

On Using Google to Enhance Teacher- Student Interaction in Distance Learning

Faculty of Cultural Development

Margaret Yamanaka

(Received November 17th, 2023)

遠隔教育における教師と学生の交流強化のための **Google** の活用について

文化創造学部

山中マーガレット

(2023年11月17日受理)

概要

遠隔教育について簡単に説明した後、著者は、以前は遠隔教育でどのようにライティングの授業が行われていたのかを研究してきた。そして近年は Google Document アプリを使用すると使用しない場合にどのような違いがあるのかを調べるために、具体的な授業の事例を比較しようと試みている。最後に、今回は回答者の数は非常に少なかったものの、この変化に対する学生の反応を記録した。

Keywords: Google documents, Google forms, Interactive classroom, online classes

I. Introduction

In less than a decade, Google went from two university students working in a friend's garage to a public company¹⁾. It is now a multimillion-dollar company with branches all over the world. In its early days, Google was synonymous with search engines and moving about easily within the internet. Inventions, affiliations and purchases lead Google into the fields of software production, online advertising, mapping services, music and video sharing, language translation, and Artificial Intelligence, to name just a few of their enterprises.

With the coming of the Covid Pandemic and

the absence of face-to-face classes and the following lack of hand-written assignments being handed in, both students and educators needed to become more IT literate. Google Classrooms, a platform that was initially released in 2014, became a standard in many schools. Classrooms contains documents, spreadsheets, slides, and other features to simplify the process of students completing their assignments and teachers marking those assignments. Revisions allowed teachers to reuse files with other classes, and to distribute messages or assignment topics to multiple classes simultaneously.

In other words, the focus was on gathering or tracking students' assignments, and giving

evaluations to those assignments. As educators such as Nela and Supriatna described in their research²⁾, Google applications can be integrated to increase creative learning and provide an improved workflow between the teacher and the student.

In this paper, one application in particular, Google Documents, will be looked at with the specific purpose of illustrating how it was used in a partially online writing course. A brief comparison with the well-known Google Forms application is expected to highlight the limitations of Forms, while emphasizing how adaptable the Documents application is.

II. A brief history of Distance Learning

Distance Education or Remote Learning, has a long history. It began in the US in the 1840s as lessons for adults, sent out weekly, teaching them shorthand. Distance Education as a part of tertiary education was first recorded in the 1870s with the University of Chicago establishing an independent department to cater for remote students in 1892³⁾.

Distance Learning or Correspondence School first became a part of primary education in 1914⁴⁾, providing assistance to children living in remote areas of Australia^{5) 6)}.

Originally, Correspondence School lessons were dependent heavily on paper resources and instructions sent out by post to the children and their families, which, once completed, were then returned to the school by post for correction and evaluation. The process was long and time-consuming. Unlike teaching in the classroom, once the “lessons” had been completed, the children were free to play outside or help their

parents on the farm. The amount completed, review, and the speed of completing each package was dependent on the caretakers of the child rather than on the teacher⁷⁾.

With the advent of radio and television in the early 20th century, some American and European universities developed weekly broadcasts that catered to a wide audience. For example, the Wisconsin’s School of the Air was the first to send out radio broadcasts to various schools, and the Ohio School of the Air began a music program for children⁸⁾.

As for Australia, its now famous School of the Air began as late as 1951, with the first official radio lessons being sent out from the Flying Doctor Service in Alice Springs. At last, a coordinated curriculum with a regular class, albeit via radio waves, was made possible. For one hour each day, students could have direct contact with a teacher in a major center and, occasionally, “classmates” who might be several hundreds of miles away. However, the remaining “school time” was still paper-based and dependent on the parents, older siblings, or especially hired home tutors.

During the latter half of the 20th century, video and audio tapes made it possible to prepare lessons containing more detail; lessons that could be reproduced in different areas over and over again. Studies in the U.S. indicate that the visual aspect increased motivation amongst students and were a much-appreciated assistant for the teacher.

