

# ESP STUDENTS' ATTITUDES TOWARDS JAMBOARD: REVOLUTIONIZING SELF-INTRODUCTION IN THE DIGITAL AGE

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#### Abstract:

This study explores the use of Jamboard as a tool for revolutionizing self-introduction among English for Specific Purposes (ESP) students in the digital age. It examines ESP students' attitudes towards the use of Jamboard in enhancing their self-introduction skills through a mixed-method approach, using both quantitative and qualitative data collection methods. A survey questionnaire was administered to 131 ESP students. The study found that the respondents have a high perception of Jamboard's usefulness, ease of use, appearance, and interaction towards their self-introduction, with a mean score of 3.8. The technology was found to be user-friendly, easy to use, and helpful in presenting ideas and showcasing creativity. However, some students also encountered difficulties with Jamboard's usability and features. The recommendations include providing support and training for the effective use of digital tools like Jamboard and incorporating user-friendly features. These implications can inform educators and developers in promoting student engagement, creativity, and collaborative learning. Further research can explore the impact of Jamboard on student learning outcomes and their perceptions and use of digital tools in the classroom.

#### **Keywords:**

Jamboard, ESP students, self-introduction, digital tools, writing.

#### INTRODUCTION

The COVID-19 pandemic has brought significant disruptions to the education sector worldwide, forcing schools and universities to shift their teaching and learning strategies to adapt to remote and online environments (Dhawan, 2020; Gupta, 2021; Tsai et al., 2020). This unforeseen event has also paved the way for many positive changes in education, particularly in the adoption of digital tools and technologies to support learning (Pinto & Leite, 2020; Zain, 2021). One area where digital tools have proven effective is in improving writing skills, especially in English for Specific Purposes (ESP) courses.

In English for Specific Purposes (ESP) courses, writing a self-introduction in English is a critical skill for ESP students, as it enables them to express themselves effectively in various academic and professional situations. However, several factors can make this task challenging for non-native speakers of English (Enesi et al., 2021; Rus, 2019). One of the most common challenges is a lack of confidence in their language skills. Factors such as a lack of confidence in their English language skills, uncertainty about the appropriate formality or tone to use, and difficulty translating their thoughts and ideas into written English can make self-introduction challenging for these students (Pham & Nguyen, 2021; Rus, 2019).

From these challenges, many ESP students may feel unsure about the appropriate level of formality or tone to use when introducing themselves in English, which can make the writing process daunting. Another challenge that ESP students may face when writing a self-introduction in English is difficulty translating their thoughts and ideas into written English. This challenge can be especially significant for students who have limited experience communicating in English, as they may struggle to find the right words to express themselves effectively. Additionally, cultural differences can also pose a challenge, as the appropriate level of formality and tone can vary depending on

the student's cultural background and the context in which they are writing (Elachachi, 2015).

In today's digital age, traditional self-introduction methods such as face-to-face interactions or PowerPoint presentations may not be sufficient to effectively communicate and interact with others. The emergence of digital technologies has revolutionized the way people communicate and interact (Cladis, 2020), which makes exploring innovative ways to enhance self-introduction skills in ESP (English for Specific Purposes) courses crucial. According to a study by Hefter & Berthold (2020), the use of digital tools such as social media, video introductions, and online portfolios can significantly improve students' self-introduction skills. These digital tools allow students to showcase their skills, experiences, and achievements in A method that is more captivating and participatory, which can assist them in distinguishing themselves in a highly competitive job market.

In particular, Ramamuthie & Abdul Aziz (2022) stated that digital tools have shown promise in improving writing skills in English for ESP students. For instance, digital tools such as online dictionaries and grammar checkers can help students improve their language skills and avoid common errors. Moreover, digital tools also offer an opportunity for students to showcase their creativity and enhance their communication skills (Mehta & Rathore, 2015). Digital platforms such as Jamboard provide a collaborative space where students can work together to create and present their ideas in real time. Such platforms can also help students overcome the challenges they face when writing a self-introduction in English, such as uncertainty about the appropriate level of formality and tone. Thus, Jamboard could be one of the best tools to support ESP students' self-introduction writing.

