

## The Online Learning Creativity Using the Google Meet Platform in Vocational High Schools

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**Abstract.** *Online learning during the Covid-19 pandemic is still looking for the best model. One important capital is the availability of online learning platforms. However, no studies currently explain the learning process using a unique platform for creativity. This study aims to describe the perceptions of teachers and students in learning during synchronous learning using the Google Meet platform and their creativity. This research is a qualitative descriptive study. The subjects in this study were teachers and students in vocational high schools conducting online learning. Data collection techniques were carried out through observation, interviews, and surveys. The instruments used were observation sheets, interview guidelines, and questionnaires. Data analysis was done using the triangulation technique; then, the final result was analyzed using the percentage technique. Based on field research, it is known that the Google Meet application is more effective than other learning application media. The use of Google Meet that students and teachers are interested in certainly supports effective online learning during the Covid-19 pandemic because students are more controlled in synchronous learning and teachers are more creative because of the features that support the Google Meet platform. The stages of online learning, from planning, and implementation, to evaluation through the Google Meet platform, can be very well facilitated. Thus teachers can use Google Meet as an alternative platform to support online learning because it is relevant and integrated with other learning support features.*

**Keywords:** *Covid 19 Pandemic, Online Learning, Google Meet Platform*

### INTRODUCTION

Covid-19 has spread to 185 countries worldwide, including Indonesia, and has significantly impacted the education system in the country. The transition from offline to online learning has brought about a number of challenges. One of the main obstacles is the lack of preparedness among students for this shift in the learning approach. Across the globe, online learning is being developed and implemented with the help of various technological platforms to ensure that students can continue their studies despite the limitations posed by the current situation. Indonesia, too, is witnessing the efforts of schools to adapt to the new learning habits necessitated by the Covid-19 pandemic.

Teachers face several challenges in the implementation of online learning. One of these challenges is the difficulty in effectively managing online classes while also trying to cover the curriculum. The limited study time available often makes it challenging for teachers to meet the required teaching hours. Additionally, communicating with parents, who are now taking on a more active role in supporting education at home, can prove to be a daunting task for teachers. On the other hand, students also encounter their fair share of obstacles during online learning. They find it difficult to maintain concentration while studying from home and express frustration with the reduced interaction with their teachers. Furthermore, increased feelings of stress and boredom have

been reported among students. These issues can lead to significant long-term problems (Widodo & Nursaptini, 2020).

The integration of online learning and the modernization of education is crucial for teachers to successfully adapt to the paradigm shift in classroom instruction. Teachers must now possess the skills to effectively utilize and navigate information technology within the learning environment (Astini, 2020). The mastery of technology by teachers is essential in supporting educational changes in the post-Covid-19 era. As learning continues to evolve alongside technological advancements, it becomes possible to engage in educational activities from anywhere and at any time, making learning more accessible and convenient for both teachers and students. This approach aims to enhance the quality of education and produce graduates who are well-equipped to thrive in the modern era.

Contemporary learning is increasingly focused on embracing technological advancements to facilitate interactive, productive, practical, inspiring, constructive, and enjoyable learning experiences (Purwoko, 2017). Additionally, students are expected to acquire essential life skills through the application of these technologies. Therefore, it is important to conduct research that explores the perceptions of teachers and students regarding the ongoing online learning initiatives. Moreover, it is crucial to ensure that the chosen technology platforms adequately support the learning process, which can be verified through direct feedback from students regarding their experiences with online learning.

In the context of vocational high schools, online learning models are being sought to ensure that students can continue their education (Ningsih & Erdisna, 2021; Jatmoko, et al., 2021). The use of the internet in schools allows students to access various literary and scientific references quickly, thus facilitating the teaching and learning process. One such internet-based learning method is e-learning (Widiyono, et al., 2019). Ongoing research focuses on identifying supportive applications for online learning, including the utilization of WhatsApp in various learning situations. However, the effectiveness of using this application is hindered by multiple obstacles and is perceived as less effective by both teachers and students (Rakhmah, Sapti, & Pangestika, 2021). Among the platforms utilized in online learning, Google for Education stands out as a notable innovation from Google, specifically designed to assist teachers and students in their teaching and learning activities (Daud, 2019). Google for Education offers various services, such as Google Meet, Google Classroom, Google Mail, Google Calendar, Google Drive, and Google Docs, which are highly beneficial for the teaching and learning process within educational institutions.

