# STUDENTS' PERCEPTION OF GOOGLE DOCS INTEGRATION INTO ADVANCED ENGLISH GRAMMAR COURSE AND ITS RELATIONSHIP TOWARD STUDENTS' MOTIVATION TO LEARN

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# **DECLARATION**

The undersigned,

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Certify that thesis entitled "Students' Perception of Google Docs Integration into Advanced English Grammar Course and Its Relationship toward Students' Motivation to Learn" is my own work and I did not do any plagiarism or inappropriate quotation against the ethics and rules commended by the Ministry of Education of Republic Indonesia Number 17, 2010 regarding plagiarism in higher education. Therefore, I deserve to face court if I am found to have plagiarized this work.

Palembang, January 2022

The undersigned,

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# **DEDICATION**

# This thesis is sincerely dedicated to:

Allah SWT who has given me physically and mentally health to finish my thesis.

I also thank to half of my soul, my parents,

Sudianto & Anna

for all their love, patience, kindness, and endless support to me.

Also thank you to my little sister Hasna Dian Nabillah

and my sweet little brother, Muhammad Arkan Arrasyid who always cheer me up.

They gave me strength and motivation to finish my thesis.

This thesis is also dedicated to myself,

I never expected in a million years that I would arrive at this journey of my life.

#### Motto:

"If you cannot do great things, do small things in a great way" (Atika Dian Fadhila)

"Just because you fail once, it doesn't mean you're gonna fail at everything" (Jerome Polin)

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## **ABSTRACT**

As a foreign language in Indonesia, English is taught by relying on traditional approaches, including learning grammar. Grammar rules are taught to students directly from the textbook, and then students are asked to complete a number of activities in their workbooks to demonstrate understanding and application of the rules. It leads to a lack of student exposure to technology learning tools. Thus, this research is an attempt to get student responses after using Google Docs (a web-based application that allows documents to be written, edited and stored online) in learning grammar taught by their lecturers for the aim of finding out the effectiveness of the application in building a collaborative learning environment. Data were obtained from 39 third-semester English education students who took the Grammar course at Sriwijaya University Palembang through questionnaires and selected 10 students for semi-structured interviews. The research findings show that according to students, Google Docs helps to build a collaborative learning environment as it supports teacher-to-student and student-to-student interactions and most of them prefer to use this tool for future courses since they can get benefit from the availability of written feedback from their teacher/lecture and easy access to the subject materials.

**Keywords:** Google Docs, collaborative learning, learning grammar

# **CHAPTER 1**

# INTRODUCTION

# 1.1 Background of Study

Since the beginning of 2020, Indonesia and almost all countries in the world are in very serious virus problem, COVID-19. The government makes policies to carry out social distancing. They ask everyone to stay away from the crowd, pray from home, and work from home. The school also implements a system for conducting online teaching and learning at home. Google Classroom, Google Scholar, and Google Docs are often used by teachers to support their online learning process. One of the Google platforms used for online collaboration is Google Docs. This application is one of the social networks that designed to connect both teachers and students in the online teaching and learning process.

Learning is a social process, where successful learning must occur in a conducive collaborative environment. Learners have audiences and authentic tasks similar to the real world. Therefore, it can create the necessary optimal conditions for successful learning. The theory of Vygotsky (1986) has become the principle of collaborative learning which assumes that learning is a social act and cannot be successful if it is done alone. The theory mentioned above believes that in order to learn content and skills, learners cannot learn them separately from their background knowledge and life experiences. In contrast, when they interact socially with peers and reflect on their own experiences, students have learned new skills and concepts. The term collaboration resulted from Vygotsky's description of the role of social interaction in learning and the concepts underlying the communicative approach in second language learning. As he said, collaborative writing could be one of the opportunities for collaboration during learning. This type of collaborative provides

the opportunity for students to write as part of a community where support and guidance can be obtained from one another.

