

# **A Study on the Teaching of the SDGs in Junior High School Textbooks in Japan: Proposals for Thinking about the SDGs as Matters of Personal Importance**

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## **Abstract**

In accordance with the revision of the Course of Study, the textbooks authorized for use in junior high schools from the 2021 academic year have been substantially revised. Based on the results of a survey of the subject matter of each textbook, all textbooks cover content related to the Sustainable Development Goals (hereinafter the SDGs). The purposes of this study are (1) to investigate how each textbook covers the SDGs and reflects them in the content of the text, and (2) to propose language activities for junior high school students to perceive the SDGs as their own personal matters. Common themes in each textbook were selected. To determine whether the text of each unit was directly related to the SDGs, units were extracted based on those themes and classified from three perspectives. This paper presents the results of the analysis and the suggested language activities for junior high school students so that they may perceive the SDGs as matters of their personal importance.

## **Keywords**

SDGs, junior high school textbooks, matters of personal importance

## **1. Introduction**

In accordance with the revision of the Course of Study, the textbooks authorized for use in junior high schools from the 2021 academic year have been substantially revised. As a philosophy which becomes the foundation for the revision of the Course of Study, the SDGs come to be noticed. Based on the results of a survey of each textbook, all the textbooks cover contents related to the SDGs (Ito, 2023). The purposes of this study are (1) to investigate how each textbook covers the SDGs and how they are reflected in the contents of the textbooks, and (2) to suggest language activities for junior high school students so that they may perceive the SDGs as matters of their personal importance.

## **2. Literature Review**

### **2.1 Textbook analysis related to the SDGs**

Research on textbook analysis has been conducted since the SDGs have been considered as part of the content of junior high school textbooks. Sonoda (2022) analyzed how the SDGs were covered in the revision of the Course of Study for junior high school textbooks starting in the 2021. The analysis used 18 textbooks from six authorized junior high school textbook publishers and coded the content of the textbooks in relation to the 17 SDGs goals. As a result, the goal most frequently covered was Goal 16, "Peace and justice for all." In addition to that, the frequency with which the SDGs goals were covered increased as the school year progressed.

Textbook analysis is conducted not only in English classes but also in other subjects. Kikuchi and Kamada (2021) examined all pages in geography, history, and social studies in sample junior high school social studies textbooks. The study examined how the SDGs, and descriptions of sustainability such as "sustainable society" were described in the textbooks and categorized them. Only a small number of studies have been conducted relating junior high school textbooks to the SDGs.

## **2.2 Teaching the SDGs in English classes**

In this section, we describe the teaching of the SDGs using textbooks in junior high schools. Akiyama (2021) conducted a class introducing the SDGs for second-year junior high school students. The goals of this class were to see the SDGs as their own personal matters, to present what they can do in front of the whole school, and to share their individual thoughts on the SDGs. Mapping was introduced by selecting a subject from an authorized junior high school textbook.

## **3. The Study**

### **3.1 Textbooks**

A total of 12 textbooks for three grades of the top four selling authorized junior high school textbooks (HERE WE GO! English Course 1, 2, 3, NEW CROWN English Series 1, 2, 3, NEW HORIZON English Course 1, 2, 3, and SUNSHINE English Course 1, 2, 3) were analyzed. The percentages of each authorized junior high school textbook in Japan were as follows: HERE WE GO! English Course 17.0%, NEW CROWN English Series 16.9%, NEW HORIZON English Course 44.5%, and SUNSHINE English Course 16.6% (Japan Educational Press, 2020). Since these results represented over 90% of the total use of authorized textbooks by junior high school students in Japan, we decided to analyze these textbooks.

### **3.2 Method**

The content of the teacher's manuals prepared by the textbook companies include an explanation of the topics and the SDGs goals corresponding to those topics. Based on the information, the four companies were compared, and four common goals of the SDGs were identified. Those goals (United Nation) were as follows:

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Then common themes to each textbook that corresponded to these SDGs goals were selected: “Occupation (Goal 8),” “Peace (Goal 16),” “Disaster Prevention (Goal 11),” and “AI (Goal 9).” The units that were selected for those themes were based on the content description texts related to the SDGs prepared by each textbook company. The topics in each unit were categorized according to whether they are directly related to the SDGs from three perspectives:

- ① Is the content of the unit just stating facts?
- ② Does the unit encourage students to think about the contents of the SDGs?
- ③ Does the unit specifically mention the points of the SDGs (so that it is clearly understandable that the text is about the SDGs) ?