Jamboard is an interactive whiteboard tool developed by Google that enables users to collaborate and present ideas in real time. It provides a digital platform for students to work together and create

visual representations of their ideas(Sweeney et al., 2021). In the context of self-introduction, Jamboard offers a range of features that can enhance students' communication skills. For instance, students can use Jamboard to create and share their self-introduction in a visually engaging way, incorporating images, videos, and other multimedia elements. Jamboard also offers an opportunity for students to practice their language skills in a collaborative environment (Irmayani, Masruroh, & Wulandari, 2022; Khoiriyah et al., 2022). They can work together to provide feedback on each other's work, identify areas for improvement, and develop their language skills through peer-to-peer learning. By using Jamboard, ESP students can overcome some of the challenges they face when writing a self-introduction in English, such as uncertainty about the appropriate level of formality and tone.

In this paper, we first examine the challenges ESP students face when writing a self-introduction in English. We then explore the role of digital tools in enhancing self-introduction skills and introduce Jamboard as a potential solution. Finally, we discuss the importance of this study's findings for ESP students who want to improve their English language skills. The findings of this study will be beneficial for ESP students who want to improve their English language skills and enhance their self-introduction abilities.

#### LITERATURE REVIEW

#### **Digital Tools and Writing Skills**

The use of digital tools in writing instruction has become increasingly popular in recent years (Ramamuthie & Abdul Aziz, 2022). According to (Greer et al., 2016; Williams & Beam, 2019) technology can be used to promote writing skills in various ways, including providing immediate feedback, promoting collaboration, and enabling students to practice writing in different formats. Digital tools such as grammar checkers, plagiarism checkers, and online writing

tools can be used to enhance students' writing skills in the areas of grammar, vocabulary, and organization. Additionally, digital tools such as blogs, wikis, and discussion forums can promote collaboration among students and provide them with a platform to share their writing and receive feedback from their peers (Wang, 2015).

The COVID-19 pandemic has accelerated the adoption of digital tools in education, particularly in remote and online learning environments. As a result, it is crucial to evaluate the effectiveness of digital tools in promoting writing skills and communication. According to Ramamuthie & Abdul Aziz (2022), the use of digital tools in writing instruction has been found to improve students' writing skills and enhance their communication skills. It is suggested that digital tools can be used To investigate the potential of Google Classroom as a writing tool, given that there is limited research on its use in this context.

Thus, the use of digital tools in writing instruction has the potential to enhance students' writing skills and promote effective communication. Further research is needed to explore the effectiveness of specific digital tools in promoting writing skills and communication, particularly in the context of ESP courses.

#### **Self-Introduction and ESP**

Self-introduction is an essential aspect of communication, particularly in academic and professional settings. In ESP courses, self-introduction helps students to express themselves effectively in various situations. However, writing a self-introduction in English can be challenging for non-native speakers of the language, especially for those who lack confidence in their language skills (Enesi et al., 2021).

According to (Pham & Nguyen, 2021; Rus, 2019) self-introduction in ESP courses requires students to understand the appropriate level of formality and tone to use and translate their thoughts and ideas into written English. The authors suggest that digital tools can be used to support students in writing self-introductions by

providing them with feedback on their language use and guiding them in the use of appropriate language structures and expressions.

Furthermore, the use of digital tools such as voice recorders and video recording tools can enable students to practice their oral communication skills and enhance their confidence in speaking English. The use of digital tools in self-introduction can provide a platform for students to showcase their language skills and receive feedback from their peers and instructors (Yurieva et al., 2021).

It can be said that self-introduction is an important aspect of communication, particularly in ESP courses. The use of digital tools in self-introduction can provide support for students in writing and practicing their oral communication skills and enhance their confidence in using English in academic and professional settings.

#### Jamboard as a Digital Platform

Jamboard is a cloud-based collaborative digital whiteboard developed by Google. It is a tool designed to enhance the collaborative learning experience by providing a platform where users can share ideas, draw, and write in real time. The use of Jamboard in language learning has been found to improve student engagement and collaboration (Irmayani, Masruroh, & Eka Cristin Wulandari, 2022). Jamboard can help students work together to co-create knowledge, share ideas, and brainstorm in a digital space. The tool offers a range of digital features such as sticky notes, images, text boxes, and shape tools that students can use to enhance their learning experience.

