Students' emotional engagement in online collaborative writing through google document

[1]Rahmadania Putri Ferdianawati Iskandar, [2]Muhammad Reza Pahlevi

[1,2]Universitas Singaperbangsa Karawang, Karawang

rahmadaniaiskandar@gmail.com

Abstract. Learning writing has been conducted by using various methods. Collaborative writing is one of method that used in writing learning practice. Studies about collaborative writing reveal that online collaborative writing is effective to promote students' writing quality. There are many previous studies have explored the students' perception, effectiveness, and benefits of collaborative writing. However, the study about students' emotional engagement in collaborative writing is limited. This study aims to explore students' emotional engagement during online collaborative writing through Google Docs. The exploration of students' emotional engagement is beneficial to understand students' feelings and emotions during the learning process. Classroom Action Research is used as the research design of the study. Participant of the research is four eleven grade high school students. The research was conducted at the SMA Negeri 1 Cikarang Barat in three weeks. Semi-structured interview and documentation were used for collecting the data. The result of the study showed that online collaborative writing through Google Docs involves students to learn writing enthusiastically. Online collaborative writing also involves students cognitively by acquiring new vocabulary during the online collaborative writing activity.

Keywords: collaborative writing, online learning, students' emotional engagement

INTRODUCTION

Writing is one of the language skills that included in language learning. Writing can be defined as a communication activity to express thought or feeling through written text. English writing activity in Indonesia have been conducted in many ways. In recent English learning classroom, writing activity is conducted by encouraging students to use English spontaneously and students are required to be actively involved in classroom activity. It is based on concept of curriculum that recently used in Indonesia, *Kurikulum 2013* (Ariyanti, 2016). However, in practice, students lack of participation in learning writing. Students lack of participation due to challenges they faced during learning writing. The challenges are students have difficulties in grammar structure and difficulties in delivering the idea using English cultural background (Ariyanti, 2016). It has an effect on students' grammatical structure which students use their mother tongue grammatical structure in English writing. A study about students' and teachers' experience in English academic writing found that there are five problems and challenges in English academic writing. Mukminin (2015) in Ariyanti (2016) stated that one of the problems is students doubt and afraid to face the challenges (lack of cultural background and organizing grammar) that occurs in English academic writing. It means that students have negative engagement (students' doubt and afraid) in English academic writing. To face the challenge,

collaborative writing can be used as learning writing method to build positive engagement during learning writing.

A quality and quantity of students' cognitive, emotional and behavioral reactions to the learning process is called student engagement. Student engagement has been investigated as a multidimensional concept and views all dimensions separately, such as student behavior, emotional, and cognitive (Fredricks, Blumenfeld, and Paris 2004). This study is focused on exploring students' emotional engagement. Students' emotional engagement can be interpreted as students' reactions to school or learning activities that consist of emotions such as interest, anxiety, excitement, and belonging. Study about emotional engagement show that emotional engagement is linked indirectly to learning performance (Voelkl, 2012). Therefore, lower emotional engagement could weaken students' cognitive engagement in learning (Eccles & Wang, 2012). However, students' emotional engagement can be encouraged through the positive relationship between student-teacher and student-peer (Hughes & Kwok, 2006). It indicates that a positive relationship is needed to encourage students' emotional engagement. Therefore, online collaborative writing which involves interaction between students can be used to build a positive relationship between students.

Collaborative writing is a writing activity by two or more people which collaborate to produce a single text (Zhang, 2018). Online collaborative writing involved multiple authors and they can collaborate in all parts of writing aspect such as content, structure, and language (Chao, 2011). It means that students interact and collaborate in making a text and each student can contribute in all aspects of writing. Study about collaborative writing showed that collaborative writing is proven more accurate than individual writing which has less error of writing than individual writing (Mcdonough, 2018). Online collaborative writing also promotes students' grammatical accuracy in writing (Wigglesworth & Storch, 2009). It is proven that online collaborative writing increasing students' grammatical skills due to the impact of students' interaction and discussion in the online collaborative writing process. The other impact of online collaborative writing is the quality of students' text. Online collaborative writing has impact for content, organization, and vocabulary (Shehadeh, 2011). It means students who collaborate in writing have better content, organization, and vocabulary in writing than students who write a text individually. Not only has an impact on writing aspect, online collaborative writing also assists in developing students' awareness in writing (Zhang, 2018).

