in two ways. First, they are evaluated using the Flesch-Kincaid Grade level, a measure of the readability of English texts. Scores on this index are expressed in terms of the U.S. grade system (1 for first grade elementary school students and 7 for first grade junior high school students). For example, a score of 8.3 means that the English text can be understood by an average 8th grade student in the U.S. (2nd grade in junior high school in Japan) (A&People, 2020). The score is calculated using the following formula: $0.39 \times$

(average number of words per sentence) + 11.8 x (average number of syllables per word) - 15.59. Text was entered into a free online score calculation service (Lumos Learning, n.d.). In the second stage of evaluation, evaluation criteria adapted from Eiken test writing evaluation systems (Nihon Eigo Kentei Kyokai, n.d.). The three elements are: first, whether the topic being written about fits the instructions given in question; second, whether detailed information about the topic is written; and finally, whether vocabulary and grammar usage are correct. These are adapted from the Pre-2 Eiken level, which corresponds to a CEFR level between A2 and A1. The first criterion looks at the students' understanding of the purpose of the activity. The second criterion measure student interest, assuming that more detailed information reflects better research, which is in turn, a reflection of their interest in the topic. The final criterion aims to evaluate whether the assignment is providing practice for English writing. However, some students use translation websites, so the correctness of grammar and vocabulary is not necessarily based on their skills and knowledge. In all three cases, 4-point scales are used. The higher the score, the more positive the answer to the question; the lower the score, the more negative the answer. There were 18 students in total in the class, with 16 responding to the questionnaire related to Lesson 4, and 17 responding to the questionnaire related to Lesson 5 . Appendix E provides brief teaching plans for Lesson 4 and Lesson 5. 1 to 2 classes were delivered beforehand, but these mainly dealt with grammatical issues, so they are omitted.

Results & Analysis

4.1 Analysis Overview

4.1.1 Book 1

In this book, the tasks of reading, listening, writing, and speaking are well balanced and integrated, and there are pair work activities on almost all pages. There are two types of tasks: one that can be completed in each class and the other that requires a little more time and effort. The latter has two or three patterns employing any one of the four skills. The glossary studied at elementary school is reposted with another list of new words, both at the end of the book. They are easy to understand at threshold levels. The cognitive load gradually increases, the text gets longer, and there are some essays in the end, not just conversational sentences. Some contents are intended for the Common Test for University Admissions, such as reading a map, reading a chart and choosing a climbing route. The picture of a nurse shows a male nurse, which is appropriate for the current society.

4.1.2 Book 2

This book has a small font and the amount of text is greater than in Book 1. The text is arranged on one side of the page, but compared to Book 1, the space between lines is

smaller, and passages occupy more space per page. The picture of a politician is a woman, which is appropriate for the current society. The frequency of pair work is the same as in Book 1. The content is more relevant to students' real lives and more challenging than in Book 1, such as weather forecasts, transit information, and product advertisements. The list of words learned in elementary school is also in this book.

4.1.3 Book 3

From Book 3, the word "pair" is no longer used, but instead "classmates" is used. This is thought to give more flexibility to allow not only pair work, but also group work. This book has smaller spaces and fonts, and the amount of text is greater than in Book 2. At first, the text fits on one side of the page, but as the chapters progress, the text becomes more spread out. The content of Book 3 is more challenging than in Book 2, but the content is more connected to society and other subjects, such as the food chain, the Red List, disasters, Japanese culture, energy issues, the Paralympics, international contributions, elections, and the SDGs. In addition, activities that use two or more of the four skills at the same time, such as debates and interviews, appear in the book. There is also a list of words learned in elementary school, and a three-year summary of words and expressions is also included at the end of the book.

4.2 Evaluation Results

Table 4

Evaluation Results: Book 1

Evaluation 1

Unit	1	2	3	4	5	6	7	8	9	10	11
Practicability	1	1	1	2	2	2	2	1	2	2	1
Language form	1	1	1	1	1	1	1	1	1	1	1
Compatibility	1	1	1	2	2	2	2	1	2	2	1
Total	3	3	3	5	5	5	5	3	5	5	3

Evaluation 2

Unit	1	2	3	4	5	6	7	8	9	10	11
1-1	4	4	3	4	4	3	3	4	4	4	3
2-1	4	4	4	4	4	4	4	4	4	4	4
2-2	3	2	3	3	4	4	4	3	4	4	4
2-3	3	3	3	3	3	3	3	3	3	3	3
2-4	1	1	2	2	2	2	3	2	3	3	3
3-1	4	4	4	4	4	4	4	4	4	4	4
3-2	4	3	4	3	3	3	3	4	3	3	3
3-3	4	4	4	4	4	4	4	4	4	4	4
3-4	1	2	2	4	3	4	4	3	4	3	2
3-5	4	4	4	4	4	4	3	4	4	4	4
4-1	4	4	3	4	4	3	3	4	4	4	4
4-2	4	4	4	4	4	4	4	4	4	4	4
4-3	4	4	4	4	4	4	4	3	4	4	4
4-4	3	3	3	3	3	3	3	4	3	3	3
4-5	4	4	4	4	3	4	3	4	4	4	4
5-1	4	4	4	4	4	4	4	4	4	4	4
5-2	3	3	3	3	3	3	3	3	3	3	3
5-3	3	3	3	3	4	4	4	4	3	3	3
6-1	1	3	2	3	3	3	3	2	3	2	2
6-2	2	3	2	4	3	4	4	2	4	3	2
Total	67	66	65	71	70	71	70	69	73	70	67

Evaluation Results: Book 2

Evaluation 1

Unit	0	1	2	3	4	5	6	7
Practicability	2	2	2	2	2	2	3	3
Language form	1	3	3	3	3	4	4	3
Compatibility	3	3	3	3	3	3	4	4
Total	6	8	8	8	8	9	11	10

Evaluation 2

Unit	0	1	2	3	4	5	6	7
1-1	3	4	4	4	4	4	4	4
2-1	4	4	4	4	4	4	4	4
2-2	3	4	4	4	4	4	4	4
2-3	4	3	3	3	3	3	3	3
2-4	3	4	3	3	3	4	3	3
3-1	4	4	4	4	4	4	4	4
3-2	4	3	3	3	4	3	3	3
3-3	4	4	4	4	4	4	4	4
3-4	3	4	4	4	3	3	4	4
3-5	4	4	4	4	4	4	4	4
4-1	3	4	4	4	4	3	4	4
4-2	4	4	4	4	4	4	4	4
4-3	4	4	4	4	4	4	4	4
4-4	3	3	3	3	4	3	3	3
4-5	3	4	3	3	4	4	4	3
5-1	4	4	4	4	4	4	4	4
5-2	3	3	3	3	3	3	3	3
5-3	3	3	3	3	3	3	3	3
6-1	2	3	3	3	3	3	3	3
6-2	3	4	4	4	4	3	3	4
Total	68	70	68	72	74	71	72	72

Evaluation Results: Book 3

Evaluation 1

Unit	0	1	2	3	4	5	6
Practicability	2	2	3	4	2	2	4
Language form	1	4	4	4	4	4	3
Compatibility	2	3	4	4	3	3	4
Total	5	9	11	12	9	9	11

Evaluation 2

Unit	0	1	2	3	4	5	6
1-1	3	4	4	4	4	4	4
2-1	4	4	4	4	4	4	4
2-2	3	4	4	4	4	4	4
2-3	4	3	3	3	3	3	3
2-4	3	3	3	3	4	4	3
3-1	4	4	4	4	4	4	4
3-2	3	4	4	4	4	3	3
3-3	4	4	4	4	4	4	4
3-4	4	3	3	3	4	4	4
3-5	4	4	4	4	4	4	4
4-1	3	3	4	4	4	3	4
4-2	4	4	4	4	4	4	4
4-3	4	4	4	4	4	4	4
4-4	3	3	3	3	3	3	3
4-5	3	3	3	3	4	4	4
5-1	4	4	4	4	4	4	4
5-2	3	3	3	3	3	3	3
5-3	3	3	3	3	3	3	3
6-1	3	3	4	4	4	4	4
6-2	3	3	4	3	3	4	4
Total	69	70	73	72	75	74	74

Table 5 below shows the average of the result of both evaluation 1 and 2 for each book, and Table 6 shows the number of chapters with a score of 71 or higher in Scale 2 and the highest score in each book.

Table 5

Evaluation Averages: Books 1-3

	Evaluation 1 (Max: 12 Points)	Evaluation 2 (Max: 80 Points)
Book 1	4.1	69
Book 2	8.5	70.8
Book 3	9.4	72.4

Table 6

Chapter Scores/Highest Scores: Books 1-3

	Chapters with >70	Highest score
Book 1	3/11 (27%)	73
Book 2	5/8 (63%)	74
Book 3	5/7 (72%)	75

As the above shows, Book 3 has the highest scores. This shows that the higher the level of the textbook, the more suitable it will likely be for CLIL-oriented classes. Considering the topic dealt with in Book 3, some topics (e.g., haikus and endangered animals) could easily be linked to Japanese and Biology. However, even other topics from others (e.g., international cooperation) could be linked to social studies, ethics, and other subjects. In other words, it is important to consider that the suitability of a topic for a CLIL-oriented class may depend on how the topic is related to the specific students and context.

4.3 CLIL Suitability Analysis Results

4.3.1 Breakthrough to CLIL for Biology

The introduction for teachers states that *Breakthrough to CLIL for Biology* can be used for content and language learning in science studies for L1 English students or in CLIL courses for L2 English children, that it covers what a 14-16 year old student would learn in a biology class, and that it can be incorporated into a class or used as homework. It is not intended as preparatory material, so it is preferable to work on previously learned topics. The chapters are divided roughly into topics, and there is no continuity between chapters. The chapters are divided into sections by topic and are not sequential, so they can be skipped or moved back and forth depending on the progress of the student. Also, unlike *New Horizon* and *Wider World*, there is supplemental material available, so some parts do not fit well with the criteria of Evaluation 1 and Evaluation 2.

The explanation for students is written for L2 students. The explanation is as follows. The exercises will help your English skills in different ways. They will:

- help you understand the meaning of important words
- help you to use certain types of words correctly, like nouns and adjectives
- help you to construct sentences correctly
- help you to construct whole passages of text
- give you practice in reading text and extracting information from it

(Broderick & Chadwick, 2015)

Since this material can also be used as an English learning tool, and answer key is given, and it is explained that the answers written by the students may not be word for word the same as the answers in the book. In such cases, the answer key is given as a hint to check whether the answer is correct or not, and students are instructed to ask the teacher if they still cannot understand the answer after looking at it.

4.3.2 Wider World

This textbook presents a table that divides each chapter into Vocabulary, Grammar, Communication, Reading and Vocabulary, Listening and Writing, and CLIL Review content, with two pages of Grammar per chapter, in a double spread. The content is more LOTS listening and HOTS writing (fill-in-the-blanks format), with few long sentences in the Reading section. Pair work was less frequent than in *New Horizon*, although they were similar in that students have online access to the sources, so they can study listening at their own pace. This is the most elementary book in the *Wider World* series, so the content is also elementary. However, I feel that it is a good choice of topics, neither too easy nor too difficult for elementary to junior high school students to study. At the end of each chapter, there is a page entitled “CLIL” that follows the topics covered in that chapter, with content and activities specifically framed in terms of the CLIL approach. All of the activities on that page are designed to deepen students' learning about the topic. There is a section called "And you?", where students can express their opinions. It consists mainly of questions and assignments that use the three skills of reading, listening, and writing. There are some activities that use speaking skills, such as presentations and discussions, but some pages don't have them.

Since *Biology* is a workbook, it will be compared and discussed with *Wider World*, which is similar in character to *New Horizon*. Regarding new words, in *New Horizon*, new words are listed on the page. I think this is based on the assumption that the teacher will cover them in detail in class. In *Wider World*, on the other hand, at the beginning of each chapter,

students are required to practice writing words related to the topic, such as naming things given as pictures.

Regarding dialogue, in *New Horizon*, the dialogues are written conversations, but in *Wider World*, the pictures are divided into frames with speech balloons, like in a comic book. However, both dialogues have a storyline. Regarding Activity, the activities in *New Horizon* consist mainly of reading the dialogues and making English sentences using the grammar taught in the chapter. The number of activities usually fits on one side of the page. *Wider World*, on the other hand, has four pages with dialogues, questions about the dialogues, and questions for grammar practice. After those pages, there is one page each for communication, reading comprehension, and listening and writing. The Listening and Writing pages have activities in which students write a coherent number of sentences. However, there is little connection between the listening questions and the activities. The writing assignments are designed to help students synthesize what they have learned in the chapter.