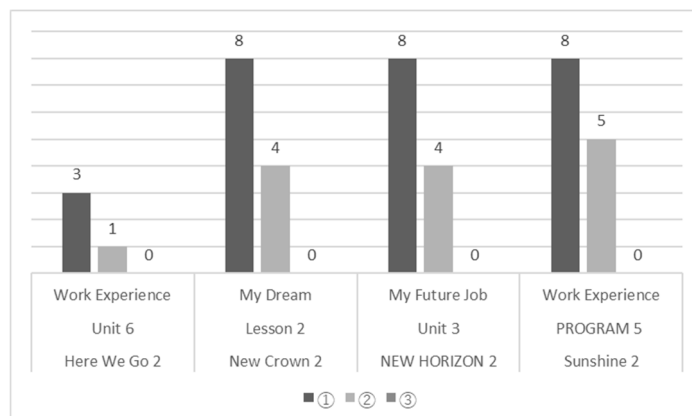
There are three main messages presented in all the textbook texts (Tanaka and Tanaka, 2009). Two of them (that is ① and ②) were used as classification criteria, and one additional (③) is related to the SDGs, which is the objective of this study. Three persons affiliated with English education conducted the classification and reviewed the categorized contents. Each of them has been teaching English for more than 20 years, approximately five years, and less than three years, respectively.

### **3.3 Results of categorization based on themes**

The results of the classifications for each theme are summarized in the table below. As shown in Figure 1 about the classification of “Occupation,” Work Experience in Here We Go 2 (pp.75-83), My Dream in New Crown 2 (pp.21-31), My Future Job in NEW HORIZON 2 (pp.35-44), and Work Experience in Sunshine 2 (pp.59-67) were analyzed. All four companies' textbooks were in the second grade of the junior high school.

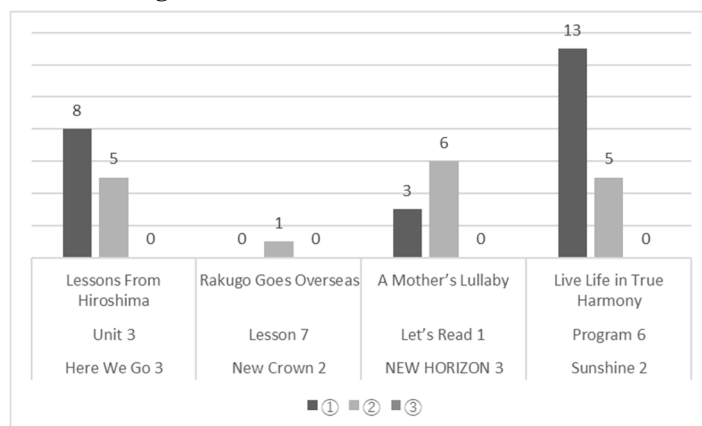
- ① “Is the content of the unit just stating facts?” was the most frequently extracted. Only one sentence related to ② was found. The sentence from Here We Go 2 was “I also learned that teaching is hard work.”
- ③ “Does the unit specifically mention the points of the SDGs?” was not present in the textbooks.

Figure 1: The Classification of “Occupation”



As for the classification of “Peace” as shown in Figure 2, Lesson From Hiroshima in Here We Go 3 (pp. 31-39), Rakugo Goes Overseas in New Crown 2 (pp. 105- 113), A Mother’s Lullaby in NEW HORIZON 3 (pp. 52-55), and Live Life in True Harmony in Sunshine 2 (pp. 69-77) were analyzed. There was no material on this theme from the first-grade junior high school textbooks. Both ① “Is the content of the unit just stating facts?” and ③ “Does the unit specifically mention the points of the SDGs?” were not found in New Crown 2. One sentence related to ② was found in New Crown 2 and the sentence was “I think this will make more peaceful world.”