The development of technology makes learning activity enable to conduct in online setting. Online collaborative writing also has been affected by technology. Conducting online collaborative writing in online setting is possible to do. Tools that can be used in online collaborative writing are Wiki, Blogs, Google Docs, etc. This study uses Google Docs as online collaborative writing tool. Google Docs is word processor by Google which the user can write, edit, and share the document with other people in online (Sieber, 2018). Google Docs have feature to conduct online editing in real time. It is suitable for online collaborative writing activity which enable to edit, discus and share the text synchronously. Google Docs also convenient for students because it can be opened in web without install software platform.

Studies about online collaborative writing show positive result. Online collaborative writing in adolescent ELL students revealed positive response which students prefer using online settings to collaborate in writing (Vorobel & Kim, 2017). In addition, online

collaborative writing using *Quip* software platform show that online collaborative writing give opportunity for students to improve their writing organization and interaction skill due to interaction activity in online collaborative writing (Abe, 2020). In conclusion, online collaborative writing both online and face-to-face is a promising method for encouraging students' emotional engagement since online collaborative writing provide many benefits for students. The benefits for students can be writing performance or English learning achievement.

Collaborative writing has been widely studied by researchers. In writing aspect, a study by Mcdonough (2018) show that online collaborative writing more accurate than individual writing which has less error of writing than individual writing. Collaborative writing also promotes students' grammatical accuracy in writing (Wigglesworth & Storch, 2009). In addition, online collaborative writing effected students' content, organization, and vocabulary in writing (Shehadeh, 2011). Outside the writing aspect, online collaborative writing assists students in developing students' awareness in writing (Zhang, 2018). However, there is a limited study about students' emotional engagement of online collaborative writing, especially in online settings. To fulfil the research gap, this research study students' emotional engagement towards online collaborative writing process in online classroom. It can be used by teachers to gain knowledge about students' emotions (feel) and response of online collaborative writing before conducting online collaborative writing in their teaching practice. Furthermore, students' engagement helps teachers to understand how students' emotions during producing a text in group especially in online settings. Moreover, in pandemic era of Covid19, teaching and learning activity is conducted in online settings and this study can help teacher to understand students' emotional engagement of online collaborative writing in pandemic covid19 situation. Based on research background above, the research question of this study is "How does online collaborative writing through google docs engage students' emotional engagement?".

Students' Emotional Engagement

A quality and quantity of students' cognitive, emotional and behavioral reactions to the learning process is called student engagement. In recent years, student engagement has been investigated as a multidimensional concept and regarding all dimensions separately, such as student behavior, emotional, and cognitive (Fredricks, Blumenfeld, and Paris 2004). The three dimensions of student engagement that related each other are emotional engagement, behavioral engagement and cognitive engagement. Behavioral engagement is a positive or negative behavior outcome of involvement and participation in academic task and school activity. Emotional engagement refers to students' reaction of learning activity such as interest, anxiety, happy and sad. Cognitive engagement is student cognitive result in learning process (Fredricks, Blumenfeld, and Paris 2004). Students' emotional engagement is the focus of this study.

Students' emotional engagement is students' reaction to school or learning activities that consist of emotions such as interest, anxiety, excitement and belonging. Students' emotional engagement is focused on the level of negative or positive response toward teacher, peer, school, and academic. Emotional engagement may reveal positive and negative outcome. The positive outcome of emotional engagement is expected to build students' relation with school and affect their awareness to do their work (Fredericks &

McCloskey, 2012). Student' emotional engagement of teacher and peer relationship with positive relation could lead supportive response from teacher and peer, and it effects student learning outcome (Hughes & Kwok, 2006). Study about emotional engagement show that emotional engagement is linked indirectly to learning performance (Voelkl, 2012). Therefore, lower emotional engagement could weaken student' cognitive engagement in learning (Eccles & Wang, 2012).