The Google Meet platform is commonly used for video conferencing purposes in online learning. It enables teachers and students to engage in audiovisual calls, both in smaller settings and with larger groups. Additionally, Google Meet offers a wide range of features that support the implementation of online learning. By utilizing Google Meet, teachers can easily present learning materials and foster active and creative classrooms through interactive discussions and interactions with students (Prisuna, 2021). Online learning, when approached creatively and professionally, still presents positive opportunities. A survey conducted in several vocational schools in Purworejo indicates that the use of Google platforms is sufficient to assist teachers in conducting online learning. However, teachers in vocational schools have yet to fully explore all the available supporting features within Google, despite the relatively creative learning approaches of vocational school students (Perdana & Sugara, 2020).

The utilization of the Google Meet platform in vocational schools mostly relies on standard features such as video conferencing, while many integrated features in Google, such as Jamboard and Google Drive, can enhance interactive presentations and allow the saving of discussion results

in Google Drive as evidence of student work. Therefore, utilizing the Google Meet platform for learning activities is crucial to ensure student comprehension is confirmed during the learning process. Asynchronous confirmation activities can be conducted, which are necessary to strengthen learning and ensure the continued relevance of blended learning schemes utilizing the Google Meet platform after the Covid-19 pandemic. Consequently, online learning can closely resemble traditional face-to-face learning if teacher-student interactions are appropriately facilitated. The Google Meet platform, with its array of supporting features, creates an environment that simulates direct learning, enabling teachers to conduct the learning process from beginning to end, while interactions can be adequately facilitated and monitored.

This study focuses on investigating the perceptions of teachers and students regarding the utilization of Google Meet in the context of online learning. Perception, in this context, refers to the direct responses and impressions that teachers and students develop through their senses as they engage with the Google Meet platform in vocational high schools (Partos, Cropper, & Rawlings, 2016). Essentially, perception provides a comprehensive picture of individuals' impressions or responses after they have absorbed information and experienced online learning through the Google Meet platform. Previous research has demonstrated the effectiveness of using Google Meet in facilitating teaching and learning processes, particularly in enhancing student communication through increased opportunities for presentations (Hutajulu, 2022). In comparison, the present study aims to describe the specific perceptions of teachers and students concerning their experiences with the Google Meet platform in online learning. Additionally, this research aims to provide insights into the creativity exhibited by teachers as they navigate the various stages of online learning, utilizing the features available within the Google Meet platform.

## **METHOD**

The research method is qualitative research using a descriptive-analytical approach. Qualitative research means exploring and understanding the meaning of individual and group behavior in a phenomenon, case, issue, and so on (Aspers & Corte, 2019). The stages in this research are designing a conceptual framework, determining the research problem, selecting research subjects, instrumentation, data collection, data analysis, and qualitative narrative (Creswell, 2016).

The conceptual framework is designed to determine the focus of the research and the aspects to be studied. The aspect that will be examined in this research is the perception of teachers and students regarding the ease of using the Google Meet platform and comparisons between platforms used in learning. Then, the researcher formulates research problems to be followed up in developing research instruments.

The subjects in this study were teachers and students at vocational high schools in the Purworejo area. A total of 6 teachers and 32 students were selected purposively from three different schools. The subject was chosen because, based on previous observations, it provided information that the three schools used the Google Meet platform in online learning. Online learning in specific subjects was chosen because teachers and students carry out learning activities using the Google Meet platform and other platforms such as Google Classroom, WhatsApp Groups, and other applications.

The instruments used in this study were 1) observation sheets used to gather initial information from schools that carried out online learning using the Google Meet platform, 2) interview guidelines used to obtain information from teachers about what creativity was done

during online learning, and 3) questionnaires for students were used to get responses during online learning using the Google Meet platform.

The procedure in this study follows the survey stages, where each school that has met the criteria for the initial observation results is then carried out by collecting data by providing a post-online learning questionnaire. Data is then combined and analyzed to find information following the research objectives.

