

**RESEARCH ARTICLE****INNOVATING CREATIVE WRITING PEDAGOGY: EXPLORING THE ROLE OF GOOGLE JAMBOARD IN COLLABORATIVE CYBER LITERATURE DEVELOPMENT****Winda Setia Sari¹, Rasha Abdulridha Saeed², Anna Riana Suryanti Tambunan³, Juli Rachmadani Hasibuan**^{1,3,4}Universitas Negeri Medan, Medan Indonesia²University of Baghdad, Baghdad, Iraq**Article History**

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This paper explores students' reflections toward the benefits of Google Jamboard in a creative writing workshop with second-year English department students. Implementing cyber learning over the course of three weeks, participants completed flash fiction by practicing collaborative writing by utilizing the features of the Jamboard. Students took turns composing the story online on sticky notes until they completed their own work. Drawing from online creative writing pedagogy, cybernetics literature and flash fiction theories, the workshop sought to expose participants to a cybernetic aspect of literary work with which they could identify and assist them in the process of producing their own digital work. Surveys and reflective essays provided data for the study. The results of a thematic analysis indicate that participants participate actively to write flash fiction collaboratively. They get engaged to complete the sticky notes. There are some difficulties encountered by students, yet they were captivated and inspired by the lines of their pair's story, appreciating not only reading the sticky notes of their friend but also the sudden emotional turn that occurred when adding some lines to the story. As a result of writing and debating sticky notes on the Jamboard, students gained confidence as a group, grew closer to one another, and experienced therapeutic benefits. Using the outcomes of the workshop as described by the participants, we hope that other teachers and instructors will recognize the potential benefits of Google Jamboard as a supportive environment for students to investigate digital and cybernetics practices.

Introduction

The creative writing curriculum has traditionally emphasized discipline-specific abilities, enhancing students' ability in literary genres, creation, and methods Holland-Batt, S., & Jeffery, E. (2020). The scenario runs from guiding questions or prompts which are designed by a creative writing instructor to stimulate and enhance creative thinking in a creative writing classroom. In addition to this, Jones and Wyse (2013) argue that the roots of creative writing stem from a methodology initiated by Alec Clegg in the 1960s, which entailed the teacher offering a stimulus, such as a musical composition or visual artwork, followed by an immediate reaction. This frequently led to a personal writing style, such as a brief descriptive sketch or a poem" (p.22).

Lying at the heart of creative writing is the workshop. Face to face workshoping has become the significant part of traditional creative writing (Paquet and Lyun, 2022). However, this so called traditional creative writing has been long questioned even before higher education moved online. Vanderslice and Ritter asserts, 'the conventional, product-oriented creative writing workshop offers minimal consideration to invention and creativity' (2011, 82); that is, these workshop models prioritize product above the processes of creation. Stuckenberg (2017) contends that the writing workshop impedes creation. Additional critiques emphasize that, despite its claimed involvement among participants, the workshop model reinforces the misconception of writing as an isolated endeavor (Barnard 2016, 7). The criticism toward traditional creative

writing workshop continued to raise and there were attempts to shift creative writing pedagogy in to an online and peer workshop mode.

Paquet and Luyn (2022) believe that the on-site workshopping may be effectively adapted to an online format, resulting in enhanced feedback quality and greater participation flexibility for students. Then how do the creative writing been taught in the online and peer participation? The answer to this question delineates the interconnections among literacy, technological advancement, and creativity (Banaji et al., 2006; Connolly and Readman, 2017; Jones and Wyse, 2013). The three-component work to establish online and peer creative writing pedagogy. Several researches currently exist in the context of teaching creative writing in the online platform. A research conducted by Wang et.al (2018) promoted a web-based educational platform employing scaffolding methodologies and collaborative learning strategies to improve students' creative writing skills in the classroom. The result of the experiments described that participants utilizing the technology for writing assistance shown substantial enhancements following three training sessions. In a recent articles, Yuan and Reiff (2022) built a model called wordcraft ; text editor that enables users to cooperate with a generative language model to compose a short story. They assessed Wordcraft with a user study in which participants composed short stories both with and without the tool. The research's findings indicate that broad language models facilitate innovative co-writing experiences. In fact, web-based tools can promote continuous peer learning in the writing classroom. Teacher can use the combination of technological tool and creative writing pedagogy to nurture student's creative work.

Adopting from the cyber literature model, this research utilize google jamboard to compose flash fiction in the online and co-writing setting. Cyber literature was born when information technology emerged and become a reservoir of new discoveries. The birth of cyber literary works gave birth to many online literature platforms such as Wattpad, Mango, Webtoon and others. The development of cyber literature and its application in Indonesia especially in the context of teaching literature is an emerging phenomena. In addition, according to developmental pedagogy, which is worth mentioning, cyber literature and its applications are still rarely used as a tool for studying literature. That is why researchers find this phenomenon very interesting to explore.

An interesting aspect of cyber literary platforms is the role of readers or followers (Lin et al, 2019). For example, on the online literary platform Wattpad, readers have the right to comment, suggest lines of argument, and even make suggestions for changing the structure of the story (Paquet and Van Luwn, 2022). Readers are invited to go on an adventure to not only be readers but also authors. The development of cyber literature provides space for novice writers in this case to get a special space to not only improve their talents, but also increase digital literacy. The development of cyber literature and its application in Indonesia is a phenomenon, especially in the context of teaching literature. In addition, according to developmental pedagogy, which is worth mentioning. Cyber literature and its applications are still rarely used as a tool for studying literature. One of the components in reading and writing cyber literature is adequate technology. Multi-media, multi-modal and interactive aesthetic packaging is used in learning in fiction writing classes. Syamugrapria and Menon (2018) stated that kinetic text and images, graphic design, sound and video are some of the components in digital literature. Students are prepared to adapt to the digital learning process which not only includes digital learning media but also digital learning outcomes which will be accessed and assessed digitally.

