

Training on making e-books for teachers at SMP IT Insan Permata Bojonegoro with AI

Ahmad Tauchid*

English Education Department, Universitas Nahdlatul Ulama Sunan Giri, Bojonegoro, Indonesia

*Correspondence

Email: ahmadtauchidmpd@gmail.com

Received:
15 November 2023

Revised:
20 December 2023

Accepted:
25 December 2023

Published:
30 December 2023

How to cite (APA style): Tauchid, A. (2023). Training on making e-books for teachers at SMP IT Insan Permata Bojonegoro with AI. *Community Empowerment Journal*, 1 (4), 160-168. <https://doi.org/10.61251/cej.v1i4.31>

Abstract

This article discusses community service activities aimed at training teachers of SMP IT Insan Permata Bojonegoro in utilizing learning technology, especially in making e-books using AI. This training aims to improve teachers' understanding of e-book applications, create teaching materials that can be accessed by students without being constrained by time and place, and provide better material visualization alternatives. The teachers are divided into groups to create e-books with relevant subject matter, involving hands-on practice in the creation of e-books. The comprehensive reflection and evaluation stage is an important step to ensure that community service goals are maximally achieved and provide sustainable benefits for teachers at SMP IT Insan Permata. This training is expected to open up new opportunities for a more modern and inclusive learning approach, as well as increase teachers' active involvement and participation in the learning process.

Keywords: AI; E-Book; SMP IT Insan Permata

INTRODUCTION

The 21st century, also known as the Century of Technology and Media, refers to a period of significant technological and information advancements. Its impact is felt across various sectors, including the field of education, where teachers face the challenge of developing innovative teaching methods (Afand, 2020). Teachers need to enhance their abilities to apply the latest innovations and incorporate them into the teaching-learning process. The use of technology and information not only enriches the teacher's experience but also positively contributes to students' ease of learning. For example, the integration of gadgets in the classroom is expanding year by year.

Technology, information, and communication play a key role in improving the quality of education in Indonesia. The ease, accuracy, and speed in delivering information make them integrated into various fields, including education (Mentari et al., 2018; Mufarrokhah & Pramusinta, 2022). Learning media relevant to the 21st century, such as e-books, provide effective and efficient alternatives. The use of technology, such as Artificial Intelligence (AI), enables the creation of interactive e-books, making reading activities more engaging for readers. According to Ahmad et al. (2014), the creativity of teachers plays a crucial role in developing a

classroom atmosphere that supports innovative learning. The development of teacher creativity not only motivates students to learn but also supports their preparation for competition in life.

Community service (Pengabdian Kepada Masyarakat shortened PKM) at SMP IT Insan Permata Bojonegoro Regency aims to train teachers in utilizing instructional technology, especially in e-book creation. Despite the school providing technology-based facilities, challenges persist, such as teachers' lack of knowledge and limited creativity in developing teaching materials. Therefore, this training aims to address these challenges by enhancing teachers' understanding of e-book applications. The goal is to create teaching materials accessible to students without constraints of time and place, providing alternative visualizations for better comprehension.

IMPLEMENTATION METHOD

This research, which is a result of community service activities, was systematically conducted in August 2023 at SMP IT Insan Permata, Bojonegoro Sub-district, Bojonegoro Regency. The active involvement of 18 teachers in the dynamics of this community service activity not only reflects their dedication to learning in the school but also signifies their commitment to improving the quality of education. The approach adopted in the Community Service Implementation (PKM) is service learning, a structured model consisting of four critical stages: 1) investigation; 2) preparation; 3) action; and 4) reflection (Ambarita et al., 2021; Pramanik et al., 2021).

During the investigation stage, the PKM team conducted thorough research and in-depth interviews with teachers at SMP IT Insan Permata. This was done to detail the needs and issues that arise during the learning process at the partner school. Meanwhile, in the preparation stage, the team's main focus was on developing a comprehensive questionnaire and ensuring the availability of the necessary equipment to execute PKM effectively.

The next step is the action stage, where the PKM team directly engaged in training sessions on e-book creation for teachers at SMP IT Insan Permata Bojonegoro. Then, in the reflection stage, the team conducted a comprehensive evaluation of the training implementation and considered its application in real-life contexts. This reflection served as a basis for identifying areas of improvement that can be applied to similar activities in the future.

Among the expectations arising from this training are: first, an improvement in teachers' ability to design electronic books (e-books); second, the empowerment of teacher creativity in designing e-books as technology-based learning resources; and third, an enhancement of teachers' mastery of technology-based applications for media and learning resource development. To measure the level of creativity, this research used a questionnaire instrument consisting of 30 questions with a response scale covering the frequency from "never" to "always." In addition, participants were asked to provide feedback on training satisfaction using a Google form.

In delivering content and the stages of e-book creation through AI, the presenters in this community service activity used PowerPoint slide media. The workshop event was carefully organized, starting with content delivery by presenters, followed by a session where participants had the opportunity to collaborate and design e-books. The implemented learning method was cooperative learning, where training participants were divided into groups to collaborate in the e-book design process. Equipment involved in this activity included a projector, microphone, laptop for each participant, WiFi network, smartphones, and seminar materials. Therefore, the optimal utilization of AI in e-book training created a conducive

environment for the enhancement of teacher creativity and technology mastery.

