



# Google Docs: Students' Perceptions as Online Collaborative Tool in Learning Writing Skills

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#### **Abstract**

The recent Covid-19 outbreak has led educators to explore different online pedagogical tools during English lessons. It has gradually impacted the way writing skill is taught. With the integration of various digital tools like Google Docs, educators and learners are learning to adapt to the new learning mode. Although the lesson is not conducted face-to-face (F2F), collaborative learning can still be continued and carried out online. As the online learning method is adopted in a writing class, it is important to highlight students' perceptions regarding their learning motivation and how working collaboratively affects their learning. Therefore, this study aims 1) to explore students' perceptions of Google Docs as a tool in learning writing and 2) to discover students' perceptions of Google Docs as an online collaborative tool in learning writing. A quantitative study was carried out on 98 ESL tertiary students and the result was tabulated and analysed using Statistical Package for the Social Science (SPSS). The results revealed that Google Docs positively affected students' learning experience and assisted the learning process through the teacher's written corrective feedback. The majority of the students reacted positively to the usage of Google Docs in learning writing and the written corrective feedback helped the students to comprehend the writing task. Most importantly, Google Docs was considered an effective collaborative learning tool in English writing skills class. For future studies, to obtain more accurate data, a larger scale of respondents of low and high proficiency can be used and hybrid research (quantitative and qualitative measures) can be adopted to address the research questions more effectively.

Keywords: Collaborative Writing, Online Collaborative Writing, Google Docs, Learning Writing

#### Introduction

Writing is an essential skill in learning the English language. As second language learners, tertiary students are required to master the skill of academic writing. By producing academic writing, the students can learn, comprehend, analyse, synthesise, and apply new information (Defazio et al., 2010). Since learning academic writing skills is not an easy task, most educators

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use collaborative writing techniques to help students expand and exchange ideas between them. Collaborative writing skill is vital to help students produce good academic writings. It is a skill that can help students explore more on the ideas, structures, and outcomes of the writing. Vygotsky's theories suggested that there is a connection between social interaction and cognition as both significantly affect one another (Vygotsky, 1978). When one can interact with another person regarding an assigned task, their cognitive ability also gets developed, hence helping them to successfully complete the assigned task. Thus, this method of pair-work or group work is a popular student-centred approach in helping the learners to produce writing accurately and fluently. Learning collaboratively helps the students to become independent and create a sense of autonomy or ownership in their learning environment (Foote, 2009 as cited in Suwantarathip & Wichadee, 2014). Aside from achieving self-autonomy in learning, collaborative writing will also help the students interact, help, and learn from one another when they are completing the writing task - starting from the initial stage until the final stage (Suwantarathip & Wichadee, 2014). In a traditional face-to-face (F2F) class, handling a group writing is a challenging task, but the educators can monitor and scaffold the students physically as compared to doing it virtually. Since the COVID-19 outbreak, teaching and learning has shifted to traditional F2F to a fully online learning environment. Without any other option left, both students and teachers must adapt to the online and distance learning (ODL) approach.

Undeniably, learning online i.e flipped classroom, blended learning has been long introduced in our education system. However, the usage of it is more for part-time students who prefer the method of delivery. It is rarely being practised by undergraduates who are used to the traditional pedagogy during their school years. Similarly, using Google Docs as a collaborative tool in learning writing is not new as it has started even before the pandemic. Previous studies (Suwantarathip & Wichadee, 2014; Talib & Cheung, 2017; Basri et al., 2019; Yaacob & Yunus, 2019; Sudrajat & Purnawan, 2019; Hidayat, 2020; Bakar, 2021) have shown that the integration of Google Docs in learning writing has positive impacts, benefited the students in their writing, as their writing skill is enhanced, and they are motivated to learn. Google Docs is a web-based application that allows students and teachers to collaborate synchronously and asynchronously by writing, commenting, proofreading, and editing the online text. This application can be accessed if the users/owners of the document grant the access to a certain group of people, or even to the public. By utilising this application in teaching and learning writing, it helped the instructor to achieve the targeted learning objectives using the online pedagogical approach. Online environments help students focus more on the materials given as they have more time to analyse and synthesise the given information. In the online setting class, teachers can leave comments to the students' writing and a two-way communication, not only between the instructor and their students, but also among the students themselves, can still be practised. The students can also contribute and collaborate at their own pace. Corrective feedback from educators and peers that appear instantly on the Google Docs can help the students track their progress and identify their mistakes. Evaluation gives learning opportunities for students to revise and improve their writing before submitting their final product (Alvarez et al., 2011).