Google Jamboard can facilitate the development of cyber literature models in the classroom by facilitating the role of readers and followers through the features in this application. According to Draucker (2021), google Jamboard is an application that offers a collection of virtual whiteboards, known as "Jams," to which anybody with the link and editing permissions may participate. However, in the context of cyber literature-based learning, the sticky notes is the key because dialogue can be created between the author, readers and followers, which is in the context, students with their peer. Google Jamboard application is one of the newest Google applications that appeared after the Covid 19 pandemic hit the world and changed learning modes. Google Jamboard is better known as a collaborative digital whiteboard. Jamboard is a digital whiteboard that allows users to write, draw, pin notes and images. Google Jamboard can facilitate 21st century learning which emphasizes the 4C principles (communication, critical thinking, creativity and

collaboration. For this reason, through the comment feature and collaborative whiteboard, jamboard applications are able to facilitate the development of cyber literary models in writing digital fiction works.

Cyber Literature

The role of the digital world or better known as the cyber world is indeed very large. The development of literary works in the world in the past two decades has grown rapidly, resulting in the emergence of a literary genre called cyber literature. Cyber Literature can be defined as literature, covering various genres of work which are then conveyed through electronic media (Pratamanti, 2018). The numbers of online fiction platforms that have emerged do not only specialize in literary genres. Account owners (readers or followers) are allowed to write whatever they want and share comments in the comments box below the published stories. The Cyber Literature Platform is open to anyone who can create an account and write stories on their account. Online story platforms are popular cultural products that are currently mushrooming in urban society. The ability of the public to access digital works on online platforms such as Noveltoon and Wattpad has brought about major changes, namely the shift from the dominance of printed literary works. Not only that, Wattpad as the most popular online reading platform has become a trend in mass reading and writing habits in the digital era (Bal, 2018). In fact, one of the other platforms, Webtoon, is used not only as a digital reading source but also as a fanbase, namely a new online-based community. New authors create effective and economical online communities to produce and distribute content, build fans, communicate with the public and disseminate works electronically (Carolan, S. and Evain, C., 2013: 289).

Towards the beginning of 2020, Indonesia was ranked fourth as the country whose population was the most readers of Wattpad (Pinastika 2020). By carrying various genres, such as fan fiction, flash fiction, adventure, horror, fantasy, science fiction and mystery, other online story platforms such as Toon Novels, Inovel and others are also growing massively and have loyal readers. With a combination of multimodal, creative and interactive elements, online story platforms have become a popular reading source for the younger generation in Indonesia. So the rapid development of the online reading platform phenomenon makes it worthy of research.

Much research has been conducted on online story platforms in the last three years. One of them is about the emergence of online social authors who emphasize the phenomenon of the emergence of microcelebrities; interaction of new authors with readers as an online fan community (Ramdharsan 2018). This research results in the function of microcelebrities not only as authors but also as influencers. In terms of teaching literature, previously the method used was the “traditional” method which made students read only using printed books and in limited quantities and in limited places, for example only in the library. With the development of cyber literature applications and the cyber literature genre, it provides space for novice writers to get a special space to show their abilities. They can also show their existence amidst a borderless global communication network that can minimize the barriers between novice and senior writers.

Google Jamboard

Google Jamboard comes in the form of a smart display. Users quickly grab images from Google searches, save work to the cloud automatically, use shape recognition and easy-to-read handwriting, and draw with a stylus and erase with a finger – just like a regular whiteboard. In his research, Draucker (2021) has using Jamboard to assist students in developing writing abilities such as formulating thesis statements and subject sentences. At times, he split students into multiple zoom breakout rooms and instruct each group to construct a working thesis regarding a course material, then adding it to a common jam. In a different way, Warwick et al. (2020) investigated the teacher's role in a collaborative setting utilizing an interactive whiteboard, which is precisely the function of Jamboard. The findings indicated that the teacher is intended to remotely facilitate the activity for assistance while encouraging independent knowledge creation.

Jamboard makes learning visible and accessible to all collaborators during a Jam session. Students can use the clock from anywhere. Teachers can engage all students in the learning process, whether in the form of collaboration in traditional classes, group seminars, or through distance learning. The Jamboard app for Android and iOS makes it easy for students and teachers to create together from their phones, tablets, or Chrome. Students working on their assignments are more likely to engage with the content. Students are

more enthusiastic about having a positive view of their capabilities, which underscores the necessity of collaborative tools such as Jamboard. Thus, utilizing jamboard in a collaborative online writing while acting as author and follower, students in this research found themselves react eagerly to write on the sticky notes while reading some lines of their peer's work.

Materials and Methods

Participants

The study was undertaken in the Faculty of Language and Art at Universitas Negeri Medan. To seek out students' reflections on utilizing Google Jamboard to improve their creative writing skills, fifty-six students majoring in English Literature participated voluntarily in the current study. They were asked to fill out the questionnaire in a Google forms. The questionnaire was crafted to extract the components of students' reflections on using the Google jamboard in the survey forms which consists of 5 sections; the first section of questionnaire describes the demographic profile; gender, the experience of study English and writing. These responses were from 47 females (83.9%) and 9 males (16.1%). In addition, 39.3% of the respondents have studied English more than 12 years and 98.2% of them have experienced in creative writing.

