Teaching the SDGs: Content-Based Research and Virtual International Exchange via Multimedia

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Abstract
Virtually everyone currently living in the modern world with access to the global media is familiar with the United Nations Sustainable Development Goals (a.k.a. the SDGs). The ubiquity of the symbol, the logo, and the colorful icon is such that these commitments made in 2015 are recognizable around the globe. This is particularly true in Kyoto, Japan, where one can see daily signage on buses or billboards, regular posts in the media, and support expressed on the local as well as national levels of government. Institutions are also on board, as these ideals are both simple to understand and, importantly, easy for students to agree with on principle. The SDGs have been called "the world's largest lesson", and as such, they constitute a tremendous educational opportunity. Throughout the unprecedented academic years of 2020 and 2021, a project was initiated, extended, and continued between cohorts of students at Kyoto University of Foreign Studies and Wenzao Ursuline University of Languages in Kaohsiung, Taiwan. The ongoing aim of these collaborations has been to connect larger issues to local communities. Due to the ubiquity and global reach of the Google Suite for Education - now Google Workspace for Education - groups can work together and interact in a way never before possible. Our research highlights the methodology, best practices, challenges, and advantages of structuring collaborative international projects in a virtual space with hyperlinks, sheets, multimedia, and shared documents embedded within a master sheet shared between up to a hundred participants.

Keywords: SDGs, Virtual Exchange, Project Design

Introduction

Coming from the vantage point of project and curriculum design, the concept of collaborative online international learning (herein referred to as COIL) is about designing an educational experience around an educational philosophy of collaboration and teamwork. The author has participated in and led the Tandem Learning Research Group at Kyoto University of Foreign Studies, which has more recently become the COIL research group and has conducted more than ten international projects over the past five years. This group has been responsible for over twenty research projects and collaborative projects, from more traditional language exchanges within the English department, to projects involving English as a means of communication to perform other research-based tasks. As we move towards more Lingua Franca interactions, participants use English as a means of communication within the international academic community; speakers of different languages utilize a wide variety of content in their interactions. A primary component of our international projects was the use of SDGs as a key source of content. The design of the project and the central theme of the interaction is predicated on the fact that students create better content if it has a wider audience. When students create research, presentations, or writing that will be seen multiple times by a wider audience, they are likely to invest much more time and energy into the work.

COIL Project Content

We use the definition of the term 'artifact' to indicate "an object made with a view to subsequent use," and that can include anything from a class chat which is viewable later, to a shared 'wiki' page on the learning management system, to a collection of YouTube links curated and shared by students, for students. These are all examples of educational "artifacts" that can outlast the period of the individual class, term, or even school year. Our current projects are mediated by the Google Workspace for Education, and this platform was specifically selected for the simple reason that all members of partner universities have institutional access to those tools. Recent projects also utilized SDGs as project content for international collaborations for several key reasons. Firstly, these ideals fit well with the motto and mission statement of Kyoto University of Foreign Studies: "Pax Mundi Per Linguas", meaning "world peace through languages". The study of international themes, trends, and issues leads to a contributing and positive environment in the world moving forward.

The SDGs represent 17 broad categories of international action. They were established in 2015, ratified in 2020, and by 2030 many countries around the world have committed themselves to progress in these areas, including progressive ideas in the fields of education, equality, gender, and obviously environmental goals. The SDGs have been called the "world's largest lesson," and as a set of principles, they aim to encourage students to become changemakers in their communities. Becoming global citizens is a central aim, and especially applicable when the content we have chosen to study is easy to agree with in principle, in line with the goals of higher education, and supported by a wealth of online information. Davidson (2017) posits that the thrust of 21st century education should focus less on specifically technical skills, but skills such as critical thinking, collaboration, and creativity. By studying content with a tremendous amount of online information, students must think and process that information carefully to make sense of the underlying issues.

SDGs apply to local, regional, national, and global issues. Content is free and available to anyone with an Internet connection, so this facet of project design gives us an incredibly wide

reach. This reach and connectivity enable student groups to interact in a way that we could never fully achieve before, so the ubiquity of technology-based learning in the era of the COVID-19 pandemic proved to extend our ability to move forward with COIL projects. In 2020-2021 we participated in a trilateral classroom project and in 2022 we extended this to five professors and an even larger group of students working together between our institution and a Taiwanese partner university.

