

A Study on Google Classroom as a Tool for the Development of the Learning Model of College English

Jeong-Hwa Lee ¹ and Kyung-Whan Cha ^{2,*}

¹ Dankook University; Instructor, 2019jhlee@naver.com

² Chung-Ang University; Professor; kwcha@cau.ac.kr

* Correspondence

<https://doi.org/10.5392/IJoC.2021.17.2.065>

Manuscript Received 24 March 2021; Received; 24 June; Accepted; 25 June 2021

Abstract: *The aim of this study was to explore the use of Google Classroom as a learning management system for College English. The study targeted 34 university students. They took part in various activities, such as writing reactions to video lectures, peer-editing essays, and recording video presentations, et cetera. For the study, a t-test was conducted to evaluate the English development of the students. The two essays that each student wrote were used as the data sources. The result ($t=-5.854$, $p=.000$) indicated an improvement in their English writing proficiency. In addition, a survey was conducted to gather students' feedback regarding their perceptions towards the course. The study covered five aspects of their experience: Google Classroom, language development, Quizlet, classroom experience, and essay-writing experience. From the results, students indicated a positive response to the program. The use of Google Classroom in an online learning setting accomplishes two things; it helped the students in the development of their English proficiency, and provided activities that students find interesting, which in turn stimulates their self-learning spirit.*

Keywords: Google Classroom, Development of learning model, College English, English writing, Student's perception

1. Introduction

The COVID-19 has affected not only the economy, and social life, but also academia. In an attempt to mitigate infection from COVID-19, many universities around the world, including those in Korea, have been forced to conduct classes online. Technology, as it is used in the field of education, has aided in the development of the learning process. It has made it possible to access knowledge more easily and has even helped students learn the skills needed in their careers [1]. The development of a learning model that allows students to acquire knowledge and at the same time provide student-to-student interaction is urgently required. Due to the sudden changes brought about by the pandemic, the education system has had to deal with many difficulties. The average tertiary institution offers hundreds of courses per semester. With all these courses being taught over the web, many instructors have had to make use of learning management systems such as Google Classroom (GC), Edmodo, Daum Café, etc. Many universities have their own e-learning programs. However, almost all courses in the first semester were done online, and E-learning Campus, the online program used by the university, was not designed to handle large amounts of data because the typical classroom involves face-to-face interaction between the teacher and students. Online courses were intended to be only supplemental.

GC has been one of the prevalent online learning management systems. It was used by about 40 million teachers and students worldwide as a learning management system in 2019. During that period, GC was used mostly in elementary, middle, and high schools as a class aid tool for face-to-face classes. When Covid-19 hit, instructors in universities grew interested in the use of GC as a learning management system. Online courses provide technical issues and with more complex topics because online classes can interact with instructors and students in a virtual space anytime and anywhere. Thus, a new teaching approach is needed. The purpose of this research is to explore the use of GC as a learning management system for College English courses that are conducted online. The idea is that this program can help the student achieve his or her learning goals during the semester while away from the classroom. GC was the medium of communication and the

avenue of instruction, and it was used in every class activity. The course was taught in English. This provided students a natural English learning environment.

The instructor tried to find practical activities in GC that would engage the students and stimulate their interest in the course. At the end of the semester, these activities were evaluated to determine if they achieved their purpose. The students were also surveyed for their feedback. GC provides an array of features such as instructor-student interaction, grading, submitting assignments and projects, etc. Video lectures can also be uploaded onto the platform for students. This study will introduce the class activities that were conducted during that period to improve the students' English communication skills in a non-face-to-face setting. It will also evaluate the essays written as part of the exam. Furthermore, a survey was conducted to gather student feedback. The following are the key research questions.

1. What teaching methods does the instructor choose to follow while using GC ?
2. Based on the analysis of the essays, is GC an effective learning management system to use?
3. What are students' perceptions of the use of GC as a tool for online learning?

2. Literature Review

2.1 The characteristic of GC

GC is an educational program that was developed by Google as a free online service for schools. Although it was launched in 2014 [2] it was first released to the general public in 2017. As a component of G Suite for education, it allows any user with a Google account to create, teach, and join a class [3]. The main objective of GC is to make it easy for instructors and students to share files over the web. It links the user to his or her other Google services, such as Gmail, Google Drive, Google Docs, etc. This does away with hard copies of documents. The instructor creates a class and provides the students with the class code. This allows them to join the classroom and gives them access to the class materials. As soon as a student joins, a separate folder is created in his or her Google Drive. This folder contains all the materials the instructor has shared with the students. Students can then submit their assignments to be checked and graded by the instructor. These assignments are uploaded to the appropriate folder in GC.