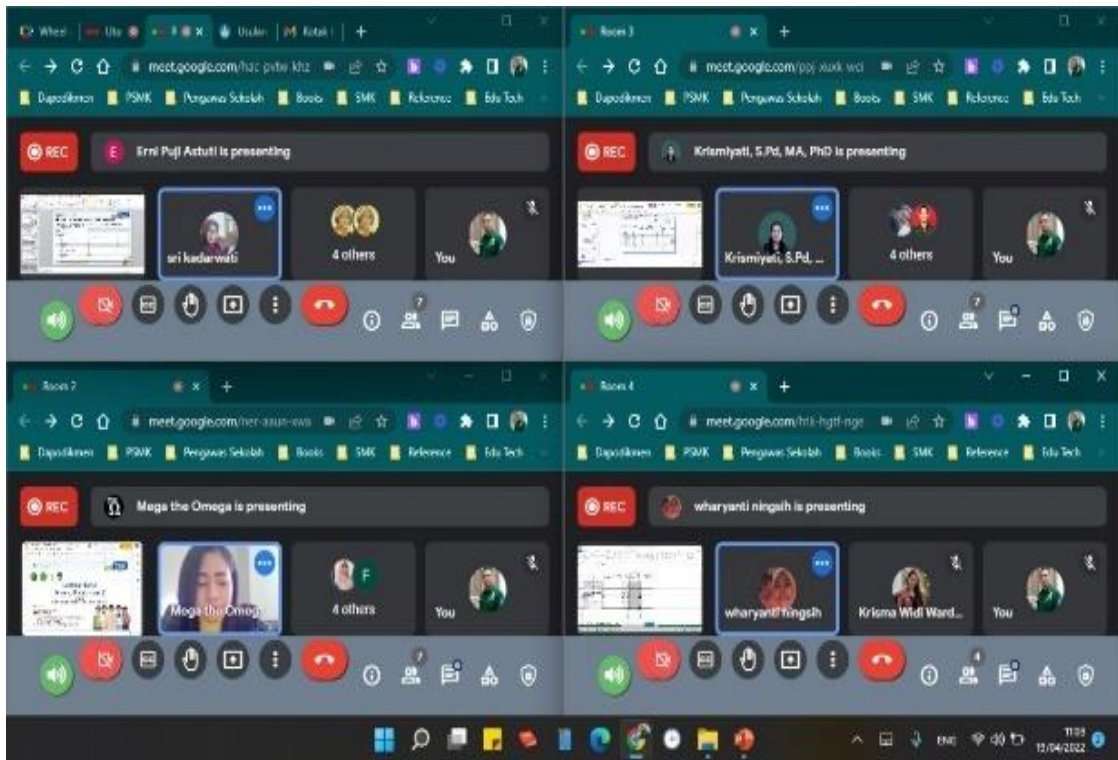
Data was collected by triangulating data through field observations, interviews, surveys, and documentation studies at a vocational high school in Purworejo. The data were analyzed using an inductive paradigm that seeks to understand the meaning and perception of the importance of using this platform and constructing the phenomenon of online learning in a vocational high school in Purworejo. In the final stage, to provide a qualitative narrative, the data is presented in 2 ways, namely in the form of diagrams and descriptions. Diagrams make it easy for readers to see results quickly and systematically.

## **FINDINGS**

Online learning continues to be implemented in vocational schools in Purworejo, with various learning platforms being trialed to identify the most effective model. Among these platforms, the Google Meet application remains in use. Interviews conducted with teachers from three different schools reveal that initially, teachers relied on WhatsApp groups and Google Classroom as learning aids. The utilization of these two platforms proved sufficient in facilitating communication between teachers and students, particularly in terms of assigning structured tasks. However, over time, students began to feel bored with the existing patterns, prompting teachers to explore more creative approaches to enhance the learning experience, especially during confirmation activities. Students expressed a desire for more in-depth exploration of the concepts being taught, as they felt that the focus had primarily been on assignments. Consequently, interviews highlight the necessity of an online learning platform, specifically during the confirmation stage, to address students' understanding of the concepts covered. The Google Meet platform, with its comprehensive range of features, can effectively fulfill the requirements of online learning.

Additionally, the utilization of the Google Meet platform has been observed to facilitate the smooth progression of various stages in the learning process for both teachers and students. During the planning phase, teachers demonstrate effective preparation by organizing learning materials and optimizing the use of the Google Meet platform. They make use of the platform's features to upload and share relevant documents, utilize multimedia resources, and present information in an engaging manner. This ensures that students have access to a wide range of resources that complement the lesson objectives, thereby enhancing their overall learning experience.