Table 1. Demographic data of 56 survey respondents

Measure items	Frequency	Percentages
Gender		
Female	47	83.9
Male	9	16.1
English as Second Language		
5-7 years	16	28.6
8-12 years	18	32.1
More than 12 years	22	39.3
Writing Experience		
Yes	55	98.2
No	1	1.8

Data Analysis

Data on students' writing experiences was collected through a close-ended questionnaire, including frequency of creative writing, using technology in writing, the platform use in writing, experience in using Google Jamboard, and the genre fiction of creative writing. Meanwhile, the reflection was designed to draw out students' difficulties and impacts on utilizing Google Jamboard in creative writing by obtaining of open-ended questions. To determine and interpret the difficulties and impacts as students' reflection on using Google Jam Board, thematic analysis proposing by Braun and Clarke (2017) was applied as theoretical frameworks. It aimed to classify themes in the survey answers provided by respondents in this study. Thematic analysis is a qualitative research method employed by researchers to systematically sort and analyze a significant amount of data (Dawadi, 2020). An intense thematic analysis approach may result in insightful as well as trustworthy results (Nowell, Norris, White & Moules, 2017).

Inductive approach analysis is a method of coding data that does not attempt to fit it into a previous coding frame. (Braun & Clarke, 2006). In this study, students' reflection was derived from the answer on the survey, and it refined by the researcher to construct the themes. There are three subthemes that form a more detailed section of a students' reflection as a larger theme. They are reasons, difficulties, and impacts on applying Google Jam Board in order to enhance the creative writing as displayed in the figure 1. Through analyzing the responses of survey by using thematic analysis, it was found the result of students' reflection utilizing Google Jam Board in improving their creative writing skills.

Table 2. Students' Writing Experience

Measure items	Frequency	Percentages
Frequency of creative writing		
Everyday	3	5.4
During weekends	13	23.2
Once in a month	23	41.1
Sometimes	4	7.1
Others	13	23.2
Using technology in writing		
Yes	53	94.6
No	3	5.4
Platform		
Instagram	46	82.1
Facebook	9	16.1
Twitter	39	69.6
Microsoft Word	16	16
Google Jam board	27	48.2
Google Keep	6	10.7
WhatsApp	31	55.4
Google Docs	18	32.1
Others	4	7.2
Experience in using Google Jam board		
Yes	50	89.3
No	6	10.7
Genre Fiction		
Romance	30	53.6
Fan fiction	5	8.9
Fantasy	5	8.9
Thriller	6	10.7
Comedy	4	7.1
Romantic Comedy	5	8.9
Drama	1	1.8

Results and Discussion

Creative writing plays a critical role in developing students' literary competence, self-expression, and critical thinking skills. The findings demonstrate that students' engagement in literary writing activities stems from various motivations, ranging from external academic requirements to personal interest and skill development. These motivations reflect both extrinsic and intrinsic drivers that influence students' participation in creative writing tasks. Academic requirements, such as assignments, are seen as a formal motivator, compelling students to create literary works as part of their coursework. On the other hand, personal interests, including emotional expression and enjoyment of literature, act as powerful intrinsic factors that encourage students to write beyond academic obligations.

The intersection of personal and academic motivations highlights the dual role of creative writing. Students are not only completing required coursework but are also actively exploring their passion for literature, as reflected in their comments about poetry, captions, and short stories. This dual motivation helps them view writing as more than a task; it becomes a meaningful process that fulfils emotional, intellectual, and creative needs. For instance, several students noted that writing poetry allowed them to express feelings and emotions in a beautiful and satisfying manner. The aesthetic and emotional aspects of writing provide a sense of accomplishment and deeper engagement, fostering a lifelong interest in literature.

However, the process is not without challenges. The data reveals significant obstacles faced by students in using digital tools such as Google Jamboard for creative writing tasks. These challenges include word limitations, technical constraints, and difficulties with platform usability, particularly when accessing it on mobile devices. Word limits were one of the most frequently mentioned barriers, as they restrict students' ability to fully express their ideas and develop comprehensive literary pieces. Additionally, technical issues such as low internet speed, lagging devices, and limited mobile functionality interrupt the natural flow of creative processes. These barriers underscore the need for improved digital tools that can accommodate longer texts and offer seamless features for literary work creation.

Despite these difficulties, creative writing activities continue to provide significant benefits to students. The findings emphasize that creative writing enhances students' creativity, critical thinking, and digital literacy. Writing tasks push students to think imaginatively, organize their thoughts coherently, and adapt to collaborative or individual writing scenarios (Gersbacher, 2021). For example, students highlighted how writing on Google Jamboard allowed them to develop ideas visually, collaborate with peers, and experiment with narrative structures. This process encourages higher-order thinking skills, such as problem-solving and adaptability, while also improving students' confidence in expressing their emotions and thoughts through words.

The discussion around these findings underscores the importance of supporting creative writing as an integral part of students' academic and personal development. By addressing the challenges identified—such as improving technological tools and reducing word limitations—educators and developers can create a more conducive environment for literary creativity. When students are provided with the appropriate resources and platforms, their ability to express themselves and engage with creative writing increases, ultimately fostering a stronger connection to literature and improving their writing proficiency. The analysis highlights the dynamic relationship between motivation, challenges, and impacts in students' creative writing experiences. While external factors like coursework act as catalysts, personal interest and emotional expression serve as strong intrinsic motivators. Addressing the identified challenges will not only enhance the overall experience but also empower students to fully explore their creative potential, develop essential academic skills, and cultivate a deeper appreciation for literary arts.