2.2 Previous works involving GC

Various research works involving GC were collected from all over the world [4, 5] Heggart and Yoo [6] examined the efficacy of using GC to encourage Students' voices in the final year of students majoring in primary teacher education. It also sought to consider how the program would influence future teaching at the university level. The research revealed that GC boosted student performance in multiple parameters. This data was used in evaluating online platforms. Four criteria were distinguished: ease of access, pace, collaboration, and student voice. Research conducted by Kwon and Kang [7] into the effects of GC at Korean high schools proved that the program brought many advantages for learning. They found that it allowed students and teachers to interact more easily at an individual level. It also made it easy to organize class materials, as well as assignments, and it encouraged participation through real-time collaboration on projects. Another study by Izenstark and Leahy [8] shined a light on the opportunities that GC provides to students and instructors by discussing its practicality. It revealed that the program made a delivery of materials quite seamlessly, as was seen in the ability for librarians to easily share information, exercises, and supplementary materials with their students. The students were particularly pleased with the fact that they could integrate their campus email accounts. Iftakhar [9] carried out a study involving 35 students and seven instructors working at a university. The researcher sought to evaluate the overall impact of GC as used in the different classes. A survey was also conducted to assess the learners' expectations. In carrying out the research, the "typical case sampling" method was followed. Interviews and observations were how the data was gathered. The results showed that GC does possess great potential when used in teaching. The data collected from the learners' perspective also proved valuable to the research. Al-Marroof and Al-Emran's study [10] was done to determine the factors that influenced their students' reception of GC Google Classroom. This was conducted with 337 respondents through an online questionnaire. The results revealed that the students' feelings regarding its ease of use and usefulness have a positive effect on their behavior. This, in turn, affects their actual usage of the program. Decision-makers in universities and colleges can benefit from this by gaining a better understanding of the effectiveness of their students using GC. Azhar and Iqbal [11] focused their study on the instructor's perceptions

toward GC. By using a qualitative research design, they collected a sample of 12 university instructors who used GC for at least a semester. They found that most instructors viewed it only as an assisting tool for organizing documents and other basic classroom tasks. The reason they indicated was its lack of a user-friendly interface. Kim, Im and Kim [12] examined the effects of middle school online classes that utilize GC. The students' English listening skills were the focus. Seventy-four students assigned to the experimental group used Google for Education apps. The control group was composed of 71 students who all made use of only paper worksheets. At the end of the semester, the listening ability of both groups were compared. The results revealed that the class that utilized GC experienced improvement. This suggested that the program is effective in the English development of middle school students.

Based on these studies, we can see that GC can be used as a learning management system not just for online classes but even for those taught in the classroom. They proved that GC is beneficial to both instructors and students. This research, however, is unique when compared to the previous studies. The course instructor utilized a wide range of activities, including video lectures, peer-editing, oral presentations, word games by Quizlet, etc. The curriculum and teaching methods used in Korean schools are known to be both teacher-centered and student-centered [13]. However, during this semester, students were put into a situation where they had to take more initiative regarding their studies. For this reason, the instructor needed to give the students more freedom in the management of their time and in the carrying out of their class responsibilities.

3. Methods

3.1 Participants

This study was conducted with 34 participants enrolled in the course of College English 1 at a university located in Gyeonggi Province, Korea. The course was taught for 15 weeks in the spring semester of 2020. College English 1 is a mandatory course for freshmen. A pre-admission placement test following the modified TOEIC was taken by all the freshmen. It resulted in 59% of them being placed in the lower class, 35% in the intermediate class, and 6% in the upper class. The students who participated in this study are all in the intermediate class. This course was taught in two different classes. One class was for 28 students belonging to the College of Software Convergence. The other class was for six students belonging to the College of Music and Arts. Both of the classes were under the same curriculum using GC.

3.2 Data procedure

College English 1 focuses on writing. The main textbook was Great Writing 3. As a part of their midterm exam, the students were required to write a descriptive essay and a comparison essay for their final exam. These essays were directly based on the textbook models. The errors in two pieces were analyzed to investigate the improvement of students writing skills. These writing activities were done in order to determine the students' writing abilities. It involves a descriptive essay, assigned to the students in week 7, and a comparison essay assigned in week 15. Moreover, at the end of the semester, we conducted an online survey to gather students' feedback regarding the use of GC as an online learning management system.

3.3 Data analysis

We utilized the statistical program SPSS 23 to examine the data, which constituted a total of 3683 sentences from the descriptive and comparison essays. The program was used in the frequency analysis of the survey results, as well as the *t*-test. Moreover, we divided the questionnaire items into six sections in order to comprehensively evaluate the students' classroom experience. Besides GC, other programs were used, such as Quizlet and MS PowerPoint.

4. Results

4.1 Design effective online teaching models for general English courses using GC

The GC platform played a huge role in managing this course. GC makes it possible for an array of things to happen, such as teacher-student interaction, grading, submitting assignments and projects, meeting deadlines, etc. Video lectures can also be uploaded onto the platform for students to access. In this section, we presented the class activities that were conducted to meet the student learning objectives in a non-face-to-face setting with the help of GC. Figure 1 shows a screenshot of one of the main pages of GC selected for this research.