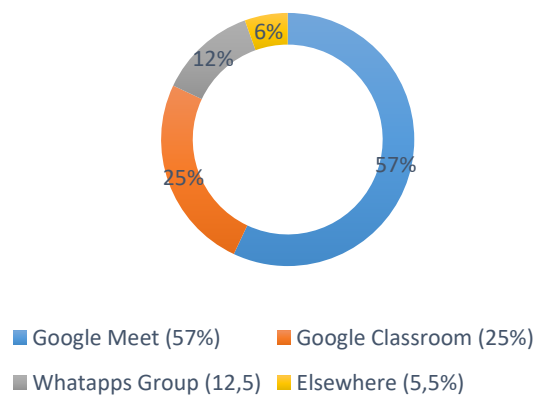
In the implementation stage, teachers leverage the "breakout room" feature provided by Google Meet. This feature enables them to create smaller groups within the virtual classroom setting, allowing for focused discussions and interactions among students. By utilizing breakout rooms, teachers can foster collaboration, critical thinking, and confirmation of understanding within study groups. This interactive approach enhances student engagement and facilitates peer-to-peer learning.



**Figure 1. Students Seemed Enthusiastic about Discussing in the Breakout Room**

Figure 1 captures a moment where students are actively engaged and enthusiastic during their discussions in breakout rooms. The visual representation of their involvement showcases the effectiveness of online learning in fostering a sense of excitement and interest among students. Despite the physical distance between them, students still managed to exhibit a high level of enthusiasm, highlighting the potential of online platforms in creating an engaging learning environment.

To gain further insights into the effectiveness of different platforms utilized in online learning, a survey was conducted. The aim was to compare and evaluate the various tools and software that assist teachers in delivering online lessons. The findings are presented in Figure 2, which outlines the perspectives of Vocational High School students in Purworejo regarding the most effective platform for their online learning experiences.

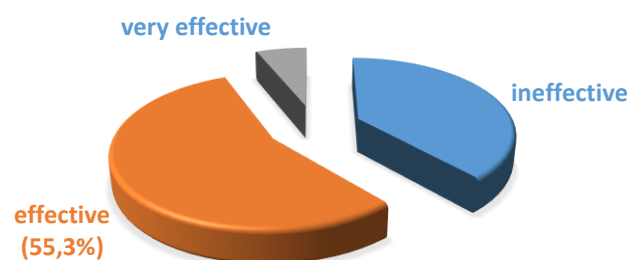


**Figure 2. Comparison of the Most Effective Platforms for Online Learning According to Vocational High School Students in Purworejo**

According to the survey results, a significant majority of students (62.5%) identified Google Meet as the most effective platform. This particular software stood out as the preferred choice among students due to its seamless user interface and comprehensive features. It enabled smooth communication and collaboration during virtual classes, enhancing the overall learning experience. In second place, with a preference of 25%, was the Google Classroom platform. This online classroom management system provided students with a structured and organized approach to accessing course materials, submitting assignments, and engaging in discussions. Lastly, the Whatsapp Group platform garnered a percentage of 12.5%, representing a smaller portion of students who found this communication tool effective for specific purposes within their online learning journey.

To delve deeper into the reasons behind the students' preference for Google Meet, valuable insights were gathered through discussions with teachers and students. It was revealed that Google Meet offered several advantages, including the ease with which teachers could monitor and manage the learning process. The platform provided tools and functionalities that facilitated effective classroom management, allowing educators to conduct seamless virtual lessons and maintain students' focus and engagement. Furthermore, students expressed their appreciation for Google Meet's user-friendly interface, which enabled them to easily comprehend and grasp the learning materials. The clear and efficient communication channels available on the platform fostered active participation and collaboration, enhancing the overall learning experience for students.

The results of interviews conducted with vocational high school teachers in Purworejo confirmed that the Google Meet platform is deemed more effective compared to other online learning platforms in the region. Teachers found the Google Meet platform to be practical and user-friendly, facilitating the seamless delivery of educational materials. However, it is crucial to ensure that the perceptions of both teachers and students regarding the use of the Google Meet platform in online learning are aligned. Here are some student responses regarding their experiences with the Google Meet platform in the learning process.