Collaborative learning is learning that results from peer interaction who is involved in a joint task. One of the goals of collaborative learning is the completion of a group project. In this study, collaborative learning helps students to solve grammar tasks collaboratively in class through the use of Google Docs as a learning platform. The collaboration discussed in this study can also be considered as writing collaboration, which refers to the activity of producing the results of grammar tasks between students in the classroom. The term collaborative writing can be defined as cooperation between students to solve writing problems. Every student in the class has access to the same documents posted on Google Docs. They are able to solve the grammar tasks in small groups.

Currently, online learning is most widely used as a medium that supports education. Online learning is one type of learning that is carried out not only in the classroom but also through online. As mentioned by Khan (1997), online instruction serves as an innovative approach to delivering teaching and learning materials to audiences using the web as a medium. The use of online learning could be used for students who are in remote areas. Not only that, but also it can be used in all corners of the country.

During online learning, both students and teachers have many challenges. Amadea & Dahesihsari (2015) said that some of the problems in online learning were the limited implementation of online learning. It is only used when deliver and submit assignments, and the most common challenge is a bad internet connection. Lack of understanding of features through online learning is one of the causes. Lack of connectivity is also a major concern of students and teacher while doing online learning. This can reduce student motivation to learn using online learning.

The use of computers is generally recognized as an increase that affects teaching and learning activities. Computers also have a function as a supporting

instrument for the learning process as well as a platform for providing learning materials. The development of Information Communication Technology (ICT) provides benefits to the world of education, especially in Computer-Supported Collaborative Learning (CSCL). Collaborative learning is a learning process among students who have been confirmed to achieve certain instructional goals. CSCL offers students and educators a flexible online collaborative teaching setting. Liu and Lan (2016) state that when working collaboratively, students will be more able to think critically. So, the use of Google Docs has an important role in promoting collaborative learning, it can increase students' motivation and engagement in learning. Mentioned by Balakrishnan (2015), the development of Web 2.0 technology found a way for the use of this latest web technology at CSCL. Google Docs allows its users to work on collaborative projects by importing current documents efficiently and flexibly or creating new documents. This application promotes collaborative learning because of its characteristics.

Collaborative learning using online tools as a platform can help students see doing grammar assignments as a dynamic process and help them focus on meaning in their work. Newer technology has also increased the use of these tools beyond just online learning as is often the case with online discussion boards and chats. Implementing collaborative grammar learning using an online platform is certainly an important step in directing education for the needs of the 21st century.

The learning process and motivation have a close relationship. The core of human aspirations and achievements is motivation (Gopalan, et al., 2017). Therefore motivation is very important in success in the world of education. Nothing is impossible if we have high fighting spirit, not only in education but also in real life. The learning process is a never ending process, and to achieve high motivation is very important in it. Motivation will provide encouragement that encourages students to face all difficult and challenging situations.

Traditional teaching methods refer to methods of teaching that apply or use a paper-based pencil system. The monotonous system in this traditional method seems to cause boredom in students. Today, technology offers teachers to carry out teaching and learning activities in writing class more interesting. Google Docs is one of the media that can be used to carry out teaching and learning activities in writing class interestingly. It was made by Google, which provides four main alternatives; Google Docs, Google Spreadsheets, Google Presentations, and Google Picture. Moving to Google Docs might be a daunting task for some students as they will discover a lot of new features and editing documents that might seem unfamiliar. Learning more about the tools' features will help with your work on Google Docs. To get started with Google Docs, you can follow this few simple steps.

The first step you need to do is get ready with your Google account. Google Docs requires you to register for a Google account. Besides being easy to do, your account will also give you direct access to your Gmail, Google Maps, YouTube, and the entire Drive suite. To create a Google account, go to the registration page. After that, enter the information and follow the instructions on the screen. If you already have an account, simply log in as usual. The second step is to create a document. To create a document file, users can click the file menu and select Document to start the document. After that, the user needs to click on the blank document to start it and the untitled document will appear. The untitled documents can be renamed by simply clicking on them. It can easily organize documents according to user requirements and the document is ready to be used.