During an ODL session, teachers are expected to use digital tools that can easily be used by the students and teach the English language. With a lot of applications available on the internet, educators need to use the appropriate tool for learning system management that is

Vol. 11, No. 3, 2022, E-ISSN: 2226-6348 © 2022

not only user-friendly but also accessible to everyone. Although students now are regarded as "digital natives", however when it comes to the use of technology for online learning, students are reported to be spending more time for entertainment (e.g. social media) rather than for academic purposes (Yuen & Song, 2009 as cited in Yong, Gates, Harrison, 2016). This is probably due to lack of interaction between the instructor and students (Coman et al., 2020). Therefore, there is a need to find a suitable tool in order to make sure that the students are able to learn on their own with the assistance of the educators. Being in an ODL environment and to achieve collaborative learning goals, engagement in the digital environment is important in making sure the students feel connected and engaged in the classroom. By using Google Docs as the supporting collaborative tool to create an active learning setting, this study focuses on learners' perspectives in using this digital tool in their writing class. The following are the research questions of this study:

- 1. What are the students' perceptions of Google Docs as a tool in learning writing?
- 2. What are the students' perceptions of Google Docs as an online collaborative tool in learning writing?

#### **Literature Review**

During the Corona pandemic, education settings were forced to undergo changes and adjustments. Face-to-face (F2F) classrooms have been flipped to online classes which have triggered countless issues related to students' readiness, teaching platforms, and learning motivation. Nevertheless, educators have no choice but to employ technology in teaching. Regardless of various issues that arise due to online learning, it is undeniably true that online language learning provides many advantages to learners. Mishra et al. (2020) defined online teaching at tertiary level as a teaching process via the internet using different online based media. On the contrary, Dhawan (2020) described online learning as a learning tool that creates student-centred learning experiences that are unconventional and adaptable for students. Saeedi and Biri (2016) claimed that technology has contributed positive benefits in many fields including language teaching and learning. Gilakjani (2017) also believed that technology enables learners to adapt to their individual learning process besides gaining access to limitless information virtually without depending on their teachers. Therefore, technology is deemed to be a powerful tool in learning and thus, should be imparted as an integral part of students' learning experiences.

Writing involves complex activities (Ling, 2016) which makes it a challenging English skill among language learners. Thus, to be good in writing, working with small groups or writing in pairs alleviates its difficulties compared to writing it individually (Biria & Jafari, 2013). The concept of collaborative learning resonates with Vygotsky's belief (Vygotsky, 1978) that learners learn better when social interaction takes place. Learning collaboratively leads participants to get engaged in activities which encourage communication and co-construct one's knowledge (Storch & Wigglesworth, 2009,). Collaborative writing is defined when a piece of writing is written by two or more authors (Storch, 2019). It is also described as a social process whereby writers cooperate, negotiate, and discuss while writing (Lowry et al., 2004). Dobao (2012) and Storch (2011) claimed that writing collaboratively is one of the effective teaching methods and is highly suggested to be applied in a writing class. Furthermore, according to Veramuthu and Shah (2020), collaborative writing develops peer support whereby students discuss among friends and eventually, it results in receiving feedback. Learning collaboratively also triggers students' critical thinking skills (Mandusic & Blaskovic, 2015).