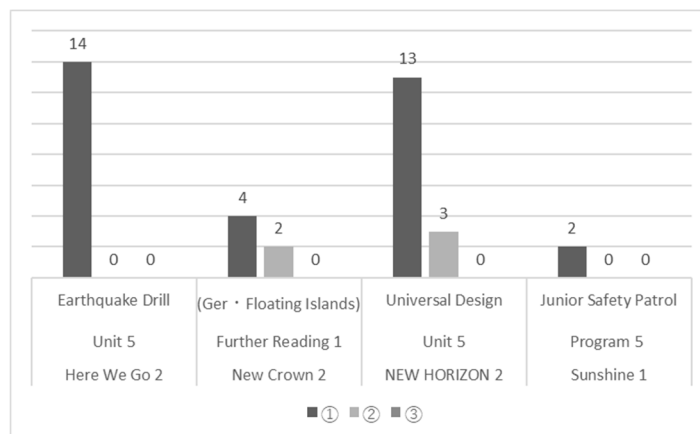
Figure 2: The Classification of “Peace”



Following Figure 3 about the classification of “Disaster Prevention,” Earthquake Drill in Here We Go 2 (pp. 63-71), Further Reading 1 in New Crown 2 (appendix 5 and 6), Universal Design in NEW HORIZON 2 (pp. 71- 80), and Junior Safety Patrol in Sunshine 1 (pp. 61-67) were analyzed. ① “Is the content of the unit just stating facts?” was the most frequently extracted in Here We Go and NEW HORIZON. However, both ② “Does the unit encourage students to think about the contents of the SDGs?” and ③ “Does the unit specifically mention the points of the SDGs?” were not found in Here We Go and Sunshine. As for ② in both New Crown 2 and Sunshine 1, there are two sentences in each textbooks. In New Crown 2, they were “It is easy to put up and take down the tent.” and “The Uros also use totora to build their houses, furniture,

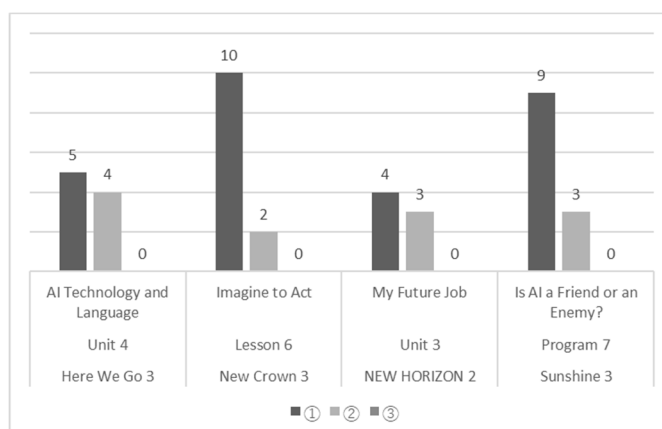
and boats because there are no trees in the high mountains.” The sentences in Sunshine 1 were “They're the Junior Safety Patrol.” and “She is proud of it too.”

Figure 3: The Classification of “Disaster Prevention”



In reference to the classification of “AI” as shown Figure 4, AI Technology and Language in Here We Go 3 (pp. 51- 59), Imagine to Act in New Crown 3 (pp. 87-97), My Future Job in NEW HORIZON 2 (pp. 35-44), and Is AI a Friend or an Enemy in Sunshine 3 (pp. 91-97) were analyzed. ① “Is the content of the unit just stating facts?” was extracted from all the lessons in four textbooks. In the context of ①, the term 'AI' was prominently featured in three textbooks, excluding New Crown. Specific instances of this were shown in the following sentences.: “In the near future, AI will help us communicate with people all over the world quite easily.” in Here We Go3, “The progress of AI is changing our lives.” in NEW HORIZON 2, and “Today AI has developed to a level that is difficult for humans to imagine.” in Sunshine 3. Concerning both ① “Is the content of the unit just stating facts?” and ② “Does the unit encourage students to think about the contents of the SDGs?” in Here We Go and NEW HORIZON, its contrast was insignificant.

