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Enhancing Educational Practices: Digital Map Exploration For Senior High School Teachers

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Abstract − This article discusses the implementation of a Google Earth training program for teachers at SMA Putra Bangsa Depok as part of an effort to develop technological skills in education. The training aimed to assist teachers in integrating technology into their teaching practices in line with *Kurikulum Merdeka* (Merdeka Curriculum), which emphasizes student-centered learning and the use of digital tools to enhance student engagement and understanding. The program included an introduction to Google Earth features, hands-on training, and an evaluation of the training outcomes. Although the training received positive feedback from the teachers, challenges such as limited time and inadequate equipment were identified. Therefore, it is recommended to conduct follow-up training sessions, provide ongoing support, and form a dedicated team focused on developing technology in education to ensure the optimal and sustainable use of this tool.

Keywords: Google Earth, Teacher Training, Merdeka Curriculum

1. INTRODUCTION

In today's digital age and the era of the Fourth Industrial Revolution, education is increasingly expected to adapt by using technology as a central part of the learning process. The introduction of the Merdeka Curriculum is a key milestone in supporting student-centered learning through various teaching tools designed to improve student competencies (Kemendikbudristek, 2021). This curriculum aims to enhance not only accessibility and interactivity in teaching but also promote learning methods that are inclusive, enjoyable, flexible, and context-based to meet the unique needs of every student (Festiyed et al., 2022; Yarsama, 2022).

One critical aspect of the Merdeka Curriculum is the ability of teachers to effectively use technology in their classrooms. At SMA Putra Bangsa Depok, a school that is working to implement this curriculum, teachers face challenges in developing their technological skills to deliver lessons in a more interactive and meaningful way. These challenges include adjusting the curriculum to fit individual student needs and managing time efficiently for project-based learning activities. Such activities aim to develop essential 21st-century skills like problem-solving, critical thinking, and creativity (Jufriadi et al., 2022;Yarsama, 2022). One possible solution is using Google Earth, a tool that allows users to explore a 3D map of the world and apply it to various subjects like Geography, History, Natural Sciences, and Social Sciences.

Before receiving training, teachers at SMA Putra Bangsa Depok had different levels of understanding and ability in using tools like Google Earth. While some teachers had already started using the tool in their lessons, others needed further training to fully use its potential in creating more interactive and context-based learning experiences (Anita & Astuti, 2022). The Google Earth training program for teachers at SMA Putra Bangsa Depok was designed to help them build their skills in using this technology as part of project-based learning. By improving their ability to use Google Earth, teachers are expected to create more engaging and meaningful lessons that align with the goals of the Merdeka Curriculum. The training also aims to reduce the gap between current teaching practices and the ideal way the curriculum should be applied, helping to make education more relevant and competitive (Jufriadi et al., 2022; Nafisa et al., 2021). This program is expected to make a significant contribution to improving teachers' skills with technology, allowing them to deliver lessons that are more engaging and relevant for students. It also highlights the steps, results, and impact of introducing technology in education at SMA Putra Bangsa Depok, further supporting the school's efforts to implement innovative teaching methods.

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2. METHODS

The community service program was carried out using a structured and systematic approach, involving several crucial stages to ensure optimal outcomes. It was held at SMA Putra Bangsa Depok and focused on teachers as the main participants. To enhance the effectiveness of the activities, supporting tools such as computers, projectors, and the Google Earth application were utilized. This well-planned approach not only addressed the specific needs of the participants but also emphasized the integration of technology as a means to enhance learning and support the professional development of the teachers.

