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## Educational Utilization of Chromebook as Learning Medium to Increase Students Interest in Learning at SMP 2 Muhammadiyah Kartasura

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#### **ABSTRACT**

In the Industrial Revolution 4.0 era, technology developed rapidly in every aspect. Technology is an inseparable part of various aspects of life, including education. Technology actively contributes to the support of education. The presence of Chromebook is part of the entry of digitalization in the world of education. The use of Chromebook as a learning medium for students needs in-depth supervision and direction so that it can increase students interest in learning activities. Therefore, community service activity at SMP Muhammadiyah 2 Kartasura, Sukoharjo Regency is essential. The activity was carried out in the following stages: 1) survey and data collection; 2) determining the main ideas (themes) of research; 3) making activity materials; 4) socialization of educational activities with lecture; discussion, and demonstration methods; and 5)monitoring and evaluation. The results of this activity are: 1) survey and data collection activities at the research location ran smoothly; 2) formulated the research theme for the community, namely education on using Chromebook as a learning medium by utilizing a website based on Kahoot! learning games to increase student interest in learning; 3) activity materials in the form of exposure and socialization; 4) socialization of educational activities carried out by lecture, discussion and demonstration methods of education on the use of Chromebook as a learning medium for students: 5) learners get an understanding of the use of Chromebook and can use Chromebook as learning medium, in order to increase knowledge and add insight.

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#### INTRODUCTION

Education has a vital role in the development of human life (Priyambodo & Hasanah, 2019). In the Industrial Revolution 4.0 era, technology is developing very rapidly, as same as education (Wistiawati et al., 2023). Technology is an inseparable part of modern life. With the utilization of technology, there are new updates in various fields, including education. In education, technology has an active role in support of learning, make it easier to obtain educational content, and additional data sources, find specific information, and encourage interaction between the same level groups (Pratama & Rahman, 2023).

In today's digital era, communication and information technology become the integral in everyday life. One of the technology device that is gaining popularity among educational institutions is the Chromebook. Google develops these devices that offer innovative update solutions to enhance learners' learning experience in a more interactive, efficient, and in engaging way (Danuri, 2019).

With their Chrome OS operating system, Chromebook are specifically designed to support cloud-based learning. Where educational resources on this web are created and optimized for the web (Albataineh et al., 2024), this allows learners to access various learning resources, collaborate with classmates, and interact with educators in real-time without being limited by time and place. However, despite the massive potential of Chromebook as a learning medium, their optimal utilization should be improved to fulfill the needs of schools and educators.

Therefore, education on using Chromebook as learning media is essential. A deep understanding of it features and applications will create more dynamic and exciting learning. Teachers can use it as a learning media to increase students' interest in participating in the learning activities. So, in learning process students can be encouraged to actively participate and facilitate their understanding of the material (Qosim et al., 2023).

In this context, we will discuss practical strategies to educate educators and learners on using Chromebook in the learning process. A culture of learning in the digital age implies that school administrators are constantly on the lookout for educational innovations that strongly emphasize enhancing digital learning, and in the learning regularly, they also use the effective technology. To meet the various needs of each student, they try to create learning environments with technology and educational materials, and they continue to implement efficient technology also the cultural studies teaching methods across the curriculum. They also engage in community learning activities, encouraging collaboration, creativity, and innovation in the digital field (Musid et al., 2024).

According to Deafey Marjitol & Melor Md Yunus, learning the integration of technology and digital resources will make learners feel motivated and interested in participating in the learning activities. Learners' interest in learning will increase if Chromebook media can be understood and applied appropriately and creatively. This media will be a catalyst for educational transformation to create a collaborative and fun adaptive learning environment (Majitol & Yunus, 2023).

In the world of education, this digital era demands strengthening and improving the quality of learning by utilising digital medium to obtain scientific information and help facilitate the achievement of learning objectives (Saleh dkk., 2023).

To improve the quality of education through digital learning regulators, teachers, educators, and students are essential in improving the quality of education in digital learning (Mazrur & Jennah, 2023).

According to this reality and to support government programs, SMP Muhammadiyah 2 Kartasura, located in Sukoharjo Regency, Central Java Province, seeks to make learning digitization through Chromebook as a mandatory thing in learning activities.

In addition to supporting the central government programs, this supports the school's commitment to implementing paperless learning. Both the central government program and the school program focus on advancing technology used in education, especially leading to the digitization of learning and the orientation of improving the quality of human resources that excel in science and technology.

In the education unit, using Chromebook is a way to open mastery of technology for an educator. Regarding device infrastructure, Chromebook devices at SMP Muhammadiyah 2 Kartasura have Chrome Device Management installed from the beajar.id domain, making it easier to use in the teaching and learning process. It also have a special features for learning or exams that other Chromebook without CDM do not have (Qosim et al., 2023).