Jamboard provides students with a platform for real-time collaboration where they can share their ideas and receive immediate feedback from their peers and instructors (Khoiriyah et al., 2022) This feature is beneficial for language learning as it allows students to practice their language skills in a safe and collaborative environment. According to a study (Irmayani, Masruroh, & Wulandari, 2022) digital tools like Jamboard can facilitate collaboration and communication

among students, which can lead to improved learning outcomes.

Another feature of Jamboard that is beneficial for language learning is its ability to save and share content. Students can save their work on Jamboard and share it with their peers or instructors for feedback or further collaboration. This feature promotes active and engaged learning, as students can revise and improve their work based on feedback received from their peers or instructors (Irmayani, Masruroh, & Wulandari, 2022).

#### **Attitudes of Students Towards Jamboard**

Research has shown that students have a positive attitude toward the use of digital tools in learning. According to a study by Liu et al. (2018) students who used digital tools in writing instruction reported increased motivation and engagement in the learning process. Moreover, students who used digital tools reported higher levels of confidence in their writing skills than those who did not use digital tools.

The use of Jamboard in language learning has not been extensively studied, particularly in the context of ESP courses. However, research has shown that students' attitudes toward digital tools play a crucial role in the success of digital tool implementation in the classroom. Students' positive attitudes towards digital tools are linked to increased engagement and motivation, leading to improved learning outcomes (Liu et al., 2018)

### **Implications for Language Learning**

The concept of "digital natives" and "digital immigrants" has significant implications for language learning, particularly in the adoption of digital tools and technologies. Digital natives refer to people who have been raised in the digital era and possess ease and familiarity in utilizing digital technologies, while digital immigrants are individuals who have adopted digital tools later in life (Hakkarainen

et al., 2015).

Digital tools in language learning have been shown to have several benefits, including increased student engagement and motivation, improved language proficiency, and enhanced critical thinking skills (Liu et al., 2018)In addition, digital tools can enable students to personalize their learning experience and learn at their own pace, which can improve their language proficiency.

Writing a self-introduction in English can be a challenging task for ESP students, particularly for those who are not native speakers of the language. The use of digital tools such as Jamboard can potentially provide a solution to address these challenges. Jamboard provides a collaborative space where students can work together to co-create their self-introduction, practice their language skills, and receive feedback from their peers and instructors(Yurieva et al., 2021). The tool's ability to save and share content also enables students to revise and improve their work, leading to better learning outcomes.

# **Previous Studies and Research Gap**

Previous studies have investigated the use of digital tools in language learning and their impact on student engagement and motivation. However, there is a gap in the literature regarding the use of Jamboard as a digital platform for self-introduction among ESP students. This study aims to address this gap by examining students' attitudes towards Jamboard as a tool for self-introduction.

One study that investigated the use of Jamboard in language learning is by (Irmayani, Masruroh, & Wulandari, 2022). They found that the use of Jamboard improved students' collaboration, communication, and critical thinking skills. This is in line with (Castillo-Cuesta et al., 2022) who conducted a study that involved 122 TEFL students with varying language proficiency levels who used virtual workspaces, including Jamboard, for collaborative activities and showed that virtual workspaces improved students' collaboration

skills and promoted open-mindedness, creating positive e-learning environments for respectful discussions from different perspectives. Another study by Wulandari & Wahid (2022) discovered that the implementation of Jamboard resulted in better writing skills for students in composing personal letters. Based on the findings, the researcher suggested that Jamboard could be a practical substitute approach to develop students' writing proficiencies.

Moreover, research on the use of Jamboard in language learning has also shown positive effects. For example,(Khoiriyah et al., 2022)) examined students' acceptance of Google Jamboard for online language learning using the Technology Acceptance Model. Findings indicate a positive attitude towards the application, although technical issues were identified as a hindrance. Pedagogical suggestions were made. Similarly, (Niladatika & Hasanuddin, 2021) investigated the use of Jamboard in English language classrooms and found he effectiveness of Google Jamboard as a teaching tool during the COVID-19 pandemic. Results from a survey and interviews indicate positive attitudes and agreement on its usefulness. In conclusion, Google Jamboard is a suitable digital tool to enhance e-learning.