**Figure 3. Vocational School Students' Opinions on Online Learning Using the Google Meet Platform**

Figure 3 provides insights into the opinions of vocational high school students in Purworejo regarding the use of the Google Meet platform for online learning. The findings reveal that approximately 55.3% of Class XI students consider the Google Meet platform to be more effective. According to the students, Google Meet enables direct communication with their teachers, allowing for a better understanding of the presented materials (Pernantah, Nova, & Ramadhani, 2021).

Moreover, students appreciate the platform's ability to facilitate real-time discussions and direct interaction with their teachers, particularly through the breakout room (BOR) feature. This feature effectively supports group activities, fostering more dynamic and engaging exchanges among students. Within these smaller group discussions, the teacher can closely monitor the process and enhance the discussions by posing thought-provoking questions (Purwoko, Nugraheni, & Instanti, 2019).

The inclusion of these student perspectives highlights the benefits of the Google Meet platform in online learning, as reported by the students themselves. The platform's direct communication capabilities and the breakout room feature are particularly valued for their facilitation of effective teacher-student interactions and small group collaborations. These elements contribute to a more engaging and interactive learning experience, enabling students to grasp the material more effectively. By incorporating the opinions and experiences of both teachers and students, a more comprehensive understanding of the effectiveness and advantages of the Google Meet platform in the context of online learning is achieved. These findings underscore the platform's ability to enhance communication, facilitate collaborative activities, and ultimately support the overall learning process.

## **DISCUSSION**

The utilization of the Google Meet platform throughout the stages of planning, implementation, and evaluation has garnered positive responses from both teachers and students. This study focuses on leveraging the Google Meet platform to support effective online learning. The platform was chosen due to its perceived effectiveness, allowing teachers to deliver materials directly to students. It provides a flexible environment similar to traditional face-to-face instruction, enabling teachers to explain concepts with ease. Moreover, the platform enables real-time interactions, allowing teachers to meet students virtually and monitor their activities closely (Nasution & Nandiyanto, 2021). An additional advantage of the Google Meet platform is its accessibility, as it can be used free of charge without requiring a premium account like some other paid platforms.

Currently, blended learning, which combines traditional classroom instruction with online learning, is gaining traction (Zainuddin & Keumala, 2018). This indicates that online learning will continue to play a significant role in the teaching and learning processes across all educational levels. To ensure the successful implementation of online learning, innovative approaches are necessary, capitalizing on existing technologies. The effectiveness of online learning relies heavily on how well teachers can adapt and tailor their instruction to suit the online environment and meet student expectations. As such, several principles and factors that influence the effective use of digital technology in education become crucial considerations for educators (Benavides-Varela et al., 2020).

While it is undeniable that offline or face-to-face education has traditionally been considered more effective than online learning, this should not discourage teachers and students from actively engaging and fostering creativity in the online learning environment. Online learning still faces various challenges, including connectivity issues and the burden of internet data quotas for both students and teachers. However, it is essential for teachers to remain adaptable and embrace technological advancements, as the need for digital literacy and competency predates the emergence of the Covid-19 pandemic. Teachers are expected to continuously develop their professional skills and fulfill their responsibilities by aligning with students' needs and utilizing contemporary learning materials that keep pace with the evolving times (Kivunja, 2015).

In order for online learning to function as intended, teachers must leverage various tools such as the Whatsapp Group platform, Google Classroom, and Google Meet. The internet and multimedia technology have the potential to revolutionize content delivery and provide alternative approaches to classroom-based learning. Within the online learning process, effective and frequent communication becomes crucial among teachers and students, students and parents, and teachers and parents. This ensures that everyone remains synchronized in guiding students' learning activities from home (Setiawan, Rofi, & Jatmikowati, 2021).

In the context of online learning, the Google Meet platform allows teachers to monitor students' preparedness and engagement during the learning process. The on-camera feature enables teachers to visually assess whether students are attentive and ready to actively participate. Teachers can also enhance their instructional delivery by utilizing various learning media, ensuring that students can comprehend the material effectively. Moreover, the platform facilitates interactive discussions and question-and-answer sessions between teachers and students, as well as among students themselves. This shift from traditional face-to-face learning to online learning has been well-received by teachers and students, with minimal obstacles reported (Setiana, Kusumaningrum, & Purwoko, 2021).