The importance of this training is based on several factors. First, digital literacy has become a basic necessity in daily life and work. By providing education on using Chromebook, students will be prepared to face future challenges better with the requiring qualified technological skills. Second, Chromebook provide various educational applications that enrich the learning process, allowing students to access materials interactively and collaboratively can increase students' interest in learning. Third, using Chromebook can improve learning effectiveness by facilitating distance learning and access to the latest information.

The importance of this training is based on several factors. First, digital literacy has become a basic necessity in daily life and work. By providing education on using Chromebook, students will be prepared to face future challenges better with the requiring qualified technological skills. Second, Chromebook provide various educational applications that enrich the learning process, allowing students to access materials interactively and collaboratively can increase students' interest in learning. Third, using Chromebook can increase the effectiveness of learning by facilitating distance learning and access to the latest information. Based on this background, the author chose a community service program to conduct education on using Chromebook as learning digitization at SMP Muhammadiyah 2 Kartasura, Kembangbahu District, Sukoharjo Regency. The purpose of this community service is to educate and equip students related to information and communication technology, especially about Chromebook utilization education as a digital learning media, to create a more interactive teaching and learning process. It also help students to understand how technology can be used as a tool to improve the learning process and academic results, it can increase students' interest in participating in learning activities.

#### **METHODS**

The implementation of this research activity began with a survey activity aimed to find the main problem. Figure 1 below shows the grand plan for problem-solving with a grand design model made after a discussions with the principal and teachers of SMP Muhammadiyah 2 Kartasura and the situation in the field.

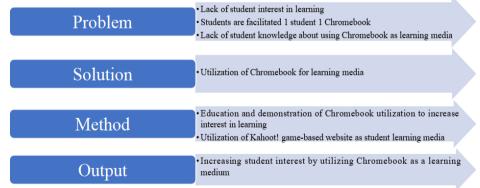


FIGURE 1. The grand design of problem-solving

This activity was held for two days, starting from the preparation stage and the core event, namely educational activities. This activity has five series of activities, which are describe as follows:

- Survey and Data Collection
  - The researcher collected information by conducting a survey. Then, they collected information about the governance of the Principal of SMP Muhammadiyah 2 Kartasura in handling digital-based learning activities.
- Determine the Main Idea (Theme) of Research
  - After conducting the phase 1 survey and obtaining information related to digital-based learning, the author formulated a plan to conduct community service research by raising the education theme of using Chromebook as learning media for students. In this activity, Chromebook as learning media will be combined with using a website based on Kahoot! Learning games to increase students' interest in learning.
- Preparation of Activity Materials
   After obtaining the main ideas from the research, the researchers formulated the material for the activities through exposure and socialization.
- Socialization
  - The researcher prepared all the needs for this socialization activity. The presentation of the material was carried out using the lecture and discussion methods. They also carried out demonstration activities to provide a more straightforward explanation to the participants of this activity, students of SMP Muhammadiyyah 2 Kartasura. This activity was attended by 17 students from the seventh and eighth grades.
- Monitoring and Evaluation
  - The implementation of socialization activities accomplished without any significant obstacles. After monitoring activities, the researcher noted the problems faced by teachers and students when using digital learning media and saw how far the progressed the research had.

## **RESULTS AND DISCUSSION**

Digitization efforts in education are an important thing to bring to the world of education. This effort is the first step in following the development of technology. The utilization of technology in education has been the focus of research in recent years, with particular attention to the use of devices such as Chromebook in the school environment. This discussion compare will review research related to the use of Chromebook as learning medium and their impact on students' interest in learning.

In a study conducted by Ramdhani, et.al (2024) conducted a study on "Optimizing the Use of Chromebook for Elementary School Education at SDN Plamongansari 01" and found that these devices can improve student access to digital resources and facilitate collaborative learning. This study emphasizes the importance of adequate training for teachers and students to maximize the benefits of this technology (Ramdani et al., 2024).

In the research of alifa et al, (2024) with the title utilization of Chromebook as a support for student learning at SMPN 1 Banjarmasin, it shows that the effectiveness seen from students' responses to the use of Chromebook is the enthusiasm of students who can provide new experiences in learning and fun so that it can create active learning that leads to increased student interest and motivation to learn, with the use of Chromebook students can master and understand lessons. This good effectiveness occurs when using a chromebook utilization strategy with a classroom situation utilization pattern where its use is combined with

the teaching and learning process and used in collaborative student projects and student school assignments (Alifa et al., 2024).

In the research of Heriansyah, et.al (2021) with the title Basic Introduction to Chromebook for Digitalization of Teaching and Learning Activities, and also as an educational medium so that students are not left behind by the current era, as well as making it easier for students for learning activities and also teachers to provide existing materials through the Chromebook, as well as minimizing the need to purchase books and also may be able to produce and provide teaching and learning activities to be newer and not monotonous (Heriansyah et al., 2021).

