

Using the SDGs as a Springboard to Developing Academic Literacy and Language Skills

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Abstract

Although the idea of Education for Sustainable Development (ESD) has existed for almost ten years, its integration into English Language programs at the tertiary level in Japan has been slow. This paper aims to encourage its application by illustrating how ESD can be integrated into a reading course at a private university in Japan. Taking on a case study approach, the author details the main features of the course concerning the structure, the materials used, the lesson activities, and the assessment methods. By doing so, he aims to show how ESD can be combined with approaches to teaching English to develop university students' academic proficiency while increasing their knowledge about sustainability and the world. It is hoped that this practical paper will inspire other English Language teachers to incorporate ESD into their classes.

Keywords: Education for Social Development, English for Academic Purposes, Content Integrated Language learning, Project Based Language Learning, Sustainable Development Goals.

Introduction

Since the inception of the Sustainable Development Goals (SDGs) in 2015, Education for Sustainable Development (ESD) has influenced curriculums around the world. The SDGs are a collection of 17 goals which aim to create “a sustainable, peaceful, prosperous and equitable life on earth for everyone now and in the future” (UNESCO, 2017, p. 10). To achieve this future, UNESCO formulated the ideas and principles of ESD, in which learners reflect on how

their actions impact society, culture, economy and the environment and how to act sustainably (UNESCO, 2017, p. 11). Through the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan has been committed to ESD and has published several guides that outline how ESD can be realised (Ministry of Education Culture, Science and Technology (MEXT), 2020). As these guides have been focused on primary and secondary education, the adoption of ESD into higher education has been slow and further hampered by the unfamiliarity of university teachers with ESD principles (Jodoin & Singer, 2019, p. 55). One proposal to counteract this resistance is to use EFL classes, not only because they are mandatory in Japan but because they can easily connect with SDG-related topics (Jodoin, 2020). This connection is not only one of convenience, as the skills emphasised in ESD by MEXT (Ministry of Education Culture, 2020) parallels English for Academic Purposes (EAP). Encouraging the use of English is also authentic and connects to the aim of developing global citizens (Yu et al., 2024, p. 2). Content and Language Integrated Learning (CLIL) and Project Based Language Learning (PBLL) have been proposed as possible approaches to teaching sustainability (Cardiff et al., 2024; Reisinger et al., 2021) and I will outline these in the next section before describing the course that was designed.

Approaches to Incorporating ESD into Teaching English

In conceptualising the CLIL approach, Coyle (Coyle, 2008, p. 103) developed the 4Cs framework, which integrates learning (content and cognition) with language learning (communication and cultures). By combining the two, CLIL has been found to develop linguistic ability and study skills and motivate students while raising intercultural awareness (Coyle, 2002). A key component of ESD is learner-centred pedagogy, in which students actively develop knowledge, monitor, and reflect on their learning. Thus, I decided to integrate CLIL with PBLL.

PBLL extends project-based learning to focus on language learning, in which students explore global issues to find possible solutions while developing the necessary language skills. According to PBLworks (n.d), projects should

have the following features: they should be focused on a challenging problem or question; students should go through the research process of making questions, searching for information and applying it; the project should be both connected to the real-world context and their lives; students should decide how they work and use their voice; both students and teachers should reflect on their learning, the challenges they faced, strategies for overcoming them; students should give, receive, and apply feedback; and finally students should present their findings to people beyond the classroom. In the next section, I will illustrate how I incorporated the principles outlined into a first-year course titled “Text-based Interactive Learning,” which I designed and have been teaching at Chuo University in the Faculty of Law since the curriculum overhaul in 2023. Through doing so, I hope to increase awareness of ESD at the tertiary level within an EFL programme, which interested teachers can adapt to their contexts.

Developing the Course

The “Text-based Interactive Learning” (TBIL) courses aim to develop students’ knowledge about a particular theme by enabling them to actively engage with multiple sources of information through independent research, which they then share in pairs and small groups. The courses are streamed using the TOEIC ITP test, and I was assigned the Foundational level with a class of 30 students with a TOEIC score of up to 560. Each TBIL teacher can develop a course on a particular theme, and inspired by my readings on ESD, I decided to focus on how countries, regions, and people collaborate to implement the SDGs.

In making the course accessible to my assigned level, I used “We Have a Dream: 201 Countries, 201 Dreams, with Sustainable Development Goals,” a collection of 201 short essays written by youth leaders of 201 countries. In each essay, the youth leaders describe their context and explain how they impact the world through work relating to the SDGs. Although I used the English version in my classes, a Japanese version is available as the book was created by a company based in Japan, the “World Dream Project.” To put into practice the overall aims of the TBIL class, which the curriculum coordinators had created, I used a combination of the CLIL & PBIL approach to realise the guidance over student

choice relating to subtopics, their exposure to multiple sources of information, and requiring them to conduct independent research. In the following sections, I will explain how I did so through the course structure, the materials used, the lesson activities, and evaluation methods.