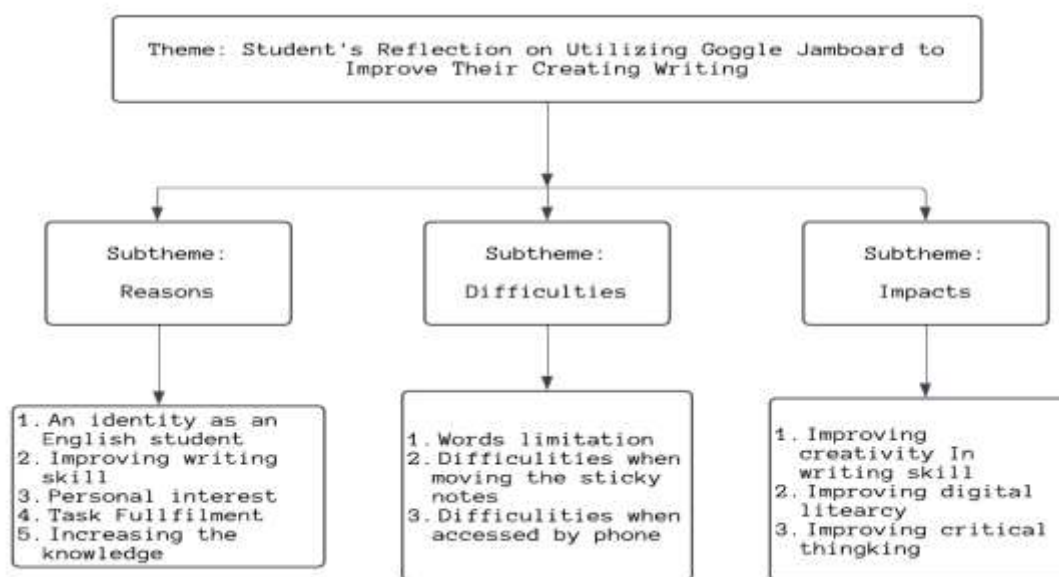


Figure 1. A sample thematic map of developing themes

Motivation for Writing Literary Works

- *"The reason I wrote poetry in the first language was because I had a poetry course."*
- *"I wrote captions, poems, short stories, and novels. The reason is because I am an English literature student."*
- *"I write poetry to express thoughts and feelings by conveying these feelings through words."*

The data shows that motivations for writing literary works stem from three main categories: academic requirements, skill improvement, and personal interest. For example, students often cite their identity as English literature students as a key driver for engaging with literary writing. Courses, assignments, and curriculum requirements push students to produce literary works, especially poetry, short stories, and captions. Simultaneously, students recognize writing as a way to enhance their writing skills. For example, one student stated that writing poetry *“improves my writing skills”* and allows them to *“practice with lots of mistakes.”* This reflects how students view creative writing as an opportunity for academic and skill development. Finally, personal interest serves as a strong intrinsic motivation. A student mentioned, *“I write poetry to express thoughts and feelings by conveying these feelings through words.”* Another explained, *“I like literature, especially poems.”* This suggests that writing fulfills emotional needs, providing students a space for self-expression, enjoyment, and creative exploration. The motivations align with previous research that highlights how writing combines academic fulfillment and self-expression (Avila, 2023; Snyder, 2019). Students’ coursework assignments may act as external motivators, but writing also becomes a personal activity to articulate emotions and enhance creativity. For example, poetry writing offers a medium to convey abstract thoughts and emotions, while captions for social media demonstrate aesthetic and communicative functions. This mix of academic and personal drivers reflects the dynamic nature of literary writing among English literature students.

Challenges Encountered During Writing

- *“The sticky note feature makes me feel restricted to write my fiction because of word limits.”*
- *“If I use Google Jamboard on my phone, the features are very limited.”*
- *“My mobile is sometimes getting lag, and I face low internet speed.”*

Students face several challenges in their creative writing processes, primarily related to technical limitations and platform constraints. One of the most frequently mentioned issues is the *word limitation* on tools like Google Jamboard. For instance, a student noted that *“I can’t write more than 30 words in one note.”* This restriction becomes particularly frustrating for students attempting to write fiction or longer poetic works, as it interrupts the natural flow of their ideas. Another common issue is technical difficulties when using devices or platforms. For example, a student complained about *“low internet speed and lags,”* which often hindered their ability to use digital platforms efficiently. Similarly, students reported challenges accessing features when using mobile devices, such as editing or rearranging notes, stating, *“The notes get stuck sometimes,”* and *“Some features make me confused.”* These challenges highlight how technological tools, while offering creative opportunities, can simultaneously limit productivity and creativity due to their constraints. Word limitations can stifle expression, particularly for students attempting complex literary works. Likewise, technical difficulties—such as lagging, feature accessibility, and poor internet connectivity—reduce the efficiency of collaborative writing processes. These findings suggest a need for tools that are more user-friendly, flexible, and capable of accommodating longer and more detailed literary compositions.