The analysis of the aforementioned data regarding the most effective platforms for online learning, as perceived by students, aligns with the teachers' perspectives. Both groups highly recommend the use of Google Meet as the platform of choice. This finding is consistent with previous research, highlighting that Google Meet has proven to be an effective solution for revitalizing the teaching and learning process during the Covid-19 pandemic (Aswir, Hadi, & Dewi, 2021). Teacher creativity remains essential in supporting meaningful learning, even in an online setting (Purwoko, 2017). Therefore, teachers need to exhibit high levels of creativity to nurture students' potential and ensure their critical and constructive engagement, particularly when utilizing the Google Meet platform, to maintain the meaningfulness of the learning experience (Setiana, Purwoko, & Sugiman, 2021).

Despite the challenges associated with online learning, it is important to acknowledge its potential and actively seek solutions to overcome any limitations. By embracing technology and establishing effective communication channels, teachers can optimize the online learning experience, ensuring that students receive a quality education and support regardless of the physical distance between them. The utilization of the Google Meet Platform in vocational high schools offers several key features that bridge the gap between online and in-person learning. Through this platform, teachers can enhance their teaching methods and engage students in more interactive and constructive lessons. This is particularly crucial at the vocational high school level, where the Google Meet Platform enables teachers to maximize their creativity and students to actively participate in each lesson, resulting in a more effective learning experience.

## **CONCLUSION**

The utilization of the Google Meet platform offers several advantages in facilitating various stages of the learning process. It enables teachers to explore concepts, ensure students' comprehension of the material, and provide detailed explanations. Moreover, the platform fosters effective communication and feedback among teachers, students, and even peers. Compared to other learning applications, the Google Meet platform stands out due to its ability to bridge the gap between online and in-person learning, which is particularly valuable during



the Covid-19 pandemic. It effectively supports the planning, implementation, and evaluation phases of online learning, making it a relevant and integrated platform for educators. Therefore, teachers can consider using Google Meet as an alternative platform to enhance online learning, leveraging its compatibility with other supportive features.

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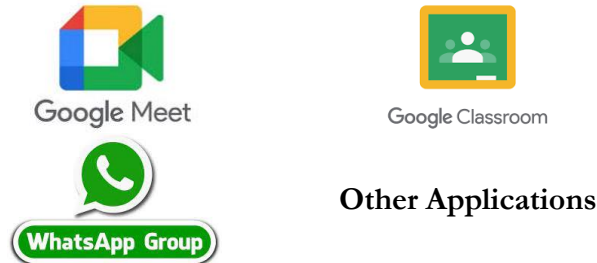
## AUTHORS' CONTRIBUTION

Author	Contribution
Riawan Yudi Purwoko	1. Designing and developing learning models for vocational high schools and developing online learning features assisted by the Google Meet platform 2. Arrange the dissemination of collaborative research results
Aci Primartadi	Analyze the characteristics of learning in vocational high school and assist in designing online learning.
Yosep Efendi	Assist in documenting activities and analyzing research data.
Thomas Amin	Carry out learning in class and collaborate with teachers in class

**APPENDIX**

**Questionnaire of Students' Perspectives on Online Learning**

Which of the following applications supports online learning at this time?



This questionnaire has eight stages of the flow of online learning developed using the Google Meet platform.

1. Carefully consider each statement concerning the learning material you have finished working on and determine its effectiveness in learning as a whole.
2. Give the correct answer according to your choice.
3. Consider each stage separately and make a choice.
4. Record your response by ticking (✓) on the answer sheet provided.

No.	Statement (Online Learning Stages)	Ineffective	Effective	Very effective
1.	Start from self (Associating previous understanding and experience with the material to be studied)			
2.	Concept exploration (Studying the material studied)			
3.	Collaboration room (break out room) (Discuss the problems given by the teacher collaboratively)			
4.	Guided reflection (Directions by the teacher for further understanding of teaching materials)			
5.	Contextual demonstration (Students make presentations in groups)			
6.	Understanding elaboration (Confirm understanding)			
7.	Real action (Complete the task given by the teacher)			
8.	Interaction			