In a broader context, this community service activity is crucial not only because it touches on the development of teachers' skills in technology and educational innovation but also focuses on strengthening teacher engagement and active participation in the learning process. Improving teachers' skills in designing technology-based e-books not only has a positive impact on the quality of teaching at SMP IT Insan Permata but also opens up new opportunities for more modern and inclusive learning approaches.

Moreover, the strategic role of presenters in delivering content using PowerPoint slide media highlights the importance of effective and engaging information dissemination. The carefully designed workshop creates a collaborative learning environment where participants are given the opportunity to interact and actively contribute to the e-book design process. This fosters a climate conducive to the exchange of ideas and best practices among teachers, which, in turn, can shape a more dynamic learning culture in the school.

It is important to note that the success of this training is not only measured by teachers' technical abilities in using AI but also by their ability to apply creativity and innovation in designing learning resources (Pang, 2015; Prastowo, 2015). Therefore, involving teachers in the e-book creation process not only as end-users but also as producers of educational content paves the way for a more engaged and personalized learning approach. By understanding the needs and challenges in the field, this community service activity makes a significant contribution to shaping an education paradigm that is responsive and relevant to the demands of the times.

RESULTS AND DISCUSSION

This community service is structured in four stages to provide a significant positive impact. The first stage, the investigation stage, involves the PKM team intensively conducting research and in-depth interviews with teachers at SMP IT Insan Permata. The primary focus at this stage is to analyze the needs and challenges in the learning process at the school in Bojonegoro Regency. With a highly focused approach, the team seeks to comprehensively understand the dynamics of learning at SMP IT Insan Permata, allowing for accurate identification of needs.

The second stage, known as the preparation stage, involves distributing pre-test questionnaires using Google Forms to evaluate the level of knowledge and creativity of teachers related to e-book creation. This evaluation indicates that understanding and experience related to e-book creation training are still limited among teachers at SMP IT Insan Permata. Additionally, in this preparation stage, the PKM team also prepares the necessary equipment two days before the implementation of the community service activity. This thorough preparation serves as the foundation to ensure the smooth execution of the training.

The implementation of community service enters the third stage at SMP IT Insan Permata in Bojonegoro Regency. A total of 18 enthusiastic teachers participate in the e-book creation training, starting with the presenter delivering content using PowerPoint slides. The material includes the objectives and benefits of e-books, as well as the steps to create e-books using AI. The selection of AI as the e-book creation application is based on its accessibility and user-friendliness for beginners, as well as providing various layouts to support teachers' creativity in e-book creation. The presentation process is then documented to monitor progress and gather feedback from participants.

After the presentation session, training participants are divided into groups to create e-books with relevant teaching materials. Within a three-hour timeframe, teachers apply the steps taught by the presenter using AI. The PKM team provides guidance and facilitates teachers to

create e-books according to their creativity. The working process goes beyond theoretical learning, involving hands-on practice in e-book creation. Selected works from these teachers are then identified and evaluated by the PKM team.

The fourth stage, the reflection stage, involves a comprehensive evaluation and assessment of the e-book creation training. The PKM team distributes post-test creativity questionnaires through Google Forms to teachers at SMP IT Insan Permata. Additionally, the team provides support to teachers regarding difficulties or challenges faced during the e-book creation process with AI. The aim of this reflection stage is to ensure that teacher creativity is well honed through the provided training. The entire analysis of the training activities, including pre-test and post-test scores, is summarized in Table 1 as part of the overall evaluation of the e-book creation training.

Thus, the entire community service process not only serves as an effort to provide practical training on e-book creation but also becomes a platform to understand and meet the needs of teachers and support the development of their creativity in teaching. The reflection and comprehensive evaluation stages are crucial steps to ensure that the community service objectives are maximally achieved and provide sustainable benefits for teachers at SMP IT Insan Permata.



Figure 1. Participants Listen to the Material Presentation by the PKM Team at SMP IT Insan Permata

As a supportive step to enhance the benefits of the training, the PKM team involves teachers in a group reflection session after the completion of the e-book creation. This group discussion provides a space for sharing experiences, challenges, and solutions encountered by each teacher during their creative process. This not only strengthens engagement and collaboration among training participants but also provides an opportunity for teachers to deepen their understanding of AI and exchange practical ideas and tips.

Furthermore, as an effort to ensure the sustainability of the training impact, the PKM team plans follow-up sessions. These sessions involve continuous monitoring of the implementation of e-book creation in daily teaching activities by the teachers. Through regular interaction and ongoing feedback, the PKM team can continue to support teachers in overcoming any emerging obstacles and improving the quality of the generated e-books. With

this approach, the training not only serves as a one-time activity but also as part of an ongoing effort to strengthen the teaching capacity of educators.

