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# STUDENTS' PERCEPTIONS OF THE USE OF *GOOGLE DOCS* FOR ONLINE COLLABORATIVE WRITING

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## Abstract
The existence of technology, particularly *Google Docs*, is vital to supporting students in surviving the online learning environment. This research, therefore, aims to investigate students' perceptions of using *Google Docs* for online collaborative writing, as well as its benefits and limitations. There are two research questions addressed: (1) What are the students' perceptions of the use of *Google Docs* for the ELESP students' online collaborative? (2) What are the possible benefits and challenges of using *Google Docs* for the ELESP students' online collaborative writing? This qualitative case study was conducted at the English Language Education Study Program of Sanata Dharma University. A close-ended questionnaire and semi-structured interview were utilized to collect data. The researchers discovered that most students had positive perceptions of using *Google Docs* for online collaborative writing. With the aid of its capabilities, *Google Docs* made online collaborative writing easier and more successful, particularly in students' performance during group work, communication, and accessibility. Aside from the functionality of *Google Docs*, students' active participation was also an important factor for successful online collaborative writing.

**Keywords:** *Google Docs*, online collaborative writing, students' perceptions

## Introduction
Technology has shaped a new learning behavior within the education field, including data literacy, technology literacy, and human resources (Delipiter, 2019). The use of technology quickly and widely spread during the COVID-19 pandemic, in which online learning became an urgent solution to address limitations in face-to-face social activities. Both students and teachers were forced to adapt and utilize all available resources for the learning process to happen.

As one of the most important skills in learning English, writing has fortunately been facilitated by the existence of various technological applications, including *Google Docs*, which, among others, has been used by the majority of teachers and students. *Google Docs* is the most suitable for students in collaborative learning because it can be a versatile and powerful tool to support a wide range of collaborative learning activities. According to Cunningham, Rashid and Le (2019),



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it also allows students to have more effective and convenient communication using a word processor.

This research aims to find out how the students perceived the use of *Google Docs* for online collaborative writing. To be precise, the research focuses on the perceptions of students of the English Language Education Study Program (ELESP) of Sanata Dharma University. Being the oldest in Indonesia, the ELESP is highly regarded for its comprehensive and innovative curriculum, its focus on teacher development, and its commitment to social justice. The ELESP is also known for its strong Ignatian Pedagogy foundation, which emphasizes critical thinking, compassion, and service (Suparno, 2015). It incorporates Ignatian Pedagogy into all aspects of its curriculum, from teaching English grammar to developing lesson plans. Collaborative learning, which is implemented in the ELESP classes, is an example of how Ignatian Pedagogy is put into practice (Mesa, 2017). The students are given opportunities to collaborate and learn from each other's experiences (Mesa, 2017; Nowacek & Mountin, 2023). In so doing, according to Suparno (2015), the students develop the three C's of Ignatian Pedagogy: competence (including knowledge and skills), conscience (such as critical thinking), and compassion (such as helping each other).

The issues that need to be addressed in this study are focused on the two research questions below.

1. What are the students' perceptions of the use of *Google Docs* for the ELESP students' online collaborative writing?
2. What are the possible benefits and drawbacks of using *Google Docs* for the ELESP students' online collaborative writing?

### *Perceptions*

This study investigates the students' perceptions of the use of *Google Docs* as a form of collaborative writing. According to Slameto (2010, p. 102), perception is a continuous cycle that includes the process of transmitting or receiving information to the human brain as well as a link between the person and the environment. Odendaal (2003, pp. 108-109) identifies three elements that impact human perceptions. The first element is the perceiver, whose personal traits such as attitude, purpose, interest, experience, and anticipation might impact perception. The second is the perceived target, which might be a person, object, or event and is determined by its novelty, motion, sound, size, backdrop, closeness, and resemblance. The third component is the environment in which the perception is formed, which includes time, work, and social settings.

### *Technology in writing*

Using technology may provide several benefits, such as making a topic more engaging, reducing learning time, and enabling non-traditional learning (Lynch & Campos, 2014). A computer, the most frequent learning device, facilitates student-centered learning (Al-Mahrooqi & Troudi, 2014), which can assist learners in engaging in knowledge instruction, collaboration, and reflection (Rosicka & Mayerova in Pazilah, Hashim, & Yunus, 2019). Another option for utilizing technology for learning is to use software (Ammade et al., 2018).