However, there is a gap in the literature regarding the use of Jamboard specifically for self-introduction among ESP students. This study aims to address this gap by examining students' attitudes towards Jamboard as a digital platform for self-introduction.

#### **METHOD**

The research design utilized in this study is a mixed-method approach, which involves collecting and analyzing both quantitative and qualitative data. The research was conducted among second-semester students of the Faculty of Sharia at UIN Sayyid Ali Rahmatullah in the academic year 2022/2023, with a focus on their attitudes towards the use of Jamboard in the context of ESP, specifically in the area of

economic Sharia law. The sample size consisted of 113 students from three different classes.

The data collection tools used in this study were a Likert scale questionnaire and open-ended questions. The Likert scale questionnaire contained several items related to the use of Jamboard, and the respondents were asked to rate their level of agreement or disagreement on a five-point scale, ranging from Strongly Agree to Strongly Disagree. The open-ended questions aimed to elicit students' perceptions regarding the use of Jamboard, including their likes, the most interesting feature, challenges, and difficulties faced, and suggestions for future use.

The quantitative data collected from the Likert scale questionnaire were analyzed using SPSS software to generate descriptive statistics, while the qualitative data collected from the open-ended questions were analyzed using qualitative methods. The use of both quantitative and qualitative methods allowed for a more comprehensive understanding of students' attitudes toward the use of Jamboard in writing self-introduction.

The study aims to contribute to the existing literature on the use of digital tools in language learning, particularly in the area of ESP. The research gap that this study seeks to address is the limited research on the use of Jamboard for writing self-introduction in the context of ESP courses. The findings of this study can provide valuable insights for instructors who want to integrate digital tools such as Jamboard into their language teaching practice. The recommendations made in this study can also help to enhance the effectiveness of Jamboard as a tool for promoting language learning and communication.

#### FINDINGS AND DISCUSSION

The researchers used a range score to classify the mean scores obtained from the Likert scale questionnaire responses. This range

score was adapted from a previous study conducted by Zaki & Ahmad (2017). According to this range score, a mean score between 1.00 and 1.89 was classified as very low, meaning that the response was strongly negative. A mean score between 1.90 and 2.69 was classified as low, indicating a negative perception. Mean scores between 2.70 and 3.49 were classified as moderate, meaning that the response was neither positive nor negative. Mean scores between 3.50 and 4.29 were classified as high, indicating a positive perception. Finally, mean scores between 4.30 and 5.00 were classified as very high, meaning that the response was strongly positive.

Using this range score, the researchers were able to interpret the participants' responses in a more nuanced way. It allowed them to differentiate between very low, low, moderate, high, and very high levels of perception. This classification was used to analyze the data obtained from the Likert scale questionnaire responses and to provide a more detailed understanding of the students' attitudes towards the use of Jamboard in writing self-introductions.

Table 1. Descriptive Statistic of four aspects of using Jamboard

Aspect of Criteria	n	Mean
Usefulness of Jamboard	131	4.02
Ease of Jamboard using	131	3.62
Jamboard appearance	131	3.99
Attitude toward the	131	3.75
Technology		

In this paragraph, the researcher is providing an overview of the results of the descriptive statistics in the study. The mean score of the respondents' perception of using Jamboard for writing selfintroduction is 3.8, indicating that the students have a high perception of the technology's usefulness, ease of use, appearance, and interaction. This high mean score value is also reflected in the percentage of agreement and strong agreement in the Likert scale responses to the questionnaire items. Additionally, the standard deviation is 0.662, suggesting that the respondents' scores were relatively consistent and close to the mean score. These results are presented in Table 1 of the study, which provides a summary of the descriptive statistics for all the questionnaire items. Overall, these findings suggest that the students have a positive perception of Jamboard as a medium for writing self-introduction in the context of ESP, which has important implications for the integration of technology in language learning.