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However, there are some limitations when implementing collaborative writing in a F2F writing classroom. According to Hewitt and Scardamalia (1998), in a traditional writing classroom, students may not have enough time to read and build their friends' work. In-class communication may also be limited due to time constraints. Besides that, students would likely become more teacher centred as they are prone to only receive feedback from teachers in ESL classes (Rollinson, 2005). Based on Thompson and Ku (2006), though students managed to create better work, students may communicate ineffectively while collaborating online. Dobao (2012) and Shehadeh (2011) also believed that ESL students may have problems working collaboratively since English is not their first language. This could affect their motivation level especially with low proficiency students as they might not participate and contribute to completing the tasks. Consequently, the aim of collaborating writing which is to students obtain academic communicative competencies and skills through communication could not be achieved (Manathunga & Hernandez-Leo, 2015; Shehadeh, 2011). Furthermore, findings from some studies suggested that some students do not appreciate working with friends. Meyer (2014) claimed that due to disagreements and conflicts among peers, students are often demotivated to work collaboratively with their team members. Collaborating writing is a success when all members in a group work together. If they are not familiar with their group members, it is difficult to work as a team. This is shown in research finding by Meyer (2014) that the writing quality of a group of friends is better than a group of friends who are not familiar with one another. Problems as such could affect one's writing performance. Therefore, it is significant to discuss the benefits of online collaborative learning and its effectiveness in a writing class.

Lock and Johnson (2017, p. 47) claimed that online collaborative learning is "an overarching way of learning that fosters continued knowledge building" (Lock & Johnson, 2017, p. 47). Because of Coronavirus, learning institutions must transform learning that is usually carried out within four walls of classrooms into digital learning. Technology has become more prevalent in learning; driving educators and learners to keep up with its fast advancement. The teaching and learning of writing skills has also expanded due to technology (Lee, 2013). Google Docs is an example of a web application that is easy and simple. One of the functions of Google Docs is that students can edit and update information simultaneously (Kessler et al., 2012). In addition, Boyes (2016) also claimed that "Google Docs allows instant feedback and collaboration on student-generated text when students are online at the same time" (p. 229). Learners can access the documents anywhere at any time. Without being an expert in technology, the documents can be opened, edited, and shared by many users at one time (Woodrich & Fan, 2017). Parvin and Salam (2015) also stated that though technology leads to autonomous learners, the role of teachers is still significant in giving support. This makes it a great digital tool for teachers to adopt Google Docs as a learning platform when teaching writing.

Some studies agree that integrating technology fosters collaborative writing among students (Elola, 2010; Ragupathi, 2013; Strobl, 2015; Boyes, 2016), but most studies specifically focused on the effectiveness of online collaborative writing on students' writing accuracy (Ansarimoghaddam & Tan; 2013; Ansarimoghaddam et al., 2017; Khalil, 2018; Neumann & Kopcha, 2019). Only a few studies incorporate the use of Google Docs in the learning of online collaborative writing. Suwantarathip and Wichadee (2014) for instance, compared paragraphs written by 40 university students in both modes: face-to-face (F2F) and online using Google Docs. Similar to Wichadee (2013), online collaborative groups via Google Docs

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composed better writings compared to F2F classrooms. The researchers agreed that Google Docs is undoubtedly accessible to students as they can trace others' writing work easily and deemed that more studies could be carried out to explore the effectiveness of Google Docs and students' writing motivation. Moonma (2021) studied on errors made via online collaborative writing written by 32 Thai second-year students who majored in English. She compared the errors made using Google Docs and F2F collaborative writing. It is revealed that less errors were made and writing quality was better when using online collaborative writing using Google Docs. She also suggested that more studies should be done to explore students' writing motivation using Google Docs techniques.

The implication of such technology such as Google Docs would facilitate learning and help language teachers. However, some researchers believe that online collaborative writing should not be about assessing students' level of writing accuracy. It should centre on helping students become better writers and not solely looking at upgrading their writing scores. It is unjust to determine students' writing abilities when they have different proficiencies but rather measure the writing improvement they made (Mcdonough & Sunitham, 2009; Noonan & Coral, 2013; Nosratinia & Nikpanjeh, 2015).

As previous studies mainly study the effects of online collaborative writing on students' writing quality and students' writing performance, the present study is aimed at examining students' perceptions on Google Docs in learning writing and discovering their views of Google Docs as an online collaborative tool in learning writing skill. The results of this study could provide insights for educators to use Google Docs as a digital teaching tool to assist collaborative learning, not only to produce high quality writing, but essentially, to motivate them to write.