The next step is to share Google Docs access to collaborators. The user can share documents with others with three options; edit, comment, and view. "Can edit" means that invited people will be able to write, edit, comment on and reply to the document. If the option is "can comment", they will not be able to edit or write the documents, they just can give comment on it. "Can view" means that they are able to see all the activities that's happening on the document, but they won't be able to write,

edit, comment, or reply to it. The last step is to download the document. The document can be downloaded to pdf, word, HTML, and other formats. Users can download documents according to their needs. When a user is invited as an editor, all activities displayed in Google Docs will be visible in the downloaded document. Google Docs promotes their features, which can be used to collaborate with others. After creating and inviting others to the document, Google Docs is ready to use.

Google Docs is an excellent platform for collaboration learning (Dekeyser & Watson, 2006). Not only that, but also they have suggested using Google Docs for a collaborative learning tool. They said Google Docs is a lightweight application, supports simultaneous editing work, and enables multiple editors. They use Google Docs to collaborate on this paper, as well as on other papers and slides. They mentioned several limitations of Google Docs since the research was conducted in 2006, such as it does not support offline editing of documents, mathematical formulas, citations, figures, tables, and bibliography. Meanwhile, nowadays, some improvements have been made to this platform. Offline document editing, mathematical formulas, quotations, numbers, tables, and bibliography are already available on Google Docs.

The use of Google Docs as a medium for teaching and learning is still rare and limited to teaching grammar in Indonesia. As mentioned by Jannah in his research (2017), integrating technology such as Google Docs into the learning process can improve students' writing skills. But as far as he knows, there are still few studies that apply grammar learning using Google Docs. Therefore, this study will discuss the use of Google Docs as an online collaboration tool in advanced English grammar class. Considering that Google Docs has several features that can support students to collaborate with others, it is assumed that using Google Docs can make it easier for students to do assignments in groups.

To acquire students' knowledge and experience with Google Docs in their Grammar course, the researcher carried out some preliminary research using questionnaire. The answers revealed through this question are what, how, and how much; not why. The questionnaire showed they all came from two different classes. 20 participants came from class B Palembang and 19 participants came from class A Indralaya. Participants consisted of 4 men and 35 women.

The first question in this section asks if each student has a Gmail account, and all of them answered with 'yes'. This indicates that all students (100%) had a Gmail account before being introduced to Google App. The second question asked if students used Google Docs or other online learning tools before. Same as the previous answer, all participants answered 'yes'. Since the previous question all participants answered yes, then, the next question was applied to all of them. The next question was whether they used online learning tools to complete the task, and all of them answered 'yes'. They found these online learning tools in a variety of ways. 16 students said they learned about it from Google, 7 students from YouTube and social media, and the rest of them were recommended by their friends and lecturers.

Google Docs is a social network that connects teachers and students to carry out teaching and learning activities. In addition, it also helps teachers use online media when they are in difficult situations to carry out teaching and learning processes directly. Online learning activities may take place continuously for an unexpected time depending on this virus issue. Therefore, identifying the best platform for teaching students is important. This is shown by knowing students' perceptions of the use of this platform that has been used during online learning activities for the Advanced English Grammar course and its relationship toward students' motivation to learn.

### 1.2 Research Question

The research questions are formulated in the following question:

- 1) What are students' perceptions towards Google Docs in advanced English grammar class?
- 2) Do students feel motivated to use Google Docs and prefer it as a collaborative learning tool in future studies?

# 1.3 Research Objectives

Based on the previous explanation, this research tries to find out students' responses to the use of Google Docs in the classroom. This research will be conducted on students of the English Education study program at Sriwijaya University. To investigate how students perceived the use of Google Docs in grammar class, this research aimed:

- 1. To identify students' perceptions and experiences of using Google Docs in the advanced English grammar class.
- 2. Whether they feel motivated to use Google Docs and prefer it as a collaborative learning tool in future studies.