Statements	SD	D	N	A	SA
Jamboard is beneficial for my English for Specific Purposes (ESP) class.	0.9	2.7	27.4	38.9	30.1
Utilizing Jamboard can help me improve my ability to write self-introduction.	0	3.5	24.8	40.7	31
Jamboard is great for creatively visualizing self-introduction.	0	2.7	22.1	36.3	38.9

Table 2. Students' perceptions towards the usefulness of Jamboard

#### The usefulness of Jamboard

The first part of the questionnaire aimed to gather information about students' perceptions of the usefulness of Jamboard for writing self-introductions. The findings indicate that students had a positive perception of the usefulness of Jamboard for this purpose. The mean score for the usefulness of Jamboard was the highest among all items on the Likert scale, with a score of 4.02. This suggests that students find Jamboard to be a useful tool for writing self-introductions.

Moreover, the majority of respondents agreed or strongly agreed with the statement that using Jamboard can positively help them improve their ability to write self-introduction. Specifically, over 70% of the respondents agreed or strongly agreed with this statement, indicating that students believe that Jamboard can help them enhance their writing skills. Additionally, students strongly agreed that

Jamboard is good for visualizing self-introduction. This suggests that students found Jamboard to be an effective tool for presenting their ideas in a clear and organized manner.

Overall, the findings indicate that students had a positive perception of the usefulness of Jamboard for writing self-introductions in ESP class. These results have important implications for the use of Jamboard in language learning, particularly for ESP courses. By providing a collaborative space where students can share their ideas and receive immediate feedback, Jamboard can potentially enhance students' writing skills and improve their communication skills in the target language.

Statements	SD	D	N	A	SA
It is easy to get proficient with Jamboard and its features.	0	5.3	40.7	38.9	15.0
I found it easy to create a self-	0	5.3	46	30.1	17.7

Table 3. Students' perceptions toward the ease of using Jamboard

## The Ease of using Jamboard

In this part of the study, the researchers investigated the students' perceptions of the ease of using Jamboard in the digital age. The results, as shown in Table 1, indicate that the ease of using Jamboard received the lowest mean score of the four aspects measured in the questionnaire. This suggests that students found using Jamboard to be a bit challenging compared to other aspects of its use.

Additionally, the findings show that 40.7% of the students expressed a neutral attitude towards their proficiency in using Jamboard and its features. This implies that almost half of the respondents neither felt confident nor struggled when using Jamboard. Similarly, the students also showed a neutral attitude towards the easiness of creating self-introduction using Jamboard. These results suggest that the ease of using Jamboard for writing self-introduction shows

moderate perceptions among the participants.

Overall, these findings indicate that while the students perceived the usefulness of Jamboard for writing self-introduction positively, they also found using it somewhat challenging. Therefore, it is recommended that teachers provide adequate guidance and training on how to use Jamboard effectively to enhance students' proficiency in using the platform.

Statement	SD	D	N	A	SA
Compared to traditional media such as book and whiteboard, Jamboard's appearance is unique.	0	0	28.3	31.9	39.8
The appearance of Jamboard encourages me to compose a self-introduction in English confidently.	0	3.5	39.8	29.2	27.4

Table 4. Students' perception towards Jamboard's appearance

### Jamboard appearance

The third aspect of the study explored students' perceptions of the appearance of Jamboard, which refers to the visual design and layout of the tool. The findings indicate that the mean score for this aspect is 3.99, which is considered high and suggests that students have a positive perception of the Jamboard appearance. The table shows that over 70% of the students agreed and strongly agreed that the Jamboard appearance has uniqueness compared to other media like whiteboards and writing books.

Moreover, the findings suggest that students perceive the Jamboard appearance as a factor that can influence their confidence in writing self-introduction. Specifically, 39.8% of the students were neutral about whether the Jamboard appearance could encourage them to write self-introduction confidently. This suggests that although the Jamboard appearance is viewed positively overall, its impact on

students' confidence levels may not be as clear cut.

Overall, the study shows that students have a high positive perception of the Jamboard appearance, which suggests that the tool's design and visual elements may play a crucial role in its effectiveness as a medium for writing self-introduction in ESP classes.