Impact of Writing on Students’ Development

- *“Google Jamboard helps me develop my creativity, especially in writing.”*
- *“I think this makes me more passionate about writing.”*
- *“It has improved my creativity and adaptivity as I had to match my style of writing with my partner.”*

The data reveals three significant positive impacts of creative writing activities: improved creativity, enhanced critical thinking, and greater digital literacy. Students often associate writing with increased creativity. For example, one student stated, *“Google Jamboard helps me develop my creativity, especially in writing.”* Writing literary works, particularly in collaborative settings, encourages students to think imaginatively, experiment with narrative structures, and articulate ideas effectively. Additionally, critical thinking improves as students navigate collaborative writing tasks. For instance, one student explained that

“it makes me think more creatively because writing on the Jamboard has to wait for our partner’s version of the story, which makes us more imaginative.” This indicates that collaborative writing encourages adaptability, critical thinking, and the ability to integrate multiple perspectives into a single narrative. Furthermore, writing on digital platforms enhances students’ digital literacy. A student mentioned that *“I learn to write and create stories by compiling them into sticky notes, and I can make a beautiful story from beginning to end.”* This suggests that students develop technical skills while also using digital tools creatively to organize their writing and express their ideas visually. The impacts of creative writing resonate with the findings of Murniarti et al. (2018) and Linnenluecke et al. (2020), who emphasize that creative tasks not only improve writing proficiency but also foster critical and digital skills. Writing with tools like Jamboard pushes students to adapt to technological features, think critically about narrative structure, and collaborate effectively. This combination of technical and creative learning enhances students’ overall skill set, preparing them for more advanced academic and professional challenges.

Discussion

There are several reasons, impacts, and difficulties that influence students’ reflections on utilizing Google Jamboard. Firstly, the implementation of cyber literature-based learning significantly enhances students’ abilities to write digital fiction. By using Google Jamboard as the tool, most of them stated that it can increase and give the benefit in the development of writing ideas. Another student expressed that using Google Jamboard aided them in crafting a story, as it allowed them to outline the main idea first, then refine it to become more detailed and comprehensive. Furthermore, the features on Google Jamboard can guide the students to think more creatively. As they described in their answer, ‘It helps me to be more creative to collaborate on many features in Google Jamboard to make my story become more interesting’ and ‘I can create my writing the way I want; there are lots of features that can be used to beautify my writing.’ It implied that cyberliterature-based learning, in particular Google Jamboard, is able to improve students’ ability to write digital fiction because of the beneficial features of the tools.

The integration of Google Jamboard into the creative writing process demonstrates its potential to support cyber literature learning models that align with 21st-century educational goals. The platform is widely accessible and user-friendly, allowing students to work collaboratively and individually on creative writing tasks. This accessibility is a significant advantage, as students can utilize Google Jamboard anytime and anywhere, accessing it through their personal devices. Such flexibility supports modern learning practices, which emphasize technology-based collaboration and innovation. According to the data, 48.2% of students actively use Google Jamboard as their primary platform for creative writing, with 94.6% of students stating that they integrate various technologies into their creative writing practices. This highlights the increasing reliance on digital tools to enhance students’ engagement and productivity in literary activities.

Moreover, the platform effectively fosters collaborative learning, a cornerstone of 21st-century education. Students noted that Google Jamboard facilitates peer-to-peer interaction, allowing them to brainstorm, exchange ideas, and develop their creative works together. For instance, students described how the platform enables them to write down initial ideas using sticky notes, which can then be expanded into full-fledged literary pieces. This collaborative process not only stimulates creativity but also encourages critical thinking as students must integrate and adapt their writing styles with their peers’ contributions. Additionally, the visual layout of Jamboard, which allows for the arrangement of ideas in an organized manner, provides a unique opportunity for students to structure their creative writing projects effectively. However, despite its effectiveness, students also reported significant challenges while using Google Jamboard, particularly related to word limitations and technical constraints. The most frequently mentioned difficulty was the 30-word limit imposed by the sticky notes feature. This restriction prevents students from fully expressing their ideas and developing more comprehensive literary works. For example, a student remarked that the sticky notes feature “makes me feel restricted to write my fiction,” as longer narratives cannot fit into the limited word count. This limitation forces students to compress their ideas, which can disrupt the natural flow of creative writing and stifle deeper exploration of themes or character development. As a result, students may struggle to produce more detailed and meaningful pieces of literature, impacting the overall quality of their creative output.

Technical operation issues, such as difficulties in moving sticky notes, lagging devices, and limited mobile accessibility, further complicate the writing process. Several students pointed out that Google Jamboard does not function optimally on mobile devices, with some features becoming harder to access or edit. For instance, slow internet connections and device lags were commonly cited as barriers that hindered their ability to collaborate seamlessly or complete their writing tasks efficiently. Students also found it challenging to simultaneously open other applications for reference while working on Jamboard, which limited their ability to cross-check ideas, conduct research, or integrate additional materials into their writing.

Despite these challenges, Google Jamboard remains a beneficial tool for enhancing creative writing skills among students. The platform encourages digital literacy, creativity, and critical thinking, which are essential competencies in modern education. 89.3% of students reported prior experience using Google Jamboard, indicating that familiarity with the platform contributes to its effectiveness in facilitating both individual and group writing tasks. Students acknowledged that Google Jamboard provides a fun and interactive way to organize their thoughts, collaborate with peers, and produce creative works. For example, some students described how the tool allowed them to visualize the "big picture" of their stories before expanding them into detailed narratives. This structured approach helps students develop their ideas more systematically, resulting in improved writing outcomes.