### 1.4 The Significance of the Study

#### 1.4.1 The Lecturers

The application of collaborative learning in the teaching and learning process of English grammar with a help of technology platform can help students to improve their grammar skills. In the same way, during class discussions, they have a lot of opportunities to turn their passive knowledge of grammar rules into active use. The possibility benefits of Google Docs in improving writing are also felt by both teachers and students, especially in terms to its collaborative characteristics through features; sharing, working with other authors, and getting feedback (Yim, et. al., 2016). By using Google Docs as an alternative approach to traditional grammar teaching and learning methods, students can learn collaboratively and consider some feedback from both teachers and peers for the progress of their grammar skills. Furthermore, the majority of students enjoyed using Google Docs because of its ease

of management and convenience. Therefore, teachers can now feel more comfortable with the effects of using Google Docs in the classroom as this study demonstrates the positive impact from this online learning tool when teaching grammar collaboratively.

### 1.4.2 The Students

Students reduced the use of traditional communication tools (Facebook and text messaging) and increased in using of Google Docs when using that application. With Google Docs, students were less dependent on email, course management systems, and face-to-face meetings (Zhou, et. al., 2012). Students adapt their communication tools to take advantage of the tools they find most effective for collaboration. In addition, the need for their tools is less when using Google Docs. Zhou, et al. Al. (2012) also found that students informed an interest in using Google Docs for their future studies, indicating that Google Docs will always be a useful application for collaborative learning.

Positive perceptions of the use of Google Docs among students in their study revealed the potential benefits of using Google Docs for writing activities outside the classroom, in addition to traditional in-class assignments. One of the benefits of Google Docs is that it is free and browser-based, which allows users to create great-looking documents anywhere (Firth & Mesureur, 2010). Nowadays, students rarely meet face-to-face for group projects, but they found effective ways to collaborate such as via email, instant messaging, video conferencing, and so on (Koch, 2010). Thus, Google Docs is a perfect fit as a tool for collaborative assignments outside of the classroom.

# REFERENCES

- Aboderin, O. S. (2015). Challenges and prospects of e-learning at National Open University of Nigeria. *Journal of Education and Learning*, 9(3), 207-216.
- Al-Harbi, S. S., & Alshumaimeri, Y. A. (2016). The Flipped Classroom Impact in Grammar Class on EFL Saudi Secondary School Students' Performances and Attitudes. *English Language Teaching*, *9*(10), 60-80.
- Alsubaie, J., & Ashuraidah, A. (2017). Exploring Writing Individually and Collaboratively Using Google Docs in EFL Contexts. *English Language Teaching*, 10(10), 10-30.
- Amadea, M., & Dahesihsari, R. (2015). Hambatan dalam Pengadopsian E-Learning pada Pengajar Perguruan Tinggi di Jabodetabek. *Jurnal Kependidikan*, 28(1).
- Ansbacher, T. (1998). John Dewey's experience and education: Lessons for museums. *Curator: The Museum Journal*, 41(1), 36-50.
- Arikunto, S. (2013). Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta: Rineka Cipta.
- Balakrishnan, B. (2015). Online computer supported collaborative learning (CSCL) for engineering students: a case study in Malaysia. *Computer Applications in Engineering Education*, 23(3), 352-362.
- Bhandari, Pritha. (2021). Population vs sample: what's the difference?
- Chen, Y., & Hoshower, L. B. (2003). Student evaluation of teaching effectiveness:

  An assessment of student perception and motivation. *Assessment & Evaluation in Higher Education*, 28(1), 71–88.

- Chu, S. K. W., & Kennedy, D. M. (2011). Using online collaborative tools for groups to co-construct knowledge. *Online Information Review*, *35*(4), 581–597.
- Dekeyser, S., & Watson, R. (2006). Extending google docs to collaborate on research papers. *Toowoomba, Queensland, AU: The University of Southern Queensland, Australia*, 23, 2008.
- Ferreira, M., Cardoso, A. P., & Abrantes, J. L. (2011). Motivation and relationship of the student with the school as factors involved in the perceived learning. *Procedia-Social and Behavioral Sciences*, 29, 1707-1714.
- Firth, M., & Mesureur, G. (2010). Innovative uses for Google Docs in a university. *Jalt call journal*, 6(1), 3-16.
- Franssen, B., Jafari, J., Zary, N., & Masiello, I. (2015). Designing patient education with distance learning. *PeerJ Pre Prints*, *3*(2),
- Gopalan, V., Bakar, J. A. A., Zulkifli, A. N., Alwi, A., & Mat, R. C. (2017, October).