Figure 4: The Classification of “AI”



As a result of classifying “Occupation”, “Peace”, “Disaster Prevention”, and “AI” from three perspectives, ① “Is the content of the unit just stating facts?” and ② “Does the unit encourage students to think about the contents of the SDGs?” were extracted in large numbers. Only NEW HORIZON in the classification of “Peace”, there were more cases of item ② than ①. It is noted that the most extracted item ② was found in “A Mother's Lullaby” from NEW HORIZON English Course 3. ③ “Does the unit specifically mention the points of the SDGs?” was not present in the textbooks.

#### 4. Survey of teachers' attitudes toward the SDGs

We found that although junior high school authorized textbooks were designed with the SDGs, there are no actual units that clearly state the points of the SDGs. Therefore, we assume that it is not easy to deal with the SDGs in English classes. In accordance with the SDGs being covered in revised textbooks, an online survey of junior high school English teachers on their attitudes of the SDGs was conducted using Google Forms. The questionnaire comprised seven inquiries and was distributed among teachers who had been teaching English for over a year at either junior high or high school.

The questions were as follows:

- (1) How long have you been a teacher?
- (2) Are you interested in the SDGs?
- (3) Are you aware of the SDGs as a subject in your English classes?
- (4) If you include the SDGs as a topic in your English classes, which SDG goals would you like to cover?  
(Multiple answers)
- (5) What textbooks do you currently use?
- (6) In your current textbook, which units are suitable for relating to the SDGs? Please answer the grade and Unit / Lesson number.
- (7) What challenges or difficulties do you think you will face in teaching the SDGs in your classes?

#### 4.1 Results

Responses were received from seven respondents. The results of the questionnaire were as follows.

- (1) How long have you been teaching?

Table 1: Results of the length of teaching experience and the number of participants

Length of Teaching Experience	The Number of Participants
1-3 years	1
4-9 years of teaching experience	3
10 or more years	2
20 or more years	1

(2) Are you interested in the SDGs yourself?

Four respondents answered “Very interested”, and three respondents answered “Interested”.

(3) Are you aware of the SDGs in the subjects you cover in your English classes?

One respondent indicated a high level of awareness by selecting “Very aware”, while three respondents expressed moderate awareness by choosing “Aware”, and another three respondents indicated low awareness by selecting “Not very aware”.

(4) If you introduce the SDGs as a topic in your English classes, which SDG goals would you like to cover?

(Multiple answers)

Table 2: Results of the SDGs goals that teachers would like to cover

The SDGs Goals	The Number of Respondents
Goal 1: No Poverty	4
Goal 2: Zero Hunger	4
Goal 3: Good Health and Well-Being	2
Goal 4: Quality Education	4
Goal 5: Gender Equality	4
Goal 6: Clean Water and Sanitation	4
Goal 7: Affordable and Clean Energy	3
Goal 8: Decent Work and Economic Growth	2
Goal 9: Industry, Innovation, and Infrastructure	1
Goal 10: Reduced Inequalities	5
Goal 11: Sustainable Cities and Communities	3
Goal 12: Responsible Consumption and Production	4
Goal 13: Climate Action	3
Goal 14: Life Below Water	4
Goal 15: Life On Land	3
Goal 16: Peace, Justice and Strong Institutions	4
Goal 17: Partnerships for the Goals	3

(5) Which textbook are you currently using?

The number of respondents for each textbook was as follows:

BLUE SKY: 1 respondent

Here We Go!: 3 respondents

NEW HORIZON: 2 respondents

ONE WORLD: 1 respondent

(6) Which of your current textbooks are appropriate for relating to the SDGs? Please indicate the grade and Unit / Lesson number.

Table 3: Results of textbook and Unit / Lesson regarding the SDGs

Textbook	Grade	Unit / Lesson
BLUE SKY	2nd	Unit 6 and 8
Here We Go!	2nd	World Tour 2 (Non-Unit)
	3rd	Unit 3,4, and 5
NEW HORIZON	2nd	Unit 5
ONE WORLD	1st	Lesson 8 and 9
	2nd	Lesson 1, 2, 3, 4, and 7
	3rd	Lesson 2, 6, and 7

Other: We believe that the SDGs can be covered in any basic lesson. We feel that it is always necessary to communicate the relationship with the SDGs through activities in which students themselves learn the importance of learning to communicate.