Collaborative Writing

Collaborative writing appeared because of sociocultural theory from Vygotsky (1978). From sociocultural perspective, learning is social activity and learning can be constructed from social interaction. Collaborative writing is writing activity of two or more students to produce one text by interacting and discussing during the writing process. Collaborative writing involves students' interaction and engagement, sharing ideas, and sharing responsibility in making decision (Zhang, 2018). In collaborative writing, there is peer interaction in all phases of collaborative writing process. The phases are collaborative prewriting discussion, online collaborative writing task, and peer review of written text (McDonough, 2018). Beside the phases, online collaborative writing include strategy in its implementation.

In practice, collaborative writing has five types of collaborative writing strategy. The five types of strategy based on theory from Lowry et.al (2004). The five types online collaborative writing strategy are Group Single-Author Writing, Sequential Single Writing, Parallel Writing, Horizontal Division Parallel Writing, and Reactive Writing. Group single-author writing is the collaboration of writing which member of the group discussed the idea together and one member is the writer of the text. Even though the text writer only one member, but the collaborative interaction still occurs in sharing idea. Sequential single writing is collaborative writing strategy which start with one member writing their text and continue the text into next member consecutively. In this strategy, the text is written by all member of the group consecutively. Parallel writing is collaborative writing strategy which the member of group divided the text into several portion and each member is responsible to write their portion at same time. Horizontal Division Parallel Writing is collaborative writing strategy which each member of the group has their own role in writing process, such as team leader, author, editor, and reviewer. The last is reactive writing. Reactive writing is collaborative writing strategy which member of the group discuss, write, and contribute in writing process synchronously. Teaching writing has been elaborated by Susanto (2017) about teachers' perceptions towards teaching writing using word games; the case study of junior high schools in Semarang, central java, Indonesia

Google Document as Online Collaborative Writing Tool

Google Docs is one of online writing platform that usually used by many people. Google Docs can be defined as word processor by Google which the user can write, edit, and share the document with other people in online setting (Sieber, 2018). Google docs is an appropriate tool for conducting online collaborative writing. The reason is Google Document is easy to use and made for collaboration writing activity. It is in line with Ebadi & Rahimi (2017) point out that students assumed google document is easy to use and appropriate for online collaboration activity. Google Documents has many features that can

helps students to collaborate effectively. The features are sharing document, online editing synchronously, and online chatting. Sharing document is a feature to share the text document and join the writing process through link. Online editing makes students able to edit the text synchronously with the other students. Online chatting is a feature to help students discussing when writing the text synchronously. Those features needed by students to creating a text in online setting. Thus, students can conduct online collaborative writing in effective, efficient, and convenient way.

METHOD

Research design that used in this study is action classroom research. The site take place at SMAN 1 Cikarang Barat which is located in Telaga Harapan, Cikarang Barat, Bekasi. The study was conducted in three weeks. Participants of the study are four second grade language study major of SMAN 1 Cikarang Barat. The four participants based on two groups and each group consist of two members. The detailed information of participant will be informed in participant's demography information.

Table 1. Participant Demography

Participants (Pseudonym)	Gender	Age	Education Background	Length of English Learning Experience	Social Economy Background
Farah	Female	17	Senior High School	10 years	Medium
Gita	Female	17	Senior High School	10 years	Medium
Gina	Female	17	Senior High School	10 years	Medium
Karina	Female	17	Senior High School	10 years	Medium

The data is collected by using semi-structured interview and documentation. Interview is used as primary data collection technique and documentation is used for support and strengthen the data from interview. The data analysis adopted thematic analysis by Braun and Clarke (2006). There are four main steps in analyzing the data; transcribe the data, coding, defining themes, and writing up (interpretation).

FINDINGS AND DISCUSSION

Findings

This study has found online collaborative writing through google docs involves students to learn writing enthusiastically and involves students cognitively. Students were engaged emotionally in google docs mediated online collaborative writing. The features of google document assist student to write a text in group enthusiastically. Students feel happy during writing process since online collaborative writing assist them to learn English and writing indirectly. The chat and the synchronous features cope students to write collaboratively.