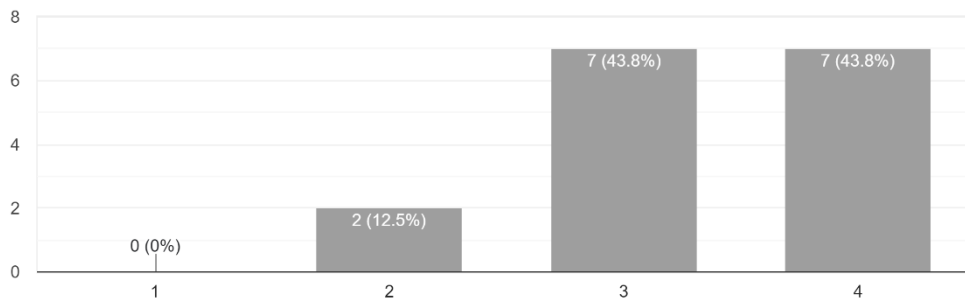
4.4 Questionnaire Results

4.4.1 Lesson 4

The following data are from the Lesson 4 questionnaire.

Q1: Was the graph of the breakdown of plastic garbage found in the sea easy to understand? 1= completely disagree 4= completely agree

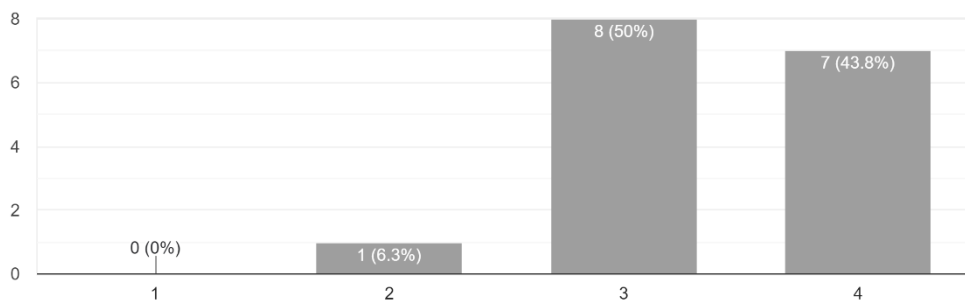
16 responses



As the above shows, most students answered that it was easy to understand.

Q2: Do you think the graph of the breakdown of plastic garbage found in the sea has triggered you to know something new for you? 1= completely disagree 4= completely agree

16 responses

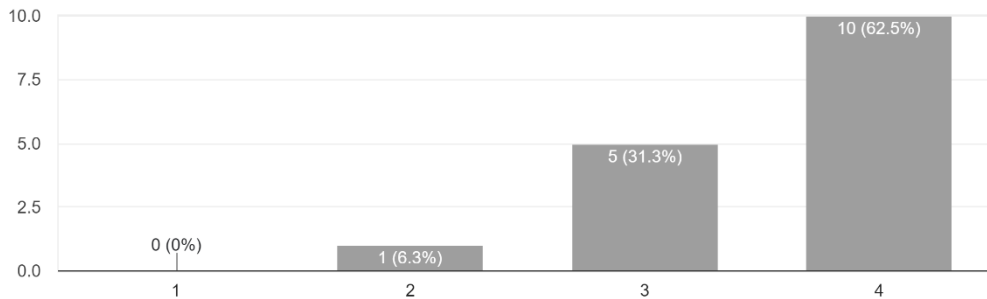


As the above shows, most students responded that it allowed them to learn something new. The purpose of this pie chart was to let students know that companies and business owners produce more marine debris than households. It goes without saying that each of us must work to reduce our plastic waste. However, the intention was to make students

aware that companies and governments also need to work to reduce plastic waste. It is assumed that the one respondent who answered 2 (somewhat disagree) either already knew this or couldn't realize the intent of this assignment.

Q3: Was the video about micro plastic problems easy to understand? 1= completely disagree 4= completely agree

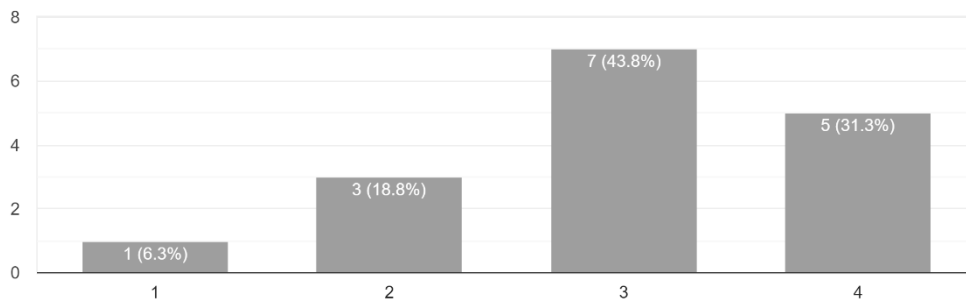
16 responses



As the above shows, most students answered that it was easy to understand.

Q4: Do you think the video about microplastic problems has taught you something new? 1= completely disagree 4= completely agree

16 responses

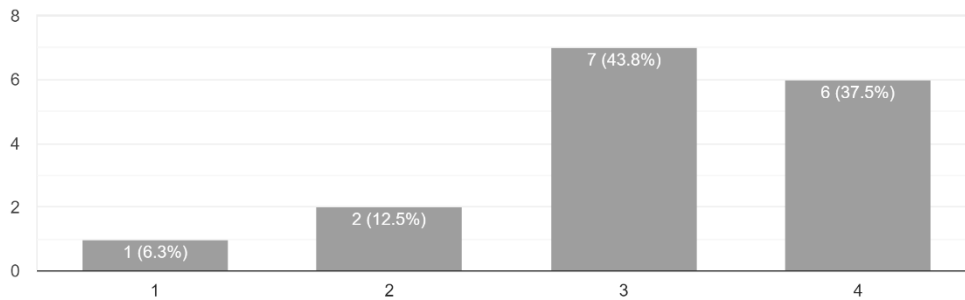


As the graph shows, 4 students (the sum of students who scored 1 or 2) responded that it was less helpful for them. Textbook dialogues describe microplastics, but they do not provide detailed information about them, such as where they are produced and how they flow into the ocean. Therefore, the author showed the students a short video about microplastics, or Nurdle, produced by TED-Ed to deepen their understanding.

The issue of microplastics is well known, so students may have already learned or read about it in middle or elementary school.

Q5: Do you think the activity about environmental issues you are interested has taught you something new? 1= completely disagree 4= completely agree

16 responses

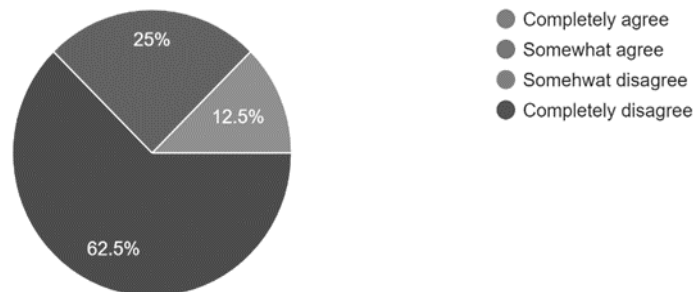


As the above shows, most students answered that it helped them learn something new.

To deepen the students' learning, the author asked them to choose one of the eight major environmental issues in which they were most interested and to write a short essay about it. In order for the students to learn how to cite in their essays, they had to cite numerical data in their essays. The data had to be from newspapers (either print or internet), books, or credible organizations (government, NPOs, etc.). The data was mainly used by the students to support their arguments and to prove that the environmental issue was one that needed to be tackled. Students also had to write about what they should do to solve the environmental problem. This was to ensure that the students had a good understanding of their chosen topic and to let them realize that it is a problem that is close to their lives.

Q6: Do you think the activity where you share ideas about the environmental issues you are interested in has helped improve your English skills?

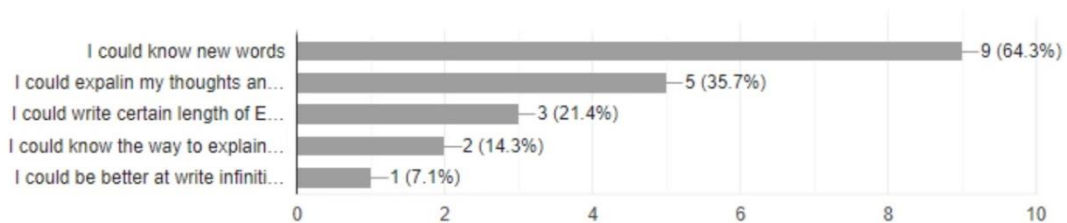
16 responses



As the above shows, 87.5% of students answered that it helped them to improve their English.

Q7: In Q6, those who answered "Completely agree" or "Somewhat agree" What kind of improvements do you think you have made? Please select all that apply from the following list. If you have other ideas, please write freely by selecting "Other".

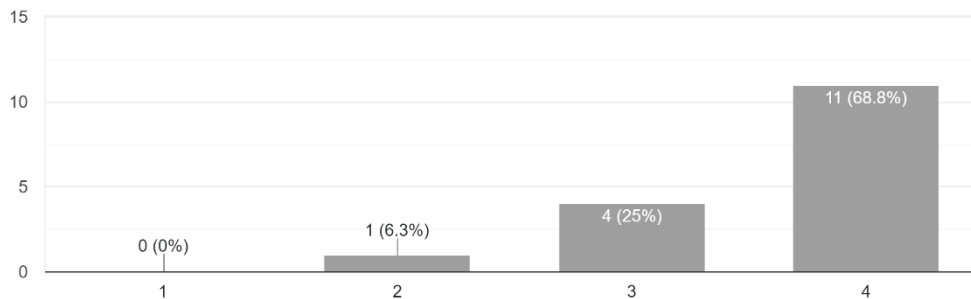
14 件の回答



As the above shows, more than half of students answered that they learned new words. Also, many students answered that they learned how to write sentences with a certain number of passages in English. Some students also answered that they learned how to say large numbers and decimal points in English, or that they are doing better at writing sentences with infinitives.

Q8: Have you found that each individual's actions are linked to environmental issues and daily life? 1= completely disagree 4= completely agree

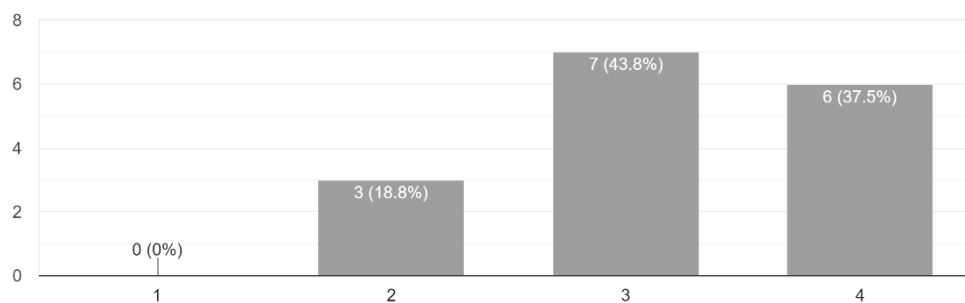
16 件の回答



As the above shows, almost all the students answered that they found a connection between environmental issues and their daily lives. The results indicate that the students learned through both what they learned and the assignments they did in class about the importance of individual actions in solving environmental issues.

