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# Effect of Academic Web-based Projects on EFLStudents' Writing Motivation

Tseganesh Yirga[1,2,*], Abiy Yigzaw[2], Birhanu Simegn[2]

[1]Department of English Language and Literature, College of Social Science and Humanities, Woldia University, POB 400, Woldia, Ethiopia.

[2]Department of English Language and Literature, College of Education, Bahir Dar University, Bahir Dar, Ethiopia.

*Corresponding author email: tseganeshyirga@gmail.com

### Abstract

*The main objective of the study was to examine the effects of academic web-based projects on EFL students' writing motivation in terms of self-efficacy, achievement goals, beliefs and affects about writing. A single group quasi-experimental design was employed, involving 35 second year English major students (30 males and 5 female) enrolled in advanced English course at Woldia University. Comprehensive sampling technique was used to select participants. Questionnaire was used to collect data about learners' writing motivation before and after intervention. Students' diary analysis and focus group discussion were also employed as data gathering instruments during the intervention and after the intervention respectively in order to triangulate the data obtained through questionnaire. The data obtained through students' questionnaire were analyzed quantitatively using paired sample t-test. On the other hand, the data gathered using focus group discussion and students' diary analysis were analyzed qualitatively through thematic analysis. Specifically, Google Docs was employed in this study among other academic web-based platforms/applications. Results demonstrated a significant difference between learners' writing motivation before and after the intervention which suggests that collaborative writing via academic web-based projects specifically, using Google Docs positively influenced students' writing motivation. Therefore, EFL teachers can employ academic Web-based projects besides to the conventional collaborative writing approach to promote their students' writing motivation.*

**Keywords**: *Collaborative writing, Academic Web-based projects, Google Docs, Writing motivation.*

## 1. Introduction

In learning English, students are expected to master the fundamental skills highlighted in the English language classroom; however, many EFL students find it challenging, particularly when it comes to writing for both academic and general purposes (Dastgeer & Afzal, 2015; Younes & Albalawi, 2015). Students and teachers encounter various obstacles in learning and teaching process of writing due to the complexity of writing skill. Firstly, students often struggle to come up with ideas for their writing. Secondly, students have difficulty with using the accurate language structure. At times, students have thoughts they want to express in writing, but they are unable to do so/ write using correct grammar. Thirdly, students often lack interest in writing due to a teaching and learning process that fails to engage them. Teachers often assign writing tasks for students to complete on their own, which can lead to a lack of confidence in their writing abilities. As a result, some students resort to coping their peer's work. Another factor contributing to students' difficulties is the teaching approach employed by educators. Many teachers lack the technical skills necessary to use methods that effectively engage students and spark their interest in developing their writing skills. This can have a negative impact on students' writing performance (Metilia & Fitrawati, 2018).

Similarly, as Bantalem (2021) stated, EFL students' at Woldia Univeristy, which is in current study area had faced different kinds of writing problems such as: lack of interest to write, deficiency to write clear thesis statements, shortage to support their writing with strong evidence, and unable to detect claims and evidences. Overall, according to him, the students were in difficulty to compose effective written texts that consider basic writing aspect in terms of task response, coherence and cohesion, lexical resources, and grammatical range and accuracy since the teachers did not use appropriate method that encourage them to develop it and overcome all the pitfalls of the students faced in writing. In addition, with reference to the preliminary study, conducted by the researcher it was found that significant number of students scores low in writing assignments and tests, as well as their motivation towards writing was low. Therefore, it is important to identify/ look for suitable strategies that enhance students' motivation to write and develop their overall writing abilities.

Particularly, working on a method that increase learners' motivation is a sensitive issue that needs priority since it is a necessary ingredient to bring success among students. In line with this, many scholars acknowledged motivation as the main factor that influences the learning process in either a positive or negative way (Bandura, 1997; Ryan et al., 2000; Dornyei, 2001; Pintrich, 2003). Specifically, Dornyei (2001) has extensively researched motivation in language learning, and he identifies various motivational factors that influence learners' attitude towards language acquisition, including integrative and instrumental motivations. Further, his work highlights how motivation significantly impact

learners' persistence and success in language learning.

Accordingly, various research findings suggested using technology based collaborative writing instruction/ academic Web-based projects benefit students by potentially increasing their motivation and creativity, and allowing them to have more convenient feedback and revision with in a fastest time response rate (Lam & Pennington, 1995; Kitjaroonchai & Suppasetseree ,2021; Woodrich & Fan (2017). Such technology supported collaborative writing instruction, particularly the devices also allow students to work on the text simultaneously, and the text is always available to all users (Pennington, 1991).