In conclusion, Google Jamboard has proven to be an effective platform for supporting the development of cyber literature learning models and facilitating 21st-century learning goals. While word limitations and technical difficulties pose challenges, the overall benefits of using the tool outweigh its drawbacks. By enabling collaborative and personal creative writing, Google Jamboard fosters creativity, critical thinking, and digital literacy among students. To enhance its effectiveness, addressing the identified barriers—such as expanding word limits and optimizing technical features—will further empower students to express themselves freely and develop their creative potential. With continuous improvement, Google Jamboard can serve as an essential tool for enhancing creative writing education in a technology-driven learning environment.

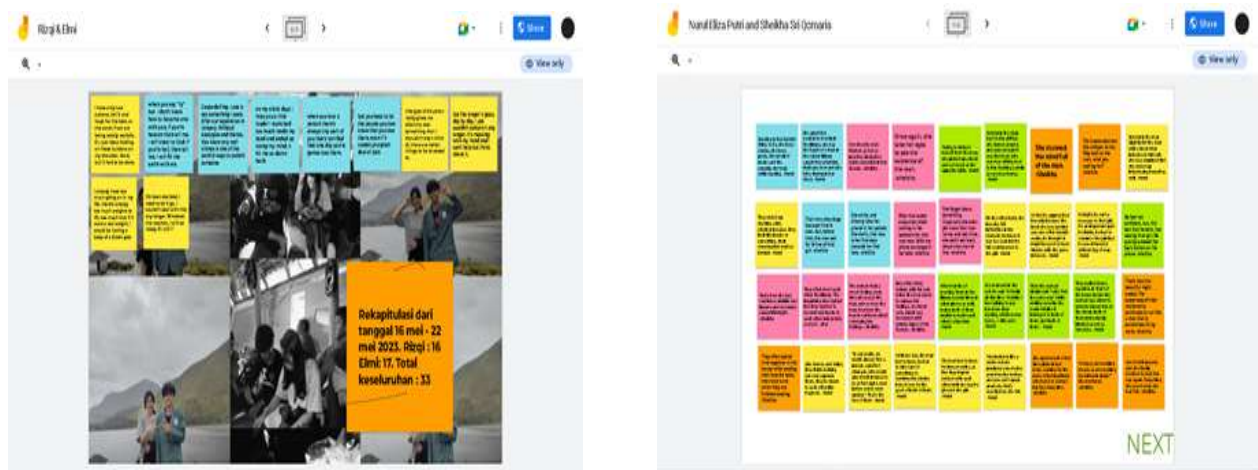


Figure 2. A visual representation of the Google Jamboard in application

When creating a new Jamboard and write an original flash fiction story using the text boxes, students collaboratively completed their flash fiction between 50-1000 words. The instructor divide students into small groups of 3-4 students accordingly to their favorite theme. One student starts a jamboard and writes the opening sentence of a flash fiction story. Each group member adds a sentence or a few sentences to the story in turn, using the sticky notes. Surprisingly they add relevant images, drawings, or shapes to visually enhance their story. In the period of two weeks , students share their jamboard with the class and present their story. In turn they discussed the themes of jamboard and ideas.

Therapeutic impact of utilizing jamboard when writing flash fiction collaboratively was obvious during two weeks online workshoping. In addition to its practical utility—Jamboard is reasonably fun and informal.

Students found it exhilarating to witness the plot twist their peer created. It fosters their willingness to play with the language and the literary elements like character development and plot. The sticky notes moved and filed the empty virtual white board. Also, they collaborate, experiment and share their emotions. Students are permitted to engage with the materials at their own tempo. Instead of a competitive or anxiety-inducing pursuit of credit or approval, their conversation is dynamic and enjoyable.

In conjunction with research and observation of online workshopping in the context of cyber learning, students' reflection and comment on using google jamboard suggests strategies for facilitating more productive access to online collaborative writing tools through explicit instruction and student choice. Following the result of two weeks workshop and observation of student experiences in developing and editing their sticky notes, we as an instructor would begin the prompt or story's first line from the students. This factor should be underlined to avoid the flaws most instructor stumbled upon; student's passiveness and inactivity. Students were more enthusiastic to create their own prompt. students responded to their peers with diligence and consideration, frequently composing extensive responses to their classmates' story's excerpt. One students wrote, *"It certainly has improved my creativity and adaptivity as I had to match my style of writing and ideas with my Google Jamboard partner."* Another student responded, *"It makes me to think more creatively finding out some inspiration while waiting for our partner's to continue his/her own version of the story, which makes us more imaginative."* After several days they noticed that they were experiencing significant change on being author and follower. Hecq and Hill (2017) have shown that the processes and problem-solving abilities of numerous internationally recognized artists are fundamentally rooted in a sense of pleasure and collaboration. And this also becomes the most effective approach to reconciling the literature regarding the advantages of workshopping and its enhanced quality in online environments with the students' perception of online workshopping as enjoyable and challenging.

The majority of students have found Jamboard to be particularly beneficial for collaborative online learning activities in virtual class instances in which instructors encourage students to come up and write on the board. A student's familiarity with the technology helps them operate Jamboard easily. Data described that 94% of participants are generally technology user-friendly. Despite occasionally finding it challenging to use sticky notes, the data revealed that 94% of participants are generally comfortable with technology. We have occasionally requested that students contribute an equal number of sticky notes to a jam, trying to complete the flash fiction, which has served to stimulate their creativity and autonomy.