The Course Structure

As the academic term at Chuo University is split into two 14-week semesters of 100-minute lessons, I had to structure the course within these parameters. From experience, I have had the best results if students can submit two artefacts for assessment during the term, with the feedback on the first attempt informing the development of the second. With this in mind, I decided to have the evaluation in the seventh and fourteenth weeks. When choosing what would be assessed, I decided that a presentation and discussion would enable the students to share their ideas and opinions interactively if each presenter had a small group audience. To incorporate PBL into the course, I decided that the students would each choose a country and SDG to research over six weeks using various sources, including the textbook.

Materials Used

According to Grabe & Stoller (Grabe, F. L., 2018), “Students can only become more skilled readers in academic settings if they read, read a lot, and read for a variety of well-defined purposes.” This approach echoes the Concept-Orientated Reading Instruction (CORI) approach developed by Swan (Swan, 2003), which is organised around these stages: students engage in guided inquiry around a central theme, which they investigate by gathering information from multiple sources in project work that has a tangible outcome and are supported by reading specific strategy training.

As stated, I used “We Have a Dream: 201 Countries, 201 Dreams, with Sustainable Development Goals” as the core text. As the book was split into regions, I focused on one region every seven weeks. Within each area, students were required to choose a chapter that would provide the starting point for research over six weeks (with the seventh week being the consolidation stage).

After they had read and made notes on their chosen chapter, the students were expected to research independently: first, background information on the country itself, then information on the SDGs that the writer of the chapter was promoting, before re-reading the chapter and conducting more in-depth research. To gather more information on the country, I directed the students to the Simple English Wikipedia <https://simple.wikipedia.org/wiki/Simple_English_Wikipedia>, which served as an introduction to the CIA World Factbook <<https://www.cia.gov/the-world-factbook/>>. As sometimes the country's entry in each could be quite long, I stressed the importance of relevancy and had the students focus on the parts related to the chapter they had just read. This strategy was aided by restricting the number of pages the students could submit each week to two A4 pages.

After the students had gathered enough background information on their chosen country, I asked them to focus on the SDGs mentioned in the chapter. To make this research achievable to the students, I directed them to the Explainers, Fast Facts and Infographics produced by the United Nations and available at: <<https://www.un.org/sustainabledevelopment/sdg-fast-facts/>>. To make these texts comprehensible, I recommended that the students read the relevant infographic first to activate schemata before attempting a closer reading of the two-page Fast Facts.

Once the students had gathered enough background information on the SDG, I advised them to find out more recent details on the SDG using the website produced by Our World in Data <<https://ourworldindata.org/sdgs>>. This website collates data on the progress of the SDG worldwide based on the targets and indicators defined by the UN. This data is published visually through graphs, tables, charts, and a short paragraph. As these pages are sometimes quite long, I advised the students to make notes selectively by focusing on the indicators connected to what is mentioned about the SDG in their chosen chapter. After they completed background and recent research on their SDG, I asked the students to learn more about the youth leaders' projects to promote the SDG in their country. If they cannot find information, I advised them to search for it strategically, focusing on ".org" (which will focus on NGOs), or ".gov" (government) sites

using a combination of keywords. Although the information they find can vary in complexity, I envisaged that by going through the stages mentioned previously, they will be able to deal with these demands. According to Grabe & Stoller (Grabe, F. L., 2018), pg. 60) rereading “also leads to vocabulary recycling, critical thinking, and the consolidation of content learning.” In the next section, I will illustrate how, in the lesson activities, I scaffold the students’ development of the necessary academic skills.

Lesson Activities

Each lesson is split into two parts: the first half is devoted to pair sharing, while the second is taught to the whole class. As I have stated, each student chooses an SDG to research over several weeks and conducts independent research each week for homework by reading and making notes. To give the students meaning and purpose for this research, I engineer peer-teaching where each week, the students share their research with a “novice,” someone who has not researched the topic before. To do this, I restricted the number of students who could do similar countries and kept track of their topic choice using a class Google Document where each student wrote their name under their chosen chapter. I also asked the students to write their chosen country and SDG on their name cards, and before each lesson, I shuffled the name cards to ensure that they were always paired with a novice. For each lesson, I made a Lesson Google document detailing the activities the students should complete in the pair-share and whole-group activities.