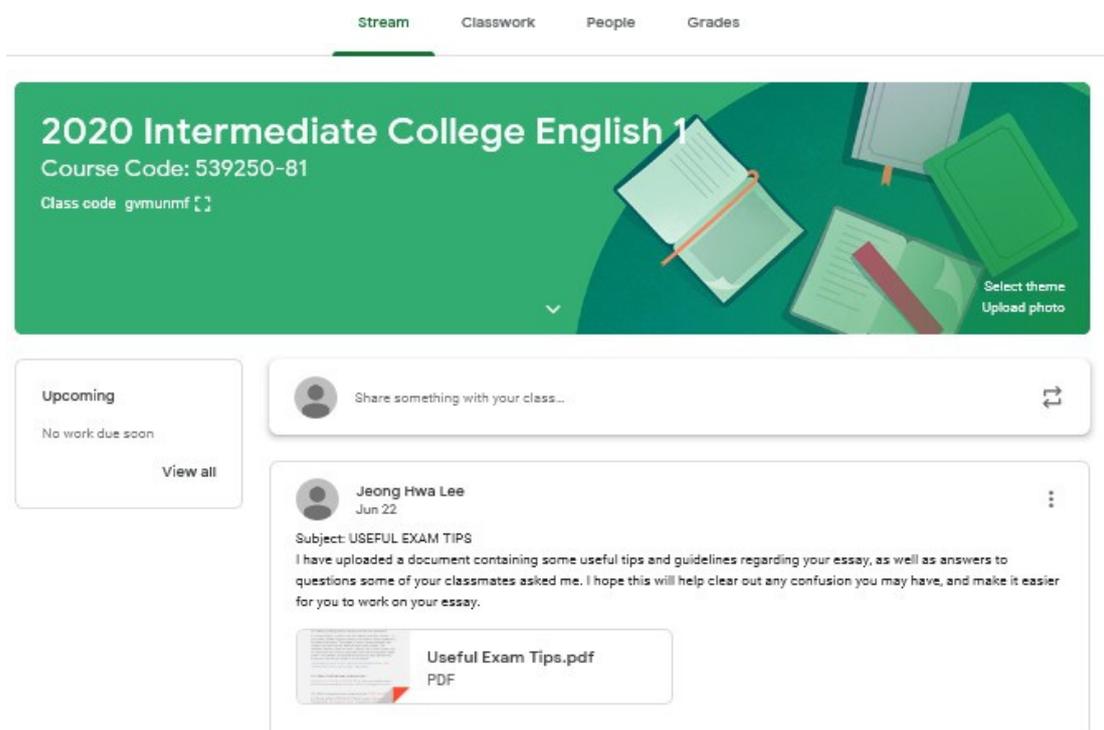


Figure 1. The main page of GC

4.1.1 Reaction to each video lecture

Students would watch the video on the day the class was scheduled, after which they would summarize the contents of the lecture by writing a reaction in a minimum of 5 sentences. This was done as a confirmation that the student had indeed watched the lecture video and understood the content. There were a total of 27 lecture videos uploaded. This equated to 27 reaction assignments from each student. The prompt submission of their assignments before the deadline was considered proof of their attendance for the day. If they failed to submit their homework more than 10 times, they automatically failed the course. Attendance alone constituted 10% of the grade. This motivated them to complete and submit their homework on time. There were only a few cases of late or missing submissions. Here is an example of a student's reaction (*italicized*) to the video lecture. This was selected as a sample for the study. On this particular day, the students watched a video lecture discussing the components of a paragraph and how to write a good topic sentence. From the student's reaction below, we can perceive how much the student was able to comprehend the lecture. We also get a window into the student's choice of words and style of writing. It is obvious that each student sometimes understands the subject matter differently and has his unique way of writing, but we selected this student's reaction assignment as a good representative of the others.

“This video describes the definition and function of a paragraph and explains in more detail about a topic sentence (1 of 3 important main parts of a paragraph). As most people know, a paragraph describes, discusses, or explains one central idea. And it consists of 3 important main parts; a topic sentence, two or more supporting sentences, a concluding sentence. Of course, there are paragraphs for many purposes, but they all still follow the same pattern; they all include the topic sentence, supporting, and concluding sentences. To tell in more detail about a topic sentence, a ‘Good’ thing should guide the paragraph and should not be a well-known fact because there is not much more to say about the topic. And it also needs to be specific, but it cannot be too specific. If too general, it does not convey any special idea like a well-known fact. If too specific, the idea loses steam.” This excerpt contains an actual reaction submitted by one of the students.”