(7) What challenges or difficulties do you think will be found in teaching when relating the SDGs to the classroom?

- I have to be careful not to leave out the fact that it's an English class. However, that may not make it deep enough.
- A certain amount of knowledge is essential for communication in English. Currently, students' amount of knowledge has affected their motivation for interaction. To increase opportunities for dialogue using English, I feel that a lot of correlative learning between other subjects and English, like the International Baccalaureate, needs to be introduced. Especially in this topic, I wished that more progress could be made in enhancing cross-curricular learning between social studies and English classes. (This means creating opportunities to use English in social studies as well.)
- The problem is that it is difficult for Japanese students, who are relatively well off, to understand. (Which is probably why they need to develop more empathy.)
- I think that junior high schools really have fewer topics directly related to the SDGs than high schools (especially because my students are first-year students in junior high school.). Therefore, teachers still need to expand the topics by making them related somehow, or creating new activities such as projects, small talks, and so on.



- I agree with the idea of making the best use of the matter as a topic, but I feel that sometimes the objective of “having students learn English as a language properly” is lost if the matter is used too much. (I once heard a presentation by a teacher who was working on such an approach and wondered how much the students were learning “English” as a language.)
- If it is done incompletely, it will end up being "someone else's business. If we make no effort to make it “our personal matter,” we will lose the meaning of the process.
- It is a great disappointment that even if a textbook is created with the SDGs in mind, if the teachers who use it are not interested in the subject matter, it will be completely meaningless. There is a possibility that teachers may not be able to deepen the content due to a lack of study on the SDGs. In addition to teaching with textbooks, it is essential to encourage students to consider the SDGs in connection with the issues themselves.

## 5. Discussions

Since ③ “Does the unit specifically mention the points of the SDGs ?” was not specifically mentioned in the textbooks, teachers need to be more conscious of the SDGs and take classes that introduce the SDGs. However, introducing the topics or matters related to the SDGs using the textbooks remains a challenging issue. According to the survey of teachers' attitudes toward the SDGs, its results also revealed that “teachers do not study enough about the SDGs” and that they find it not easy to make students think about the SDGs as their own. Therefore, we considered providing an example of a language activity that would encourage junior high school students to think about the SDGs as their own personal matters in their English classes. Moreover, Ito (2019) emphasized that the introduction of the SDGs into English language education could be a new direction for foreign language and English language education in Japan. As mentioned above, lesson plans about “A Mother's Lullaby” from NEW HORIZON English Course 3 which was the most extracted item ② is proposed below.

Procedures:

1. Get students interested in the SDGs, present the icon for the SDGs Goal 16 “Peace, Justice and Strong Institutions” and ask them to think about the goal before introducing the story.
2. Have students think of some key words and opinions about the goal using a mind map or similar method. Then have them share them with each other.
3. Read through the story and expand their thought by asking inferential questions.
4. Have students research news they are interested in and present on the theme of “What you can do for peace.” Being aware of events happening around them in their daily lives may be easier for them to see it as their own personal matters.

5. Again, have the students think about and share key words and opinions about the goal. Besides, they can compare their ideas with their own ideas before the lesson (No.1) and learn from the opinions of their classmates.

## 6. Conclusion

From the survey, we found that textbooks have many different contents to think about the SDGs. However, none of the units in the textbooks we analyzed specifically mention the points of the SDGs. Therefore, there are limited opportunities for junior high students to develop an understanding of the SDGs. Moreover, teachers should deepen their knowledge of the SDGs more and treat them in the classes. To achieve this, language activity is crucial. In this study, we suggested an example of a language activity. Nonetheless, it is not clear that the activity as stated above helps junior high school students see the SDGs as their own personal matter. Further research is needed to explore how the SDGs can be integrated into textbook topics and effective teaching methods to improve English language skills and motivation. The effects of these approaches should be investigated in the further study. We hope that both teachers and students will become global citizens through English classes in which they learn about the SDGs and think about the topics as their own personal matter using the authorized textbooks.

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