Q9: Would you try to do something personally to protect the earth and the natural environment? 1= completely disagree 4= completely agree

16 件の回答



Compared to the results of the previous question, a slight increase in the number of students with negative answers can be seen. This shows that what they learned does not always connect to their actions. Question 10 received 15 answers. They were analyzed separately in respect to several elements. Answers with multiple elements were classified by element. The (translated) results are as follows:

Learning with others:

- *It was good to hear everyone's presentation.*
- *I want to do group work next time.*

Positive views on receiving information through videos:

- *It was fun to watch videos in English and I wanted to watch many others because it was a good way to learn English and the environment.*
- *Watching the videos in English was very good. I especially liked the part that I could listen to English while watching the video.*

Difficulty in writing essays in English or using words they do not know:

- *It was difficult to look up and make English sentences.*
- *It was difficult to make sentences and read them.*
- *The part of thinking of explanations by writing English sentences by myself was difficult.*
- *It was a little difficult because I had to write and summarize quite long sentences.*
- *It was difficult to read words I didn't know.*

Opinion that it is a good opportunity to write essays in English and words they do not know:

- *Reading graphs in English was difficult, but I was able to read them little by little.*
- *It was difficult to explain the contents of the graphs, but it was good to know new words.*
- *When I write sentences for the EIKEN writing test, I write what I want to write using words I can write, but this time I was able to use words I didn't know while reading the graphs.*
- *I was glad that we were given handouts that summarized grammar.*
- *I think it helped me to understand the different meanings of words and grammar. It was also good practice to use different expressions in one sentence.*
- *It was fun and practical to write by myself.*

Interest in the subject matter:

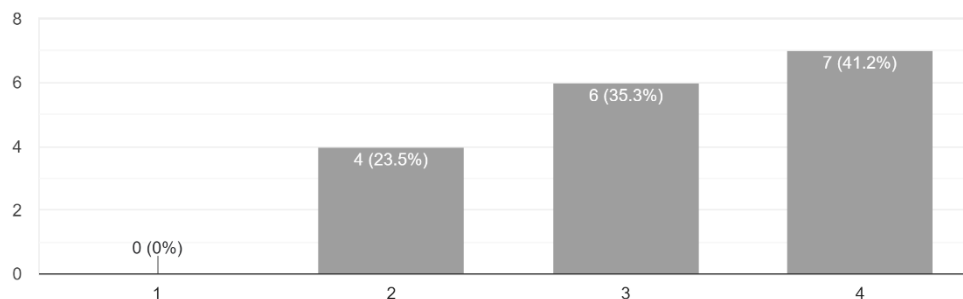
- *I researched endangered species. I was very surprised to find that there are many endangered species.*
- *I thought it was a very good class because I could learn both English and environmental issues.*

Regarding cognitive aspects, many students answered that it was difficult for them to use new vocabulary and to explain their opinions in English, but listening to others' opinions and learning from videos had a positive impact on the students. Regarding emotional aspects, some students found the practical features of the class enjoyable. In particular, two students said they were interested in the content of the topic. These answers indicate that at least some students were positively influenced by the CLIL-oriented class.

4.4.2 Lesson 5

Q1: Was the advertisement for volunteering easy to understand? 1= completely disagree 4= completely agree

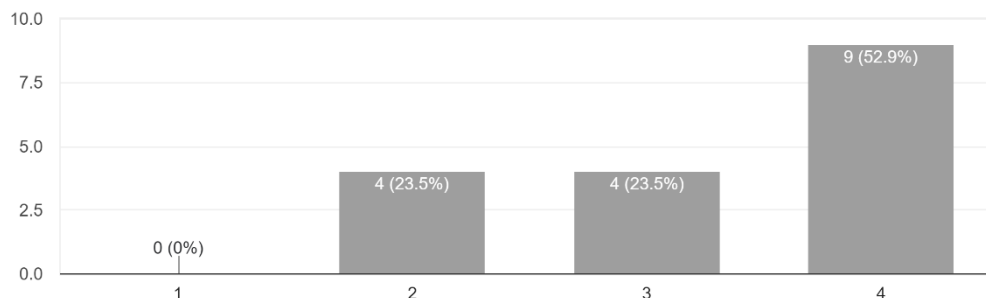
17件の回答



As the above shows, most students answered that it was easy to understand. 4 students answered that the advertisement was not easy to understand, which, compared to Lesson 4, is double the amount, which is interesting to note. This is likely because there are a few words that are difficult for students, which may have hindered their understanding.

Q2: Do you think the advertisement of volunteering helped you to learn about something new? 1= completely disagree 4= completely agree

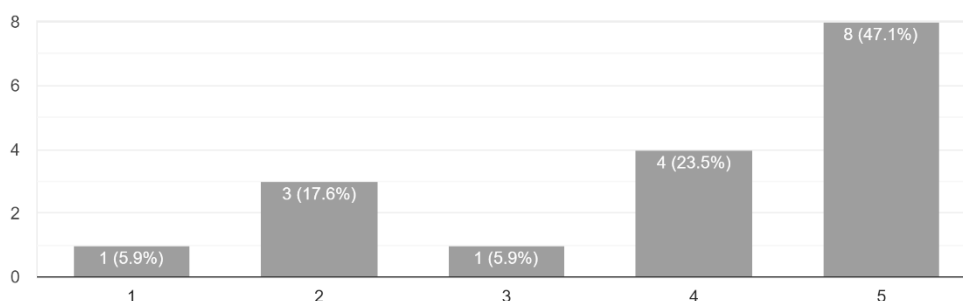
17件の回答



As the above shows, most students responded that it allowed them to learn something new. The purpose of posting this activity was to let students know that there are some volunteers that go abroad and help overseas communities. In general, Japanese high school students are not familiar with the idea of volunteering abroad. This question was intended to let students know that there are a variety of volunteer opportunities and to inspire them in their writing activities. It is assumed that the 4 respondents who answered 2 (somewhat disagree) either don't have interest in volunteering or couldn't understand the intent and purpose of this assignment.

Q3: Was the video about volunteering with shelter dogs and cats easy to understand? 1= completely disagree 4= completely agree

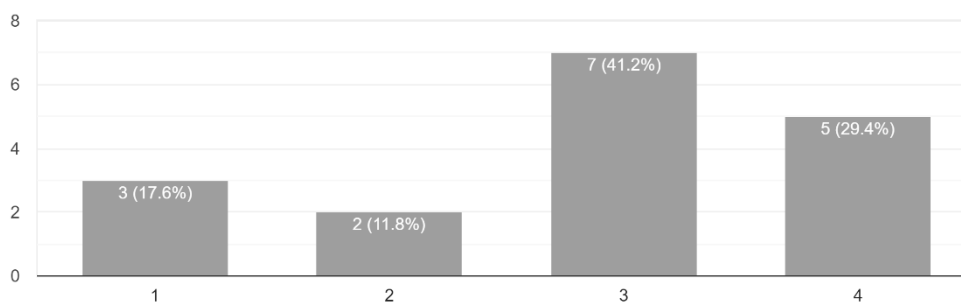
17件の回答



With this question, the author made a mistake and allowed for five choices. Therefore, the answers of those students who chose the middle option (3) were discounted in the analysis. As the above shows, most students answered that it was easy to understand, but one student answered 1 (not easy to understand at all). This video is about a foreigner who is an ALT teacher in Japan and takes care of dogs and cats at a shelter as a volunteer. The video not only shows what the volunteers do, but also explains how cats and dogs were sheltered and how to be their new owners. However, it was too long to be shown entirely in class. It also included an advertisement of her YouTube channel, which is not relevant to the class. Therefore, the author had to stop and skip the video frequently to show only a few important scenes. This may have made the video a little more difficult for students.

Q4: Do you think the video about volunteering with shelter cats and dogs helped you learn something new? 1= completely disagree 4= completely agree

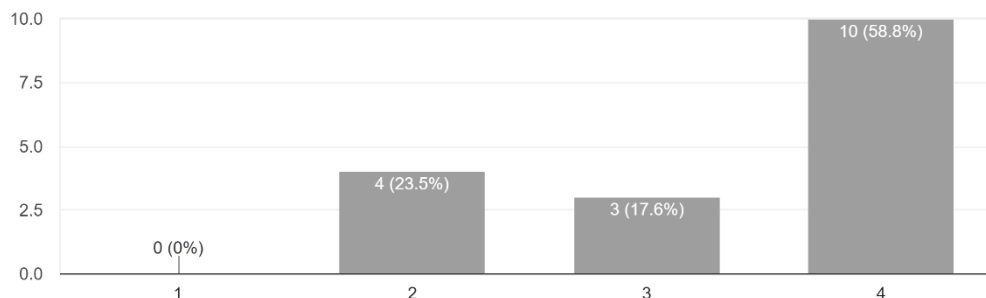
17件の回答



As the above shows, 5 students answered that it didn't help them to learn new things.

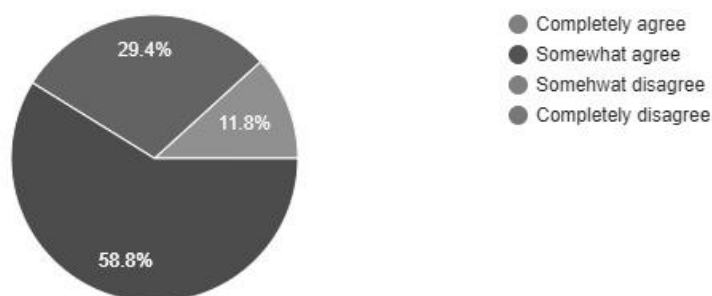
Volunteering at shelters is very popular. Moreover, students who have pets know a lot about cats and dogs. Therefore, some students may already know about this topic quite well.

Q5: Do you think the activity of presenting about volunteering activities that you would like to participate in helped you to learn something new? 1= completely disagree 4= completely agree
17 件の回答



As the graph shows, most students answered that it helped them learn something new. Students will find one volunteer activity that is open to high school students and that they would actually like to participate in, and explain the activity in detail. Students will describe how they would prepare and develop if they were to participate in that volunteer activity. The purpose of this was to familiarize students with the topic, and also to remind them that they can participate in society, even if just in small activities.

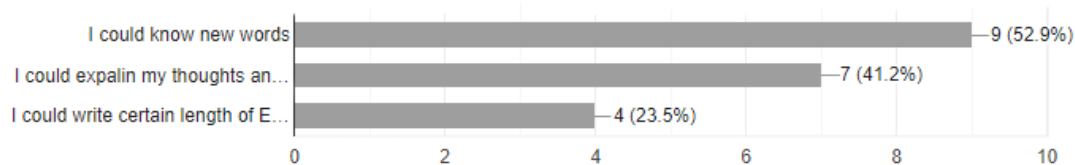
Q6: Do you think the activity of giving a presentation about the volunteering activities you would like to participate in has helped you improve your English?
17 件の回答



As the above shows, 88.2% of students answered that it helped them to improve their English.

Q7: In Q6, those who answered "Completely agree" or "Somewhat agree" What kind of improvements do you think you have made? Please select all that apply from the following list. If you have other ideas, please write freely by selecting "Other".

17 件の回答

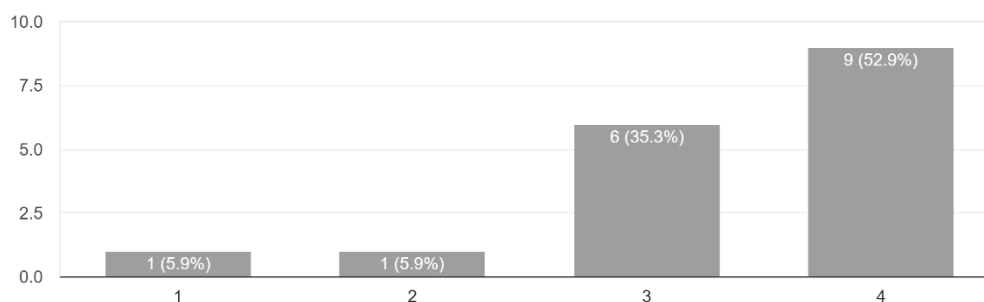


As the above shows, more than half of students answered that they learned new words.

Also, many students answered that they learned how to write sentences with a certain number of passages in English. Unlike responses to the corresponding question in the questionnaire for Lesson 4, no students chose the last two options.

Q8: Have you found that you can contribute to various social issues through small actions? 1= completely disagree 4= completely agree

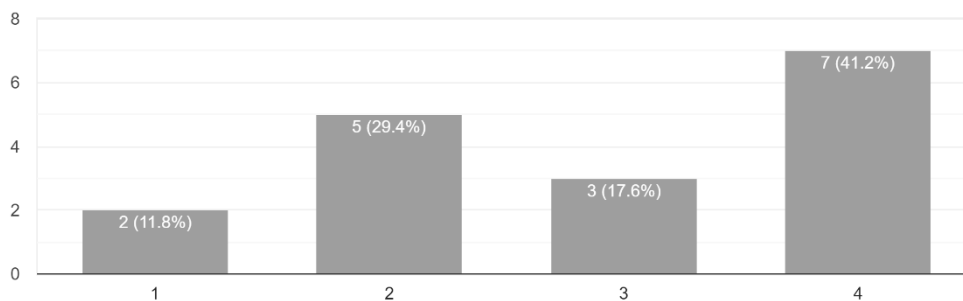
17 件の回答



As the above shows, almost all the students answered that they found the connection between environmental issues and their daily lives. The results indicate that the students understood or reinforced through what they learned in class and the assignments they did in class, the essence of the volunteer work that they can participate in society with small acts. One student, however, responded that they did not understand it at all. The reason is not clear, but it is possible that this student was not interested in the topic or that the intent of the activity was not clear to the student.