The usage of technology can be advantageous for learning writing by assisting the writer in doing simple writing. According to Karlan (2011),

"technology-supported writing" can help with writing demands such as editing and fixing words with tools. The use of technology in writing can boost writers' motivation while also increasing the amount and quality of their work (Nichols in Rahimi et al., 2019). By investigating an experimental group that was given a word processor to help them in a writing activity, Abdelrahman (2013) discovered that the use of word processors helped EFL college learners' writing skills because it is an effective application that engages the learners and makes the editing process easier.

***Online collaborative writing using Google Docs***

Collaborative learning with peers was beneficial in in-class activities because it allowed students to have meaningful interactions with their peers, which could involve them in the learning process and give them an interest in engaging or contributing to the learning activity, as well as help them overcome their anxiety (Yate González, Saenz, Bermeo, & Castañeda Chaves, 2013). Working collaboratively not only resulted in supportive learning in which students learned to appreciate and work with their classmates, but it also allowed students to learn without the assistance of a teacher (Gödek, 2004). It suggested that student Zone of Proximal Development (ZPD) aided them in gaining more knowledge when studying in collaboration or with assistance from others (Vygotsky, 1978).

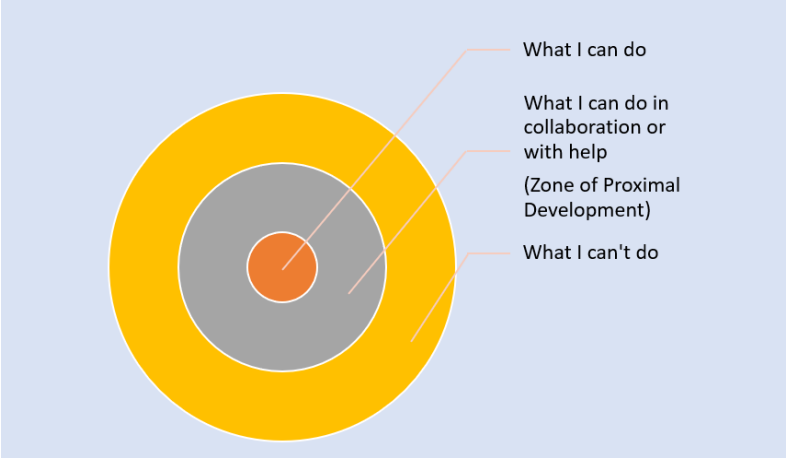



Figure 1. Vygotsky's (1978) zone of proximal development

According to Garrison, Anderson, & Archer (2000) and Garrison & Arbaugh (2007), collaboration in online learning happens not just inside the student's social presence but also within the link between social, cognitive, and instructional presence.

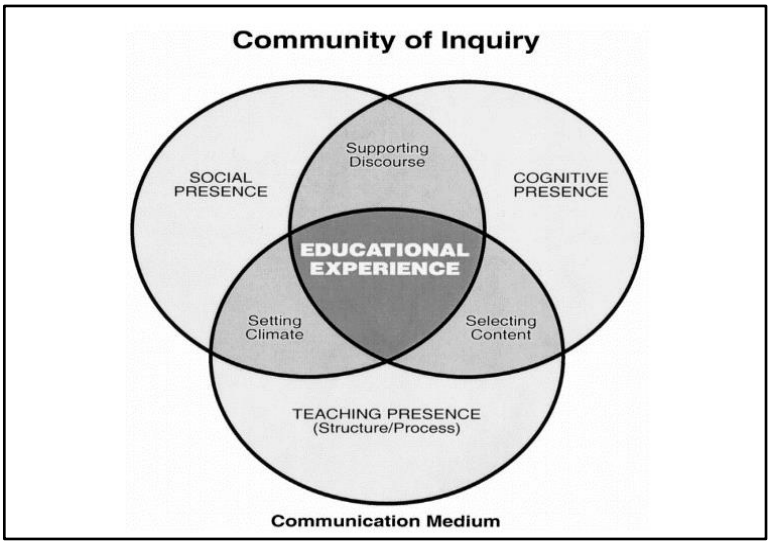



Figure 2. Garrison et al. (2000); Garrison & Arbaugh (2007)

