# The Influence of Digital Writing Platforms on Collaborative Writing Processes in Undergraduate Students

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#### **Abstracts**

This research looks into various digital writing platforms such as Google Docs, Microsoft Word Online, and collaborative editing tools such as CollabWriter to assess their role in encouraging collaboration among undergraduate students. The research seeks to gain an insight into the dynamics and implications of collaborative writing in digital contexts, along with their repercussions for student learning and collaboration, by taking a mixed-methods approach. This research investigates the perceived advantages and challenges associated with digital writing platforms for collaborative writing projects. Analysis includes elements such as user interface design, accessibility features, and compatibility with other digital tools that may impact students' experiences and preferences in collaborative writing activities. In this study, quantitative measures such as surveys and usage analytics are utilized, alongside qualitative methods like interviews and focus groups that employ qualitative techniques in order to collect various perspectives and experiences of undergraduate students involved in collaborative writing on digital platforms. This research seeks to explore empirical data in order to analyze capabilities and limitations of digital writing platforms used for collaborative writing in undergraduate education. This study seeks to provide educators and instructional designers with valuable insights into using digital technology to enhance collaborative writing experiences, increase student engagement and learning results, as well as inform future research paths and the creation of educational interventions aimed at increasing collaborative writing abilities among undergraduate students.

Key words: Digital writing platforms, collaborative writing

Introduction

Digital technology has dramatically transformed many areas of education, such as writing. Digital writing platforms have had an enormously beneficial impact on undergraduate student collaborative writing processes. These systems allow students to collaborate in real-time across geographical borders, without being limited by distance. Blattner and Fiori recognize how digital technologies have transformed how students develop different talents such as writing. Technology-driven education has led to an ever-increasing reliance on online tools that enhance written work. Digital writing platforms offer various elements that facilitate cooperation and streamline the writing process, thus improving written work production. Students can utilize tools such as real-time editing, commenting, and version control to collaborate effectively on shared projects. Furthermore, these platforms enable easy retrieval of work from any internetconnected device. Employing digital writing platforms in collaborative writing processes offers undergraduates many advantages. Building digital literacy skills is critical to both success in academia and employment in today's knowledge-based economy. Digital literacy encompasses an array of skills necessary for productive engagement and communication in today's modern society, such as creating and disseminating information in multiple forms and styles as well as engaging effectively online (Warschauer 1997; Dobson & Willinsky 2009; Knobel 2008).

Digital platforms increase writing engagement and interactivity for students. Students can become actively involved in their writing process by offering feedback, suggesting improvements, working together with peers, and contributing to overall comprehension as well as cultivating critical thinking and problem-solving abilities. Digital writing platforms foster effective communication and collaboration skills among students. Students can improve teamwork abilities while communicating and collaborating effectively with their peers in an online virtual environment to get their ideas across effectively. Furthermore, these platforms present numerous innovation opportunities with the potential to drastically alter business models, market offerings, and/or processes across organizations (Nambisan et al. 2017).

Digital writing platforms facilitate the sharing and dissemination of written content with a broad audience, giving students easy access to share their writing with classmates, teachers, industry professionals, or industry analysts. Exposure to an expanded audience boosts confidence as it offers invaluable feedback from many viewpoints; furthermore digital platforms offer convenience and flexibility compared to in-person collaboration; these tools are especially important in undergraduate education settings.

Collaboration in undergraduate study courses often relies on collaborative writing. Students often collaborate on group projects, research articles and presentations. Digital writing platforms offer students an efficient means of working together on tasks; these platforms allow immediate editing/rewriting capabilities as well as commenting/track changes features which provide feedback to facilitate feedback/modification for student authors. Such platforms have a considerable effect on collaborative writing processes for undergraduates - using networked contexts can enhance writing abilities by merging interactive textual conversations with reflective composition (Ware & Warschauer 2006).

These platforms have revolutionized how students develop and refine their writing abilities. Technology-driven education has led to an ever-increasing reliance on digital writing platforms to facilitate collaborative writing processes. Students rely on digital tools to facilitate learning, comprehension and the writing down of ideas in written form to connect with a wider audience. Undergraduate students now consider digital writing platforms integral components of their educational experience (Vendityaningtyas & Styati, 2018). However, our knowledge of students' interaction practices, outcomes, and perceptions in classrooms with culturally and linguistically diverse student bodies over long-term is still incomplete, even with Google Docs' widespread usage. Due to a dearth of research, educators are forced to come up with instructional strategies and tasks that utilize cloud-based technologies optimally, thus increasing student engagement, collaboration, and ultimately learning.