# Methodology

# Participants and the Setting

Ninety-eight students from a public university participated in this study. They were ESL students who enrolled in a writing English course in their third semester. These participants came from three groups of three different faculties: (1) Faculty of Accountancy, (2) Faculty of Applied Sciences, and (3) Faculty of Computer and Mathematical Science. This study was conducted online. Due to the COVID-19 pandemic, all lessons were shifted from F2F classroom to online distance learning. Thus, the teaching and learning of the writing English course was conducted via Google Meet whereby the lecturer would explain and teach the lesson of the day. All the written paragraphs or essays were saved in Google Drive prepared for each specific class while the writing lessons were conducted using Google Docs. All three groups were taught by the researcher. The duration of the writing lesson was for 5 weeks. In week 6, they had to sit for a writing test which was also carried out online. The online class was conducted twice a week for a duration of 50 minutes per class. The length of the semester was 14 weeks.

#### Instrument

The present study aimed to answer two research questions. For the first research question, the research intended to discover students' perceptions of Google Docs as a tool in learning writing. The questionnaire was adapted from Khalil (2018) who had sent it for validity and reliability checked by experts. Previously, the questionnaire was used to study the students' perceptions on Google Docs in relation to learning grammar. For the purpose of this study,

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some of the items in the questionnaire were modified to fit the criteria of the research question.

The second research question highlighted in this study is to explore students' perceptions of Google Docs as an online collaborative learning tool in learning writing. Another questionnaire adopted from Suwantarathip and Wichadee (2014) was given to the participants. The questionnaire was initially designed based on the theoretical framework of Vygotsky's (1978) social cultural theory which puts emphasis on the role of social interaction and communication in learning. After the questionnaire was drafted, the questionnaire had already been checked for its validity by three experts in the English language field before it was piloted and calculated to assess its reliability value using Cronbach's Coefficient Alpha. The reliability value is .85 indicating that the questionnaire was reliable to be used.

The questionnaire was distributed before week 6. It was divided into 3 parts: (A) Demographic background, (B) Perceptions on Google Doc as a tool in learning writing, and (C) Perceptions on Google Docs as an online collaborative tool. In part A, students were asked on their gender, faculty, and opinion on their writing skill. For part B, there were 6 statements while in Part C there were 10 statements. All statements in the both questionnaires followed a 5-point Likert scale based on the following responses: 1-Strongly Disagree, 2- Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree.

# **Procedure**

All participants in each group were taught by the same researcher. After the class was introduced with the course syllabus, the students were divided into several groups. Since the researcher was not aware of each student's proficiency level, they were mixed randomly into several groups depending on the total number of students in each class. In the third semester, one of the assessments that they needed to excel in was expository writing. It was an individual assessment which was carried out for the first six weeks after the semester began. During the first five weeks of the semester, the students started to learn the format of writing an expository essay. Since the writing lessons were done fully via online mode, the researcher chose to use Google Drive as a platform to keep all the written documents by the researcher or students. This way it would be accessible for everyone and therefore, ease the process of learning. All the paragraphs and essays written in groups must be written via Google Docs and named according to the group members' names. They must be saved in a specific Google Drive folder prepared by the researcher so that it is easily retrieved and referred to by other classmates.

In week one, students learnt about the format of writing an expository essay and ways to write a thesis statement. Each group had to write the thesis statements for three topics given by the researcher on Google Docs. In the following class, all thesis statements from every group were assessed and feedback was given on the Google Docs. In week two, students were taught on the structure of writing a body paragraph in the first class. After the class, each group was given a few days to complete three body paragraphs for one essay topic to be written on Google Docs and submitted before the next class began. The researcher read the paragraphs and shared her comments on the Google Docs. Highlighted errors or comments needed were bold, underlined or coloured so that they would be easier to be seen and edited by the students. In the second class of week two, during class hour, students were asked to read the written corrective feedback, revise and rewrite the paragraphs before they were submitted again to the researcher to be read. In week three, students learnt about introductory and concluding paragraphs. Using a different topic, each group was asked to