They also expressed that there is no burden in writing process. It can be proven by the interview below.

```
Question      : Were you happy in writing text collaboratively using
                Google Docs?

Participant 1: "I am happy because I know the feature of google document and
                I can discuss and share my opinion on google document."

Participant 4: "I am happy because it easy to write the text and I learn
                many things after write the text."

                                                    (Interview Data 1)
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The interview data shows that students agreed and admitted that they were delighted during the online collaborative writing process through google docs. They expressed that in the writing process they can discuss and share their ideas. The factor that makes them felt happy refers to valuable features in google docs. In addition, online collaborative writing also assists them to learn a new thing about making text.

In online collaborative writing process, the students were facilitated to share their writing ideas virtually. Thus, they could practice peer feedback. Students found that google document assist them in learning to write collaboratively. It is in line with dialogue interview which is presented below.

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Question      : Did you interested in writing a text in pair using Google
                Docs? Why?

Participant 1: "I am interested because in this pandemic situation, google
                docs helped me to write a text online."

Participant 4: "Yes, because when I write a text by myself, I have problem
                in developing the idea. So, if I write the text
                collaboratively it easier to develop my idea and discuss in
                a group using google document."
                                                    (Interview Data 2)
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The interview transcription indicates that students interested in learning to write collaboratively through google docs. They expressed that google document assist them to write a text collaboratively in online setting. They also felt that online collaborative writing helped them to develop their idea by discussing the topic together.

This study also found students also enjoyed online collaborative writing activities through google document. They expressed that google document assisted them in writing collaboratively. Synchronous Writing feature in google docs made students able to write a text together at the same time. Thus, students had a good relationship with pair and it helped them to enjoy the writing process. It can be proven in the interview below.

```
Question      : Did you enjoy writing a text in pair using Google
                Docs? Why?

Participant 2: "Yes, because I used to write a text with my pair and share
                ideas together. So, I enjoy the writing process."


Participant 3: "Yes, I enjoy it, because I think using Google documents is
                easier and we can chat too, so we can pour our ideas and
                type it at same time."
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The interview presents students' enjoyment during online collaborative writing through google document. Students felt that they enjoy writing a text collaboratively using google document. Google document assists them in facilitating their writing activity. In addition, students found that they enjoyed online collaborative writing because their pair is their close friend. It helped them to communicate well and have an enjoyable environment during the writing activity. To strengthen students' statement in the interview, photograph below show students' facial expression during online collaborative writing activity.

Figure 1 Students' facial expression during online collaborative writing

The photograph above shows students' facial expression during online collaborative writing activity. In the photograph, students smile and it indicates that online collaborative activity is fun and enjoyable. It is in line with students' statement that they are happy, enjoy and interested in online collaborative writing. In sum up, students have positive emotion during online collaborative writing through google docs such as happiness, interest, and enjoyment. It also reveals that Google docs mediated online collaborative writing involved them learn to write enthusiastically.

This study also found that online collaborative writing through google document involves students cognitively. Students were engaged cognitively in learning to write through google document. Online collaborative writing indirectly effect students' English ability both in vocabulary and writing quality. After the online collaborative writing activity, students think they acquire new vocabulary and satisfied with the text that written collaboratively. It is presented in the interview transcription below.

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Question      : Is there any positive outcome after writing a text in pair
                using Google Docs? Why?
Participant 1: "Yes, I learn new vocabulary, words or parables that I don't
                know before from my friend"
Participant 2: "I think when I was assigned my first poem (individually), I
                thought it wasn't like it, and I more like it (text in
                collaborative writing) than before (individually)."
Participant 3: "Yes, when I write it, I felt like I learn new vocabulary."
Participant 4: "There are many positive things, yesterday I learned about
                how to write a text properly, how is structure should be and
                how to use the vocabulary."
                                                        (Interview Data 4.6)
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The interview indicates that students have positive outcome in English and writing ability. Students agree that online collaborative writing help them acquiring new vocabulary