Conceptually, looking technology-based collaborative writing instruction/ academic Web-based projects separately in terms, as instruction first, collaborative writing is originated from collaborative learning, and it is used to refer the involvement of two or more writers to produce a single text, and in this study, it largely rested on the work of Vygotsky (1978) which stresses the role of social interaction with technology support for learning activated through the Zone of Proximal Development (ZPD) (Dillonbourg, 1999). Hence, academic Web-based projects in this study is operationalized as collaborative writing tasks that delivered for students to work collaboratively using online/Web-based application/platform, particularly using Google Docs. As Sholihaha & Setyandaria (2018) Google Docs is among the many technological advances currently available in the realm of Web 2.0, and it is suggested as the latest and effective Google feature/

web-based writing platform in teaching writing in collaborative environment since it has multiple benefits like: it allows users to create, edit, and share documents online; it is easy to use, free to access, and accessible from anywhere with an internet connection. Therefore, these days, it is a popular choice not only for students but also for businesses, and other individuals worldwide.

The literature reveals a significant rise in interest in collaborative writing, contrasting with earlier views that considered writing primarily as a solitary endeavor. However, the evolution of work place writing, along with the emergency of Web 2.0 applications such as Google Docs, blogs and wikis, has changed writing practices by facilitating collaboration and making text creation more accessible. Consequently, writing is frequently done in teams instead of individually, and there is a growing emphasis on collaborative practices in second language classroom (Kessler, 2009; Kessler & Bikowski, 2010; Storch, 2005).

Several studies have examined the learning experience of students in second/ foreign language classes, comparing those using online technology with those participating in face-to-face collaborative instruction, and the results have varied. Many researchers have indicated that incorporating online technology in the classroom enhance collaborative learning among students, boost their motivation, and improving learning outcomes (Chou & Chen, 2008; Vaughan, 2008). Other findings indicates that students found Google Docs as an effective tool for collaborative projects (Brodahl et al., 2011; Zhou et al., 2012). In addition, students

believed that a document written collaboratively could potentially have higher quality than a document written alon (Blau & Caspi, 2008). Nevertheless, online collaboration can sometimes result in negative learning experiences. For instance, both students and teachers may feel uneasy about sharing their knowledge; students think it is inappropriate to alter their peer written work, and there could be disparities in how much each of them contributes to the assignment (Coyle, 2007)

The previously mentioned foreign studies focused on investigating learners' perceptions of collaborative writing using Google Docs, and assessing the impact of technology-based collaborative writing instruction on students' writing performance. However, to the best of the present researcher's knowledge, there are no local studies that have conducted to investigate the effect of academic Web-based projects on students' writing motivation. Hence, this study will fill the gap since it has been conducted to examine the effect of academic Web-based projects on EFL students' writing motivation, particularly in writing an argumentative essay through using Google Docs, at Woldia university. Therefore, in this study, EFL students' motivation in writing an argumentative essay has been examined in terms the four motivational factors including: self-efficacy, achievement goals, beliefs and affects about writing according to (MacArhur et al., 2016).

Thus, based on the above stated views on the problem the research tried to answer the following basic research questions:

1. Was there a significant difference in

EFL students' writing motivation before and after the intervention of academic Web-based projects/ tasks via Google Docs?

2. What were EFL students' experiences in using Google Docs to do collaborative writing tasks/projects.

## 2. Methods

### 2.1. Design of the Study

In this study, a single group quasi-experimental design was employed as it allows to recognize effects of academic Web-based writing projects using Google Docs in a group of participants through mitigating data contamination that happened between or among groups, and controlling other extraneous variables that influence the study (Matowe et al., 2004).

### 2.2. Participants

In the present study, a total of 35 (30 male and 5 female) second year English major students who enrolled in advanced English course, at Woldia University were selected using purposeful sampling method since these students are highly attached with the issue under investigation, and there was only one English major section who took this writing course in the University. Then, all these students in this section were taken using comprehensive sampling as participants of the study. In the present study gender disaggregation was not impossible because vast majority of the students were males.

### 2.3. Data Gathering Instruments

Gathering data with different alternative tools increases the authenticity of the information obtained and triangulation of

information possible during data analysis (Richards, 1994). Accordingly, three data collecting instruments: questionnaire, focus group discussion and students' diary analysis were used to collect data about student's academic writing motivation and their experiences in using Google Docs.