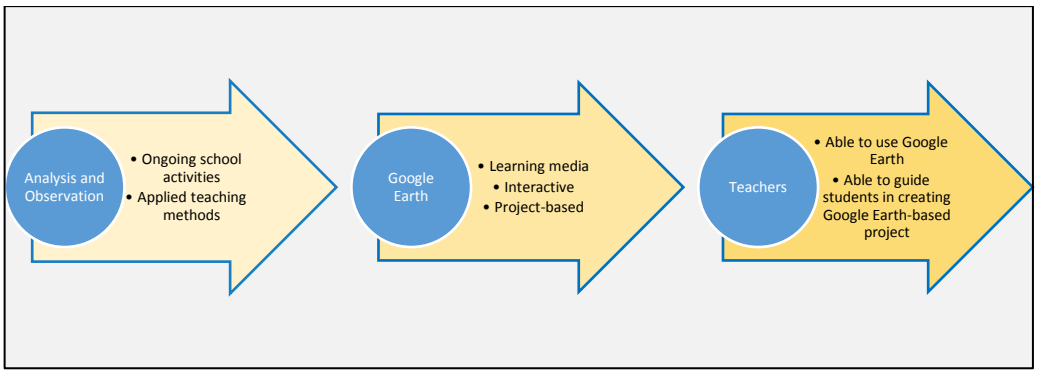

Figure 1. The Application of Science and Technology

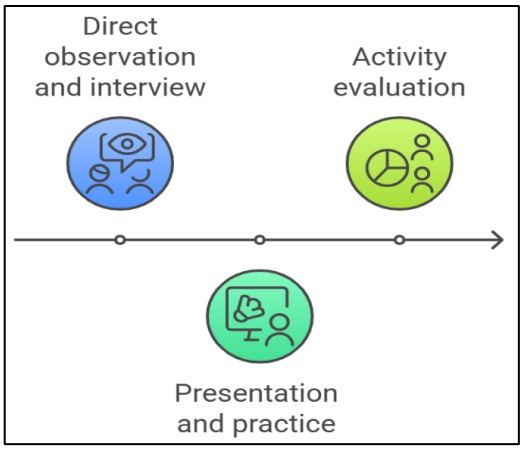

Figure 2. Stages of the Community Service Activities

The first phase of the community service involved direct observation and interviews. The team representatives visited the site to gather information on how teachers presented the material, observing both before and during the activities. Interviews with teachers helped identify their needs and the tools required for the training. This phase was important for ensuring the success of the project, as it provided a clear understanding of the real-world context and teachers' specific needs.

The second phase included presentations and hands-on practice. These activities were conducted in person, with meeting times arranged in cooperation with the community partners. This phase was divided into several key steps:

a) Introducing the community service team and explaining the activities,

b) Explaining how to use Google Earth,

c) Providing training on the features of Google Earth,

d) Holding a reflective discussion between participants and the team to evaluate the activities' implementation.

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In this activity, the presentation sessions served to introduce key ideas and provided participants with a basic understanding. The practical sessions, on the other hand, allowed participants to apply what they had learned, with guidance and support from the community service team. This way, participants not only understood the theory but also got real experience applying it.

Figure 3 & 4. The implementation team presenting the materials

Figure 5. Examples of project topics students can create in the learning process

The evaluation activity, which was the third phase, assessed the effectiveness of the training activities, with a particular focus on the utilization of Google Earth as a learning tool. This phase involved evaluating participants' understanding and ability in using the application. Additionally, feedback from participants was collected to gain insights into their experience with the training. The findings from this evaluation were important for making improvements and enhancing future training sessions.

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Figure 6. Group photo after the activity

3. RESULTS AND DISCUSSION

The Google Earth training session held at SMA Putra Bangsa Depok received a very positive response from both the school principal and the teachers. The event started with a warm welcome from the principal, followed by an introduction from the implementation team. The training focused on using Google Earth as an effective learning tool. The session began with an explanation of what Google Earth is, followed by a discussion on its benefits for teaching various subjects. The training covered how Google Earth can be used to visualize geographical features like mountains, rivers, deserts, and forests, as well as to study important historical events. Participants were also taught how to use the 3D features of Google Earth to explore countries and access data on climate, flora, and fauna across the world. As part of the hands-on training, participants learned to use advanced features such as displaying the Eiffel Tower in 3D and utilizing the data layer feature to view surface temperatures in different parts of the world.

The teachers participating in the Google Earth training showed a strong interest, not only listening to the presentation but also actively trying out the features of Google Earth on their own devices. The training offered both practical and theoretical knowledge and provided teachers with a hands-on experience. This approach had several positive effects, including:

a) Increasing student involvement: Using Google Earth in lessons helped make learning more interactive and interesting, which grabbed students' attention more effectively.

b) Providing a deeper learning experience: Google Earth allowed teachers to present a more engaging and hands-on learning experience, helping students better understand complex ideas.

c) Promoting critical and creative thinking: The use of Google Earth encouraged students to think critically and creatively, allowing them to explore topics from different angles.

d) Broadening students' global knowledge: The training helped teachers introduce students to a wider understanding of the world, giving them a better grasp of global events, geography, and different cultures.