Vol. 11, No. 3, 2022, E-ISSN: 2226-6348 © 2022

write a complete essay. Before the second class began, the researcher had read and written feedback on the Google Docs before they were presented to each group in the second class. In the following week, students were again asked to write a complete essay in the first class. Unlike previous lessons, the essays were corrected and commented on during the second class. Each group met the researcher or the class teacher via Google Meet where she showed the Google Docs to them. Feedback related to grammatical errors, writing format or vague content were some of the feedbacks discussed. Everything was written and typed on Google Docs for everyone to see and note. Each group was asked to write another essay as homework and submit it before the first class of week five. In week five, a schedule was prepared whereby each group had to review the essay written by another group via Google Docs. They had to evaluate and write any feedback related to the format, arrangement of ideas or any obvious linguistic errors they could detect if possible. They also had to fill in a peer evaluation form to be given to their friends. In the second class, the class teacher or researcher went through the form and the comments again with the writers and their friends who reviewed the paper. Before week six started, the questionnaire was distributed to each student to be filled in.

#### Results

The quantitative data obtained from the questionnaires were tabulated and analysed using Statistical Package for the Social Science (SPSS) version 21. The findings were presented in tables as shown in the next section.

# **Findings and Analysis**

There are two research questions highlighted in the present study. The results of the study are presented in tables below. Both tables demonstrate the mean score and standard deviation of each item.

RQ1: What are the students' perceptions towards Google Docs as a tool in learning writing?

To answer the first research question, Table 1 shows the results of students' perceptions on the use of Google Docs in learning writing.

Table 1
Perceptions towards the use of Google Document in learning writing

Statements	Mean	SD
I enjoyed completing writing tasks using Google Docs.	3.9	0.69
I felt comfortable completing the tasks using Google Docs.	4.0	0.78
I would use Google Docs for my studies in the future.	4.0	0.83
I would like to complete similar learning tasks again.	3.9	0.73
Google Docs influenced our group's collaborative experience positively.	4.1	0.68
I felt that the teacher 's written corrective feedback via Google Docs helped	4.5	0.63
me understand writing tasks better.		

Based on the results, majority of the participants are in favour of the use of Google Docs in learning writing. It is found that most of the students' perceptions on the items above range from 'agree' to 'strongly agree' in which statement 'teachers' written corrective feedback via Google Docs' is recorded as the highest mean score (M = 4.5, SD = 0.63) while statement 'Google Docs influenced our group's collaborative experience positively' is the second highest

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(M = 4.1, SD = 0.68). Though the mean score for 'I enjoyed completing writing tasks using Google Docs' and 'I would like to complete similar learning tasks again' are the lowest (M = 3.9, SD = 0.69) and (M = 3.9, SD = 0.73) respectively, their perceptions towards Google Docs are still regarded as positive whereby the responses slightly inclined to 'agree'.

As shown in the table above, students considered that written corrective feedback given by teachers via Google Docs assisted them in understanding the writing tasks. Though Google Docs can be an effective tool in learning writing skills, students cannot be left abandoned by assuming that they can learn on their own. The design and function of Google Docs is easy and simple to comprehend therefore, students do not have to be an expert in technology when using Google Docs. It provides the opportunities for students to take charge of their own learning, turning them into autonomous learners. Though it assists learners to become independent in learning, teachers' role is still needed to provide them with instructional support (Parvin & Salam, 2015). It reduces technological problems which could hinder them from completing the tasks. Furthermore, the role of writing teachers in online collaborative writing is significant in guiding students for more constructive feedback (Chao & Lo, 2009). Many studies have emphasized how important feedback is in online writing classes as students can interact actively among themselves (Ge, 2011; Duran & Carrillo, 2017; Zaky, 2020). Regardless of indirect and direct or focused or unfocused written corrective feedback chosen by educators, this study puts an emphasis that the function of Google Docs to teach students writing must be accompanied with instructor's presence. This means that the value of feedback shared by the teacher could determine whether Google Docs is a successful learning tool in learning writing. Moreover, the findings also indicate that searching for an effective teaching tool is also important for providing the appropriate feedback for the students. It could eventually determine the level of motivation among students (Ghosn-Chelala & Al-Chibani, 2013). In a traditional classroom, teachers may just scribble their comments on papers, and it could take days for them to complete. With Google Docs, teachers can give immediate feedback and highlight significant areas to be improved in. Students can read and reply to the comments instantly and ask questions needed if they require more clarifications. The written corrective feedback is also available for others to read through and thus, increases their motivation as they work closely with the teacher online.