From the three literatures above, it can be concluded that the use of digitalization through Chromebooks shows the positive potential of using Chromebooks. Further research is needed to explore the effectiveness of Chromebooks in the specific context of SMP 2 Muhammadiyah Kartasura, taking into account unique factors that may influence the implementation and impact on student' interest in learning by the educational game Kahoot!

Based on research conducted at SMP Muhammadiyah 2 Kartasura during continuous learning, the results obtained from researcher observations show that some of people need to understand Chromebook as learning media. SMP Muhammadiyah 2 Kartasura school has provided one student with one Chromebook.

After observation, the researcher interviewed teachers at SMP Muhammadiyah 2 Kartasura in the next step. In this school learning activities, the teacher emphasizes reducing paper and switching to using Chromebook as learning media. Therefore, in developing students learning abilities and interests using Chromebook, researchers utilize Kahoot! as a learning media that carries educational and fun games.



FIGURE 2. Socialization of Chromebook Usage

In learning activities at SMP Muhammadiyah 2 Kartasura, researchers introduced interactive learning media that can be accessed through Chromebook to increase students' interest in learning. To clarify the development of students' interest in learning at SMP Muhammadiyah 2 Kartasura using educational game learning media in this study requires discussion. Therefore, it is necessary to improve the learning activities using Chromebook so students are eager to learn (Figure 2).

Kahoot! is an educational learning application features with a game show containing questions that can be accessed for free or for a fee. This application has a question display that can be equipped with images and videos to help the students understand the questions. Kahoot! is easy to use and can be accessed through the application or web (Damayanti & Dewi, 2021).

According to the teacher interviewed, "The obstacle in utilizing Chromebook as learning media is that educators must continue to be innovative in teaching because students are easily bored with material-focused learning". Because teenage students are still in the transitional stage of childhood, educational games can be the best solution to increase students' interest in learning according to their learning styles.

In theory, learning style refers to a person's personality, beliefs, choices, and behaviours that are used to help students in learning in a particular context (Ghufron & Suminta, 2020).



FIGURE 3. Assistance in using Chromebook

This is the one of the use Chromebook as a learning media, "Kahoot!". The method of utilization is as follows:

The research team conducted a demonstration to introduce students to the game they would use during the learning process. This learning initiative utilizes Kahoot! Website, an interactive quiz-like platform that creates a fun environment and enhances learning engagement in the classroom. Kahoot! can be a learning medium using a laptop and projector. The researcher demonstrated the game directly to students in grades seventh and eight, starting with explaining the rules of the game, the sequence of the game, and how to use the necessary tools. The demonstration went very good and smoothly, as the students showed their readiness by setting up their Chromebook and listening attentively by following the instructions on how to run the game technically (Figure 3).



FIGURE 4. Demonstration of Kahoot!

The picture above shows students enthusiasm in following the demonstration process using Kahoot! Website. The learning media that the researcher applied at SMP Muhammadiyah 2 Kartasura attracted the students' interest, who were very happy and enthusiastic about learning. Teachers at SMP Muhammadiyah 2 Kartasura are also pleased with the learning media that researchers offer. Learning activities using this media can be done by learning while playing can increase students' interest in learning (Figure 4).

Chromebook have been equipped with various Google learning features that are useful for learning activities in the classroom. Such as Google Drive, Google Forms, Google Docs, Google Slides, Google Meet, Google Classroom, and E-mail, as well as several websites such as Kahoot! Chromebook as learning media can increase student interest in learning. Purchasing Chromebook makes learning more accessible and efficient also increases students' interest.

Learning activities at school is must be adjusted to the characteristics of students. In learning, of course, there are rules and medium or tools used to achieve learning goals (Setiawan dkk., 2023). Students can do more varied learning activities with Chromebook because they can view videos and listen to audio and materials virtually. With Chromebook, students have varied learning activities because they can view videos and listen to audio and materials virtually. This makes students more active and enthusiastic and increases their interest in learning (Kresnadi et al., 2023).

Learning interest significantly influences student learning activities because students' interests will help them learn independently. Students' interest in learning will always focus on achieving their learning goals (Suratno et al., 2023).

## CONCLUSION

Based on the discussion above, it can be concluded that:

- Educational socialization on using Chromebook as learning media to increase students' interest in learning, provides an easy way for them to understand the use of Chromebook.
- Lecture, discussion, and demonstration approaches are used in educational activities for students.
   With the learning media that researchers apply at SMP 2 Muhammadiyah Kartasura, the utilization of learning media can increase students' interest in participating in learning activities.
- Chromebook positioning activities related to the educational utilization of it as learning media can be received better.

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