The training demonstrated the use of technology like Google Earth could significantly enhance classroom teaching methods. The teachers who participated in the training reported feeling more confident in using Google Earth for their daily lessons and recognized its great potential in increasing student engagement. Furthermore, the training provided teachers with new skills that are essential for modern education, particularly in modern technology to support the learning process. However, there were some challenges during the training. One of the main issues was the limited time available to fully master all of Google Earth's features. Additionally, the need for adequate

hardware was another concern. Some teachers also needed more time to adapt to the new technology. Despite these challenges, the training proved successful. These obstacles can be addressed by providing ongoing support, such as additional training sessions and more detailed guidance, to ensure that teachers can fully utilize the capabilities of Google Earth in their teaching.

Moreover, the training had a significant positive impact, with teachers becoming more confident in using Google Earth. They planned to incorporate this technology into the subjects they teach. The long-term effect is an improvement in the quality of education at SMA Putra Bangsa Depok, offering students a more engaging and deeper learning experience. To ensure the program continues to be effective, it is important to take steps like providing follow-up training and ongoing support for teachers. Besides, the school can form a small team focused on integrating technology into the curriculum to ensure that the use of Google Earth continues to develop and is applied effectively. Regular evaluations will also be necessary to assess the success of Google Earth in the learning process and to adjust the training strategy if needed.

4. CONCLUSION

The Google Earth training at SMA Putra Bangsa Depok had successfully enhanced the teachers' ability to integrate technology into their teaching practices. Evaluation results indicated that this training was expected to have a positive impact in several areas, such as increasing student engagement, fostering critical and creative thinking skills, and deepening students' understanding of the world. The positive feedback from the teachers further underscored the great potential of Google Earth as a tool to improve the quality of education at the school.

During the training, there were some challenges, such as limited time to fully master the various features of Google Earth. Also, the available equipment was not enough to fully support the use of the technology. This shows that more support is needed to help teachers use this tool effectively in their teaching. To optimize the use of Google Earth in learning and address the existing challenges, several key steps can be taken:

a) Advanced Training: Offer more in-depth training sessions to help teachers master the advanced features of Google Earth.

b) Ongoing Support: Provide regular guidance to ensure teachers can effectively integrate this technology into their teaching practices.

c) Technology Team Formation: Create a small team focused on developing technology for learning, serving as a consultation hub for other teachers.

d) Regular Evaluation: Conduct periodic evaluations to ensure that the use of Google Earth aligns with the principles of the Merdeka Curriculum, which emphasizes inclusive and competency-based learning.

With these steps, SMA Putra Bangsa Depok is expected to optimize the use of technology to enhance the effectiveness of learning.

REFERENCES

Anita, A., & Astuti, S. I. (2022). Digitalisasi Dan Ketimpangan Pendidikan: Studi Kasus Terhadap Guru Sekolah Dasar Di Kecamatan Baraka. *Jurnal Pendidikan Dan Kebudayaan*, *7*(1), 1–12. https://doi.org/10.24832/jpnk.v7i1.2509

Festiyed, F., Mikhayla, M. E., Diliarosta, S., & Anggana, P. (2022). Pemahaman Guru Biologi SMA di Sekolah Penggerak DKI Jakarta terhadap Pendekatan Etnosains pada Kurikulum Merdeka. *Jurnal Pendidikan Dan Kebudayaan*, *7*(2), 152–163. https://doi.org/10.24832/jpnk.v7i2.2993

Jufriadi, A., Huda, C., Aji, S. D., Pratiwi, H. Y., & Ayu, H. D. (2022). Analisis Keterampilan Abad 21 Melalui Implementasi Kurikulum Merdeka Belajar Kampus Merdeka. *Jurnal Pendidikan Dan Kebudayaan*, *7*(1), 39–53. https://doi.org/10.24832/jpnk.v7i1.2482

Kemendikbudristek. (2021). Buku Saku: Tanya Jawab Kurikulum Merdeka. In *Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi*, *Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi*. Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi.

http://repositori.kemdikbud.go.id/id/eprint/25344

Nafisa, N. N., Kanzunnudin, M., & Roysa, M. (2021). Nilai-Nilai Pendidikan Dalam Novel Cinta Suci Zahrana Karya Habiburrahman El Shirazy. *GHANCARAN: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, *2*(2), 111–124. https://doi.org/10.19105/ghancaran.v2i2.3705

Yarsama, K. (2022). Urgensi merdeka belajar – kampus merdeka dalam pembelajaran bahasa dan sastra Indonesia pada Abad Ke-21. Mahadewa University.