Digital writing tools facilitate collaboration and communication while offering convenience, flexibility, and access to a wider audience. Recently there has been an exponential increase in their use within undergraduate education. According to Yancey (2009), digital literacy involves collaboratively producing textual communication through collaborative efforts. These systems have revolutionized how students take part in collaborative writing processes by providing features like real-time editing, commenting and track changes. According to Cheung et al (2021), digital technology enables tailoring educational experiences specifically to individual needs. Utilizing various tools in the classroom improves personalized learning effectiveness, and digital writing platforms have become essential tools for inclusion and accessibility in collaborative writing processes. Students of various learning styles and skills can use these tools to engage and contribute meaningfully in the writing process, leading to improved collaborative writing assignments as students are better able to collaborate and communicate. Visual components of learning have been significantly augmented through the incorporation of interactive whiteboards, tablets and instructional software, creating a more engaging and pleasurable educational environment for students. Furthermore, technology enables personalized learning experiences by giving students control over tempo, timing and location of studies (K. T. Arnesen et al 2019).

Digital writing platforms provide many features that enhance the efficiency and efficacy of collaborative writing. Students can utilize headings, bullet points and other formatting tools to structure and organize their work effectively; grammar/spell-check tools help students detect any faults in their writing; real-time editing/commenting options enable students to provide immediate criticism/improvements without lengthy discussions taking place over a paper's lifespan; digital writing platforms also facilitate smooth collaboration among students by offering real-time editing/commenting options that allow real-time correction/improvements thus streamlining collaboration among student writers ensuring smooth collaboration among students allowing real-time editing/commenting options that allow students offer constructive

criticism/improvements without lengthy discussions taking place over multiple drafts/papers/papers/etc.

Based on this explanation, the researcher formulates their research question as follows.

1. How does the use of digital writing platforms affect the collaborative writing processes of undergraduate students?

# **Research Methodology**

This study seeks to investigate the influence of digital writing platforms on collaborative writing processes among undergraduate students. A mixed-methods approach will be employed, which involves collecting quantitative and qualitative data for analysis; mixed method research combines qualitative and quantitative models in order to increase validity and provide comprehensive knowledge that cannot be gained with using only one (Creswell & Plano Clark 2017).

Data about student experiences and impressions were collected via questionnaires, interviews and direct observation of writing sessions. Examining real writing samples provided empirical proof of any changes in writing quality or process efficiency. For this research project undergraduate students enrolled in semester six and eight were included. Selection criteria would depend upon their willingness to participate as well as proficiency in collaborative writing practices.

#### **Instruments**

Quantitative data will be gathered through questionnaires. Online questionnaires will collect quantitative data on students' interactions with digital writing platforms, their views on collaborative writing methods and writing outcomes; while qualitative interviews will gather in-depth insights into student experiences and viewpoints about how digital writing platforms influence collaborative writing processes.

# **Research finding and discussions**

# The use of digital writing platforms affects the collaborative writing processes of undergraduate students

Data for this research was collected via distribution of a questionnaire paper to all respondent students. There was an excellent response from these respondents as evidenced by all students filling up the paper within thirty-eight students who gave it their attention to fill it up, with assistance provided from researcher in cases where students struggled to comprehend information included on it.

Variable Items in this issue of collaborative writing performance and digital writing platforms utilize the Likert scale for interpretation of their results, which ranges from one to five scales. A first score indicates strongly disagreeing responses; second scores signify disagreement; third scores signal undecision or uncertainty; fourth scores show agreement among respondents while a fifth score signifies strong disapproval among respondents.

The result tabulation on variable Digital writing platforms can be showed in table 1.0.

Table 1.0. Respondent score answer

Likert–scale	Score	Frequency	Presentation (%)
Strongly Disagree	1	5	1.84
Disagree	2	6	14.74
Undecided	3	8	20.26
Agree	4	6	32.37
Strongly Agree	5	13	30.79
Total		38	100

Based on this table, it can be seen that most respondents answered strongly agree and agree on variable English reading performance, accounting for 30.79% with 13 respondents answering strongly agree and 32.37 with 6 respondents answering agree. 20.26 percent or 8 respondents were undecided or disagreed and 14.74 percent or 6 respondents answered strongly disagree; 1.84 percent or 5 respondents showed strong disagreement with this item of questionnaire. After processing all data thoroughly,

researchers observed that most students responded positively towards teaching activities.