Students have relied mainly on technology to study, but as technology has improved, students may now obtain information through the use of Internet-based applications rather than conventional learning techniques (Pazilah, Hashim, & Yunus, 2019). Online writing app technology can help to promote and improve online communication and cooperation in the classroom (Alkhataba, Abdul-Hamid, & Bashir, 2018; Brodahl, Hadjerrouit, & Hansen, 2011). Collaboration is now feasible not just through online writing but also through modern technologies such as discussion boards and online chat rooms as technology has improved in the 21st Century (Lawrence & Wah, 2016). Grief (2007) discovered that group members continuously shared ideas, making collaborative writing more encouraging and productive. Aside from students learning to write from their classmates, employing an online writing platform may make collaborative writing simpler (Abrams, 2019).

*Google Docs*, one of the most popular online writing applications, offers an online communication feature that enables real-time collaboration (Ambrose & Palpanathan, 2017). According to Andrew (2019), using *Google Docs* in collaborative writing offers various advantages related to the simplicity of the use of *Google Docs*, such as the ability for anybody to work in different places and times. According to Khalil (2018), *Google Docs* was beneficial for delivering feedback to students and promoting collaborative learning. It allows teachers to provide students with immediate and detailed feedback, and it also allows students to collaborate on projects and peer review each other's work. Students as collaborators would participate more actively in learning activities than students as individuals, as cognitive ability and social competence affected students' learning performance (Liu & Lan, 2016). The study by Liu and Lan (2016) found that collaborative learning activities can help students develop both their cognitive and social skills, and they can also help students achieve better academic results.

Aside from the benefits of *Google Docs* for increasing students' collaborative writing, the existence of *Google Docs* may be considered contradictory in some studies. In contrast to face-to-face learning activities, Krishnan, Cusimano, Wang, and Yim (2018) discovered that using *Google Docs* for online collaborative writing activities was challenging since there was no tool to identify who was actively

participating in the activity. According to Woodrich and Fan (2017), collaborative writing with *Google Docs* was effective in an eighth-grade English Language Arts classroom. However, face-to-face writing activities earned higher and statistically significant scores than anonymous collaborative writing with *Google Docs*. When there are too many students in one group, the students must deal with not only technical issues, such as difficulty logging in and loss of connection but also with the group members themselves, as the students have difficulty tracking changes in their writing and dealing with the fixed structure or result of the text, according to a finding from Brodahl and Hansen (2014) involving 177 students ranging in age from 19 to 44.

## Method

This research focuses on investigating students' perceptions of the use of *Google Docs* for online collaborative writing. Thus, the qualitative case study was adopted as it explores a process, activity, or event that requires a detailed description of the investigated subject (Creswell, 2009). In support, a close-ended questionnaire and semi-structured interview were selected as the research instruments.

The English Language Education Study Program (ELESP) of Sanata Dharma University was selected as the location of the research. In addition, the ELESP students from batch 2018 who participated in the Computer Assisted Language Learning class participated as the research participants. The research took place between March and April 2021.

The data collection was carried out using two instruments, namely, a questionnaire and a semi-structured interview. The questionnaire, which was presented using *Google Forms*, was a close-ended type with thirty-four (34) questions, having a Likert-scale range as the measurement tool. The interview itself was done based on the interview guide, consisting of eight (8) open-ended questions. To perform this, *Google Meet* or *Zoom* was used as the meeting platform based on the personal agreement between the participants and the researchers.

## Findings and Discussion

The results of this research were reported in the questionnaire under six sub-themes: (1) Student's perception of social interaction in collaborative writing, (2) Student's perception of the indicator of online collaborative writing, (3) Student's perception of their performance when using *Google Docs* for online collaborative writing, (4) Student's perception towards *Google Docs*' features, (5) Student's perception towards the easiness of communication in *Google Docs*, and (6) Student's perception towards the accessibility of *Google Docs*.