Statement	SD	D	N	A	SA
As an ESP student, I believe Jamboard will be beneficial for studying.	0	0	28.3	38.9	32.7
I can utilize Jamboard to enhance my English proficiency in other areas.	0	4.4	44.2	28.3	23.0
Jamboard is quite useful for enhancing my writing ability.	0	1.8	38.1	37.2	23

Table 5. Students' Attitude toward the Jamboard as new technology

#### Students' attitude toward the Jamboard as new technology

In this aspect of the study, the researchers explored the students' attitudes towards Jamboard as a new technology. The mean score of 3.75 indicated that the students had a high positive perception of Jamboard. The majority of the students, over 71%, agreed that Jamboard would be beneficial for studying. This finding suggests that students recognized the potential benefits of using Jamboard in their learning process.

However, the results also showed that 44.2% of the students were neutral about using Jamboard to enhance their English proficiency in other areas such as listening, speaking, and reading. This finding suggests that the students may not have fully understood the potential of Jamboard beyond writing self-introduction. Therefore, it may be necessary to provide students with more information about the diverse functions of Jamboard in the future.

Moreover, the study found that more than 60% of the students agreed that Jamboard is useful for enhancing their writing ability.

This finding indicates that the students recognized the potential of Jamboard to improve their writing skills. Therefore, it is recommended that Jamboard should be used more frequently as a tool for enhancing students' writing ability in ESP classes.

Overall, the students showed high attitudes towards Jamboard as a new technology for helping them to write self-introduction in ESP class. The positive perception of Jamboard among students suggests that it can be an effective tool for improving students' writing skills in ESP.

#### DISCUSSION

# The students' perceptions of their Jamboard for writing self introduction.

In order to provide context for the analysis of students' perceptions of using Jamboard for writing self-introductions, it is helpful to provide examples of work that students have submitted through Google Jamboard. These examples can give an idea of the range of approaches that students have taken when using this digital tool. By looking at these examples, one can see how students have used the various features of Jamboard, such as text boxes, images, and sticky notes, to create their self-introductions. Additionally, it can be useful to analyze these examples to identify common strengths and weaknesses in students' work, which can inform how Jamboard is used in the classroom in the future.

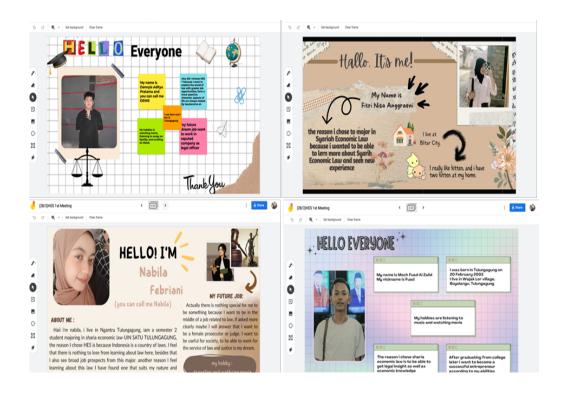


Figure 1. Examples of work that students have submitted through Google Jamboard.

The second finding of the study was centered around gathering the opinions of students on the use of Jamboard as a medium to support their writing of self-introductions. Upon analysis of the responses, it was found that students generally viewed Jamboard as a tool with several advantages. Some students commented that using Jamboard helped to enhance their creativity and made the process of writing a self-introduction more enjoyable. However, it was also noted that some students experienced difficulties while using Jamboard to develop their writing. In light of this, some of the students offered suggestions for the better utilization of Jamboard in future learning activities. To gain a more comprehensive understanding of the students' perceptions regarding the use of Jamboard, Word Cloud was utilized to provide a visual summary of the key themes that emerged from their responses.



Figure 2. Students' perceptions of what they liked about Jamboard.