Evidently, the findings of this study disagree with some previous studies (Meyer, 2014; Dobao, 2012; Shehadeh, 2011). The results of this study revealed that online students' interaction is not a barrier when working collaboratively with group members via Google Docs. Even though the participants are teamed up in groups with mixed proficiency levels, they managed to work well together. In the F2F classroom, students may be intimidated to share their opinions and thoughts while being assessed physically in a class. Their input in a writing class may be misinterpreted by their peers which could eventually lead to embarrassment or low self-esteem. With class time constraints, the learning experiences gained in a traditional classroom could also be impeded. Google Docs on the other hand, allows its users to contribute or share ideas online. It is a unique teaching tool whereby asynchronous and synchronous learning is fostered. As claimed by Perron and Sellers (2011), Google Docs is a user-friendly technological tool that works best for all students across all levels. Such finding is also consistent with Gan, Menkhoff and Smith's (2015) view that writing tasks via webbased application could enrich students' educational experience and their collaborative writing practice.

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RQ2: What are the students' perceptions towards Google Docs as an online collaborative tool in learning writing?

To answer the second research question, Table 2 shows the findings of students' perceptions on the use of Google Docs in collaborative writing activity.

Table 2
Perceptions on collaborative writing activity using Google Document

Statement	Mean	SD
I liked to see my peers interact with the content I had posted on Google	4.1	0.56
Docs.		
I felt comfortable to see other students edit the content I had posted.	4.0	0.82
My group was able to come to a consensus by using Google Docs.	4.0	0.72
I learned to exchange information with other students via Google Docs.	4.2	0.83
The feedback and editing from peers were useful in improving my writing	4.3	0.72
skill.		
Google Docs helped me to share ideas with other students.	4.2	0.71
The use of Google Docs promoted knowledge information.	4.3	0.65
The use of Google Docs increased interaction with other students.	4.1	0.82
The use of Google Docs increased my motivation to study this course.	3.9	0.87
The use of Google Docs promoted a collaborative learning environment.	4.2	0.66

The students were asked to respond quantitatively on their perceptions towards collaborative writing activity using Google Docs. The table shows that most of their responses range from 'agree' to 'strongly agree'. The highest mean score is represented by the statement 'feedback and editing from peers were useful in improving my writing skills' and 'Google Docs promoted knowledge information' with (M = 4.3, SD = 0.72) for the former and (M = 4.3, SD = 0.65) for the latter. The other three items share the same mean value; 'I learned to exchange information with other students' (M = 4.2, SD = 0.83), 'Google Docs helped me to share ideas with other students' (M = 4.2, SD = 0.71) and 'Google Docs promoted collaborative learning environment' (M = 4.2, SD = 0.66). Even though the lowest mean score was recorded by the statement 'Google Docs increased my motivation to study this course' with (M = 3.9, SD = 0.87), their response was still inclined to 'agree'.

Although the present paper excludes students' grammatical errors or writing fluency via online collaborative learning, this paper highlights that students' writing ability can be further enhanced through Google Docs as an effective teaching device. Writing in English is considered as challenging for most ESL learners since it requires learners to be competent not only in linguistic aspect and subject matter, but also confident and good in writing skills (Darus, 2008). Therefore, writing teachers have to find a suitable and right approach to help students in a writing classroom. They are suggested to break through from a traditional learning classroom which used to spoon feed students with information and knowledge that somehow prevents them from the ability to think independently. According to Hussin (2008), to develop scaffolding and enhance Zone of Proximal Development (ZPD) pioneered by Vygotsky (1978) among ESL students, a suitable online learning tool should be employed to

Vol. 11, No. 3, 2022, E-ISSN: 2226-6348 © 2022

facilitate them in learning. Findings of this study suggests that Google Docs could be one of online learning methods that could help achieve such objectives.