4.1.2 Practice activities

Because the course was taught through online video lectures, the activities that required classroom participation could not be done. To bridge this gap, the instructor prepared a worksheet document after each lecture. These worksheets contained exercises designed to help develop the students’ knowledge of grammar rules and useful vocabulary, among others. They were useful in enhancing the students’ English writing proficiency when dealing with the four types of essays. These are descriptive, comparison, cause-effect, and classification essays. These worksheets also served as proof of their class attendance. Once they completed and submitted them, they were marked present. There is an actual copy of a student’s completed worksheet below (Activities 4 & 5). This particular one was taken from pages 98 and 99 of the textbook, focusing on sense words, which are defined as descriptive words such as dazzling, bright, foggy, etc., and prepositions of location. The purpose of this worksheet was to help students build better vocabulary using word association and gain a better understanding of the use of prepositions in sentences. This is an actual copy of a student’s completed worksheet.

*“Activity 4: Focusing on sense words study the nouns on the left.
Write three adjectives to describe each noun. Which senses do your adjectives appeal to?
1. a park green crowded refreshing
2. a wedding dress white silky pretty
3. a horse fast free muscular
4. a cup of soup hot warming cozy
5. a professor educational gentle hard working
6. a pop singer exciting fancy confident
7. a car fast expensive dangerous
8. a party crowded fun chaos
9. a university lively green educational
10. a book dusty thick interesting”*

*“Activity 5: Using Prepositions of Location
Look around your classroom. Write four original sentences based on what you see.
Use prepositions of location from the chart above. In addition, try to use vivid adjectives in your sentences.
1. There is a huge monitor on the desk
2. There is a window which is covered with dust next to my desk.
3. The lightings on the ceiling are as bright as the sunlight.
4. The student sitting in front of me has been sleeping through the whole class.”*

4.1.3 Writing assignments for midterm and final exams: Descriptive essay and comparison essay

In addition to a written exam, the students were required to write two full essays. The first was a descriptive essay as a part of the midterm exam. The other was a comparison essay as part of the final exam. The instructions were the following. Each student was free to choose a topic he or she was interested in and write at least 900 words based on it. The rules applied to both the descriptive essay and the comparison essay. There were several steps the student had to follow in the essay-writing activity. One important step was peer editing, which was done with the use of Google Docs. The students were divided into pairs. Each pair worked together editing each other’s essay using their email addresses. The peer editing sheet allows the student to check the general organization of the essay, the unity and clarity of ideas, and its ability to stimulate the reader. After completing the peer-editing activity, the student developed his or her essay, and then submitted the second draft. The instructor then analyzed the essay and gave feedback regarding the writing errors involving grammar and inappropriate terms. The feedback collected is of great use to the students [13].

4.1.4 Oral presentation of the essay

One significant goal of College English 1 is to develop students' English communication skills. Although the students were able to learn their lessons via recorded video lecture, they did not have the opportunity to communicate with their classmates. In order to achieve this goal, the instructor asked each student to make a video presentation of his or her descriptive essay. The video would be accessible to his or her classmates. This would give each student the privilege of seeing and hearing his or her fellow classmates speaking in English. They gave a presentation based on their descriptive writing. This activity helps develop their speaking skills.

4.1.5 Vocabulary games on Quizlet

The lessons are divided into seven units. Each unit contains a list of new words and collocations. The instructor prepared a vocabulary game for each unit with the help of Quizlet. It has many features such as test practice, flashcards, fun word games, and multi-lingual audio recordings. It also contains images and videos that can enhance studying. Another benefit is it helps students learn foreign languages in a more effective and fun manner.

4.1.6 Online interaction between the instructor and students

There are two means a student can use to comment and ask questions. One is through email. The other is by posting the comment or question in the relevant GC webpage. There are two ways to comment on a post. The student can either comment openly, for the entire class to see, or they can comment privately, and the conversation will only be between the student and the instructor. There is also a provision for the students to interact with one another, although the cases are rare. Most of the questions are related to students' attendance, lecture, homework, etc. The interaction is done in both Korean and English, with the majority of cases in English.

4.1.7 Announcements and memos

There were 30 announcements and memos posted in the GC during the course. They varied depending on the purpose. Some involved the grading system, some dealt with the midterm and final exam, others related to day-to-day assignments, etc. An example is a waiver which the students were required to fill out for the midterm exam, which required them to exercise honesty when taking the test. Another waiver was sent out before the oral video presentations were uploaded. This particular one was intended to maintain confidentiality among the students regarding the videos.

4.2 Results of the paired *t*-test

A paired *t*-test was used to assess the students' writing skills. It was conducted using errors that were identified in the descriptive and comparison essays. The number of sentences collected from the descriptive essays submitted by the students was 1852. These sentences were all assessed for errors in grammar, sentence structure, choice of vocabulary, and punctuation. Out of this total, 635 were found to be correct. When it came to comparison essays, 1831 sentences were collected, and 939 were marked as correct. The *t*-test result ($t = -5.854$, $p = .000$) reveals that the students' writing abilities significantly increased after week 7 when the descriptive essays were written.