As the Internet took hold in the 1970s to 1990s, online educational programs were launched from various universities in Europe and the U.S. At the beginning of the 2003 school year in Australia, Remote Learning changed greatly as each “school” started to broadcast

classes via satellite broadband, allowing students to see their teachers for the first time⁹⁾. Homework, that used to take a month or more to return, was seen quickly, and the speedy feedback improved motivation.

III. Teaching Creative Writing as a Remote Learning class (without the help of Google Docs)

It is now 15 years since Gifu Women's University opened its Satellite School within the precincts of the Okinawa Women's Junior College, and began allowing College graduates to become Junior and Senior students at a university a thousand kilometers away. Within the curriculum offered to students in the remote learning course, a large number of the classes are offered as traditional style lectures.

Unlike the days of the School of Correspondence, lecturers can now prepare a PowerPoint slide show or show short video clips to help the learner better understand the content being mentioned.

Writing classes, on the other hand, are best given in an environment where immediate feedback can be given to the students, in the hope that they will be able to "see" their mistakes, and rectify them expeditiously.

In the case of distance classes between Okinawa and Gifu, the lecturer is shown on a large screen to the students while the whole classroom is shown to the lecturer on a smallish monitor right in front of them and a larger screen to their right or left. This situation might be very efficient for lectures, especially when PowerPoints, videos, OHPs, and other resources are used alongside the spoken lecture. It is not

however, an ideal situation for a writing class.

During the early stages of this special distance learning curriculum, Creative Writing classes were attended to by another teacher, who, by being in Okinawa, was able to assist students directly with any questions or explain any grammatical inaccuracies on-site. When the class included students stationed in Gifu, the teacher altered class content, decreasing written work and allowing voice reporting. After a number of years, and staff realignments, the class was taken over by the author, stationed in Gifu. This situation has led to a number of problems arising.

During classes, some students are out of sight, that is, not within the scope of the single classroom camera. Other students who give comments, or try to explain what they have written, cannot be heard unless they come to the front to tap on the mic. Even if the communication is successful and the information is relayed without any sound or technical barriers, the process can be very time consuming. Sending messages through the school Cybouszu intranet application may seem possible, but this, too, is not an efficient way to continue the lesson. One reason for this is that many students attend class with just their phones, which makes composition difficult. From the teacher's position, the time required in processing long paragraphs from multiple sources as well as the inability to correct multiple paragraphs during the time limit of 90 minutes does not make for an efficiently run class especially when there are five classes held back-to back on one day.

IV. Teaching from Gifu to Okinawa with Google Applications

In contrast to the above, one year the author was faced with doing a three-day writing course from Fukuoka on way to Okinawa during a typhoon. As the subject was being done at the time of the Covid 19 Pandemic, each student had a laptop or tablet and, while most of the students still came to the Okinawa Satellite classroom despite the bad weather, Zoom was used to connect the class with the teacher. During that course of three days, Google Documents, Google Forms, and Google Slides were used to great advantage.

Slides were used to show photographs of situations about which the students could write comments. Google Forms were used to get feedback from students who previously wrote comments in class notebooks that were collected at the end of the course. The use of Forms allowed the teacher to grasp quickly how the students felt about their interactions (in English) with others.

The use of Google Documents provided the best replacement for actually being in the classroom. Links to Document files with the session's topics were sent out to each student with tables in which the students could write their own sentences. The collaborating function of the Document allowed every student with the link to be an editor of the file. In other words, along with simultaneous data input from every member of the class, the teacher could give immediate verbal comments to the necessary individuals, or add "comments" to the file suggesting different words or alternative phrases, or even make direct changes to sentences. (Ref. Fig. 1 & Fig. 2)

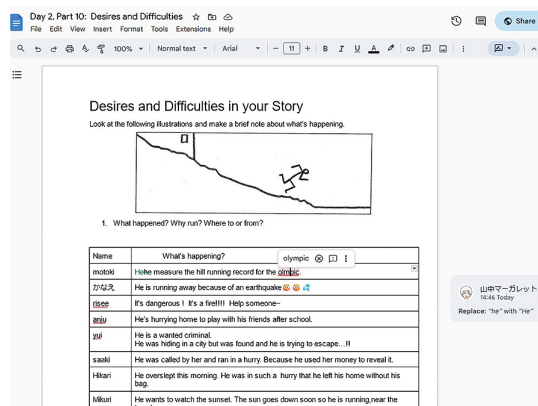


Figure 1. An example of Teacher to Student suggestions

Write about two items, then choose an item of your own.