### *Students' perceptions of the use of Google Docs for online collaborative writing*

The findings of the student's perception of social interaction in collaborative writing are presented in Table 1. The first statement found that twenty-six (26) students (41.9%) answered "Agree," meaning that the presence of collaborative learning speeds up their work. According to the second statement, 35 students (56.5%) "Agree" that learning cooperatively in a group helps them gain more information. The third statement indicates that when students study collaboratively,

they can gain more information by exchanging ideas or opinions, as well as critiques or recommendations, among group members.

Table 1. Student's perception of social interaction in collaborative writing

| No. | Statement | SD (1) | D (2) | A (3) | SA (4) |
|---|---|---|---|---|---|
| 1. | I prefer learning alone to learning collaboratively in a group. | 6.5%<br>4 | 37.1%<br>23 | 38.7%<br>24 | 17.7%<br>11 |
| 2. | Learning collaboratively in a group helps me work faster. | 3.2%<br>2 | 24.2%<br>15 | 41.9%<br>26 | 30.6%<br>19 |
| 3. | Learning collaboratively in a group helps me gain more knowledge. | 0 | 6.5%<br>4 | 56.5%<br>35 | 37.1%<br>23 |

The findings from the interview below indicate that they align with the questionnaire results. The students say:

(1) In my opinion, learning collaboratively with peers is both plus and minus (50/50), depending on the people whom I work with. I need both of them (learning collaboratively with peers and learning individually). I cannot fully depend on my friends, and I also cannot 100% learn by myself. (Interviewee 1)

(2) When I have collaborative learning, the work can be distributed among the group members, which makes it finished quickly, or let's say, collaborative working can shorten the working time. By having collaborative learning, I can also exchange ideas with other group members, and I can get new insights from them, too. (Interviewee 4)

(3) If I compare learning alone and learning collaboratively, it is easier to adjust the time when I am learning alone. However, when it comes to developing ideas, learning collaboratively with peers is more comfortable because each of the group members can share their ideas, and we can know what should be improved from each member's ideas. There will be lots of suggestions and critiques that help us to make new and better ideas. (Interviewee 2)

The findings above align with Vygotsky's (1978) theory that studying in collaboration with peers helped students learn more than learning alone. Furthermore, because the work was accomplished in collaboration with other group members and each student was responsible for completing the same job, learning cooperatively with peers sped up the process.

The second table reveals the significance of critical thinking and problem-solving skills, the role of peers, the digital literacy requirement, and the role of teachers. From Table 2, it can be observed that thirty-three (33) students (53.2%) responded "Strongly Agree" to statement number seven, showing that collaborative writing requires critical -thinking and problem-solving abilities. In response to the statement which discussed the value of group members' participation in

collaborative writing, forty (40) students (66.1%) selected "Strongly Agree." Thirty-five (35) students (56.5%) agreed that to participate in online collaborative writing, students must be technologically literate. However, twenty-seven (27) students (43.5%) "Agreed" that instructors should be present in the online collaborative writing to watch the group's work.

Table 2. Student's perception on the indicators of online collaborative writing

| No. | Statement | SD (1) | D (2) | A (3) | SA (4) |
|---|---|---|---|---|---|
| 1. | I need to have critical thinking and problem-solving skills to write collaboratively with other peers. | 0 | 1.6%<br>1 | 45.2%<br>28 | 53.2%<br>33 |
| 2. | The presence of group members is the most important thing in online collaborative writing. | 0 | 6.5%<br>4 | 27.4%<br>17 | 66.1%<br>41 |
| 3. | I have to be digitally literate to work collaboratively with other peers. | 0 | 1.6%<br>1 | 41.9%<br>26 | 56.5%<br>35 |
| 4. | I still need the presence of a lecturer to observe my work in online collaborative writing with my peers. | 4.8%<br>3 | 25.8%<br>16 | 43.5%<br>27 | 25.8%<br>16 |

From the interview, when it comes to online collaborative writing, it suggests that the most vital point for each group member to have been their social presence. It can be seen from the quotations below.