The first inquiry in the study aimed to determine what students enjoyed about using Jamboard as a medium for writing self-introductions. The analysis of a word cloud, presented in the accompanying picture, revealed that students found Jamboard to be an interesting tool for their learning activity. More specifically, they appreciated the features that allowed them to express their creativity, resulting in attractive self-introductions. Several students' responses were chosen as exemplars of their positive perception of Jamboard, such as;

"I can express the design that I want" – Student 8

"Jamboard makes the learning fun" – Student 12

"It was easy to introduce oneself creatively" – Student 15

"It is interesting and user-friendly appearance of Jamboard"

— Student 19

"Ability to prevent the boredom" – Student 49

"It is easy to access" - Student 62

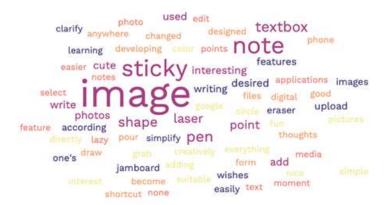
"Able to demonstrate the idea and imagination" – Student 86

The finding of the present study is in line with the latest research that highlights the importance of using digital tools to enhance students'

learning experiences. According to Liu et al. (2018) the integration of digital tools, such as Jamboard, in language learning provides students with a more engaging and interactive environment. Cladis (2020) further argue that such tools promote creativity and critical thinking, which are essential skills for students in the 21st century.

Moreover, research conducted by Irmayani, Masruroh, & Wulandari (2022)showed that digital tools, including Jamboard, can increase students' motivation and engagement in the learning process. The authors suggest that digital tools provide students with a sense of ownership over their learning, which can lead to a more positive attitude towards the subject matter.

Figure 3. Students' perceptions of what they did not like about Jamboard.



In the subsequent question, the study aimed to identify the features of Jamboard that students liked the most. According to the word cloud analysis, the image feature that allowed them to creatively attach pictures in Jamboard was found to be the most popular among students. In addition, the sticky note feature was also considered interesting by the students. The laser pen feature was identified as another appealing aspect of Jamboard that helped the students to develop their self-introduction writing. Other features such as the eraser that supported design development were also mentioned. The following excerpts illustrate the students' preference for using Jamboard:

"The sticky note color is good" - Student 8

"The image feature is great because we can add pictures creatively" - Student 12

"Everything is simple" - Student 27

"The image feature is amazing because we can adopt pictures directly from Google" - Student 32

"The textbox feature is useful for showing our thoughts digitally" - Student 83

"The pen feature is great because I can write as I want" - Student

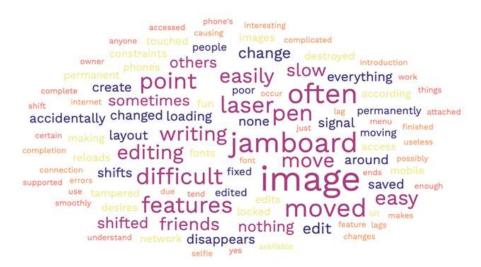
The findings of this study align with recent research on the use of digital tools for learning and creativity. Studies have shown that digital tools can promote student engagement, enhance creativity, and facilitate collaborative learning (Irmayani, Masruroh, & Wulandari, 2022; Khoiriyah et al., 2022). Jamboard, as a digital tool, offers various features that enable students to express themselves creatively and collaborate with their peers, as evidenced by the positive responses of the students in this study. The image feature, for example, allows students to incorporate visual elements in their self-introduction, enhancing the overall impact of their presentation. The sticky note feature also enables them to organize their thoughts and ideas in a visual manner, making it easier for them to communicate their message effectively.

Moreover, the laser pen feature, mentioned by some of the students in this study, can be particularly useful in facilitating the writing process. According to Dong et al. (2021), digital tools that allow for free form writing and drawing can enhance students' creativity and help them to generate new ideas. The eraser feature, also mentioned by the students, allows for easy editing and refining of their work, promoting the development of design skills.

Therefore, this study's findings support the use of digital tools

such as Jamboard in promoting student engagement, creativity, and collaborative learning. Jamboard's features enable students to express themselves creatively, organize their thoughts, and refine their work, promoting their development of essential skills for the 21st century. Future research can explore the impact of digital tools like Jamboard on student learning outcomes and investigate ways to optimize their use in educational settings.

Figure 4. Students' perceptions of what they found difficult about Jamboard.