Table 1. The result of the paired *t*-test between two essays

Essay types	M	SD	95% Confidence interval of the difference		t	Sig. (2-tailed)
			lower	upper		
Two types of essays	-15.813	15.751	-21.309	-10.317	-5.854	0.000

4.3 Student perceptions involving GC

The survey results are displayed below. It involved 27 questions, 25 were multiple choice and two required short answers. Thirty-four students participated in the survey. The researchers required only one answer for each question. However, a few questions received multiple answers, and some questions went unanswered. We did not include the student's answers regarding multiple answers. A few students also did not answer the open questions. We divided the questionnaire items into six sections. Besides GC, other programs were used, such as Google Docs, PowerPoint. We sought, through these questions, to cover the entire classroom experience of the students.

4.3.1 Google Classroom

At the start of the semester, when GC was introduced, it was new to 31 (91.2%) of the 34 students. In terms of the process of joining GC, the respondents responded in the following manner. Eleven students found it to be very simple (32.4%), 12 found it simple (35.3%), for 10 (9%) it was average, and for 1 it was complex (2.9%). The students were asked how often they visited the site. Eight (23.5%) of them stated that they visited it 3 to 4 times a day, 14 (41.2%) said 5 to 6 times, 5 (14.7%) said 7 to 8, and 7 (20.6%) visited it than 9 times and a week. On average, GC was visited 5 to 6 times a week. The class was scheduled twice a week, but because the entire course was managed through this program, the student would visit it frequently.

The students were also asked what their most common reason was for visiting GC. The most common was watching video lectures. This was selected by 14 of the students, and was followed by uploading of homework assignments, selected by 9 (29.0%) of the students. The checking of announcements came third, with 8 (25.8%) students choosing it as the most common reason. This result is expected since these were routine class matters. Another question in the survey asked if they would recommend GC to their juniors. Almost half of them, 16 (47.1%) students, agreed. Six (17.6%) strongly agreed, 4 (11.8%) disagreed, and 8 (23.5%) were unsure. This proves that most students were satisfied with using it as their learning management system. Table 2 presents the difficulties the students encountered while using GC. For 13 of them, there was none. Six students left the question blank. One prevalent concern the students have is that they cannot interact with their instructor the way they would in a classroom. This makes some learning aspects challenging.

Table 2. Difficulties encountered while using GC features

Answer given
1. It was difficult to recognize the new notice of Google Classroom because there were no visual or auditory alarms.
2. Nothing
3. For me, it is inconvenient to contact with professor individually because when using Google Classroom, it is difficult to find contacting with professor privately. I used email, and I think more private ways to contact using Google classroom need for students.
4. It is hard to find a lecture that has passed a long time.
5. Nothing
6. I have no idea.
7. The volume of the voice of the professor is too weak, so it needs to be amplified with a video editor. It is recommended to add an example of a summary on the end of the lecture. The theme of the presentation is wasting space to add content like tables and images, so it needs to be fixed. The uploading time is often irregular, so it is hard to concentrate on the lecture.
8. It was hard to communicate quickly and I couldn't know my classmates.
9. Nothing
10. Too many alarms and notifications
11. The alarm of Google Classroom sometimes doesn't works.
12. No
13. Nothing problem.
14. Distinguishing between registered and submissions
15. I think there isn't any inconvenience in using Google Classroom. It is quite nice platform.
16. No answer
17. Nothing
18. I think there aren't any inconvenient things in using Google Classroom.
19. It was hard to communicate with others. (But it is only when all classes are online)
20. There was nothing inconvenient.
21. I have no inconvenience.
22. Nothing
23. It was hard to concentrate to video because there are only words in PPT without facing professor.

-
24. Announcement and questions feedback about the lecture.
 25. I forgot to press the submit button.
 26. I think there is nothing problems(*sic*) of this system.
 27. Nothing
 28. No answer
 29. I actually did like using Classroom. However, using Google Docs sometimes caused some problems with HWP.
 30. No answer
 31. The process of accessing, submitting and saving a Word project is inconvenient.
 32. No answer
 33. Not actually but first I was using it. the process was complicated, so it took a lot of time.
 34. No answer
-

Table 3 presents the answer each student gave when asked about the GC features that he or she found to be most useful. It is apparent from the table that three students left the question blank.