  A review of the motivation theories in learning. In *AIP Conference Proceedings* (Vol. 1891, No. 1, p. 020043). AIP Publishing LLC.
- Gorra, V. C., Bhati, S. S (2016). Students' perception on use of technology in the classroom at higher education institutions in Philippines. *Asian Journal of Education and e-Learning*, 4 (3), 92-103.
- Hanif, M., Asrowi, A., & Sunardi, S. (2018). Students' access to and perception of using mobile technologies in the classroom: the potential and challenges of implementing mobile learning. *Journal of Education and Learning* (*EduLearn*), 12(4), 644-650.

- Huda. N. (2015). Open & distance learning (ODL) and Agricultural extension workers' Social competence in Indonesia. Journal of Education and Learning (EduLearn), 9(1), 17-24.
- Jannah, K. (2017). Using Google Docs as online collaborative writing platform for the development of students' writing skill. Master Thesis. Bandung: Universitas Pendidikan Indonesia.
- Jones, R. G. (2011). Emerging technologies mobile apps for language learning. Language Learning & Technology, 15(2), 2-11.
- Kacetl, J., Swmradova, I. (2020). Reflection on blended learning and e-learning case study. *Procedia Computer Science*, *170*, 1322-1327.
- Khalil, Z. M. (2018). EFL students' perceptions towards using Google Docs and Google Classroom as online collaborative tools in learning grammar. *Applied Linguistics Research Journal*, 2(2), 33-48.
- Khan, B. H. (1997) Web-based instruction: What Is It and Why Is It? In Khan, B. H. Web-Based instruction. Educational Technology Publications.
- Koch, M. D. (2010). Utilizing emergent web-based software tools as an effective method for increasing collaboration and knowledge sharing in collocated student design teams. University of Oregon, Eugene, OR.
- Liu, S. H. J., & Lan, Y. J. (2016). Social constructivist approach to web-based EFL learning: Collaboration, motivation, and perception on the use of Google Docs. *Educational Technology & Society*, 19(1), 171–186.
- Majid, U. (2018). Research fundamentals: Study design, population, and sample size. Undergraduate research in natural and clinical science and technology journal, 2, 1-7.

- Mansor, A. Z. (2012). Google Docs as a collaborating tool for academicians. *Procedia-Social and Behavioral Sciences*, 59, 411–419.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.
- Montague, M. (1997). Student perception, mathematical problem solving, and learning disabilities. *Remedial and Special Education*, *18*(1), 46–53.
- Olayiwola, O., I., Alimi, K., M. (2015). Preparedness of colleges of education in southwestern nigeria for the adoption of blended learning. *Journal of Education and Learning*, 9(1), 25-34.
- Sudrajat, W. N. A., & Purnawarman, P. (2019). Students' perceptions on the use of Google Docs as an online collaborative tool in translation class. *Lingua Cultura*, 13(3), 209-216.
- Vygotsky, L. (1986). Thought and language (Rev. ed.). Cambridge, MA: MIT Press.
- Yim, S., Warschauer, M., & Zheng, B. (2016). Google Docs in the classroom: A district-wide case study. *Teachers College Record*, 118(9), 1-32.
- Yang, C. C. R. (2010). Using Google Docs to facilitate collaborative writing in an English language classroom practice. *TESL-EJ*, *14*(3), 1–6.
- Zhou, W., Simpson, E., & Domizi, D. P. (2012). Google Docs in an out-of-class collaborative writing activity. International Journal of Teaching and Learning in Higher Education, 24(3), 359–375.