during writing activity and the writing quality of collaborative writing is better than individual writing. They learn new vocabulary from the discussion during writing process. It proven by photograph that showed students peer discussion in room chat Google document.
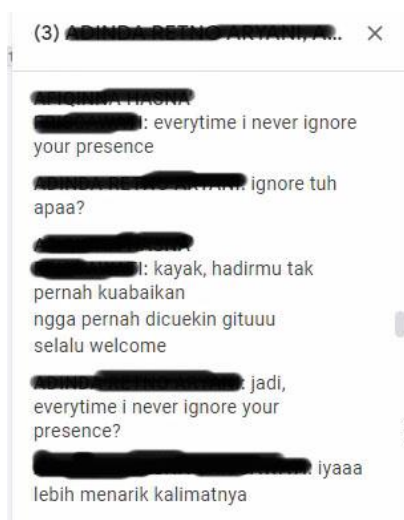

Figure 2 Students' discussion during online collaborative writing

The photograph above shows students' discussion in google document chat feature during online collaborative writing. In the students' discussion, the participant shares a new vocabulary to her pair. The first participant asked her pair "what's the meaning of ignore?", then her pair tell the meaning of "Ignore". It means they share new vocabulary with each other and indirectly acquire a new vocabulary. It is in line with students' statement in the interview that they learn new vocabulary during the discussion in online collaborative writing activity.

Online collaborative writing also improves their writing quality. In the interview, the participant agree that online collaborative writing improve her text quality. She admits that the text she made with her pair have better quality than the text she made individually before. It means that online collaborative writing could improve students' writing quality since online collaborative writing includes sharing idea and discussion session.

Discussion

Students were engaged enthusiastically in online collaborative writing through google document. This study found that students feel happy, interested and enjoy the online collaborative writing activity. The positive outcome of emotional engagement is expected to build students' relation with school and affect their awareness to do their work (Fredericks & McCloskey, 2012). It means the students have awareness in doing writing task since students were delighted during online collaborative writing activity. One of positive outcome in emotional engagement is students feel happy during online collaborative writing. The factor that makes them felt happy refers to features in google document. It is in line with Ebadi & Rahimi (2017) point out that students assumed google document is easy to use and appropriate for online collaboration activity. Moreover, students have interest in online collaborative writing due to friendly-user feature of google document. Students also expressed that online collaborative writing is enjoyable. It

confirms Shehadeh (2011) finding that students in collaborative writing situation responded positively, enjoyed the writing process, and expressed that collaborative writing mediated their English learning.

Online collaborative writing also indirectly engage student cognitively. It is in line with Voelkl (2012), emotional engagement is linked indirectly to learning performance. Students admit that online collaborative writing assist them to acquire new vocabulary and improve their writing quality. Collaborative writing provides students' sharing idea, developing idea, discussion, and peer feedback which produce better text (Shehadeh, 2011). It means collaborative writing has better writing product than individual writing. In addition, students experience new vocabulary acquisition during online collaborative writing process. It is same with Kim (2008) findings in Zhang (2018) point out that collaborative writing assist students to acquire new vocabulary.

CONCLUSION

Students' emotional engagement has important role in learning activity. To built positive emotional engagement, appropriate learning method is needed. In learning writing, there is collaborative writing that can be used as learning method. Sharing and discussion session in collaborative writing assist students to easier writing a text. Challenge of using collaborative writing during online learning which is conducted during pandemic Covid19 can be solved by using Google Document. Online collaborative writing through Google Document creates enthusiastic feeling for students. It can be seen from students' statement that they feel happy, interested and enjoy the online collaborative writing activity. Online collaborative writing also indirectly effect students cognitively. Students acquire new vocabulary from the discussion session in online collaborative writing. Google Document as a tool in online collaborative writing, assist students in facilitating their writing activity. Features in Google document helped students to create a text synchronously. Therefore, google document is appropriate tool for online collaborative writing to build a positive emotional engagement for students.

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