### 2.3.1. Questionnaire

A questionnaire was used to gather data on students' motivation towards academic writing. It incorporates 24 items among which 10 of them pertain to self-efficacy, five achievement goals, five beliefs about writing, and the rest five were affect about writing. According to MacArhur et al. (2016) these are the main aspects of motivation, and the questionnaire was adapted from it. The items were a five-point Likert type ranging from - 'strongly agree'- to - 'strongly disagree'. This questionnaire was distributed before and after the intervention. Prior to intervention the questionnaire was administered to understand students' existing motivation towards academic writing. The post-intervention questionnaire was used to see if there were changes in students' motivation towards writing. Before the questionnaire was administered to the students, its content validity was checked and approved by concerned experts along with the two supervisors. Besides, pilot study was conducted before the main study with students out of the target group at Bahir Dar university. Then, using the pilot study data, Cronbach Alpha test was calculated in order to check the internal consistency of the questionnaire items. Accordingly, the value of (r) in self-efficacy=.74, the value (r) in achievement goals=.79, the value of (r) in beliefs about

writing=.82, and the value of r in affect about writing=.91. which indicated that almost all the questionnaire items were internally consistent except two items under the efficacy category and one item in achievement goal category. As a result, necessary/ minor modifications were made on the inconsistent items accordingly before the questionnaire distributed for the main study participants at Woldia university (McMillan & Schumacher, 1997).

### 2.3.2. Students' Diary Analysis

Students' diary analysis was employed to gather a qualitative data on students' motivation towards academic writing in order to strengthen the quantitative data which obtained through the questionnaire. The students' diary analysis includes 2 open ended questions which students required to answer per each session from the beginning through end of the intervention. In relation to this Donyaie and Afshar's (2019) highlighted the significance of diary analysis in understanding participants' daily feelings, thoughts and experiences about a certain issue/event/situation/object and among others. Hence, in this study, it was served to comprehend participant students' everyday experiences with reference to their feeling, interest, preference and other challenges aligned with their motivation in engaging with academic Web-based writing projects using Google Docs. In doing so, first, the validity of the items included in the FGD guide was ensured by concerned experts to assure whether they retain essential meaning in line with the purpose of the study, and the language accuracy and appropriateness in explaining

the intended idea. Then, students' diary analysis guide was handed to participants at the beginning of the intervention/ when the session began, and collected soon after the completion of each session during the intervention.

### 2.3.3. Focus group discussion

Focus group discussion (FGD) was employed to gather a qualitative data on students' general motivational experiences, which in turn used to triangulate the data obtained using questionnaire. The focus group discussion contained two open ended questions which focused on learners' general feelings and experiences in line with their motivation about the intervention (academic Web-based projects using Google Docs). Therefore, in conducting the FGD properly, first the validity of the items incorporated in the FGD guide was checked by concerned experts and supervisors in terms of its contents and language clarity according the aim of the study. Then, it was administered with participant students after the intervention by organizing them in to four groups, which each group comprises (8-9) members.

### 2.4.Intervention

The intervention in this study was academic Web-based projects/ collaborative writing tasks which was delivered using Google Docs for around 20 hours. The intervention was guided by the teaching manual which was prepared by the teacher-researcher. The tasks were prepared inthe manner which was appropriate for Web-based learning, and in order to teach students writing an argumentative essay. Accordingly, the teaching material/manual was prepared including two major sections which included contents about a general overview of an essay, and an argumentative essay in particular. Therefore, in the teaching learning process, participant students were engaged in the tasks incorporating discovering their own writing topics through producing a complete essay with effective collaborated work among their group members by beginning in participating on brain storming tasks/ activities about an essay as a whole.

The students performed their writing tasks in small group after they registered as member using their Gmail account. Then, they could share information and work together on the tasks like that of groups which were created using telegram and other Web applications. In implementing the intervention, first, training was given for students on how they use Google Docs to do collaborative writing tasks by concerned expert/ ICT expert. Accordingly, students practiced working on collaborative writing tasks using Google Docs. In the teaching learning process, starting from the beginning through end students passed through five writing stages: (Planning, Drafting, Revising/ Editing, Interactive writing work shop and Final submission/presentation). In the planning stage, the teacher created a shared Google Docs where students collaboratively brainstorm ideas for their essays and have students to work on it. Students conducted the collaborative brain storming activity about general over view of an essay, and argumentative essay including assigning a topic, contributing ideas, key words or relevant quotes in real time. In the drafting