Additionally, the anonymity of Jamboard (Baker,2021 ;Draucker, 2021; Yesmin and Siddique, 2023) in this case resulted in students feeling more at ease and secure when participating in a potentially intimate activity. Google Jamboard and the virtue of cyber learning facilitate the sense of anonymity. When the sticky notes were added, they were protected by the fact that the lines of their flash fiction would not be identified as theirs.

The 171-character limit on Jamboard's sticky notes promotes remarks that are brief, speculative, or fragmentary. In fact, students worked hard to write on the limited space. One student informed, *"The limitation of words in sticky note feature makes me feel restricted to write my fiction"*. Another replied, *"When I want to write more than 25 words and the notes cut some of my words, so my words are not complete."* Although some students initially encountered difficulty in producing classwork that appears unpolished, they quickly embraced the opportunity to create a chaos. As Draucker described in his research, Jamboard motivates students to engage in chaotic activities. The term "Jam" itself implies a mode of engagement that is impromptu, relaxed, and experimental (2021). But at the end, during the last session, one student claimed to experience hilarious moments when she realized the story, she wrote with her peer is unexpectedly brilliant, she admitted, *"it was spontaneous, she followed my lines and add some detail few minutes I published the nest sticky notes."*

This study emphasizes the importance of peer feedback. Peer feedback is typically provided in written form through a concise response letter addressed to the student-writer, as well as verbally during the instructor-facilitated workshop session, which typically lasts between thirty minutes and an hour per piece (Chavez 2021, 162). Workshop instructors may also offer feedback during one-on-one conferences prior to or following the workshop (Chavez 2021, 157–61). The content of the feedback may pertain to one or more craft elements, such as voice, tone, plot, characterization, structure, tension, and coherence, depending on

the genre of the piece (Chavez 2021, 8–10; Salesses 2021, 49–98). In some instances, instructors may request that students submit a revised version of a composition after it has been workshopped. Students may also be required to write a self-reflection note that outlines the specific revisions they made and the reasoning behind them (Chavez 2021, 173–76; Salesses 2021, 176–79).

Throughout the workshop, students take turns commenting on their peer's sticky notes, confirming the lines, character's hidden motive, and the plot twist. We learned it from their reflection. This is unique, since students were granted an unusual opportunity to express their real enthusiasm for each other's concepts during the Jam, an outcome that is rarely accomplished in the offline workshop, where affective responses are frequently communicated through inconspicuous smiles or head motions. We encouraged students to highlight or star comments that they found particularly engaging. This somehow remarked the development of cyber learning. Stars and emoticon invitations are frequently utilized and appear to be well received by participants, as it provides them with the opportunity to observe the thoughts of their peers.

Conclusions

The transition from paper to digital format alters not only the forms of writing but also the definition of the 'author' due to the corresponding changes in language and structure (Bowen and Van, 2021). It is possible to engage in collaborative and multimodal composition practices that emphasize the social processes of writing as well as various modes of expression and methods of knowing. In light of the rapid advancements in digital technologies that have revolutionized education and communication, Google Jamboard can facilitate peer writing and cyber learning in fiction writing class. By operating the sticky notes, students can take role both as writer and follower. The roles contribute much to the completion of their flash fiction. By examining the result of survey and reflection statement thematically and analyzing result of writing and observing the debating sticky notes on the jam board, it is clearly pictured that students gained confidence as a group, grew closer to one another, and experienced therapeutic benefit. Activities using Google Jamboard enable the re-evaluation of the conventional essay and conventional peer writing as well. The Google Jamboard as Multimodal composition and digital collaborative writing possess increase students' capacity to revolutionize literature learning by infusing cyber literature as one of possible genre to promote 21st century learning.

Educators will use Google Jamboard in educational spaces effectively through knowing what an educator is trying to accomplish that aligns with curriculum expectations for engaging students in collaborative creative writing or building new modes of digital literature. Possible writing activities could include brainstorming using virtual stickies or illustrating a concept graphically with the drawing features in Jamboard. Collaborative activities should have defined roles with clear responsibility, such as author, editor, illustrator, to deepen the engagement level. The potential will be developed only if an institution provides certain training specifically for instructors: workshops on features of Jamboard, examples of model lesson plans that include strategies on how multimedia elements can be integrated into writing activities. With the continuative support, including the availability of instructional resources and a forum for teachers to share best practices, it can be an effective implementation. Other challenges will need solutions, such as digital equity in terms of device availability or an offline solution alternative. Through the formulation of a comprehensive implementation strategy and by providing educators with appropriate tools and competencies, Jamboard is potentially capable of revolutionizing creative writing pedagogy into an exceptionally stimulating, collaborative, and technologically sophisticated educational experience.

References

- Bakar, E.W. (2023). 'Peer-Jamming': Promoting Collaborative Learning and Enhancing Students' Engagement using Jamboard.
- Bal, M. (2018). Reading And Writing Experiences of Middle School Students in The Digital Age: Wattpad Sample. *International Journal of Education and Literacy Studies*, 6(2), 89-100. <https://doi.org/10.7575/aiac.ijels.v6n.2p.89>
- BANAJI, S., BURN, A. and BUCKINGHAM, D. (2006) *The Rhetorics of Creativity: A Review of the Literature*. London: Arts Council England.