Q9: Do you want to participate in the volunteering activities you have researched? 1= completely disagree 4= completely agree

17件の回答



As the above shows, 7 students answered they do not want to, and 10 students answered they want to. This shows that what they think about as a topic in class does not necessarily lead to actual action. Compared to question 9 in the Lesson 4 questionnaire, the number of students who stated that they do not want to increased. This difference is assumed to be due to the casualness of the action students are required to take. Eco-friendly activities are very easy. By simply separating trash correctly, for example, people have contributed to protecting the environment. Also, many such actions can be done at home. However, many volunteer activities are not so easy. In general, people need to go to the place where the activity occurs, and they are not paid. This difference in the simplicity of action may have made a difference in the results. Question 10 received 15 answers. They were analyzed separately with respect to several elements. Answers with multiple elements were classified by element. There was one answer that could not be classified (“*not in particular*”). The (translated) results are shown below:

Learning method:

- *Group work was easier to understand than thinking alone because we all think together.*
- *I would like to see them do a Quizlet as well (the one 1-9 are doing).*
- *I enjoyed watching the videos.*

Difficulty in writing essays in English or using words they do not know:

- *Reading the ads was difficult because there were some words I did not know.*
- *It was difficult to translate Japanese explanations into English.*
- *It was difficult to explain what kind of activities we would do.*

Opinion that it is a good opportunity to write essays in English and words they do not know:

- *It was difficult to make my point in English, but it was fun to make sentences.*
- *I found it difficult to write long sentences. However, I am glad that I was able to write my own opinion with the help of the teacher.*
- *I liked the part where I had to think about my English presentation.*
- *I wasn't very good at putting my own opinions back into English, but this class made me like it.*

Interest in the subject matter, and connection to increased motivation and confidence to take action:

- *I thought I would actively participate in volunteer activities. I would like to be able to write and explain sentences in English by myself.*
- *I wish I could have explained the details of Mopper (student volunteers) more in detail.*
- *I had never participated in volunteer activities before, but this was a good opportunity for me to want to do so.*
- *I learned that there are various types of volunteer activities through each person's presentation, and I could improve my English skills.*
- *When I did my own research, I researched about the volunteer activities that I am most interested in at this moment, which made me more interested in participating in them. If I have the chance to participate (in the volunteer) next time, I would like to do so proactively.*

The above categorized answers were analyzed in terms of cognitive and affective aspects. Regarding cognitive aspects, and similar to the answers received in the Lesson 4 questionnaire, many students answered that it was difficult for them to use new vocabulary and to explain their opinions in English. Listening to others' opinions and learning from the videos had a positive impact on the students, as in the previous lesson. Regarding emotional aspects, many students said they would like to participate in volunteer activities. Also, by researching volunteer activities related to their interests, 2 students were able to stimulate their interest. Some students also indicated that the in-class activities increased their confidence in their English skills. These answers indicate that some students were positively affected by the CLIL classes.

Comparing the two questionnaires, Lesson 5 had more negative feedback than Lesson 4. One possible reason for this could be students' familiarity with the program. As the teaching plan shows, the procedures for Lesson 4 and Lesson 5 were almost identical, in to be fair. So, the students were more engaged and took the activities more seriously than usual. However, Lesson 5 was no longer a new lesson for the students. This may have been one of the factors that lowered the motivation of the students.

4.5 Writing Samples

In total, six student writings were sampled. One student's was used as the standard. Two students' writing was used as examples of substandard writing, and three students' writing was used as examples of above-standard writing. If there was an outstanding student with special qualities, they were included in the three. These students were selected based on their writing in Lesson 4. The reason for this was to determine whether the change of topic affected the quality of the students' writing, such as students who were below standard in Lesson 4 being above standard in Lesson 5. Preparation sheets were also extracted in the same way. This was randomly selected from two groups of six students, one above average and one below average.

The tables attached to text samples in Appendix B show word count, the result of Evaluation 3 and Flesch-Kincaid Grade level of writing for each of the 6 students.

Word count:

Almost all students produced shorter essays in Lesson 5 than in Lesson 4. This is likely due to differences in topic. In general, environmental issues are topics that are often taught in classes, and most students have usually already had an opportunity to become familiar with environmental issues. However, students usually have far fewer opportunities to learn about volunteering than they do about environmental issues, and high school students will likely only have the opportunity to volunteer if they or their parents have a high interest in social activities. In short discussions with students before the class, two students stated that they had actually done some volunteer work. One of them was student

A, and the number of words in their essay increased from 70 to 85. This shows that where the student has an interest in the topic, they may be likely to write more. It may be a good idea in future research to investigate the link between quantity and quality of output and interest in topics, as part of understanding CLIL.

Evaluation:

Suitability for the topic:

All students scored 4 on the first rubric. This means that all students wrote essays that were on-topic. This may be due to the quality of the students and/or the clear instructions in the handout.

Content detail:

Comparing the essays in Lesson 4 and Lesson 5, students who wrote fewer words also scored lower in content detail. The decrease in content detail scores may reflect the students' level of interest in the topic. If the student is interested in the topic, the essay will be more detailed and specific. Student A wrote about volunteering, which he had participated in, so the content is more specific. Student C has more emotional sentences, which indicates that this student is interested in unschooling.

Grammatical Accuracy

Scores given under the third rubric did not change for many students, when comparing the two lessons. This can be taken as an indication that the students' English skills are stable, but at the same time, it may indicate that this activity is not suitable for improving

English skills. The current study is limited in looking at a short period of time, and comparing just two two-class sessions, and so it may be a good idea to investigate the impact of CLIL in longitudinal studies in the future. However, Student C scores are higher in the Lesson 5 results than in the Lesson 4 results. Furthermore, some students use translation sites to write the English text. Therefore, this score may not be completely reliable.

Flesch-Kincaid Grade Level

The shorter the essay, the lower the grade level suitability tends to be in this assessment. Of course, more words is usually an indicator of more fluency, and is linked to quality, but longer essays are not necessarily better. In the future, it may be a good idea to look in more detail and quality of writing output using a bespoke assessment tool, and having second or maybe even third readers independently assess writing samples.

Conclusions

5.1 Research Question 1: *What is CLIL and how appropriate is it for Japanese English-language teaching?*

As we have seen, Content and Language Integrated Learning (CLIL) is a term for learning that combines content and language learning in a subject or theme. Although there are many approaches similar to CLIL, CLIL aims at both subject and language education. In addition, the basic idea behind CLIL is that Content, Communication, Cognition, and Community/Culture, or the so-called 4Cs, are important. CLIL-based teaching is often cross-curricular and requires teacher involvement with other teachers and classes in other subjects. To meet this challenge, teacher training and support, educational resources, and a threshold level of proficiency for both teachers and students are crucial. However, the English proficiency of students, teachers, and other stakeholders is not sufficient in many teaching contexts. Currently, Japanese society is relying heavily on foreign workers, and as in Europe, where CLIL came from, there will be many people from different backgrounds living in Japan in the future. That is why it makes sense to adopt the CLIL model.

5.2 Research Question 2: *To what extent are the existing textbooks suitable for CLIL?*

New Horizon has a balanced integration of reading, listening, writing, and speaking tasks with gradually increasing cognitive load. This fits well with CLIL's 4C principles.

Furthermore, as the target grade level of the textbook increases, activities that use two or more of the four skills at the same time also appear. The results of Evaluation 1 and Evaluation 2 show that the higher the level of the textbook, the more suitable it is for CLIL-oriented teaching. One textbook for CLIL-oriented classes is a workbook, and the other is a textbook like *New Horizon*. The workbook is designed to be used as a review of biology classes for students who use English as their L1, and as a study of English for those who do not. The structure of the text shares many aspects with *New Horizon*, but the main feature of this textbook is that at the end of each chapter, there is a page for CLIL based on the topic covered in that chapter. The activities on those pages are mainly designed to use reading, listening, and writing skills, and there is also a section called "And you?" where students can express their own opinions.

5.3 Research Question 3: *How effective were the attempts to incorporate CLIL into the classes researched in this thesis?*

As we saw in 4.4 and 4.5, the results of the questionnaire showed that many students indicated that the in-class activities based on the CLIL method helped them to learn something new or helped them to improve their English skills. However, there were slightly more negative responses after Lesson 5 than after Lesson 4. In the writing task, we also found that students who wrote well in Lesson 4 did not necessarily write well in Lesson 5. Conversely, there were cases in which students who did not write well in the Lesson 4 task wrote well in the Lesson 5 task. It turned out that the gap was created by how much the students were interested in the topic. This shows that regular classes using

the CLIL methodology are effective in developing the skills and knowledge that the CLIL methodology seeks to foster, but at the same time, the CLIL methodology is not always highly effective; the success of a CLIL class depends on the amount of interest and knowledge of the students.

In this study, it was not possible to examine the influence of the teacher on the class. The paper assumed that the slightly more negative opinion of Lesson 5 in the questionnaire was due to the fact that the topic of Lesson 5 was a topic less suited to the CLIL method and that the students had become accustomed to the classroom format and found it boring. However, it is unclear whether the teachers had any influence. Thus, the same teacher may not always be able to maintain the same quality of teaching. Therefore, it is possible that not all teachers can successfully teach in this method.

The target population of this study was first-year high school students. Further research could be conducted if the author had the opportunity to teach in a middle school, or if several different teachers could experiment with teaching under the same materials and activities. As noted at points earlier, there are several identified opportunities for further research, including longitudinal studies, studies that investigate the links with topic interest and motivation, and the potential for looking at the effectiveness of CLIL using not only quantitative data and writing outputs, but also mixed methods approaches such as interviews with students. However, as this research project has indicated there are indications that in normal Japanese junior high school contexts, CLIL-based approaches may have potential, but, more research is needed into the variables of individual learners, and the impact of the topic, as well as longer-term and more qualitative studies.

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Appendices

Appendix A: Mukundan et al.'s Checklist

I. General attributes					
A. The book in relation to syllabus and curriculum					
1. It matches to the specifications of the syllabus.	①	①	②	③	④
B. Methodology					
2. The activities can be exploited fully and can embrace the various methodologies in ELT.	①	①	②	③	④
3. Activities can work well with methodologies in ELT.	①	①	②	③	④
C. Suitability to learners					
4. It is compatible to background knowledge and level of students.	①	①	②	③	④
5. <u>It is compatible to the socio-economic context.</u>	①	①	②	③	④
6. <u>It is culturally accessible to the learners.</u>	①	①	②	③	④
7. It is compatible to the needs of the learners.	①	①	②	③	④
8. It is compatible to the interests of the learners.	①	①	②	③	④
D. Physical and utilitarian attributes					
9. Its layout is attractive.	①	①	②	③	④
10. It indicates efficient use of text and visuals.	①	①	②	③	④
11. It is durable.	①	①	②	③	④
12. It is cost-effective.	①	①	②	③	④
13. <u>Its size is appropriate.</u>	①	①	②	③	④
14. <u>The printing quality is high.</u>	①	①	②	③	④
E. Efficient outlay of supplementary materials					
15. The book is supported efficiently by essentials like audio-materials.	①	①	②	③	④
16. <u>There is a teacher's guide to aid the teacher.</u>	①	①	②	③	④