The results of this study are aligned with findings from previous researchers (Khalil, 2018; Moonma, 2021; Suwantarathip & Wichadee, 2014; Wichadee, 2013) that Google Docs help to encourage collaborative setting among ESL students. Evidently, many studies (Biria & Jafari, 2013; Dabao & Blum, 2013; Shehadeh, 2011; Veramuthu & Shah, 2020) have proven that collaborative writing works in improving students' writing skill. Likewise, Google Docs also offer the same advantage whereby this digital platform could also be integrated in the teaching and learning process because it helps increase students' motivation by using collaboration methods. Google Docs eliminates several constraints in a traditional classroom such as time limit that could restrict students from giving feedback and reflecting on one's work. Features in Google Docs enable learners to contribute to their work as they can take time to read, edit and provide comments for their friends. It motivates students to learn better because receiving feedback from their friends makes them become active learners. As discussed earlier, constructive feedback can also improve the quality of responses through student discussion (Ciftci & Kocoglu, 2012; Ertmer & Stepich, 2004). Moreover, the findings also revealed that Google Docs empower students to assist one and another. Despite working with friends from different proficiency levels, high proficiency students work hand in hand with those who are low proficient in the language and vice versa. Google Docs allow students to collaborate where they can share their prior knowledge, personal experiences and information while reviewing the documents online. This is because with Google Docs, the documents do not belong to anyone thus, the documents can be edited and commented on by several authors at the same time. They are not offended if their ideas are edited or changed. Hence, it somehow reduces self-inferiority among students due to anxieties or insecurities that other people are more deficient than them. This study suggests that Google Docs make it possible for ESL learners to learn from each other as they cooperate in completing the task. As the document is accessible, other students in the classroom also have access to the same document. The positive attitude towards the use of Google Docs as offering immediate feedback, sharing ideas, exchanging information, and promoting collaborative environment emphasizes that Google Docs can unveil many potentials in language learning as it increases students' learning involvement with peers. With reference to other studies (Brodahl et al., 2011; Zhou et al., 2012), Google Docs could appear as a useful tool to be adapted in the teaching of writing skills especially when it is carried out in groups.

# Conclusion

In conclusion, based on the objectives of the study; 1) to explore students' perceptions of Google Docs as a tool in learning writing and 2) to discover students' perceptions of Google Docs as an online collaborative tool in learning writing, the findings indicated that, the use of Google Docs as a cloud-based tool has remarkably shown a positive impact as the students viewed it as a helpful tool in learning writing and facilitated their learning. Most of the respondents agreed that the use of the tool helped them in learning writing which contributed positively to their collaborative learning experience. It was found that despite the students being grouped with different levels of proficiency, Google Docs function as a collaborative tool, thus the interaction was not a challenge faced by the students which contradicted the previous studies. Besides, the results also indicated that it contributed to the learner's autonomy. The use of Google Docs in this study emphasised that collaborative learning can be achieved although it is conducted online, and students embraced the changes

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as the tool itself helps to create a positive learning environment. Moreover, accessibility features in the Google Docs also eased the process of receiving written corrective feedback, hence, increased students' learning motivation. Google Docs helps to eliminate several constraints of the traditional classrooms such as time limits as students are able to view, read and edit the documents based on the time given in class and also outside of the classroom. It also increased the students' motivation in learning writing. Even though the result is based on a small scale of students, it is vital in indicating the acceptance and readiness of the students in using Google Docs application in their learning process. The study evidently shows that teachers should not only rely on traditional methods of teaching writing as Google Docs could also be a great alternative to motivate students to start writing. Once students are encouraged to do so, teachers can seek for effective ways to improve students' writing performance. Yet, the findings of this research cannot be generalised for a larger context. For future studies, a larger scale of respondents can be used to obtain a more significant result and analysis that can help to further explore the usage of Google Docs in writing class and a hybrid research method that combines quantitative and qualitative can be adopted in order to address the research questions and objectives in a thorough manner. Hence, not only a questionnaire but observations and interviews can also be added to gather more concrete data. Apart from that, there is a need for future research to explore the differences between low and highly proficient students when they collaborate using Google Docs as a learning tool. These differences can highlight the effectiveness of Google Docs in improving the student's proficiency in writing. The curriculum developers and educators can reflect from the findings of this study and use it as a guideline to create more flexible and comprehensive lessons that are suitable for students with different levels of proficiency to increase learners' writing motivation and eventually, aid them in achieving fluency and accuracy in academic writing.

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