stage, students worked together to create an outline and draft of their essays using Google Docs based on the guiding templates involving:(introduction, body paragraph, conclusion). The teacher ensured whether they understand the structure of an essay and encouraged peer review after each stage by setting dead line for each section. In the revision and editing stage, the students made a peer review through sharing drafts with assigned partners using the commenting feature to provide constructive feedback on content, organization, grammar and style. They conducted it through establishing guidelines for effective feedback. After receiving feedback, they made revisions directly on the document. While the teacher encouraged them to track changes or highlight edits so that peers saw how their suggestion incorporated. In the interactive writing workshops stage, the teacher conducted writing workshops where students share their screen and discuss their essays in real time through organizing small groups where students present their essays and receive live feedback from their peers and instructor. In doing so, they used the chat feature for additional comments when necessary. Finally, in the submission/ presentation stage, students submitted their final essays using Google Slides linked to their documents for a more interactive experience.

## 2.5. Procedure of Data Collection and Analysis

This study employed a series of steps to collect data. First, the data collection instruments including questionnaire items, focus group discussion and students' diary

analysis items were developed. Next, all the items of the data collection instruments and the teaching manual were commented by experts and the necessary modification were made. Then, the teaching manual was prepared to guide the intervention. Following this process, all the data gathering instruments and the teaching manual were piloted with English major students taking advanced writing English course at Bahir Dar University, during the second semester in 2015 E.C. After running internal consistency analysis on the pilot data, the necessary modifications were made to data gathering instruments. Finally, the main study was conducted at Woldia University, during the first semester in 2016 E.C.

In the main study, 2nd year English major students taking advanced English course at Woldia university were participated. In doing so, first, the participants were given a pre-intervention. questionnaire to determine their existing motivation towards writing. Following this questionnaire, the intervention was given by the course teacher for twenty hours / around a month. When the intervention was given, the students' diary analysis was collected from participant students throughout the intervention per each session.

After the completion of the intervention, participants were given a post-intervention questionnaire. The post-intervention questionnaire was identical with the pre-intervention questionnaire. It was administered to collect data which was needed to determine whether academic Web-based projects using Google Docs brings improvement on students' writing motivation. Then after, FGD was

conducted to gather data about the students' general feeling and experience about the intervention in line with their writing motivation towards writing, and to triangulate data obtained through the other instruments. Finally, after the completion of the data gathering, the data analysis was made using both quantitative and qualitative means.

The quantitative and qualitative data analyses techniques were employed depending on the nature of the data. Paired sample t-test was employed to analyze data collected using questionnaire to examine the effect of academic Web-based projects/ tasks via Google Docs (independent variable) on EFL students' writing motivation (dependent variable) by way of

comparing students' writing motivation before and after the intervention. The statistical analysis was conducted using the latest SPSS/ Statistical Package for Social Sciences (Version 29), and all statistical tests were set at a p value of .05. On the other hand, the data collected using students' diary analysis and FGD were analyzed qualitatively through thematic analysis.

## 3. Results of the Study

### 3.1.Students' Motivation towards Writing

#### 3.1.1. Questionnaire Results on Students' Motivation

This section presents results of analyses of the questionnaire data using paired samples t-test.

**Table 1.** Means and standard deviations of students' motivation before and after the intervention.

| Pairs | Items | Tests | Mean | N | Std. Deviation |
|-------|-------|-------|------|---|----------------|
| Pair 1 | Self-efficacy of writing | Pre-intervention | 3.49 | 35 | .37 |
| | | Post-intervention | 3.97 | 35 | .42 |
| Pair 2 | Goal Orientation of writing | Pre-intervention | 3.61 | 35 | .47 |
| | | Post-intervention | 4.07 | 35 | .58 |
| Pair 3 | Belief about of writing | Pre-intervention | 3.76 | 35 | .46 |
| | | Post-intervention | 4.02 | 35 | .54 |
| Pair 4 | Affect about Writing | Pre-intervention | 3.57 | 35 | .56 |
| | | Post-intervention | 3.80 | 35 | .41 |

Table 1. The post-intervention mean scores were higher than the pre-intervention mean scores for all motivational aspects, indicating that

academic Web-based tasks/projects using Google Docs positively impacted students' writing motivation. Specifically, the largest improvement was observed in self-efficacy of writing, with a mean

increase of 0.48 (pre-intervention mean = 3.49, post-intervention mean = 3.97). This was followed by goal orientation, with a mean increase of 0.46 (pre-intervention mean = 3.61, post-intervention mean = 4.07). Belief about writing and affect about writing also showed increase, with mean differences of 0.26 and 0.23, respectively. The standard deviations (SD < 1) for both pre- and post-intervention scores indicated that the improvements were consistent across the group.