II. Learning-teaching content	
A. General	
1. Most of the tasks in the book are interesting.	① ① ② ③ ④
2. Tasks move from simple to complex.	① ① ② ③ ④
3. Task objectives are achievable.	① ① ② ③ ④
4. Cultural sensitivities have been considered.	① ① ② ③ ④
5. The language in the textbook is natural and real.	① ① ② ③ ④
6. The situations created in the dialogues sound natural and real.	① ① ② ③ ④
7. <u>The material is up-to-date.</u>	① ① ② ③ ④
8. <u>It covers a variety of topics from different fields.</u>	① ① ② ③ ④
9. <u>The book contains fun elements.</u>	① ① ② ③ ④
B. Listening	
10. The book has appropriate listening tasks with well-defined goals.	① ① ② ③ ④
11. <u>Instructions are clear.</u>	① ① ② ③ ④
12. Tasks are efficiently graded according to complexity.	① ① ② ③ ④
13. Tasks are authentic or close to real language situations.	① ① ② ③ ④
C. Speaking	
14. Activities are developed to initiate meaningful communication.	① ① ② ③ ④
15. Activities are balanced between individual response, pair work and group work.	① ① ② ③ ④
16. Activities motivate students to talk.	① ① ② ③ ④
D. Reading	
17. Texts are graded.	① ① ② ③ ④
18. <u>Length is appropriate.</u>	① ① ② ③ ④
19. Texts are interesting.	① ① ② ③ ④
E. Writing	
20. Tasks have achievable goals and take into consideration learner capabilities.	① ① ② ③ ④
21. <u>Models are provided for different genres.</u>	① ① ② ③ ④
22. Tasks are interesting.	① ① ② ③ ④
F. Vocabulary	
23. The load (number of new words in each lesson) is appropriate to the level.	① ① ② ③ ④
24. There is a good distribution (simple to complex) of vocabulary load across chapters and the whole book.	① ① ② ③ ④
25. Words are efficiently repeated and recycled across the book.	① ① ② ③ ④
26. <u>Words are contextualized.</u>	① ① ② ③ ④
G. Grammar	
27. The spread of grammar is achievable.	① ① ② ③ ④
28. The grammar is contextualized.	① ① ② ③ ④
29. Examples are interesting.	① ① ② ③ ④
30. Grammar is introduced explicitly and reworked incidentally throughout the book.	① ① ② ③ ④
31. <u>Grammar is reworked implicitly throughout the book.</u>	① ① ② ③ ④
H. Pronunciation	
32. It is contextualized.	① ① ② ③ ④
33. It is learner-friendly with no complex charts easy to learn.	① ① ② ③ ④
I. Exercises	
34. They are learner friendly have clear instructions.	① ① ② ③ ④
35. They are adequate.	① ① ② ③ ④
36. They help students who are under/over-achievers.	① ① ② ③ ④

Appendix B: Student Worksheets
Student A

Student A, Unit 4	Evaluation	Student A, Unit 5	Evaluation
<p>Unit 4 Use it</p> <p>I think ① <u>Deforestation</u> is a serious environmental problem.</p> <p>② <u>Deforestation is the problem of mass cutting of forests and trees.</u></p> <p>① <u>Deforestation</u> is happening because ③ <u>The land used to build houses the cleaning of agricultural land, and the excessive use of wood for fuel and industry</u></p> <p>According to ④ <u>The Minister of Deforestation from 1990 to 2020, the global forest area has decreased from 42.5 million ha to 40.6 million ha.</u></p> <p>We have to ⑤ <u>reduce deforestation.</u></p> <p>For example, we can ⑥ <u>volunteer to plant trees.</u></p> <p style="text-align: right;">A9</p> 	<p>Word Count 70</p> <p>Evaluation Rubric 4,3,3</p> <p>Flesch-Kincaid Grade Level 10.1</p>	<p>Unit 5 The volunteer work I want to do</p> <p>I want to ① <u>do Missionary Discipleship missions</u></p> <p>In this volunteer work, we ② <u>try to keep the game moving quickly.</u></p> <p>③ <u>I use down the courts when plastic fall, when they think about strategies, and when they take a break. At that time cheerleaders and mascot characters will appear so you need to be careful in order to avoid collision.</u></p> <p>It will be ④ <u>from 3 days they play a game in Missionary Discipleship Hall.</u></p> <p>It cost ⑤ _____</p> <p>If I work for this volunteer, ⑥ <u>increased sense of responsibility and mental strength</u></p> <p style="text-align: center;">A5</p>	<p>Word Count 85</p> <p>Evaluation Rubric 4,4,2</p> <p>Flesch-Kincaid Grade Level 6.0</p>

Student A: Analysis

<p>Deforestation is the problem of mass cutting of forests and trees. Deforestation is happening because the land used to build houses, the cleaning of agricultural land and the excessive use of wood for fuel and industry. According to the Ministry of the Environment, from 1990 to 2020, the Global Forest area has decreased from 42.5 million hectares to 40.6 million hectares. We have to reduce deforestation. For example, we can volunteer to plant trees.</p>		<p>I want to do Hiroshima dragonfly's moppers. In this volunteer work, we try to keep the game moving quickly. I wipe down the courts when players. Tall. When they think about strategies and when they take a break. At that time, cheerleaders and mascot characters will appear, so you need to be careful in order to avoid collision. It will be from days they play a game in Hiroshima Sun Plaza Hall. If I work for this, volunteer increased sense of responsibility and mental strength.</p>	
<p>Text Analysis Summary Score C Word Count 70 Average Word Length 5 Average Sentence Length 14.0 Syllables per Word 1.7 Words per Paragraph 70.0 Sentences per Paragraph 5.0 Readability Grade Levels Flesch-Kincaid Grade Level 10.1</p>	<p>Gunning Fog Index 11.3 Coleman-Liau Index 11.9 SMOG Index 13.0 Automated Readability Index 9.5 FORCAST Grade Level 10.4 Powers Sumner Kearl Grade 5.7 Rix Readability 9 Raygor Readability 10 Fry Readability 12</p>	<p>Text Analysis Summary Score A Word Count 85 Average Word Length 5 Average Sentence Length 10.6 Syllables per Word 1.5 Words per Paragraph 85.0 Sentences per Paragraph 8.0 Readability Grade Levels Flesch-Kincaid Grade Level 6.0</p>	<p>Gunning Fog Index 8.5 Coleman-Liau Index 8.1 SMOG Index 10.1 Automated Readability Index 5.3 FORCAST Grade Level 9.1 Powers Sumner Kearl Grade 5.0 Rix Readability 6 Raygor Readability 4 Fry Readability 6</p>

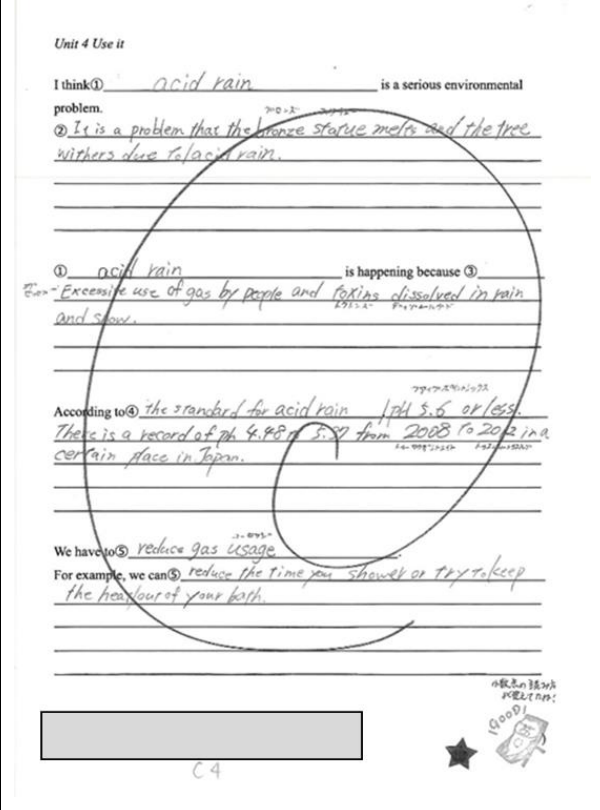
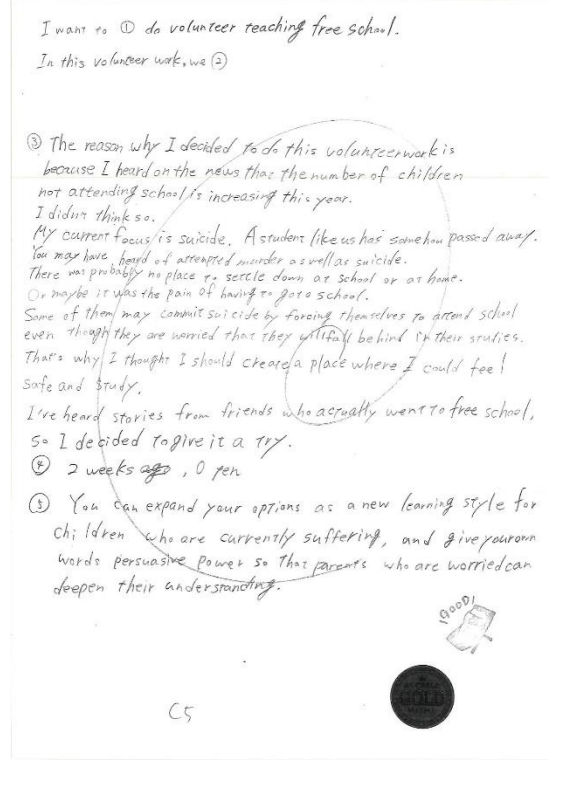
Student B

Student B, Unit 4	Evaluation	Student B, Unit 5	Evaluation
<p>Unit 4 Use it</p> <p>I think ① <u>endangered species</u> is a serious environmental problem.</p> <p>② <u>The Japanese otter is thought to have gone extinct soon after it was recorded in 1979.</u></p> <p>① <u>The Japanese otter ^{being endangered because of} is happening because ③ <u>(Due to) the deterioration of living conditions and water pollution caused by river development.</u></u></p> <p>According to ④ <u>3916 species were selected as endangered species on the Ministry of Environment Red List 2020 and 66 species on the marine life Red list.</u></p> <p>We have to ⑤ <u>(the act of cherishing) nature</u>. For example, we can ⑤ <u>(the act of not) throwing anything away in a river or sea.</u></p> <p style="text-align: right;">Good!</p> <p style="text-align: center;">B4</p>	<p>Word Count 91</p> <p>Evaluation Rubric 4,4,3</p> <p>Flesch-Kincaid Grade Level 9.6</p>	<p>Unit 5 The volunteer work I want to do</p> <p>I want to ① <u>do volunteer in Cafe</u></p> <p>In this volunteer work, we ② <u>supporting the search for homes for protected cats.</u></p> <p>③ <u>Take care of cats in the cafe and entertain visitors to the cafe.</u></p> <p>It will be (con- from) ③ we can work when ever It cost ③ <u>\$0</u></p> <p>If I work for this volunteer, ③ <u>I will be a tolerant person.</u> <u>Have a kind heart that wants to help if someone is in trouble.</u></p> <p style="text-align: center;">B5</p>	<p>Word Count 62</p> <p>Evaluation Rubric 4,2,3</p> <p>Flesch-Kincaid Grade Level 7.4</p>

Student B: Analysis

<p>I think endangered species is a serious environmental problem. The Japanese Otter is thought to have gone extinct soon after it was recorded in 1979. The Japanese Otter is being endangered. Due to the deterioration of living conditions and water pollution caused by river development. According to, 37 of 6 species were selected as endangered species on the Ministry of Environment. Red lists 2020 and 56 species on the marine life Red List we have to the act of cherishing nature, for example. Don't the act of not throwing anything away in a river or sea.</p>		<p>I want to do volunteer in cafe in this volunteer work we supporting the search for homes for protected cats. Take care of cats in the cafe and entertain visitors to the cafe. We can work whenever. If I work for this volunteer, I will be a tolerant person, have a kind heart that wants to help if someone is in trouble.</p>	
<p>Text Analysis Summary Analytics 91; Score B Word Count 91 Average Word Length 5 Average Sentence Length 13.0 Syllables per Word 1.7 Words per Paragraph 91.0 Sentences per Paragraph 7.0 Readability Grade Levels Flesch-Kincaid Grade Level 9.6</p>	<p>Gunning Fog Index 11.4 Coleman-Liau Index 10.3 SMOG Index 12.5 Automated Readability Index 7.8 FORCAST Grade Level 11.3 Powers Sumner Kearsley Grade 5.7 Rix Readability 9 Raygor Readability 8 Fry Readability 11</p>	<p>Text Analysis Summary Analytics 62; Grade B Word Count 62 Average Word Length 4 Average Sentence Length 15.5 Syllables per Word 1.4 Words per Paragraph 62.0 Sentences per Paragraph 4.0 Readability Grade Levels Flesch-Kincaid Grade Level 7.4</p>	<p>Gunning Fog Index 12.0 Coleman-Liau Index 6.1 SMOG Index 11.7 Automated Readability Index 5.4 FORCAST Grade Level 8.6 Powers Sumner Kearsley Grade 5.9 Rix Readability 7 Raygor Readability 5 Fry Readability 7</p>