In the pair-sharing stage of the lesson, I had the students introduce themselves to each other, asking them to find out about the other person’s hobbies and interests before teaching the necessary vocabulary and what they had found out in the previous week. Having the students introduce themselves and socialise before sharing notes, was a vital stage to build trust through interaction, as “we are drawn to people we have something in common with, and feel empathy towards people whom we share similarities” (Paydon, 2012, p. 52). I also had the students change pairs twice to build up fluency and confidence in explaining their research in English, following the advice of Nation (2008).

As some students were relatively low-level and had to explain a complex topic, I allowed them to use Japanese in the first pair share as long as it did not dominate the conversation. After the first pair-share, I reminded the “presenters” that their notes were in English and should be shared in English. I also encouraged the listener to look at the notes the presenter had made when they listened and ask comprehension questions when necessary.

Once the students had shared their research twice, it was time for the whole class activities. In these, I held tutorial sessions on developing academic skills. Before discussing them in small groups, I also introduced relevant texts or videos we would read or watch as a class. These academic skills were taught at the point of need, with, for example, reading and note-taking taking the forefront at the start of the semester. In contrast, slide design and presentation skills were taught in the weeks near the presentation/discussion day.

One of the first academic skills I taught was reading and making notes effectively. I did this through a guided demonstration. For each skill, I first briefly got the students to think about and share why they thought this skill was essential. Then, I asked them to share their experience developing it by responding to warm-up questions on the class Google document, which they could access on the classes’ Google Classroom. After they had finished working through these questions in pairs, I would hold a whole-class feedback session, where I would ask a few pairs each question, which I would then comment on, to build a shared understanding of the importance and experience of the academic skill. I then explained the best practices for developing the skill using PowerPoint or the whiteboard.

In some cases, I did a live demonstration, for example, in the case of reading and note-taking, where I gave the students a photocopy of a shared text and talked them through how to make notes on the first paragraph while making the notes memo on the whiteboard. After I had elicited the main features of the notes I had written, e.g. using only words and phrases, as well as lines to connect or emphasise key ideas, I asked the students to practice using the text in the following two paragraphs. As they made notes, I walked around the class, monitoring what they did and giving advice. As a closing activity, I got the students to show

their partner the notes they had made and comment on each other to imbue a common understanding.

In the next part of the lesson, we would then focus as a class on a common issue related to the SDGs, which I would introduce using either reading or listening. Before each, I would again get the students to share what they knew about the topic using warmer questions on the class Google document. Then, if necessary, I would pre-teach the required vocabulary before having them complete comprehension activities that I designed using the CLIL approach. After checking their listening or reading comprehension, I would check their understanding of the following discussion activity and give them time to prepare their answers. The students would then share their ideas and opinions in small groups. To close the activity, I would then ask each question to a couple of the groups and comment on their responses. Now that I have described the lesson activities, I will move on to how the course was assessed and how I gave feedback.

Assessment Methods and Feedback

I used continuous assessment to evaluate the students on a per-project basis. Each project was 50%, of which 35% was allotted to the weekly note-taking, 10% to the presentation, and 5% for the attendance and participation.

For the weekly note-taking, the students did the required reading and note-taking for homework and submitted photographs of their two pages of notes to Google Classroom each week. I would then assess their note-taking in terms of its completeness (they were expected to cite it correctly, write a short reflection of what they read, and include a word list) and its style (notes were expected to be clear, be made of words and phrases, and contain lines or underlining to emphasise or connect ideas). After looking at each set of notes, I would give a score and, if needed, advice on improving and suggesting future research directions. Having the students submit weekly notes enabled me to track their progress over time and have a body of their work, which I could then refer to when checking that the presentations they made were all their work.

For the presentations, the students were required to submit eight to ten-slide PowerPoint presentations that detailed their research and finished with five dis-

cussion questions. For these presentations, they were expected to give background information on their chosen country and SDG and then provide up-to-date information on progress towards achieving the SDG before detailing the efforts to support the SDG in their particular country of choice. The slides were expected to be correctly cited, easy to understand (with a mix of text and images) and contain the abovementioned parts.

To ensure the students understood how their notes and presentation slides were being assessed, I first asked them to reflect on their experiences in note-taking or making PowerPoint slides. Then, I asked them to evaluate anonymised examples of previous students' work to answer the question, "What makes good notes or slides?." After they had looked at the notes or slides, I would elicit class feedback on their answers to this question to conceptualise and then familiarise them with the evaluation criteria. To evaluate the performance of their presentation, we worked together to conceptualise what a "good" performance was. To do so, I showed them one or two short extracts of talks and got them to comment on the performance regarding the gestures used, the voice speed, and how the presenters engaged the audience through inflexions and dynamism in their voices. I would then get them to practice with each other and then give feedback on how their partner could improve. On the presentation day itself, with up to seven presenters presenting in small groups, I would move around the class and take field notes on their performance, which would supplement the peer assessment they would give each other using a Google form I created, which assessed the content of the presentation and the presenter's performance. I then asked the students to complete a one-page reflection for homework to close the project cycle. In this, they were first expected to summarise what they learned through their research and the other presentations and then self-evaluate their work over the project cycle. When I gave the students feedback and graded their efforts, I referred to my field notes, the comments they had given each other, and their self-evaluations.