**Table 2.** Paired samples t-test result of students' motivation before and after the intervention.

|        | Items | Tests | Mean Difference | Std. Error of Mean | T | df | Sig. (2-tailed) |
|--------|-------|-------|-----------------|--------------------|---|-----|-----------------|
| Pair 1 | Self-efficacy of Writing | Pre-intervention Post-intervention | -.47429 | .06 | -7.794 | 34 | .000 |
| Pair 2 | Goal Orientation of writing | Pre-intervention Post-intervention | -.45714 | .09 | -5.099 | 34 | .000 |
| Pair 3 | Belief about of Writing | Pre-intervention Post-intervention | -.25714 | .07 | -3.632 | 34 | .001 |
| Pair 4 | Affect about Writing | Pre-intervention Post-intervention | -.22571 | .08 | -2.695 | 34 | .011 |

Table 2 presents the paired samples t-test results, which confirmed the statistical significance of t improvements among the four motivation dimensions. The negative mean differences reported in the table reflect the calculation method, where post-intervention means were subtracted from pre-intervention means, emphasizing that post-test scores were higher. For example, in the self-efficacy dimension, the mean difference was -0.474, with a highly significant t-value of -7.794 (p < .05). Similarly, the mean difference for goal orientation was -0.457, with a t-value of -5.099 (p < .05). Belief about writing and affect about writing also showed significant mean differences of -0.257 (t = -3.632, p < .05) and -0.226 (t = -2.695, p < .05), respectively.

These findings clearly demonstrate that using academic Web-based projects significantly enhanced students' motivation towards writing. The improvements were most pronounced in self-efficacy and goal orientation, but belief and affect about writing also benefited from the intervention. The results highlighted the potential of academic Web-based collaborative projects, using Google Docs in fostering a more motivated and engaged collaborative writing environment.

### 3.1.2. Student-Diary Analysis on Writing Motivation

Do you think that collaborative writing using academic Web-based projects specifically, via Google Docs increases your motivation towards writing such as your willingness and preference? If so, how? Explain your experiences in detail including how you feel and what you face in using it?

The data obtained from students' diary indicated that the students' writing motivation improved when they used collaborative writing tasks/projects using Google Docs. Many of them explained that collaborative writing using Google Docs were interesting to work on writing tasks, and develop their writing skill as well.

One of the students documented:

> *Collaborative writing using Google Docs makes the process of writing easy and entertaining, because many of us are spending lot of time with our smart phone for different purposes. Thus, it provides us great opportunity to practice the skill through working together with our friends in the place and time we prefer.*

Another student also stated her feeling about academic Web-based collaborative writing projects/tasks using Google Docs. Her diary account read as follows:

> *We are students of the 21st century, so we need to learn in the way that fits the time and situation. Therefore, academic Web-based collaborative writing projects/ tasks using Google Docs for me is an interesting and innovative approach that fills the gaps of the conventional way of learning (face-to-face collaborative writing approach) like shortage of time to work and complete the given writing tasks collaboratively.*

From her response above it is possible to infer that working on academic Web-based collaborative writing tasks/ projects using Google Docs was highly accepted by the student, and it had a role in increasing students' motivation towards writing.

However, the students in their diary also mentioned challenges that indirectly influence their motivation in using Google Docs to do the collaborative writing tasks. Analyses of the challenges students mentioned showed that lack of technical skill to use Google Doc actively and properly, lack of qualified electronic device to apply Google Doc, as well as weak internet connection stood as major factors that influenced the whole teaching learning process from beginning through end using in using Google Docs to work on collaborative writing tasks.

Specially, around four students explained using smart phone to learn essay writing was boring since it did not make them to write quickly what they drafted on a paper. Accordingly, they suggested using computer instead of smart phone is preferable to avoid the problem. In addition, most of the students also suggested using Google Docs and other related online technologies besides the conventional way/ approach regularly is significant in mitigating problems that occur in using face-to-face collaborative writing approach, and promoting their motivation/interest to learn writing.