Student C

Student C, Unit 4	Evaluation	Student C, Unit 5	Evaluation
<p>Unit 4 Use it</p> <p>I think ① <u>acid rain</u> is a serious environmental problem.</p> <p>② It is a problem that the bronze statue melts and the tree withers due to acid rain.</p> <p>① <u>acid rain</u> is happening because ③ <u>Excessive use of gas by people and toxins dissolved in rain and snow.</u></p> <p>According to ④ the standard for acid rain is pH 5.6 or less. There is a record of pH 4.98 to 5.27 from 2008 to 2012 in a certain place in Japan.</p> <p>We have to ⑤ reduce gas usage. For example, we can ⑤ reduce the time you shower or try to keep the heat of your bath.</p> <p>C4</p> 	<p>Word Count 100</p> <p>Evaluation Rubric 4,2,2</p> <p>Flesch-Kincaid Grade Level 5.6</p>	<p>I want to ① do volunteer teaching free school.</p> <p>In this volunteer work, we ②</p> <p>③ The reason why I decided to do this volunteer work is because I heard on the news that the number of children not attending school is increasing this year. I didn't think so. My current focus is suicide. A student like us has someone passed away. You may have heard of attempted murder as well as suicide. There was probably no place to settle down at school or at home. Or maybe it was the pain of having to go to school. Some of them may commit suicide by forcing themselves to attend school even though they are worried that they will fall behind in their studies. That's why I thought I should create a place where I could feel safe and study.</p> <p>I've heard stories from friends who actually went to free school, so I decided to give it a try.</p> <p>④ 2 weeks ago, 0 pen</p> <p>⑤ You can expand your options as a new learning style for children who are currently suffering, and give you more words persuasive power so that parents who are worried can deepen their understanding.</p> <p>C5</p> 	<p>Word Count 191</p> <p>Evaluation Rubric 4,4,3</p> <p>Flesch-Kincaid Grade Level 6.5</p>

Student C: Analysis

<p>I think acid rain is a serious environmental problem. It is a problem that the bronze statue melts and the tree Wizards due to acid rain. Acid rain is happening that cause excessive use of gas by people and toxins dissolved in rain and snow according to the standard for. Acid rain. One part per million 5.6 or less. There is a record of part per million four point 985.57 from 2008 to 2012. In a certain place in Japan, we have to reduce gas usage. For example, we can reduce the time you shower or try to keep the heat of your bath.</p>		<p>I want to do volunteer teaching free school in this volunteer work. The reason why I decided to do this volunteer work is because I heard on the news that the number of children not attending school is increasing this year. I didn't think so. My current focus is suicide. A student like us has somehow passed away. You may have heard of attempted murder as well as suicide. There was probably no place to settle down, or school, or at home. Or maybe it was the pain of having to go to school. Some of them may commit suicide by forcing themselves to attend school, even though they are worried that they will fall behind in their studies. That's why I thought I should create a place where I could feel safe and study. I've heard stories from friends who actually went to free school, so I decided to give it a try two weeks ago. If I work for this volunteer, I can expand your options as a new learning style for children who are currently suffering and give your own words persuasive power. So, the parents who are worried can deepen their understanding.</p>	
<p>Text Analysis Summary Analytics 100 Score A Word Count 100 Average Word Length 4 Average Sentence Length 12.5 Syllables per Word 1.4 Words per Paragraph 100.0 Sentences per Paragraph 8.0 Readability Grade Levels Flesch-Kincaid Grade Level 5.6</p>	<p>Gunning Fog Index 8.2 Coleman-Liau Index 5.6 SMOG Index 8.8 Automated Readability Index 3.8 FORCAST Grade Level 9.2 Powers Sumner Kearsley Grade 5.0 Rix Readability 5 Raygor Readability 4 Fry Readability 5</p>	<p>Text Analysis Summary Analytics 196 Score B Word Count 196 Average Word Length 4 Average Sentence Length 15.1 Syllables per Word 1.4 Words per Paragraph 196.0 Sentences per Paragraph 13.0 Readability Grade Levels Flesch-Kincaid Grade Level 6.5</p>	<p>Gunning Fog Index 9.3 Coleman-Liau Index 7.4 SMOG Index 9.5 Automated Readability Index 6.3 FORCAST Grade Level 8.9 Powers Sumner Kearsley Grade 5.2 Rix Readability 7 Raygor Readability 7 Fry Readability 6</p>


Student D

Student D, Unit 4	Evaluation	Student D, Unit 5	Evaluation
<p>Unit 4 Use it</p> <p>I think ① <u>Water Pollution in Developing Countries</u> is a serious environmental problem. <small>Sub-Saharan Africa</small></p> <p>② It is <u>Water Pollution</u>. <small>(Unsanitary water and lack of adequate sewage treatment)</small> <small>In addition, forests are cut down to make way for factories and the water and soil are polluted by toxic chemicals emitted from the factories.</small></p> <p>③ <u>Water Pollution in Developing Countries</u> is happening because ③ <u>Factories are concentrated in developing countries. Moreover, it Toxic substances and other impacts from factories.</u></p> <p>According to ④ the issue of the approximately 884 million people worldwide in poor who did not have access to safe water, about 900 million were in sub-Saharan Africa.</p> <p>We have to ⑤ do the following to solve this problem. For example, we can ⑤ <u>donate to UNICEF.</u> <small>And to eliminate the waste of water by not leaving the availability of water for granted as usual.</small> <small>I also thought that cooperation was needed to improve factories by developed.</small></p> <div style="border: 1px solid black; width: 150px; height: 20px; margin: 10px auto;"></div> <p style="text-align: center;">D4</p> <div style="text-align: right;">   </div>	<p>Word Count 149</p> <p>Evaluation Rubric</p> <p>4,4,1</p> <p>Flesch-Kincaid Grade Level 12.3</p>	<p>Unit 5 The volunteer work I want to do</p> <p>I want to ① <u>be</u> volunteer for the Special Olympics Japan National Games in Hiroshima.</p> <p>In this volunteer work, we ② <u>are responsible for setting up the venue, reception, guidance, assistance in ceremonies, competition assistance, team assistance, health checkups, etc.</u></p> <p>③ <u>Volunteers will assist at the opening and closing ceremonies venues Hiroshima Airport, Hiroshima Station, and other facilities.</u></p> <p>It will be ④ from ③ <u>November 3rd to November 6th.</u></p> <p>It will be ⑤ <u>The cost will be borne by each individual.</u></p> <p>If I work for this volunteer, ⑥ <u>you will be able to see the competitions of many athletes up close.</u> <u>Also, when I play sports, I can think about what is useful and how I can make use of it.</u></p> <div style="border: 1px solid black; width: 150px; height: 30px; margin: 10px auto;"></div> <p style="text-align: center;">D5</p>	<p>Word Count 113</p> <p>Evaluation Rubric</p> <p>4,3,3</p> <p>Flesch-Kincaid Grade Level 10.2</p>

Student D: Analysis

<p>I think water pollution in developing countries sub-Sahara Africa is a serious environmental problem. It is water pollution, unsanitary water and lack of adequate sewage treatment. In addition, forests are cut down to make space for factories and the water and soil are polluted by toxic chemicals emitted from the factories. Water pollution in developing countries is happening because factories are concentrated in developing countries more over toxic substances and other impacts from factories, according to The Issue, approximately 884 million people worldwide. In 2008, who did not have access to safe water, about 330 million were in sub-Saharan Africa. We have to do the following to save the people. For example, we can donate to UNICEF and to eliminate the waste of water by not making the availability of water for granted as normal. I also thought that cooperation was needed to improve factories by developed countries.</p>	<p>I want to do is volunteer for the Special Olympic Japan, National Game in Hiroshima. In this volunteer work we are responsible for setting up the venue, reception guidance, assistance in ceremonies, competition assistance, Team Assistance, health checkup, et cetera. Volunteers will assist at the opening and closing ceremonies venues. Hiroshima airport, Hiroshima station and other facilities. It will be from November 3rd to November 6th. The cost will be borne by each individual. If I work for this volunteer, I will be able to see the competitions of many athletes up close. Also, when I play sports, I can think about what is useful and how I can make use of it.</p>		
<p>Text Analysis Summary Analytics 149 Grade D Word Count 149 Average Word Length 5 Average Sentence Length 16.6 Syllables per Word 1.8 Words per Paragraph 149.0 Sentences per Paragraph 9.0 Readability Grade Levels Flesch-Kincaid Grade Level 12.3</p>	<p>Gunning Fog Index 15.2 Coleman-Liau Index 12.4 SMOG Index 14.7 Automated Readability Index 10.9 FORCAST Grade Level 12.1 Powers Sumner Kearsley Grade 6.6 Rix Readability 10 Raygor Readability 12 Fry Readability 0</p>	<p>Text Analysis Summary Analytics 133 Grade C Word Count 113 Average Word Length 5 Average Sentence Length 14.1 Syllables per Word 1.7 Words per Paragraph 113.0 Sentences per Paragraph 8.0 Readability Grade Levels Flesch-Kincaid Grade Level 10.2</p>	<p>Gunning Fog Index 11.0 Coleman-Liau Index 9.9 SMOG Index 13.0 Automated Readability Index 7.9 FORCAST Grade Level 10.6 Powers Sumner Kearsley Grade 5.6 Rix Readability 9 Raygor Readability 8 Fry Readability 12</p>



Student E

Student E, Unit 4	Evaluation	Student E, Unit 5	Evaluation
<p>I think Ozone layer depletion is a serious environmental problem.</p> <p>Ozone depletion is the destruction of the ozone layer that covers the earth by greenhouse gases.</p> <p>Why it happens?</p> <p>Refrigerant Freon gas which is used for the cooling effect of air conditioners and refrigerators, is released into the air and it flows up to the sky and creates a hole in the ozone layer.</p> <p>Hazardous UV rays from these holes harm crops and humans so what should we do?</p> <p>We can avoid using machines that use CFCs.</p> <p>Furthermore, from April 1, 2020, the revised Fluorocarbon ban control law came into effect. However, in recent years, emissions have increased from 25% to 50% between 2010 and 2020.</p> <p>Therefore, firm new air action must be taken to control freon gas. Let's all do our best.</p>  <p>E4</p>	<p>Word Count 124</p> <p>Evaluation Rubric 4,4,3</p> <p>Flesch-Kincaid Grade Level 6.7</p>	<p>Unit 5 The volunteer work I want to do</p> <p>I want to ① work as a bird volunteer.</p> <p>In this volunteer work, we ② clean the bird cages and feed them.</p> <p>③ Some people clean some cages while the birds are out. Feed while changing the food gives depending on the type of bird.</p> <p>It will be (on - from) ④ We have activities several times a week. It cost ⑤</p> <p>If I work for this volunteer, ⑥ I think I will increase my knowledge about birds and improve my ability to work collaboratively with people.</p> <p>E5</p>	<p>Word Count 73</p> <p>Evaluation Rubric 4,3,3</p> <p>Flesch-Kincaid Grade Level 5.8</p>

Student E: Analysis

<p>I think ozone layer depletion is a serious environmental problem. Ozone depletion is the destruction of the ozone layer that covers the earth by greenhouse gases. Why happens the cause? Freon gas, which is used for the cooling effect of air conditioners and refrigerators, released into the air and it flows up to the sky and creates a hole in the ozone layer. Harmful UV rays from these holes harm crops and humans. So what should we do? Avoid using machines that you Cfcs? Furthermore, from April 1st 2020, the revised emissions control law came into effect. However, in recent years emissions have increased from 25% to 50% between 2010 and 2020. Therefore. Action must be taken to control the emissions of Freon gas. Let's all do our best.</p>		<p>I want to work as a bird volunteer. In this volunteer work we clean the bird cages and feed them. Some people clean some gauges while the birds are out. Feed while changing. The food given depending on the type of bird. We have activities several times a week. If I work for this volunteer, I think I will increase my knowledge about birds and improve my ability to work collaboratively wigh people.</p>	
<p>Text Analysis Summary Analytics 124 Grade A Word Count 124 Average Word Length 5 Average Sentence Length 10.3 Syllables per Word 1.5 Words per Paragraph 124.0 Sentences per Paragraph 12.0 Readability Grade Levels Flesch-Kincaid Grade Level 6.7</p>	<p>Gunning Fog Index 8.3 Coleman-Liau Index 8.7 SMOG Index 9.7 Automated Readability Index 5.7 FORCAST Grade Level 10.7 Powers Sumner Kearn Grade 5.0 Rix Readability 6 Raygor Readability 5 Fry Readability 7</p>	<p>Text Analysis Summary Analytics 73 Grade A Word Count 73 Average Word Length 4 Average Sentence Length 10.4 Syllables per Word 1.5 Words per Paragraph 73.0 Sentences per Paragraph 7.0 Readability Grade Levels Flesch-Kincaid Grade Level 5.8</p>	<p>Gunning Fog Index 8.6 Coleman-Liau Index 7.1 SMOG Index 9.2 Automated Readability Index 4.4 FORCAST Grade Level 8.7 Powers Sumner Kearn Grade 5.1 Rix Readability 5 Raygor Readability 3 Fry Readability 6</p>