Photo	About the object	Name
	There are three lacquerware chopsticks. Two are red and one is brown. They are all about 22 cm long. We use these pointed chopsticks when we eat. At lunchtime, I sometimes use disposable bamboo chopsticks.	M.Y.
	1. It is an "Orizuru". 2. This is a palm sized crane. It's made from fluffy paper various colors. It is used at the time of sympathy. 3. It's an Origami. It's made of with square paper. This is crane. 4.	1. Y.H. 4.
	1. It is a windbell. It makes us think that we are cool. 2. This feels like summer. 3. It makes a nice sound. 4. This is made by the wind.	1. 2. Rise 3. M.N 4. S.M
	1. It is a bookmark. Japanese name is "shiori" 2. This is made of paper. It has a picture of seashells on it. 3. This is a bookmark. If you want to finish reading a book in the middle, you can use it. 4. This is a bookmark. When you stop reading the book in the middle, it's something that marks the spot.	1. M.Y. 2. Rise 3. Mikuri 4. Yui

Figure 2. An example of a teacher example with teacher changes highlighted in yellow.

What had been a time-consuming process, often ending in failed or delayed communication could now be almost instant.

V. Student Response

Google applications continue to be a part of the present English distance learning curriculum, and when applicable, are being used during regular semester classes, such as "Communication English", and intensive summer classes, such as "English I".

V. 1. Reactions from English I participants

When students in Ms. Burke's 2022 English I class were asked if they liked using their telephone and tablet technology to do the quizzes set in class, 77.4 % (24 students) replied that they did, indeed, enjoy using technology, while a further 16.1 % (5 students) replied that they enjoyed it somewhat.

The same question was asked of all the students who took English I in 2023 . Of the 35 students who responded, 51.4 % (18 students) and 28.6 % (20 students) replied that they extremely liked, or very much liked (respectively) to use IT technology such as tablets and phones during class.

V. 2. Reactions from Okinawa class participants

Unfortunately, at the time of writing, only four students had replied to a post-class survey asking about the students' experience in the 2023 Creative Writing class. However, of those students, three replied that they were extremely satisfied and one replied that they were somewhat satisfied with the use of Google Documents in class. Indeed, one student commented that due to the speedy response in class, they were able to recognize their own ability, and "the importance of expressing myself in my own words... without using too many translation [sites]." ¹⁰⁾

VI. Future Possible Modifications

Is "Creative Writing" class for distance learners the only English class to face the abovementioned difficulties? Indeed, during the "English Communication" class in the distance learning curriculum, conversations between the teachers and the students can be difficult due to

the "blind spots" in the corners of the room. Similarly, due to the echo effect when all the microphones are on, the microphone in the satellite classroom is usually turned off, eventuating in no constant sound available from the classroom. Furthermore, the lecturer is not able to hear how consistently or how well the students are speaking in English.

As the "English Communication" class uses various resources such as photos and student drawn maps and so on to enhance their conversation content, it is highly desirable that the teacher be able to see clearly what resources each student is using. In a face-to-face situation, the lecturer can focus on a conversation pair, move towards them to get a better understanding of their conversation flow, see the materials they are using, and then correct or encourage the interlocuters as needed.

Where the classroom has only one camera, set at a high point in the room, the teacher will not be able to see any detail. In Berlo's SMCR Model of Communication¹¹⁾, the channel of Seeing is placed above the channel of Hearing. Of course, in a natural setting, this refers to being able to see one's partners facial reactions, but this channel is not exclusive to body movements alone.

Zoom was used in the English Communication class during the pandemic. Could Zoom be a more reliable type of technology on some occasions? Like the present system of one camera for one room, there are both merits and demerits to using the Zoom system.