Project Design and Organization

The key to successful project design is the master spreadsheet (see figure one), which has several unique features. Firstly, it is colorful, and the evolution of our design and organization has really been a process of making online shared content more colorful, more collaborative, and more interesting to look at for all participants. Next, there are clear sections for each phase of the project, and these sections are color-coded by week. Such a clear method of organization allows all participants to see exactly where they are and what is expected of them at each phase. The next vial point is that the master spreadsheet is viewable to all members of the project who have been given the link. This puts control and information into the hands of the participants themselves. Finally, the master spreadsheet includes a wide array of clickable links to other pages and resources within the project. Some of these are editable by members while others are resources connected to the content that can only be viewed or read.

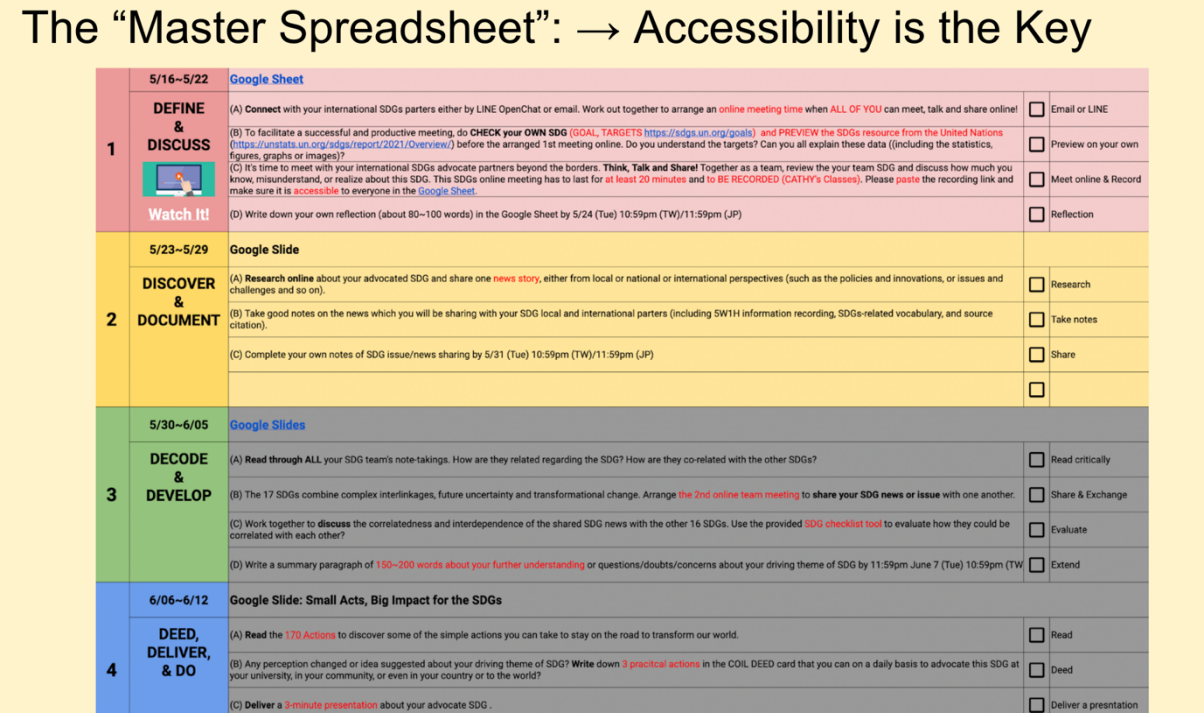

Figure 1. The Master Spreadsheet

A key component of our project design is the color-coded checklist with hyperlinks: everything is there, and in a remote learning framework or a live framework, all students have access to the “roadmap” at all times. Obviously, the smartphone has really taken this to the next level because anyone can access or interact with any aspect of our project from wherever they are. This is contingent on the permissions of participants: the organizing professors have control over who is in the project, and the privacy or ability to edit aspects of

the associated sheets and documents. It is obviously vital to ensure a safe learning environment, as well as to create backups of shared resources.

Collaborative Learning and Research

Students within all classes are initially divided into cohorts who will work together for the duration of the project. They then must make a connection and arrange get-to-know-you meetings with their group. Students record these meetings, and another central theme of project design is that it's not a micromanaged affair; we give the framework and the content over to the students, who then collaborate, meet, research, and create content. A popular education blog notes that teachers must "relinquish some of their control" in order to empower students to create and explore in the digital classroom (21 things 4 teachers, 2020). Members, as well as involved professors, have learned the value of making a personal connection at the beginning of a project. Developing rapport and becoming invested in a relationship with other human beings means that participants are much more inclined to devote their time and energy to communication and collaboration.