Student F

Student F, Unit 4	Evaluation	Student F, Unit 5	Evaluation
<p><i>Unit 4 Use it</i></p> <p>I think ① <u>marine pollution</u> is a serious environmental problem.</p> <p>② This problem is the <u>garbage/waste</u> it will annoy <u>very fishes</u>. When a fish eat the <u>garbage</u> it will die. It will <u>very bitter</u>. <u>How can you think that a fish eat a garbage?</u> The answer thinks the <u>garbage</u> with a stomach full of <u>garbage</u> it will <u>very bitter</u>.</p> <p>① <u>Marine pollution</u> is happening because ③ <u>the garbage that people put outland dirty water</u>. Every cause is <u>human</u>.</p> <p>According to ④ <u>ministry of the environment</u> there was <u>orders</u> in the stomach of the whale. <u>they</u> will very <u>hungry</u>. but <u>they</u> can't eat <u>food</u>. <u>the</u> stomach is <u>full</u>.</p> <p>We have to ⑤ <u>be aware of saving the earth</u>.</p> <p>For example, we can ⑥ <u>think about environment when shop the product</u>. we should <u>not</u> buy <u>any</u> <u>plastic</u> <u>product</u>. <u>the</u> <u>plastic</u> <u>product</u> <u>is</u> <u>not</u> <u>good</u>. <u>if</u> <u>we</u> <u>buy</u> <u>plastic</u> <u>product</u> <u>the</u> <u>earth</u> <u>will</u> <u>be</u> <u>more</u> <u>dirty</u> <u>and</u> <u>fishes</u> <u>will</u> <u>die</u> <u>and</u> <u>happy</u>.</p> <div data-bbox="241 1098 622 1182" style="border: 1px solid black; height: 50px; width: 100%;"></div>  	<p>Word Count 151</p> <p>Evaluation Rubric</p> <p>4,4,3</p> <p>Flesch-Kincaid Grade</p> <p>Level 5.1</p>	<p>I want to do volunteer cat care in Hiroshima.</p> <p>In this volunteer work, we take care of the cat in</p> <p>Volunteers take care of the cat and walking <u>home for sister</u></p> <p>the cat. sometime we feed them. That works not only help them, but also help them owners. they will not have a time for take care of cat. It is every <u>saturday and sunday</u>.</p> <p>It cost 800 yen. / If I work for this volunteers,</p> <p>I will know how to cat live at our home.</p> <p>I can be friend with cat. To take care of them.</p> <p>I must study hard. but this work will very interesting.</p> <p>So I will study them.</p> <p style="text-align: center;">F5</p>	<p>Word Count 108</p> <p>Evaluation Rubric</p> <p>4,3,3</p> <p>Flesch-Kincaid Grade</p> <p>Level 3.5</p>

Student F: Analysis

<p>I think marine pollution is a serious environmental problem. This problem is for garbage people put out annoys many fish is when fish eat the garbage we will die. They will very suffer. Have you ever thought that? This idea. Is garbage. Have you ever thought the you die with a stomach full of garbage? And very suffer marine pollution is happening because the garbage that people put. Now and dirty water. Every causes human. According to Ministry of the Environment, there was a garbage in the stomach of the whale. They were very hungry, but they can eat fish. His stomach is full. We have to be aware of saving the Earth. For example, we can think about environment when trash the garbage. We can think about and choice answer. This is good for environment if people. Around the world, be aware marine and fisheries will be safe and happy.</p>		<p>I want to volunteer cat care in Hiroshima. In this volunteer work we take care of the cat in home for shelter. Volunteers take care of the cat and walking the cat sometime we feed them. That works. Not only help them but also help them owners. They will not have a time for take care of cat. It is every Saturday and Sunday. It costs ¥600. If I work for this volunteer, I will know how to cat live at our home. I can be friend with cat to take care of them. I must study hard, but this work will very interesting so I will study them.</p>	
<p>Text Analysis Summary Analytics 151 Grade A Word Count 151 Average Word Length 4 Average Sentence Length 8.4 Syllables per Word 1.5 Words per Paragraph 151.0 Sentences per Paragraph 18.0 Readability Grade Levels Flesch-Kincaid Grade Level 5.1</p>	<p>Gunning Fog Index 5.7 Coleman-Liau Index 6.8 SMOG Index 7.8 Automated Readability Index 3.7 FORCAST Grade Level 10.5 Powers Sumner Kearsley Grade 4.4 Rix Readability 5 Raygor Readability 0 Fry Readability 5</p>	<p>Text Analysis Summary Analytics 108 Grade A Word Count 108 Average Word Length 4 Average Sentence Length 9.8 Syllables per Word 1.3 Words per Paragraph 108.0 Sentences per Paragraph 11.0 Readability Grade Levels Flesch-Kincaid Grade Level 3.5</p>	<p>Gunning Fog Index 5.8 Coleman-Liau Index 3.5 SMOG Index 8.0 Automated Readability Index 1.3 FORCAST Grade Level 7.5 Powers Sumner Kearsley Grade 4.4 Rix Readability 4 Raygor Readability 2 Fry Readability 3</p>

Appendix C: Preparation Sheets

Unit 4

お題リスト

- (1) Marine pollution 海洋汚染
- (2) Ozone layer depletion オゾン層破壊
- (3) Global warming 地球温暖化
- (4) Decrease in biodiversity 生物多様性の現象
(環境的な要因による絶滅の危機に瀕する生物)
- (5) Decrease in mineral and other resources
鉱物資源やその他資源の減少・枯渇
- (6) Deforestation 森林破壊
- (7) Desertification 砂漠化
- (8) Acid rain 酸性雨

条件: Please include at least one information with a number

具体的な数字を用いた情報を1つは調べて引用してください。

例: 「〇〇新聞によると、20〇〇年には海水の温度が1℃上がると言われています」

⇒ "According to 〇〇news, the temperature of ocean water will rise by 1℃ in 20〇〇."

引用できるものは、

Moreover... 等

①本

②新聞(デジタル新聞を含む)

③書かれた日付と著者名(実名)がはっきり書かれているネットの記事

のみです。③は、日付と著者名のどちらかしか書かれていないもの、あるいは著者名はあるが明らかにハンドルネームである場合は引用しないでください。

	①選んだ問題	②それはどんな問題? 短く説明してみよう。	③それが起こる原因はなんだろう?	④②や③で話したことを裏付ける、数字を使った引用を探そう。	⑤この問題を解決するためにはどんなことをしないとイケない?
日本語↓	開発途上国での水質汚染について	水質汚染 (不衛生な生水や下水処理が整っていない)	②工場からの有害物質などの影響。 ①開発途上国で工場が集中している。	安全な水が不足している。 2008年の世界人口の約1/3は安全な水にアクセスできない。	2017年までに安全な水と衛生を確保する。 -水の47%は汚染された水。
英語	Water Pollution in Developing Countries	Water pollution (Unsanitary water and lack of adequate sewage treatment.)	②Toxic substances and other impacts from factories. ①Factories are concentrated in developing countries.	No access to safe water. Of the approximately 684 million people worldwide in 2008, about 939 million were affected in sub-Saharan Africa.	-Donate to UNICEF -Reduce water wastage.

Unit 5

Lesson5 The volunteer work I want to do

自分が参加してみたいボランティアを一つ見つけてクラスメイトに紹介しましょう。
 自分が始めてみたいオリジナルのボランティアを考えても構いません。
 また、海外のものでも日本のものでもかまいません。
 高校生が参加できるものであることが条件です。
 ※発表するときホワイトボードに写真を映したい人は教えてください。

まず下の表を埋めてみましょう。日本語で書いて、それからキーワードを英語にしてみましょう。

	①ボラン ティアの 題名	②それはどんなこと をするもの？ 短く説明してみよ う。	③②をもう少し詳し く書いてみよう。 場所は？具体的な行 程は？	④日付は？か かる費用は？ 分かる範囲で 書こう。	⑤このボラン ティアに参加 したらどんな 風に成長でき る？
日本語↓	NPO=2日 の鳥保護 団体	・ケージの掃除 ・エサをあげる する。	・ケージで 鳥を飼育する ・ケージの外 でエサをあげる ・何人がボランティア をする。 ・種類ごとに 与えるエサを 違うエサ箱に 入れた。	週に 一回か	鳥についての 知識が 増える。 ・人の 動物の心が しやくなる。
英語	Bird protected group in NPO	clean the gauge ・ give food		several times a week	

Appendix D Questionnaires

Lesson 4

Lesson4 Questionnaire

*必須

1. Q1: Was the graph of the breakdown *
of plastic garbage found in the sea
easy to understand?
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

1

2

3

4

completely agree

2. Q2: Do you think the graph of the *
breakdown of plastic garbage found
in the sea has triggered you to know
something new for you?
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

1

2

3

4

completely agree

3. Q3: Was the video about micro *
plastic problems easy to
understand?
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

1

2

3

4

completely agree

4. Q4: Do you think the video about *
microplastic problems has taught
you something new?
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

1

2

3

4

completely agree

5. Q5: Do you think the activity about *
environmental issues you are
interested has taught you something
new?
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

1

2

3

4

completely agree

6. Q6: Do you think the activity where *
you share ideas about the
environmental issues you are
interested in has helped improve
your English skills?
1つだけマークしてください。

Completely agree

Somewhat agree

Somewhat disagree

Completely disagree

7. Q7: In Q6, those who answered *
'Completely agree' or 'Somewhat
agree' What kind of improvements do
you think you have made? Please
select all that apply from the following
list. If you have other ideas, please
write freely by selecting 'Other'.

当てはまるものをすべて選択してください。

I could know new words
 I could explain my thoughts and
opinions in English

I could write certain length of English
sentences

I could know the way to explain big
numbers or decimals

I could be better at write infinitive
forms

その他: _____

8. Q8: Have you found that each *
individual's actions are linked to
environmental issues and daily life?
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

1

2

3

4

completely agree

9. Q9: Would you try to do something *
personally to protect the earth and the
natural environment?
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

1

2

3

4

completely agree

10. Q10: Please tell me your thoughts *
and opinions about the activities in
Lesson 4 (reading a graph, watching
an English video, researching and
writing a sentence in English).
(What did you like about it, what was
difficult about it, what did you enjoy
about it, what did you want to try,
etc.)

このコンテンツは Google が作成または承認したものではありません。

Google フォーム

Lesson 5

Lesson5 Questionnaire

*必須

completely agree

1. Q1: Was the advertisement for volunteering easy to understand? *
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

- 1
2
3
4

completely agree

2. Q2: Do you think the advertisement of volunteering helped you to learn about something new? *
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

- 1
2
3
4

completely agree

3. Q3: Was the video about volunteering with shelter dogs and cats easy to understand? *
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

- 1
2
3
4
5

completely agree

4. Q4: Do you think the video about volunteering with shelter cats and dogs helped you learn something new? *
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

- 1
2
3
4

completely agree

5. Q5: Do you think the activity of presenting about volunteering activities that you would like to participate in helped you to learn something new? *
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

- 1
2
3
4

completely agree

6. Q6: Do you think the activity of giving a presentation about the volunteering activities you would like to participate in has helped you improve your English? *
1つだけマークしてください。

- Completely agree
 Somewhat agree
 Somewhat disagree
 Completely disagree

7. Q7: In Q6, those who answered "Completely agree" or "Somewhat agree" What kind of improvements do you think you have made? Please select all that apply from the following list. If you have other ideas, please write freely by selecting "Other".

当てはまるものをすべて選択してください。

- I could know new words
 I could explain my thoughts and opinions in English
 I could write certain length of English sentences
 I could know the way to explain the price
 I could be better at write gerund forms

8. Q8: Have you found that you can contribute to various social issues through small actions? *
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

- 1
2
3
4

completely agree

9. Q9: Do you want to participate in the volunteering activities you have researched? *
1= completely disagree
4= completely agree
1つだけマークしてください。

completely disagree

- 1
2
3
4

completely agree

10. Q10: Please tell me your thoughts and opinions about the activities in Lesson 5 (reading an ad, watching an English video, researching and writing a sentence in English). (What did you like about it, what was difficult about it, what did you enjoy about it, what did you want to try, etc.)