Table 3. Most useful GC features

Answer given
1. Other subjects also use Google Classroom, so it was convenient in terms of accessibility.
2. I found the lecture I had to attend, and the homework I had to do conveniently using Google Classroom. This made me use Google Classroom more handy.
3. I can check my assignment easily.
4. Nothing
5. Submit a subject.
6. It sends email when deadline is coming.
7. The announcements about the classes
8. I had a chance to relearn what I didn't understand or didn't hear.
9. It was good to be able to proceed with self-directed learning by learning through Google Classroom. In addition, the method of learning and assignment submission was simple, so it was good to do it easily.
10. It was convenient to send files without having to use email addresses.
11. It was useful that I can see the lecture at anywhere, at any time.
12. It tells you one day before the due date.
13. When assignment uploaded the notifications recognize me. Thus, I immediately know the assignment uploaded.
14. Quite comfortable to send assignments
15. It is easy to submit a completed homework.
16. No answer
17. It is good to get any extension files.
18. I think the messages from Gmail and Google Classroom were helpful for homework.
19. It is useful to submit assignments and check for announcements in provided environment of Google Classroom.
20. It is easy to see all the assignments at once.
21. I can study English when I want.
22. I think uploading function is most useful.
23. It was good that I can watch a lecture video anytime.
24. I can watch the video lecture repeatedly.
25. Communication
26. I could watch the course many times.
27. The task uploading
28. My essay writing skill is improved
29. The fact that it syncs with Google Calendar and gives notifications was great.
30. No answer
31. It's convenient to watch after receiving a class video.
32. No answer
33. It was good to check my task done or not.
34. It's easy to use.

4.3.2 Language development

There were five questions in this section, all involving the English learning experience of the students. In the first question, they were asked if the English-only rule was helpful in improving their English proficiency. Twenty-two (64.7%) students agreed that it was, with 5 (14.7%) strongly agreeing. One (2.9%) disagreed, and 6 (17.6%) were unsure. The second question asked the language element that was most highly developed as a result of essay-writing. Twenty-eight (84.8%) selected paragraph-writing, 2 (6.1%) selected grammar, and 2 (6.1%) more chose the understanding of differences between English and Korean. Only 1 (3.0%) selected vocabulary. This is expected because the focus of the course was English writing. The third question asked

whether using GC helped the students improve their self-learning skills. Eighteen (52.9%) agreed that it did, 8 (23.5%) strongly agreed, 2 (5.9%) disagreed, and 6 (17.6%) were unsure.

4.3.3 Quizlet

The third section dealt with Quizlet. There were three questions. The first asked the respondents if they frequently used the word games provided by the program which were uploaded to GC. Thirteen (36.1%) indicated that they did, 5 (14.7%) indicated that they did not, and 16 (47.1%) gave an inconclusive response. In the second question, they were asked if the word learning activity helped make their vocabulary study more interesting. Fourteen (40.0%) agreed that it did, 6 (17.1%) strongly agreed, 2 (5.7%) disagreed, and 13 (37.1%) were unsure. The third question asked whether Quizlet helped improve their vocabulary. Nineteen (55.9%) agreed that it did, and 6 (17.6%) strongly agreed. Nine (26.5%) were unsure. These data show that most students may not have had much interest in this program. This could be due to their hectic schedule and the fact that it was an optional program. However, they agreed that it did serve its purpose in helping expand their vocabulary.

4.3.3 Classroom experience

There were five questions related to their GC experience. The first asked the method they found to be most effective when communicating with the instructor. Twenty-one (61.8%) students selected email, 6 (16.6%) selected closed messaging via GC, 4 (8.8%) chose open messaging via GC, 3 (8.8%) selected text messaging via mobile phone, and 1 selected "others." The result indicates that the students preferred to hold private communication with their instructor. This was possible through emails and a closed messaging system. The second question asked the students what they found to be most interesting regarding the course. Thirteen (36.1%) chose essay writing, 9 (25.0%) selected textbook activities, 3 (8.3%) selected the watching of video lectures, 7 (19.4%) enjoyed recording their oral presentation, and 4 (11.1%) chose the reaction assignment. The numbers appear to be widely distributed, suggesting the students made the selection in terms of spread out. The students made the selection in terms of their personal interests and study methods. The third question asked if they submitted their assignments onto GC in time before the deadline. Thirty-two (94.1%) indicated that they did, while 2 (5.9%) gave an inadequate answer. No students indicated that they made submissions. This points to a good attitude regarding their assignments and class activities.

4.3.3 Essay-writing experience

The last section evaluated the essay-writing experience of the students. In the first question, they were asked what they found to be most important in the essay writing process. Eighteen (52.9%) selected the organizing of ideas, 6 (17.6%) selected the choosing of the topic, 5 (14.7%) chose proofreading, 4 (11.8%) chose writing of the first draft, and only 1 (2.9%) selected the peer-editing activity. Because the brainstorming and outlining parts come first, it is clear why most students would choose this. They can also be quite challenging. The second question asked if the feedback received from the peer-editing activity helped in the development of their essay. Twenty-eight (84.8%) agreed that it did, 2 (6.1%) disagreed, and 3 were unsure. The fact that the great majority of the students valued their classmates' opinions speaks to their willingness to learn and improve.