(1) Having online collaborative learning quite limits the things that need to be done. For example, recently, when I had to make a video in a group, it was quite hard to make it as there were things that must be done offline. We have to think of other possibilities that we can do to design a new concept that previously should have been done offline, but now it must be done online so that the project can be done successfully. (Interviewee 3)

(2) My technology and digital literacy were improved. At the senior high level, I hadn't used any online writing applications; the group work was still done traditionally by meeting face-to-face with the group members. After I enrolled in PBI, specifically after I got CALL class, I learned that there is an online writing application called *Google Docs*, which can be used for individual writing or collaborative writing. (Interviewee 4)

(3) Social presence is the important thing as I think that communication is the key point to make the group work successfully. I have a story from my friend's group. There were four members in their group, let's say A, B, C, and D. A, B, and C had been accustomed to using *Google Docs* and had already known what to do, while D was passive, and D rarely joined the discussion on the *WhatsApp* group. If D had any difficulties and D didn't communicate it with the group, other members wouldn't know it, and they couldn't help D, right? D might hinder the group work if it turns out D is having difficulties. The cognitive level

of each person is different, and I don't mind if I happen in a group with someone whose cognitive level is not that good. However, I do emphasize the communication and their willingness to do the job. If they find difficulties, just directly ask on the *WhatsApp* group. (Interviewee 2)

(4) I think that teaching presence is not important. Sometimes, I need the presence of a lecturer only to ask about the group work's progress. (Interviewee 4)

The students perceived that the attendance of each group member was vital since the project would not work well if one or more people were missing, especially once the work distribution had been distributed to each group member. Students, on the other hand, need the presence of the teacher while engaging in online collaborative writing. The teaching presence was limited to that of a facilitator or observer. The findings supported the Community of Inquiry model suggested by Garrison et al. (2000) and Garrison & Arbaugh (2007), which said that online collaborative learning was accomplished by blending social, cognitive, and instructional presence.

***The benefits and drawbacks of using Google Docs for online collaborative writing***

Another interesting finding is related to how the students perceived their performance when using *Google Docs,* as shown in Table 3. By statement number one, thirty-seven (37) students (59.7%) "agreed" that utilizing Google Docs helped them accomplish their group project quickly and efficiently. Using Google Docs for online collaborative writing saved students time because they could write collaboratively at the same time while not meeting in person. As a consequence, students believed they could easily share ideas while using Google Docs for online collaborative writing since it could be accessed at any time and from any location by anybody who was asked to participate in the writing using Google Docs. It supports the results of a previous studies by Rahayu (2016) and Sudrajat & Purnawarman (2019), which demonstrated that using Google Docs in the classroom project allowed students to work collaboratively by allowing them to easily communicate ideas and modify their writing with other group members. Twenty-nine (29) students (46.8%) answered "Disagree" with the statement, "I interact more actively with my classmates while doing online collaborative writing using Google Docs than in face-to-face group work."

Table 3. Student's perception of their performance when using *Google Docs* for online collaborative writing

| No. | Statement | SD (1) | D (2) | A (3) | SA (4) |
|---|---|---|---|---|---|
| 1. | My group work can be done faster and more efficiently using *Google Docs*. | 0 | 12.9% 8 | 59.7% 37 | 27.4% 17 |
| 2. | I participate more actively with my peers when having online collaborative writing using *Google Docs* than in face-to-face group work. | 12.9% 8 | 46.8% 29 | 27.4% 17 | 12.9% 8 |

Moreover, in the interview, one of the students argued:

(1) When I use *Google Docs* for online collaborative writing, I have an opportunity to write anything and say any ideas freely, as sometimes, when having offline collaborative writing, I am quite shy to express my opinion with others. (Interviewee 4)

The quote above echoes the earlier study by Liu and Lan (2016), which found that utilizing Google Docs for online collaborative writing helped students be more active in group work. How active students were in online collaborative writing depended on the individual.

Concerning *Google Docs*' features, as shown in Table 4, thirty-eight (38) students (61.3%) "Agreed" that utilizing *Google Docs'* capabilities made group work simpler. Moreover, thirty (30) students (48.4%) "Disagreed" that tracking their progress during online collaborative writing with *Google Docs* was challenging.