In a Zoom classroom, the computer picks up almost all of the sounds, and the facial expressions of each student can be seen when the

student has their camera turned on, and in a position where they can be seen. Breakout rooms can replace pair work situations. Teachers can go in and out of a session, listen to the ongoing conversation or make comments on the content of the dialogue.

On the other hand, when making breakout rooms it can be difficult to match different students each time, and the teacher has no way of “hearing” if the conversation continues in English after the teacher has left the breakout room. However, because the teacher can pay a surprise visit to the group, the teacher can get a holistic idea of whether or not that group is conversing in English or relying too much on Japanese. WiFi availability, the wish for privacy and other facets of the student’s willingness to participate in a Zoom classroom can also be a barrier to a smooth lesson.

As one student commented during a post-English Communication survey, “I found it easier to understand and listen when attending class in person. If I could have, I would have liked to attend all the lectures face-to-face!”¹²⁾

VII. In Conclusion

This paper has looked briefly at Distance Learning and how it has changed, most dramatically, over the past two decades. These years are almost parallel with the experience of students attending Gifu Women’s University courses via satellite (internet) from Okinawa. There are many great advantages to assisting people in remote areas to attain education degrees. However, as can be seen through this research, there are some subjects such as conversation classes that do not lend themselves

easily to a satellite classroom with a single camera sending a view of the whole classroom to the instructor.

It was also noted that, while some students seem to prefer to be in a face-to-face situation, there are many who have shown an enthusiastic response towards computer applications and online learning. Of the three Google run applications used in class, the author described how the Google Documents application could be used as perhaps the best interactive tool to replace face-to-face communication in writing classrooms, and that the interactive slides could also be efficient when the class is using pictures or other illustrations. Google Form was seen to be a speedy way of getting feedback from the students although it does not allow for any instantaneous grammar or word choice corrections.

In conclusion, it is therefore suggested that, while online classes have become more prevalent, it is still prudent to continue with face-to-face classroom time for some conversation-based subjects. At the same time, it has also been shown that the Google Doc application, along with the Google Slide and Google Form applications can be used to great advantage in writing classes.

Bibliography:

- 1) Redding, Anna Crowley, *Google It: A History of Google*, Macmillan, 2018.
- 2) Nela, Euis & Nana Supriatna, “Creative Learning Through Google Classroom in History Learning During the Covid- 19 Pandemic”, *Advances in Social Science, Education and Humanities Research*, volume 578 . Pp. 83 - 91.

- 3) "Started with letters in the 19 th century.. History of 'distance learning', Almotahida Education Group, URL: <https://www.almotahidaeducation.com>: accessed Sept. 10, 2023.
- 4) "Australia: learning at home since 1914 ", Acer Organization, URL: <https://www.acer.org/au/discover/article/australia-learning-at-home-since-1914> : accessed Oct. 1, 2023.
- 5) Cunningham, K.S., *Primary Education by Correspondence*, Melbourne University Press, 1931.
- 7) Stevens K. "Australian Developments in Distance Education and Their Implications for Rural Schools", *Journal of Research in Rural Education, Spring*, 1994, Vol. 10, No. 1, Pp. 78 - 83. Online: https://jrre.psu.edu/sites/default/files/2019-08/10-1_6.pdf : accessed Oct. 1, 2023.
- 8) "History of Distance Education", *The Handbook of Research for Educational Communication and Technology*, URL: <http://members.aect.org/edtech/ed1/13/13-02.html>: accessed Sept. 10, 2023.
- 9) "New wings for school of the air", *The Age*, February 11, 2003 . URL: <https://www.theage.com.au/technology/new-wings-for-schools-of-the-air-20030211-gdg8ql.html>: accessed Sept. 11, 2023.
- 10) Japanese: 「翻訳ページを使いすぎずに、自分の実際に使える言葉や文法の範囲で、自分の言葉で表現し、その部分を鍛錬する重要性を今回の3日間の講義で一番学んだと思います。」
- 11) Berlo, David K. *Process of Communication: Introduction to Theory and Practice*, 1960, Holt,Rinehart & Winston.
- 12) Japanese: 「対面のほうがわかりやすく、聞きやすいと感じました。できるなら全部対面で講義を受けたかったです！」