このコンテンツは Google が作成または承認したものではありません。

Appendix E: Teaching Plans

Lesson 4

High School First Grade English Course Study Guidance Plan

Dates: September 16 - 30, 2022

Time: Wednesday 4th school period, Friday 3rd school period

Participants: 18 students from 8 groups of the 1st grade

School: Hiroshima Shudo University Hiroshima Kyoso High School

Teacher: Marika Orimoto

1 Unit (subject) name

Lesson 4: Save our planet

2 View of Teaching

(1) Unit (subject) view

In this unit, students learn infinitives, and also raise environmental issues from the perspective of marine pollution, which is an issue close to their hearts. Students also learn how to read graphs, express their own opinions and arguments in English, and present them in front of others.

(2) View of the teaching materials

The book introduces grammar and other topics that first-year high school students should know, but compared to conventional English expression textbooks, the number of pages devoted to explaining grammar topics is considerably smaller. Instead, emphasis is placed on practical issues, which until now have only been dealt with in small sections at the end of the book or chapters, providing students with opportunities to learn and think independently.

(3) Student Perspective

With an enrollment of 18 students, 1-8 is a fairly small class within the school. The class has been receiving integrated education since Kyoso Junior High School, and although they are in their first year of high school, there is a sense of unity among the students, perhaps because they have spent the past three years together.

3-1 This period (3rd period of 6 hours)

(1) Goals of this period

To promote understanding of marine pollution and related words in the textbook.

(2) Plans for this period

Hours	• Learning Activities	• Teaching points to keep in mind	■ Evaluation Criteria (Evaluation Methods)
Introduction (3 minutes)	• Review of the previous period. Review the basic conjugations of infinitives based on the class handouts distributed in the previous period.	• Dealing with students who lose distributed handouts	

<p>Development (39 minutes)</p>	<ul style="list-style-type: none"> The teacher reads the text and students dictate. The teacher reads the text and the students dictate. The teacher reads the text and the students dictate. The teacher reads the text and dictates the answers. Watch a video about the problem of microplastics (about 3 minutes). Have students solve the graphs in the handout and check their answers. Have students work on the Japanese translation of the bottom part of the handout. If they do not finish in time, assign homework. 	<ul style="list-style-type: none"> Read twice at different speeds. Pay attention to time allocation 	<ul style="list-style-type: none"> Are they filling in the blanks on the dictation sheet? Are they drawing a line in the sand on even one of them? Are they able to read the graphs?
<p>Summary (3 minutes)</p>	<ul style="list-style-type: none"> Tell them to complete the Japanese translation. Tell them that the work will be collected at the next session. 		

3-2 This period (4th period of 6 hours)

(1) Goals of this period

Promote understanding of environmental issues, including marine pollution.

(2) Plans for this period

Hours	Learning Activities	Teaching points to keep in mind	Evaluation Criteria (Evaluation Methods)
<p>Introduction (5 minutes)</p>	<ul style="list-style-type: none"> Review of the previous period. Answers and explanations for the Japanese translation of the handout assigned for homework. 	<ul style="list-style-type: none"> Check with desk guidance. 	<ul style="list-style-type: none"> Have they done their homework?
<p>Development (39 minutes)</p>	<ul style="list-style-type: none"> Handout handout; time to choose your topic from 8 topics (3 minutes) Listen to the topics (for later grouping). Have students work on the chart on the first page of the handout (instruct them to prioritize learning about what kind of problem they are facing and the numerical information). Ask students to prioritize the acquisition of information on what kind of problem they are facing. 	<ul style="list-style-type: none"> Tell them that if they don't have something they want to choose, they can figure it out on their own. Have them review the instructions regarding the source of the numerical data. Instruct group members to share what keywords and websites they researched, rather than taking down 	<ul style="list-style-type: none"> Are they able to decide on a topic in time? Are they working on a handout?

	<ul style="list-style-type: none"> Keep working on the handout 	information they found.	
Summary (1 minutes)	<ul style="list-style-type: none"> Instruct that completing the first sheet is homework. Collect the workbooks after the bow. 	<ul style="list-style-type: none"> Instructing students who forgot their work to turn it in by the next period 	

3-3 This period (5th period of 6 hours)

(1) Goals of this period

To promote understanding of environmental issues, including marine pollution, and to cultivate writing skills in English.

(2) Plans for this period

Hours	Learning Activities	Teaching points to keep in mind	Evaluation Criteria (Evaluation Methods)
Introduction (5 minutes)	<ul style="list-style-type: none"> Review of the previous period (review of expressions indicating quotations such as "According to" and "It is said that," how to read large 	<ul style="list-style-type: none"> Check with desk guidance. 	

	numbers, how to read units such as area and volume, how to read decimal points, etc., and important expressions from the workbook).		
Development (39 minutes)	<ul style="list-style-type: none"> Confirm that the first sheet is complete Have the students work on the second sheet. 	<ul style="list-style-type: none"> Check with desk guidance. 	<ul style="list-style-type: none"> Have they done their homework?
Summary (1 minutes)	<ul style="list-style-type: none"> Information about the next time. Tell them that after the final confirmation time, we will move on to the presentation. Tell them to save their work for after the thank-you. 		

3-4 This period (6th period of 6 hours)

(1) Goals of this period

To promote understanding of environmental issues, including marine pollution, and to enhance the ability to present in English.

(2) Plans for this period

Hours	• Learning Activities	• Teaching points to keep in mind	■Evaluation Criteria (Evaluation Methods)
Introduction (3 minutes)	• Review of the previous period (reading large numbers, reading units such as area and volume, reading decimal numbers).	• Check with desk guidance.	
Development (40 minutes)	<p>• Final confirmation and reading practice (15 minutes)</p> <p>• Presentation as much as possible</p> <p>① Students make a presentation</p> <p>② Teacher asks questions (what was the topic, what kind of initiatives were suggested)</p> <p>③ Students respond to ② (without nomination)</p>	<p>• Pay attention to time allocation. Responding to students who lose concentration</p> <p>• Nominate if no one says anything</p>	<p>■Are they committed to the practice?</p> <p>■Are they able to give a presentation? Are they able to listen to their classmates' presentations?</p>

Summary (2 minutes)	<ul style="list-style-type: none"> • Summary (share a better understanding of environmental issues) • Collect worksheets 	<ul style="list-style-type: none"> • Tell students who forgot their worksheets to bring them in the next period. 	
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Lesson 5

High School First Grade English Course Study Guidance Plan

Dates: October 14 - 26, 2022

Time: Wednesday 4th school period, Friday 3rd school period

Participants: 18 students from 8 groups of the 1st grade

School: Hiroshima Shudo University Hiroshima Kyoso High School

Teacher: Marika Orimoto

1 Unit (subject) name

Lesson5 Volunteer Work for What?

2 View of Teaching

(1) Unit (subject) view

In this unit, students learn about verbs and nouns, and also deal with conflicts related to volunteering. Students also learn how to read advertisements, express their own opinions and claims in English, and present them in front of others.

(2) View of the teaching materials

The book introduces grammar and other topics that first-year high school students should be aware of, but compared to conventional English expression textbooks, the number of pages devoted to explaining grammar is considerably smaller. Instead, emphasis is placed on practical issues, which until now have only been dealt with in small sections at the end of the book or chapters, providing students with opportunities to learn and think independently.

(3) Student Perspective

With an enrollment of 18 students, 1-8 is a fairly small class within the school. The class has been receiving integrated education since Kyoso Junior High School, and although they are in their first year of high school, there is a sense of unity among the classmates, perhaps because they have spent three years together.

3-1 This period (3rd period of 6 hours)

(1) Goals of this period

Promote an understanding of volunteering and related vocabulary in the textbook.

(2) Plans for this period

Hours	• Learning Activities	• Teaching points to keep in mind	■Evaluation Criteria (Evaluation Methods)
Introduction (3 minutes)	• Review of previous period. Review the basic conjugations of verbal nouns based on the class handout distributed in the previous period.	• Check with desk guidance.	

Development (39 minutes)	<ul style="list-style-type: none"> The teacher reads the text and students dictate. After that, the students open the textbook and check their answers. Explanation of the text and new vocabulary will be given. In groups, read the advertisement for volunteering. Then answer the five questions on the handout. Answer the questions. 	<ul style="list-style-type: none"> Read twice at different reading speeds. Pay attention to time allocation 	<ul style="list-style-type: none"> Are they filling in the blanks on the dictation sheet? Are they reading the necessary information from the advertisement?
Summary (3 minutes)	<ul style="list-style-type: none"> Tell them that you will collect the workbook at the next time. 		

3-2 This period (4th period of 6 hours)

(1) Goals of this period

Encourage an understanding of the breadth of volunteering.

(2) Plans for this period

Hours	Learning Activities	Teaching points to keep in mind	Evaluation Criteria (Evaluation Methods)
Introduction (5 minutes)	<ul style="list-style-type: none"> Review of previous period. Review the text using the handout. 	<ul style="list-style-type: none"> Check with desk guidance. 	
Development (39 minutes)	<ul style="list-style-type: none"> Show video of volunteer shelter dogs and cats (5 minutes) Handout handout and explanation. Introduce web sites that are looking for volunteers and decide which volunteer to choose or to invent something completely new on their own. Have students work on the chart on the first page of the handout (instruct them to make it a priority to figure out what kind of volunteering they will be doing). 	<ul style="list-style-type: none"> Students who are interested in coming up with their own ideas will be consulted on an individual basis. For students who have difficulty deciding, we show them a website we have prepared (Hiroshima City Youth Volunteering). Also, ask the students about their interests and see if there are any volunteer opportunities that match them. 	<ul style="list-style-type: none"> Have they found a volunteer as the subject matter? Are they working on the handout?

Summary (1 minutes)	<ul style="list-style-type: none"> Instruct that completing the first sheet is homework. Collect the workbooks after the end. 	<ul style="list-style-type: none"> Students who have forgotten their workbooks will be told to turn them in by the next class period. 	
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3-3 This period (5th period of 6 hours)

(1) Goals of this period

To promote understanding of volunteering and to cultivate writing skills in English.

(2) Plans for this period

Hours	Learning Activities	Teaching points to keep in mind	Evaluation Criteria (Evaluation Methods)
Introduction (5 minutes)	<ul style="list-style-type: none"> Review of the previous period (review of expressions used in basic composition, review of important expressions from the workbook). 	<ul style="list-style-type: none"> Check with desk guidance. 	

Development (39 minutes)	<ul style="list-style-type: none"> Confirmation that the first sheet is complete. Hand out example sentences prepared by the instructor and explain what they are writing about. Have students work on the second sheet. 	<ul style="list-style-type: none"> Check with desk guidance. 	<ul style="list-style-type: none"> Have they done their homework? Are they working on the second piece?
Summary (1 minutes)	<ul style="list-style-type: none"> Information about the next time. Tell the students that after the final confirmation time, they will move on to the presentation. Tell them to save their workbook after the thank-you. 	<ul style="list-style-type: none"> If the second piece is not finished yet, tell them it is a homework. 	

3-4 This period (8th period of 6 hours)

(1) Goals of this period

To promote an understanding of volunteering and to improve students' ability to present their work in English.

(2) Plans for this period

Hours	Learning Activities	Teaching points to keep in mind	Evaluation Criteria (Evaluation Methods)

<p>Introduction (3 minutes)</p>	<ul style="list-style-type: none"> • Review of the previous period (important expressions that appear in the examples prepared by the teacher). 	<ul style="list-style-type: none"> • Check with desk guidance. 	
<p>Development (40 minutes)</p>	<ul style="list-style-type: none"> • Final check, reading practice (15 minutes) • Present as much as possible ① Students make a presentation ② Teachers ask questions (what kind of volunteering was it, how did they say they could grow if they participated) ③ Students respond to ② (nominated at random) 	<ul style="list-style-type: none"> • Check with desk guidance. • Pay attention to time allocation 	<ul style="list-style-type: none"> ■ Have they done their homework? Are they practicing reading? ■ Are they able to give presentations? Are they able to listen to other students' presentations?
<p>Summary (2 minutes)</p>	<ul style="list-style-type: none"> • Summary (share what they have come to understand about volunteering) • Collecting worksheets 	<ul style="list-style-type: none"> • Students who forget their workbooks are asked to bring them in the next period. 	