With the study of the SDGs, we focus on the goal of examining content in a way that allows students to understand big ideas and then how these affect their local situation. Then they have an opportunity to look at the regional, national, or international implications of their topic. Connecting with someone in another country using their second language as a means of communication, students in the English department can achieve one of their primary goals, which is to become better communicators. We enable this progress by way of a forum that is international in scope and accesses content that is based on real-world issues as opposed to language exercises in a textbook. This is one aspect of a broader trend in education; it no longer occurs in a vacuum. The National Standard Collaborative Board (2015) describes five goal areas that are commonly known as the five Cs: *Communication, Cultures, Connections, Comparison, and Communities.* These are not new and have been guiding language teachers since the 1990s. They provide an ideological framework for international communication and cooperation.

We are using Google Workspace for Education, but of course, there are analogous software platforms on Microsoft Teams or other learning management systems. Our choice of Google is primarily because it allows us to keep and share all content in one place, which all participants can access from anywhere, whether on a home computer, smartphone, or school computer. Another main concern with the design of international COIL projects is that they must fit into the term well, and the timing must work between universities in different countries with different schedules. Through trial and error, we found that a four-week project with introductory team-building activities and two main learning outcomes is the ideal length. Synchronous meetings are not necessary, but cohorts of students have a straightforward framework that they can easily begin with simple question and answer activities. Next, they research their chosen topic and share ideas on the issue in a spoken format followed by a reflective writing assignment. The project culminates in a narrated team Slides presentation.

Learner Autonomy and Agency

Students have agency: they are no longer viewed as individuals working on their own to construct target language sentences, for example, but they are social agents collaborating with other people (Kalaja et. al. 2011). Our education design here is based on real-world activity. Collaborators and professors create how-to guides and tutorials within a

multiplatform environment. Guides go step-by-step, for example, a roughly ten-minute guide showing students how to record audio on their smartphone, home computer, or school station computer, then convert that audio into the correct format, save it in a file hierarchy which we've structured for them, and then how to insert it into their Slides presentation. Agency is described by Reeve and Tseng (2011) as the process by which students proactively try to personalize and enrich both what is to be learned and the conditions and circumstances under which it is to be learned. Students take the framework provided by the class facilitators and personalize it. Another corollary benefit for student participants is having multiple professors produce tutorial content that can be added to the collection of available resources. Students are not only receiving contact from a singular professor with one accent or one style but benefitting from multiple perspectives, thus broadening their educational experience.

Benefits of International Collaborative Learning

A further benefit of content created outside of class time by cohorts of students is exemplified by the concept of the flipped classroom. The learning experience of international projects, again, is more reach – more content viewable by a wider audience, and asynchronously. Content is authentic and communicative, and there exists an aspect of positive peer pressure whereby students push each other to create better material. Cohorts of students with different skill or language levels help each other and mentor one another through the project, rather than relying on the professor. Content, questions, and answers are coming from members of the student's cohort and the Internet. Professor Ramesh Srinivasan described digital literacy as the doorway to other literacies (Srinivasan, 2020). That is to say that being able to use shared platforms is a *prerequisite* to other educational goals.

Furthermore, there is an aspect of what we call collateral learning: Even when not explicitly required to do so, students carefully watch other groups to see what they produce – comparing and benefiting from others' work. The vast majority of students have positive feedback about their international COIL project, saying that it helps them to better understand international issues, and improves their speaking skills. International community building also occurs, though it is not an explicitly specified goal.

International COIL projects are not without challenges. Technological hurdles such as email addresses, SNS accounts, formatting, tech training, connectivity, sharing documents, and others can be difficult to overcome, but all these challenges share a similar theme in their solutions: better project design, standardization, and clear communication result in fewer problems. The troubleshooting, communication, and experience of overcoming such issues over a period have resulted in a clear format and methodology which can be replicated. In the words of Yuval Noah Harari, "technology isn't bad. If you know what you want in life, technology can help you get it" (Harari, 2018). The technology that we use in the classroom should be a tool to serve the educational process, not the goal in and of itself. Therefore, technological challenges must be minimized as much as possible so as not to detract from the communicative tasks the are the real focus of COIL projects.

Conclusions

In short, the author believes in the benefits of real world and legitimate communication between international groups of peers. By widening the 'reach' of content created by students, for students, a higher caliber of academic achievement is reached. The ultimate goals of international COIL projects are not singular. As members of the English department at a

university with a rigorous language program, our students have a clear need and desire to communicate more effectively in English, increasing their spoken proficiency and, of course, test scores. Getting qualifications which will lead to future employment opportunities is key. However, there is another long-term and equally important goal that we can support as educators. As an institution or as individual professors, we aim to provide students with opportunities to become global citizens. In the process of actively and authentically communicating with peers at another institution, participants extend their horizons, learn about important issues, and embody a ‘changemaker’ mentality as they move forward in their lives and in their education.

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