Conclusion

By first explaining ESD and then showing how it can be applied to English

Language Learning at the tertiary level, I hope to inspire other practitioners to do the same. Designing such a course for many language teachers is daunting due to unfamiliarity with the subject matter. I hope my in-depth explanation of my SDG-focused reading course will give those interested the guidance and encouragement needed to adapt to their contexts. The work required to develop such a course is a lot, but it is well worth it, as such a course has the potential to come one step closer to fulfilling the SDGs, as it could inspire our students to take action. What Irina Bokova, a Director-General of UNESCO, argued in 2015 is still relevant today, perhaps more so, with the increasing pressures of climate change and conflict - “education has a responsibility to be in gear with 21st-century challenges and aspirations, and foster the right types of values and skills that will lead to sustainable and inclusive growth, and peaceful living together” (UNESCO, 2017, p. 11).

References

- Cardiff, P., Polczynska, M., & Brown, T. (2024). Higher education curriculum design for sustainable development: towards a transformative approach. *International Journal of Sustainability in Higher Education*, 25(5), 1009-1023. <https://doi.org/10.1108/ijshe-06-2023-0255>
- Coyle, D. (2002). Against all odds: Lessons from Content & Language Integrated Learning in English. In *Education & Society in Plurilingual Contexts*. VUB Brussels University Press.
- Coyle, D. (2008). CLIL-A pedagogical approach from the European perspective. In N. H. Van Deusen-Scholl, N.H (Ed.), *Volume 4: Encyclopedia of language and education 2nd edition* (pp. 97-111). Springer Dordrecht.
- Grabe, W. S. & Stoller, F. L. (2018). Introduction to Reading. In Newton, J. M. et al., *Teaching English to Second Language Learners in Academic Contexts: Reading, Writing, Listening, and Speaking* (p. 7). Taylor & Francis. Kindle Edition.
- Jodoin, J. J., & Singer, J. (2019). A framework for integrating education for sustainable development in the English as a foreign language classroom in Japan: an appeal to the language *OsakaJALTJournal*. <http://static1.1.sqspcdn.com/static/f/462558/28147796/1561380686093/OsakaJALTJournal2019.pdf#page=52>
- Jodoin, J. J. (2020). Promoting language education for sustainable development: a program effects case study in Japanese higher education. *International Journal of Sustainability in Higher Education*, 21(4), 779-798. <https://doi.org/10.1108/ijshe-09-2019-0258>
- Ministry of Education Culture, S., Science and Technology (MEXT). (2020). A guide to promoting education for sustainable development (ESD) provisional translation). https://www.mext.go.jp/en/unesco/title04/detail04/20220706-mxt_kouhou02-1.pdf
- Nation, I. S. P. (2008). Developing Fluency. In *Teaching ESL/EFL listening and speaking* (pp. 151-164). Taylor & Francis e-Library.

- Paydon, S. (2012). Developing a motivational learning environment. In Irie, K. & Stewart, A. (Eds.), Proceedings of the JALT Learner Development SIG Realizing Autonomy Conference, [Special issue] *Learning Learning*, 19(2), 46-59. Retrieved from <http://ld-sig.org/LL/19two/paydon.pdf>
- Gold Standard PBL: Essential Project Design Elements*. (n.d.). PBLWorks. <https://www.pblworks.org/what-is-pbl/gold-standard-project-design>
- Reisinger, D., Quammen, S. V., Liu, Y., & Virgüez, E. (2021). Sustainability across the Curriculum. In *Education for Sustainable Development in Foreign Language Learning* (pp. 197-214). Routledge. <https://doi.org/10.4324/9781003080183-15>
- Swan, E. A. (2003). *Concept-oriented reading instruction: Engaging classrooms, lifelong learners*. Guilford Press.
- UNESCO. (2017). Education for Sustainable Development Goals: learning objectives. 439. <https://doi.org/10.54675/cgba9153>
- Yu, B., Guo, W. Y., & Fu, H. (2024). Sustainability in English Language Teaching: Strategies for Empowering Students to Achieve the Sustainable Development Goals. *Sustainability*, 16(8), 3325. <https://doi.org/10.3390/su16083325>