- Barnard, I.) July. (2016) " I Can't Relate": Refusing Identification Demands in Teaching and Learning. In The CEA Forum (Vol. 45, No. 1, pp. 51-77).
- Bowen, N., & Van Waes, L. (2020). Exploring revisions in academic text: Closing the gap between process and product approaches in digital writing. *Written Communication*, 37(3), 322-364.
- Salesses, Matthew. (2021). *Craft in the Real World: Rethinking Fiction Writing and Workshopping*. Catapult.
- Chavez, Felicia R. (2021). *The Antiracist Writing Workshop: How to Decolonize the Creative Classroom*. Haymarket Books.
- Clarke, V. and Braun, V. (2017). Thematic analysis. *The journal of positive psychology*, 12(3), pp.297-298.
- Carolan, S., and Evain, C. (2013). Self-Publishing Opportunities and Threats in a New Age of Mass Culture. *Journal of Publishing Research Quarterly*, 29, 285-300.
- Connolly, S., and Burn, A. (2017). The Story Engine : Offering an online platform for making “unofficial” creative writing work. *Literacy*. doi:10.1111/lit.12138
- CONNOLLY, S. and READMAN, M. (2017) ‘Towards “creative media literacy”’, in B. De Abreu, P. Mihailidis, A. Yee, J. Melki, J. McDougall (Eds.) *International Handbook of Media Literacy Education*. Oxford: Routledge.
- Dawadi, S. (2020). Thematic analysis approach: A step by step guide for ELT research practitioners. *Journal of NELTA*, 25(1-2), pp.62-71.
- Draucker, S. (2021). Google Jamboard and playful pedagogy in the emergency remote classroom. *Nineteenth-Century Gender Studies*, 17(1).
- Gersbacher, Morton Ann. “Five Tips for Improving Online Discussion Boards.” *Psychological Science*, 31 Oct. 2016, <https://www.psychologicalscience.org/observer/five-tips-for-improvingonline-discussion-board>. Accessed 16 Mar. 2021.
- Hecq, D., and C. Hill. (2017). “Creative Exchanges: Play as the Infancy of Imagination. Making It New, Special Issue of TEXT.” *Journal of Writing and Writing Courses*. Accessed 9 May 2020. <http://www.textjournal.com.au/speciss/issue40/Hecq&Hill.pdf>.
- Holland-Batt, S., and Jeffery, E. (2020). Debate, discourse and productive disagreement: interrogating the performative dimensions of authorship in the creative writing classroom. *New Writing*, 1–16. doi:10.1080/14790726.2020.178810
- Jones, R. and Wyse, D. (2013) *Creativity in the Primary Curriculum*. Routledge.
- Lin, L.C., Hung, I. and Chen, N.S. (2019). The impact of student engagement on learning outcomes in a cyber-flipped course. *Educational Technology Research and Development*, 67(6), pp.1573-1591..
- Nowell, L.S., Norris, J.M., White, D.E. and Moules, N.J., (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, 16(1), p.1609406917733847.
- “Make Jamboard Meetings More Accessible.” *Jamboard Help*, <https://support.google.com/jamboard/answer/9317835?hl=en>. Accessed 10 october. 2024.
- Pâquet, L. and Van Luyn, A. (2021). ‘Things living in the cyber-universe’: facilitating peer workshopping in the online creative non-fiction classroom. *New Writing*, 19(4), 391-407, <https://doi.org/10.1080/14790726.2021.1993929>
- Pinasthika, L. T. (2020). Why They Use Wattpad: An Emotional Design Analysis on the Free Online Reading Platform. In *International Conference of Innovation in Media and Visual Design (IMDES 2020)*. (pp. 136-143). Atlantis Press.
- Pramatanti, E. D. (2018). Peran Reader dan Follower terhadap Struktur Novel: Kajian Sastra Cyber Wattpad. In *Seminar Nasional Struktural 2018*. (pp. 298-310). Dian Nuswantoro University.
- Ramdarshan, B. M. (2018). The Return of The Social Author: Negotiating Authority and Influence on Wattpad. *Convergence*, 24(2), 117-136. <https://doi.org/10.1177/1354856516654459>
- Shanmugapriya, T., Menon, N., Campbell, A. (2018). An introduction to the functioning process of embedded paratext of digital literature: <i>Technoeikon</i> of digital poetry. *Digital Scholarship in the Humanities*, <https://doi.org/10.1093/llc/fqy064>
- Stuckenberg, J. (2017). “Deep Habits: Workshop as Critique in Creative Writing.” *Arts and Humanities in Higher Education* 16 (3): 277–292.

- Vanderslice, S. and Ritter, K. (2011). *Teaching Creative Writing to Undergraduates: A Practical Guide and Sourcebook*. Fountainhead Press.
- Wang, C.-Y., Chang, C.-K., Lin, K.-J., and Chen, G.-D. (2018). Effectiveness of web-based mechanism for teaching creative writing in the classroom. *Innovations in Education and Teaching International*, 1–13. doi:10.1080/14703297.2018.146494
- Warwick, P., Mercer, N., Kershner, R., & Staarman, J.K. (2020). In the mind and in the technology: The vicarious presence of the teacher in pupil's learning of science in collaborative group activity at the interactive whiteboard. *Computers & Education*, 55(1), 350-362. <https://eric.ed.gov/?id=EJ878000>
- Yuan, A., Coenen, A., Reif, E. and Ippolito, D. (2022). Wordcraft: story writing with large language models. In *Proceedings of the 27th International Conference on Intelligent User Interfaces* (pp. 841-852).
- Yesmin, F., & Siddique, S. A. (2023). Possibility of Using Jam board for Interactive Remote EFL Teaching and Learning: A Survey of Students' Perception. *DIU Journal of Humanities and Social Science*, 10(1), 1-17.