5. Discussion

5.1 Effective online teaching models

Both the government and academic institutions were not able to provide a good learning environment for students during the first semester of 2020 as a result of the Covid-19 pandemic. All general English courses were in need of a good effective teaching model. The instructor of this course tried to come up with a new learning model that made use of GC. Because the English course was conducted online, this meant that there was no physical contact between the instructor and her students. This sudden change in the learning environment made teaching difficult. But GC was a useful and user-friendly tool that helped bridge the gap created by the pandemic. It included various practical features: Video lectures, worksheets, and class materials that could be uploaded onto the platform for students to access; submission of assignments and projects; the posting of announcements; constant updates and notifications; game applications such as Quizlet; and the ability to comment on shared posts, as well as the ability to interact with the class personally or as a group. This meant

that students could attain their learning objectives even away from the classroom. Moreover, because of the availability and easy access to class materials, it could help foster the habit of self-learning, and provide the opportunity for students to put their English proficiency skills to practice. That being said, there are some drawbacks to this learning management system. GC is developed by Google, which is not allowed in some countries. So, students who are located in those countries and are enrolled in this course were not able to access it. Another downside is the storage. The free storage is 15 GB, which is not nearly enough for class management. So, the instructor expanded it to 100 GB. This made it possible to complete the course without any loss of data. Another challenge was the inability of the instructor to monitor the students. Because the class was conducted remotely, she could not tell how much of the video lecture the student was watching. She also could not give immediate responses to student queries. These challenges reflect the need for a more enhanced learning management system; One that will accommodate all the teaching and learning needs. In addition, having to manage an online course required much effort. In order to get the lessons out to the students in time, the instructor had to record the lecture videos twice a week and upload them early. Other tasks included sending out instructions and announcements, giving practice worksheets as homework, and providing word games. At the end of the course, she had accessed GC 154 times. This averaged to 10.2 times per week.

5.2 The impact of GC on Student's writing skills

According to the results of the *t*-test ($t=-5.854, p=.000$), the students' level of writing had considerably increased by week 15, when they wrote their comparative essays. This was compared with week 7 when they wrote their descriptive essays. This change was observed by comparing the error rates of both essays. The researchers believe that the class activities that the students did, which was made possible by GC, achieved the learning goals set for the course.

5.3 Student perceptions involving GC

Out of 34 students enrolled in this course, 31 (91.2%) used GC for the first time. 23 students (67.7 %) indicated that it was simple and user-friendly. Although this semester was the first time for a majority of the students to use GC, they were able to manage it without much trouble. They liked that they could easily submit their work. They also liked that their emails were linked to the online classroom, and so they could receive notifications and announcements on time. They also appreciated that they could watch the lecture videos anytime. There were benefits for the instructor as well. One of the best features was being able to track the students' submissions in real time. The instructor knew who submitted assignments, when they were submitted, and who was yet to make a submission. Although this rule was hard to follow at times, the students recognized the need to adhere to it for the sake of their English development.

6. Conclusions

Due to Covid-19, the university English course was conducted online for the entire year. This meant that there was no face-to-face interaction between instructors and their students. It resulted in a sudden change in the learning environment. In spite of the changes, instructors were still required to provide high quality lessons and the students were forced to adapt to the new learning conditions. This research focused on exploring the impact of GC as a learning management system for the course College English 1, particularly the part that essay writing played in the development of language skills, and student perceptions towards the program itself. The study results are summarized in the following manner.

First, the teaching methods the instructor chose to apply while using GC varied in technique. The 34 students involved engaged in a wide variety of activities during the semester. Some of these activities had clear roles in enhancing their language skills. These include video lectures, reaction homework, practice activities, and writing assignments for midterm and final exams. Others served to stimulate interest. This interest was observed when the students completed and submitted all their assignments faithfully and obeyed class rules. Moreover, the students were also able to interact personally with the instructor. All these combined made for a successful semester.

Second, a *t*-test was conducted to evaluate whether these activities helped meet the course objectives when GC was used. The result ($t=-5.854, p=.000$) strongly suggested that the students did experience an improvement in writing at the end of the semester. This was evaluated by comparing the errors in the descriptive essays, written in week 7, with those in the comparison essays, written in week 15. When this was done, it was found

that fewer errors were committed by the students by the end of the semester. We also noted that the sentences were more coherent, and the ideas were more clearly expressed. This amount of progress was supplemented by the many class activities the students did, which included watching the video lectures, writing a reaction of 5 sentences after each lesson, and practicing grammar rules and vocabulary. These exercises were intended to help develop the students' English writing skills.