### 3.1.3. Focus Group Discussion Results on Students' Writing Motivation

The focus group discussion revealed that students experienced increased motivation towards writing when engaged in academic Web-based collaborative writing tasks using Google Docs. To gain a deeper understanding,

students were asked questions such as: "What do you think about the use of Google Docs in collaborative writing tasks?" and "How does working with Google Docs influenced your motivation and interest in writing?" The students responded positively, noting that their willingness and preference for writing significantly improved due to the collaborative nature of the tasks.

Students highlighted that using Google Docs was more engaging and appealing compared to conventional methods of learning. They appreciated the platform's ability to facilitate easy interaction and feedback-sharing among group members and teachers, which they believed that as it played a critical role in enhancing their writing skills. Furthermore, they emphasized that the flexibility of practicing writing without time and place restrictions was a motivating factor.

The students also mentioned that the collaborative approach offered by Google Docs provided them with multiple opportunities to gather information and evidence for their writing using resources such as the internet and search engines. This made the process of writing argumentative essays simpler and more interesting. They explained that the platform enabled them to explore topics freely and produce well-organized essays.

Overall, the focus group discussion demonstrated that students' motivation towards writing improved significantly after participating in Web-based collaborative writing tasks. The integration of Google Docs not only enhanced their willingness to write but also fostered a sense of excitement and engagement in the learning process.

### 3.2. Discussion

This study aimed to examine the effects of Web-based projects/tasks using Google Docs on students' writing motivation. The findings revealed a significant improvement in students' motivation to write after engaging in Web-based based collaborative writing activities, particularly using Google Docs. Specifically, self-efficacy, goal orientation, beliefs, and affect towards writing all showed measurable increases. The most pronounced improvement was observed in students' self-efficacy and goal orientation, highlighting the tool's potential to foster confidence and purpose in writing.

The observed increase in motivation aligns with Vygotsky's (1978) theory of social interaction in learning, suggesting that collaborative tools like Google Docs enhance engagement through peer collaboration and interactive feedback. These findings are consistent with earlier research by Lam and Pennington (1995), Moonma (2021), Kitjaroonchai & Suppasetseree (2021), and Woodrich & Fan (2017) which also highlighted the role of technology in fostering writing motivation and creativity. However, unlike these studies, some participants in the present study encountered challenges, such as technical limitations, device-related issues, and weak internet access, which influenced their experiences.

Additionally, the study explored students' experiences in using Google Docs for collaborative writing tasks. Students expressed a strong preference for this approach, noting its appeal and effectiveness compared to conventional face-to-face methods. They valued the flexibility of working without time and place restrictions and appreciated the opportunity to share ideas and receive

feedback easily from peers and instructors. This finding supports Zıoga & Bıkos (2020), Valizadeh (2022), and Suwantarathip & Wichadee (2014) who emphasized the motivational benefits of technology integration in collaborative learning. However, the challenges identified in this study, such as: lack of technical skills and device limitations, were consistent with the frustrations noted by Warschauer et al. (1998).

These results carry significant practical implications for teaching English as a foreign language (EFL). Teachers could incorporate Google Docs into their teaching strategies to enhance students' collaborative writing skills and motivation. However, to maximize its potential, it is essential to address the technical challenges and provide adequate training and resources. Moreover, this study suggests that while Google Docs fosters collaboration and engagement, its implementation needs to be thoughtfully planned to mitigate challenges and ensure inclusivity.

## 4. Conclusion

This study examined the impact of academic Web-based collaborative writing projects using Google Docs on EFL university students' writing motivation and explored their experiences with this digital platform. The findings demonstrated that integrating Google Docs into writing activities significantly enhanced students' motivation, particularly in the areas of self-efficacy and goal orientation. These improvements underscore the potential of collaborative online tools to create engaging and purposeful learning environments.

Furthermore, students expressed a positive perception of Google Docs, emphasizing its flexibility, interactivity, and ability to facilitate idea sharing and peer feedback. These benefits highlight the platform's capability to address common challenges in traditional writing instruction, such as lack of engagement and limited opportunities for collaboration. However, the study also identified obstacles, including technical difficulties and device-related limitations, which should be addressed to optimize the effectiveness of such tools.

The findings carry implications for EFL instructors, suggesting that incorporating digital collaboration tools like Google Docs can not only enhance students' writing skills but also foster a more motivated and engaged learning experience. Future research could further investigate the long-term effects of collaborative digital writing on various aspects of language learning, as well as explore strategies to overcome the challenges associated with implementing such tools in diverse educational contexts.

## Acknowledgements

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