Table 4. Student's perception towards *Google Docs*' features

| No. | Statement | SD (1) | D (2) | A (3) | SA (4) |
|---|---|---|---|---|---|
| 1. | My group work is made easier with the help of *Google Docs*' features. | 0 | 6.5%<br>4 | 61.3%<br>38 | 32.3%<br>20 |
| 2. | I have difficulties tracking other peers' work when having online collaborative writing using *Google Docs*. | 11.3%<br>7 | 48.4%<br>30 | 30.6%<br>19 | 9.7%<br>6 |

(1) *Google Docs* already has enough to support basic work that doesn't require us to make graphics, 3D models, etc. The spelling and grammar check features are very helpful. It makes online collaboration easier. Another good thing is when the work has been done, and we need to keep it private, *Google Docs* has a feature to make it inaccessible to anyone who is not on the list of accessing the work, and it is very effective and safe. In my experience, when I wrote a script for Drama class, my group members were sometimes confused about whether we used correct grammar or not. *Google Docs* showed us the grammatical or spelling mistakes by giving the red underlining, and it is very beneficial as a "reminder" for us to discuss in the group work. (Interviewee 1)

(2) When each of the group members has written something, I can track the progress in *Google Docs* as there is a feature to know what changes have been made by my peers. *Google Docs* helps me in terms of grammar. It provides spelling and grammar features, and I can also add other grammar check applications, like *Grammarly*, to *Google Docs*. (Interviewee 2)

From the interview excerpts above, however, grammar and spelling checks, as well as progress monitoring, were the most favorable features of *Google Docs*. The grammar and spelling check function, which evaluated students' grammatical and spelling problems so that they could immediately address the issues and try to

supply the proper text when doing online collaborative writing, aided students' writing process with their peers. Students could monitor who made the changes, what sort of changes were made, and when the changes were made (including the day, date, and time) from the first time the writing was done to the current version of the writing by utilizing the progress tracking function. It contradicts the findings of Brodahl and Hansen (2014) and Krishnan et al. (2018), who discovered that students perceived the usage of *Google Docs* for online collaborative writing negatively. The students found it difficult to utilize *Google Docs* because they could not see who was making changes and who was not, so they did not know who was actively participating and who was not.

The students also perceived the ease of communication in using *Google Docs*. Table 5 summarises their perceptions. Thirty-two (32) students (51.6%) "agreed" that their *Google Docs*-based online conversation was productive. Thirty-three (33) students (53.2%) answered "Agree" to the statement, "I can obtain comments from my classmates easier while utilizing online collaborative writing with Google Docs."

Table 5. Student's perception towards the ease of communication in *Google Docs*

| No. | Statement | SD (1) | D (2) | A (3) | SA (4) |
|---|---|---|---|---|---|
| 1. | My peers and I have a good online discussion using *Google Docs*. | 1.6%<br>1 | 19.4%<br>12 | 51.6%<br>32 | 27.4%<br>17 |
| 2. | I can receive feedback from my peers more easily when having online collaborative writing using *Google Docs*. | 0 | 14.5%<br>9 | 53.2%<br>33 | 32.3%<br>20 |

Meanwhile, from the interview, the students also perceived that the presence of *Google Docs* was easy enough to help them in online collaborative writing because it offered a chat box and comment capabilities similar to those present in other online talking programs. It can be seen from the excerpts below.

(1) When my group members did online group work, it was hard, right, when we directly wrote anything in *Google Docs*? So sometimes we communicate using *Google Docs*, and it becomes the substitution of *WhatsApp* indirectly. As a result, my group members usually use *Google Meet* to discuss things that we need to work on, and after that, we then write what we have discussed on *Google Docs*. However, if other group members can't access applications for direct communication, like *Google Meet*, the comment feature can help my group members to have direct communication. Through the comments put on others' work or writing, they can know what's wrong with what they have written or what needs to be added to their writing. (Interviewee 1)

(2) The feedback can also be given easily by using the comment feature, as it allows us to write any comment on the intended part. It helps me to know what's wrong with my writing. (Interviewee 2)

Students could use the chat function to have textual discussions with other users while producing material on *Google Docs*. Still, it could only be used to convey text and not to share items like images, voice recorders, and so on. While utilizing the comment feature, students might provide comments, critiques, or changes to other members' writing. It was consistent with the findings of previous research by Khalil (2018), who observed that utilizing *Google Docs* benefited students' writing by allowing them to easily acquire comments from other group members, encouraging each group member to participate in online collaborative writing.