Finally, the perceptions of the students towards the use of GC as a tool for online learning helped to substantiate the data. This was accomplished through a survey questionnaire the students filled out. It contained questions designed to address their entire experience with GC. The results showed that most students had a positive view of GC at the end of the semester. They believed that it played a role in promoting their English writing and speaking development. However, there were both positive and negative aspects when working with GC. For the students, they expressed their displeasure at not being able to freely interact with the instructor as they would in a classroom setting. They also disliked the constant alarms and notifications. On the other hand, they appreciated the user interface and the useful features Google provided that made submissions and the accessing of files easy. On the instructor's part, she had a disadvantage in terms of storage space. The 15 GB provided was insufficient, so she subscribed to the 100 GB plan at \$1.99 per month. This appears to be a necessity for every instructor that uses GC. Another disadvantage is the amount of data she needed to upload regularly. This included instructions and announcements, video lectures, practice worksheets, word games, etc. This required much time and effort. Because of the large amounts of data involved, she had to get more space from Google. It was also hard to not be able to monitor the students' class activities. Nevertheless, GC provided some useful features that made classroom management easy. One was the ability to fully keep track of the students' submissions. These were the pros and cons observed. GC often receives praise, but these results reveal its need for development as a learning management system, so it can fully handle all the needs of the classroom effectively.

Future studies in this field can build on this research by examining the progress of GC over time, and whether it will be a more effective tool in the academic setting. They can also compare this with other learning management systems to determine which one is the most effective in the classroom. The Covid-19 pandemic is far from over. Schools all over the country have been and will continue to make use of online learning systems. More research in this field is pertinent. GC is already gaining ground in institutions and is expected to continue to do so in the coming months and years, even after the pandemic is over.

Conflicts of Interest: The authors declare no conflict of interest

References

- [1] M. Syazali, F. G. Putra, A. Rinaldi, L.F. Utami, J. K. Widayanti, and R. Umam, "Partial correlation analysis using multiple linear regression: Impact on business environment of digital marketing interest in the era of industrial revolution 4.0," *Management Science Letters*, vol. 9, pp. 1875-1876, 2019, doi: 10.5267/j.msl.2019.6.005.
- [2] L. Magid, Google Classroom offers assignment center for students and teachers. (2014). [Online] Available: <https://www.forbes.com/sites/larrymagid/2014/05/06/google-classroom-offers-control-center-for-students-and-teachers/?sh=2afc9dc64d66>
- [3] G. Ressler. Google Classroom: Now open to even more learners. (2017) [Online] Available: <https://www.googblogs.com/google-classroom-now-open-to-even-more-learners/>
- [4] J. A. Kumar, and B. Bervell, "Google classroom for mobile learning in higher education: Modelling the initial perceptions of students," *Education and Information Technologies*, vol. 24, pp. 1793-1817, 2019, doi: <https://doi.org/10.1007/s10639-018-09858-z>.
- [5] R. J. M. Ventayen, K. L. A. Estira, M, J. D. Guzman, C. M. Cabluna, and N. N. Espinosa, "Usability evaluation of Google classroom: Basis for the adaptation of GSuite E-learning platform," *Asia Pacific Journal of Education, Arts and Sciences*, vol. 5, no. 1, pp. 47-51, 2018.
- [6] K. R. Heggart, and J. Yoo, "Getting the most from Google Classroom: A pedagogical framework for tertiary educators," *Australian Journal of Teacher Education*, vol. 43, no. 3, pp. 140-153, 2018, doi: 10.14221/ajte.2018v43n3.9.
- [7] E. N. Kwon, and M. K. Kang, "A study on process-based assessment using Google classroom," *English Language & Literature Teaching*, vol. 25, no. 4, pp. 61-78, 2019.

- [8] A. Izenstar, and K. L. Leahy, "Google classroom for librarians: Features and opportunities," *Library Hi Tech News*, vol. 32, no. 9, pp. 1-3, 2015, doi: <https://doi.org/10.1108/LHTN-05-2015-0039>.
- [9] S. Iftakhar, "Google Classroom: What works and how?," *Journal of Education and Social Sciences*, vol. 3, no. 1, pp. 12-18, 2016.
- [10] R. S. Al-Marroof, and M. Al-Emran, "Students acceptance of Google Classroom: An exploratory study using PLS-SEM approach," *International Journal of Emerging Technologies in Learning*, vol. 13, no. 6, pp. 112-123, 2018, doi: <https://doi.org/10.3991/ijet.v13i06.8275>.
- [11] K. A. Azhar, and N. Iqbal, "Effectiveness of Google Classroom: Teachers' perceptions," *Prizen Social Science Journal*, vol. 2 no. 2, pp. 52-66, 2018.
- [12] S. Y. Kim, B. B. Im, and J. H. Kim, "The effects of Google classroom-based digital classes on middle school students' English listening ability," *English Language & Literature Teaching*, vol. 26, no. 2, pp. 41-63, 2020.
- [13] S. Yu, Y. Zhang, Y. Zheng, and L. Zhong, "Written corrective feedback strategies in English-Chinese translation classrooms," *The Asia-Pacific Education Researcher*, vol. 29, pp. 101-111, 2020, doi: <https://doi.org/10.1007/s40299-019-00456-2>.



© 2021 by the authors. Copyrights of all published papers are owned by the IJOC. They also follow the Creative Commons Attribution License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.