According to interview results, it can be observed that undergraduate students have increasingly adopted digital writing platforms as collaborative writing environments within educational settings. Such platforms offer many advantages that can dramatically influence collaborative writing processes. Research in this area does not fully explore how collaborative writing takes place across different programs and devices, or how co-writers utilize multiple applications when writing together. Digital writing platforms have revolutionized collaborative writing environments and opened up new methods of knowledge creation. Students can collaborate in real time by working on documents simultaneously while making adjustments or sharing thoughts in real time. This rapid method enhances communication and group cohesion by enabling all team members to track changes more easily, engaging more fully with writing tasks, and sharing in writing tasks efficiently. Digital writing platforms feature tools, like comment sections and chat functions, that enable open interaction among contributors. Students can utilize these features to provide feedback, pose questions, and engage in relevant debates regarding written material they contribute. Digital writing platforms facilitate collaborative writing among college students by enhancing communication, expediting cooperation, and encouraging active participation from group members. Digital writing platforms also enhance the organization and management of collaborative writing projects, enabling students to easily access documents, track modifications, collaborate on writing tasks from any location with internet connectivity and collaborate on writing tasks together.

By providing accessibility and flexibility, physical proximity and time constraints are removed, enabling students to collaborate seamlessly regardless of their location. Digital writing platforms provide students with a central hub to store and access resources, research materials, and reference documents. This ensures each team member receives equal access to important materials thereby eliminating inconsistencies and increasing overall writing task quality. Digital writing platforms in

collaborative writing processes have drastically transformed how undergraduate students collaborate on writing. They've improved communication, enabled instant collaboration and project organization/oversight capabilities and ensured fair resource distribution between all team members.

Digital writing platforms have quickly become part of the educational landscape, and their effects on collaborative writing processes among undergraduate students has garnered growing interest. Studies have demonstrated how digital writing platforms can foster student collaboration in various ways. First, digital platforms provide an accessible space where students can collaborate on writing assignments. Digital writing platforms enhance collaboration among undergraduate students in many ways. First, it offers students an easy and accessible space where they can collaborate on writing assignments together. Users can easily share and edit documents, add comments, and track changes real time without the need for physical meetings and hard copy exchanges. Undergraduate students can collaborate more effectively on writing assignments using digital writing platforms. They can easily share and edit documents, leave comments on them and track changes real-time - eliminating the need for physical meetings and exchanges of hard copies. Furthermore, digital platforms offer various tools and features designed to facilitate collaboration.

#### **Conclusion**

Cloud storage enables students to exchange and view documents from any location, providing seamless collaboration without constraints of time or location. Digital platforms often incorporate communication tools like chat functions or discussion boards that enable students to exchange ideas quickly and effortlessly. Digital writing platforms significantly enhance the efficiency and effectiveness of collaborative writing among undergraduate students. These technologies promote active participation by allowing them to take part in real time, receive immediate feedback, and collaborate asynchronously on projects. Digital writing platforms further develop pupils' digital literacy. Pupils gain proficiency using various digital tools,

navigating online platforms and engaging in virtual collaborations - all essential capabilities for thriving in today's professional environment.

Digital writing platforms significantly enhance undergraduate students' collaborative writing processes. Their use enables seamless collaboration, enhances communication and brainstorming sessions, promotes active participation and engagement from participants, as well as foster digital literacy among its users. Overall, digital writing platforms positively affect these collaborative writing processes by offering convenient spaces for collaboration, tools that facilitate it and fostering its development while supporting digital literacy skills development in students.

# References

- S. K. S. Cheung, L. F. Kwok, K. Phusavat, and H. H. Yang, "Shaping the future learning environments with smart elements: challenges and opportunities," International Journal of Educational Technology in Higher Education, vol. 18, no. 1, pp. 1–9, 2021, doi: 10.1186/s41239-021-00254-1.
- Creswell, J. W., & Clark, V. L. P. (2017) *Designing and conducting mixed methods research*. Thousand Oaks, California:Sage publications.
- K. T. Arnesen, C. R. Graham, C. R. Short, and D. Archibald, "Experiences with personalized learning in a blended teaching course for preservice teachers," Journal of Online Learning Research, vol. 5, no. 3, pp. 251 –274, 2019.
- Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. J. M. Q. (2017). Digital Innovation Management: Reinventing innovation management research in a digital world. 41(1), 223-238. <a href="https://doi.org/10.25300/MISQ/2017/41:1.03">https://doi.org/10.25300/MISQ/2017/41:1.03</a>.
- Vendityaningtyas, V., & Styati, E W. (2018, August 28). Effect of Computer Mediated Communication and Face-to-Face Communication on the Students' Writing. Bina Nusantara University, 12(3), 233-233. https://doi.org/10.21512/lc.v12i3.4235
- Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. Modern language journal, 470-481.

- Warschauer, M. (2006). Laptops and literacy: Learning in the wireless classroom. New York, NY: Teachers College Press
- Yancey, K. B. (2009). Writing in the 21st Century. National Council of Teachers of English.