The last feature concerns the Accessibility of *Google Docs*, as summarised in Table 6. Thirty-one (31) students (50%) chose "Disagree" to the statement "I have difficulties in fixing the group work's result when having online collaborative writing using Google Docs," indicating that there were no significant issues among students when they had to fix their work in online collaborative writing using *Google Docs*. Because *Google Docs* could be accessed through a single URL, no one in the group needed to provide several files, as they did with Microsoft Word. There were forty-one (41) students (66.1%) who selected "Strongly Agree," as well as thirty-three (33) students (53.2%) who chose "Strongly Agree," suggesting that all group members could readily access the group work on *Google Docs* and had no problem doing so.

Table 6. Student's perception towards the accessibility of Google Docs

| No. | Statement | SD (1) | D (2) | A (3) | SA (4) |
|---|---|---|---|---|---|
| 1. | I have difficulties in fixing the group work results when having online collaborative writing using *Google Docs*. | 16.1%<br>10 | 50%<br>31 | 29%<br>28 | 4.8%<br>3 |
| 2. | *Google Docs* can be accessed easily by all of my group members. | 0 | 1.6%<br>1 | 32.3%<br>20 | 66.1%<br>41 |
| 3. | I do not have any trouble every time I access *Google Docs* for online collaborative writing. | 0 | 9.7%<br>6 | 37.1%<br>23 | 53.2%<br>33 |

The interview results below confirm the above findings. The students stated that correcting the group work was simple since they could work on a single page, making it easy to track which version was the most current.

(1) Before I knew *Google Docs*, there would be so many files sent in *WhatsApp* by my group members each time they revised the work, and it was hard for us to know which one was the fixed work. While in *Google Docs*, we can work together at the same time, and I think it is very effective. We can know the fixed work as we only work in one sheet. (Interviewee 1)

(2) I only need to use one link to access *Google Docs*, which is more efficient compared to other offline writing applications when it comes to online collaborative writing. We also don't need to waste our time installing any

> application since *Google Docs* can be accessed online without installing anything. In contrast, *Google Docs* needs to be connected to the internet whenever we write something so that it will be automatically saved. When the internet connection is suddenly lost, the progress that has been made will be wasted. (Interviewee 4)

This finding contradicts the findings of previous research by Brodahl and Hansen (2014), who found that when students used *Google Docs* for online collaborative writing, they had difficulty resolving the text structure or the project's outcome when there were too many group members. *Google Docs* made collaborative writing easier for students since it could be accessible online, allowing all group members to work at the same time and get real-time writing updates even if they did not meet in person. *Google Docs* may also be opened on several devices with the same *Google* account. It was consistent with Andrew's (2019) previous study, which found that everyone in the group or other individuals could readily use *Google Docs* for online collaborative writing regardless of time or place.

## Conclusions

The purpose of this study was to learn about students' attitudes toward utilizing *Google Docs* for online collaborative writing. The findings of this study suggest that *Google Docs* can be a valuable tool for online collaborative writing, particularly within the context of Ignatian Pedagogy (Nowacek & Mountin, 2023). According to the findings, the majority of students were enthusiastic about utilizing *Google Docs* for online collaborative writing. It provides features that support collaboration, reflection, and critical thinking, all of which are essential for Ignatian learners (Suparno, 2015; Mesa, 2017). The students found that collaborating on writing assignments in real-time and using the features of chat boxes, comments, and revision history is engaging. Students said *Google Docs* improved their online collaborative writing, especially when they couldn't meet in person. The presence of *Google Docs* for online collaborative writing benefited students' performance since they could interact at any time and from any location using only one online service, making their working time more efficient and convenient. *Google Docs'* capabilities were designed to assist students with online collaborative writing. Students may still connect inside *Google Docs* due to the chat box and comment capabilities, which allow students to conduct written conversations with other group members and express feedback.

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