The findings of the study suggest that while students found Jamboard to be an interesting tool for writing self-introductions, there were also some limitations to its use. The analysis of a word cloud revealed that some students had difficulty using Jamboard and experienced issues such as:

"The picture is easily shifted" - Student 9

"Everyone can edit my project" - Student 12

"It is hard to use on a mobile phone" - Student 40

"It is not easy due to the Wi-Fi connection" - Student 55

"It is hard to write with the pen" - Student 71

"Need more features" - Student 83

These findings are in line with recent research that emphasizes the importance of considering both the advantages and limitations of using technology in education (Escueta et al., 2017). Overall, the study highlights the potential of Jamboard as a tool to support creative writing, while also identifying areas where improvements can be made to enhance its usability and effectiveness in the classroom. However, the present study also revealed that some students encountered difficulties while using Jamboard. These findings align with the research of Van Allen & Zygouris-Coe (2020)who highlighted the importance of providing adequate training and technical support for students when introducing digital tools in the classroom. A study by Onuh et al., (2022) found that challenges such as the quality of internet connectivity, technical difficulties, and limited access to devices could affect the use of digital tools in classrooms.

To address these limitations, it is important to provide adequate support and training to students to help them use digital tools like Jamboard effectively. This can include providing clear instructions, offering technical support, and ensuring access to appropriate devices and internet connectivity. Additionally, developers can incorporate user-friendly features in digital tools to enhance their usability and minimize the occurrence of technical difficulties.

Moreover, the study revealed that while students enjoyed using Jamboard for their self-introduction writing, they also expressed some limitations that hindered their experience. However, some students suggested possible solutions that could improve their experience with Jamboard. For instance,

"Jamboard should allow individual saving and locking features to prevent other students from changing or accessing the slides" - Student 4

"Hope we can use Jamboard quite often" - Student 19

"Create more features" - Student 26

"Improve the editing features such as the font and color" - Student 66

"Improve the features to avoid access issues due to the slow connection" - Student 106

Research supports the importance of taking into account students' feedback and suggestions to improve their learning experiences. According to a study by Carless & Boud (2018); Flodén (2017), student feedback is essential for effective teaching and learning. Incorporating student feedback can help improve the quality of the educational experience and foster a positive learning environment. Additionally, research by Khoiriyah et al. (2022) suggests that technology-enhanced learning tools, such as Jamboard, can be effective in promoting active and collaborative learning experiences. However, it is crucial to consider students' perspectives and feedback to ensure that these tools are used effectively and meet the needs of learners.

Research suggests that there is a growing trend towards using digital tools in education, and Jamboard is just one example of such a tool. However, it is important to consider the usability and limitations of these tools to ensure that they enhance rather than hinder learning experiences. For instance, a study by Liu et al. (2018) found that the use of digital tools in the classroom positively impacted students' motivation and engagement, but that usability issues such as slow loading times and technical difficulties could negatively impact students' learning experiences.

In sum up, while students in the study enjoyed using Jamboard for their self-introduction writing, their feedback on its limitations and suggestions for improvement should be taken into consideration. Incorporating individual saving and locking features, creating more features, and improving editing and connectivity features could enhance the overall learning experience of using Jamboard. Further research is necessary to determine the effectiveness of Jamboard and

other digital tools in enhancing student learning experiences.

#### **CONCLUSION**

The study explored the perceptions of students regarding the use of Jamboard as a tool to support their writing of self-introductions. Although students reported several advantages of using Jamboard to enhance their creativity and make the writing process more enjoyable, some encountered difficulties in developing their writing. The study underscores the importance of considering both the advantages and limitations of using technology in education, with researchers recommending that students be provided with adequate support and training to use digital tools like Jamboard effectively. Educators should consider incorporating Jamboard into their instructional design as a tool for promoting student engagement, creativity, and collaborative learning, while developers should incorporate user-friendly features that enhance the usability of their tools. Additionally, future studies should investigate the impact of digital tools like Jamboard on student learning outcomes and explore the relationship between students' perceptions of digital tools and their actual use of these tools in the classroom. Overall, the study suggests that digital tools like Jamboard can be valuable for enhancing student learning experiences when used effectively.

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