In addition, the PKM team is committed to sharing the results and lessons learned from this community service activity through educational forums, both at the local and national levels. Through the publication and presentation of results, the team hopes to inspire and provide insights to other educational institutions to adopt a similar approach in leveraging technology for learning improvement (Suryanullah et al., 2021; Wibowo, 2017). This aligns with the vision of community service to make a broader and sustainable contribution to the development of education in Indonesia. Thus, this activity is not just a brief event but rather an initial step towards a larger positive change in the education sector within that community.

Table 1. Training pretest and posttest score results

| N | Test | Lowest | Highest | Mean |
|----|----------|--------|---------|------|
| 18 | Pretest | 75 | 105 | 86,3 |
| 18 | Posttest | 90 | 130 | 97,6 |

Table 1 above illustrates a positive change in the creativity levels of teachers, as reflected in the pretest score of 86.3%, while after the training, the posttest score showed a significant increase, reaching 97.6%. This data indicates a notable improvement in the creativity of teachers when they are involved in the e-book creation process.

The positive development in teachers' creativity, as evidenced by the difference in scores between the pretest and posttest, is a noteworthy achievement. The pretest result of 86.3% reflects the initial understanding and skills of teachers in e-book creation before undergoing training. However, through intensive training, a significant improvement is evident, with the posttest score reaching 97.6%, creating a positive picture of enhanced quality and creativity in e-book creation.

In addition to the increased creativity, this training also has a positive impact on teachers' understanding of the concepts and benefits of e-books in the context of digital learning. Training participants not only receive theoretical knowledge about e-book creation but also apply it directly in the creation of real works. This process provides hands-on experience for teachers, enabling them to better understand the real potential and benefits of using e-books to enhance the quality of education in schools. In other words, the training not only focuses on creativity but also delves deeper into understanding the use of technology in the educational context.

Table 2. Results of Analysis of Participants' Perspectives on Training

| Assessment Aspect | Responses | % | Criterion |
|--------------------------|---|----|-----------|
| Self-assessment | Benefits after training | 85 | High |
| | Skill improvement after training | 85 | High |
| | Satisfaction after attending training | 86 | High |
| | Increased knowledge after training | 87 | High |
| Assessment of Training | Benefits of cooperative learning methods | 87 | High |
| | Benefits of the demonstration method | 85 | High |
| | Benefits of assigned tasks | 87 | High |
| | Future benefits of this training | 85 | High |
| | Benefits of creating an e-book | 85 | High |
| | Confidence to be able to carry out these new skills independently | 88 | High |
| Assessment of presenters | As a motivator | 90 | Excellent |
| | Mastery of training methods/techniques | 94 | Excellent |
| | Clarity of conveying material | 95 | Excellent |
| | Clarity provides direction | 95 | Excellent |
| | Sincerity in providing training | 90 | Excellent |

The participant's assessment of this training involved several evaluation sheets aimed at measuring the holistic impact of the training. First, a self-reflection evaluation sheet was used to track the changes experienced by participants after the training, using a rating scale from 1 (very unsatisfactory) to 5 (very satisfactory). Second, an activity evaluation sheet aimed to identify the extent to which participants perceived the benefits of the activity, with ratings ranging from 1 (very unsatisfactory) to 5 (very satisfactory). Meanwhile, the evaluation sheet for the presenter included self-assessment, activities, and the presenter's evaluation with the intention of exploring the presenter's attitudes during the implementation of the activity.

Findings from the research reflect that approximately 85% of participants experienced improvement in both knowledge and self-skills after the training. The evaluation of the activity also revealed that the majority of participants (87%) felt the benefits of the training methods, both through cooperative approaches and demonstrations. Additionally, the evaluation of the presenter indicated that the presenter was assessed to have a good command of the assignment and practice aspects during the training (Atmi et al., 2022; Ayundasari, 2017; & Hakim et al., 2019).

Overall, this training has proven successful in enhancing the creativity of teachers in creating learning media and resources. By integrating e-book creation training, teachers have the opportunity to develop technology-based learning media to enhance the effectiveness and efficiency of classroom teaching (Azra, 2011; Desyanti et al., 2019; & Febbrizal & Aman, 2019).

The training also provided significant support for the improvement of teacher creativity, as reflected in creativity indicators such as encouragement for mature actions, confidence and imagination in work, active and creative participation, as well as synthesis and analytical abilities.

From the participant's assessment perspective, e-book training is considered highly beneficial and contributes significantly to teachers in developing learning resources and enhancing creativity in creating learning media. In this context, e-books are considered to have practical advantages in integrating online and offline learning, making it easy, practical, and efficient for both teachers and students to learn (Sapto et al., 2019). Therefore, this training not only has a positive impact on improving teacher creativity but also enriches their understanding of the use of technology in the educational context.

To support these research findings, in addition to quantitative analysis, in-depth interviews were conducted with some training participants to gain a more detailed understanding of the training's experience and impact in the context of everyday teaching (Sardiman, 2015). The interview results provide qualitative perspectives indicating that the training not only enhances technical skills in e-book creation but also stimulates teacher creativity in designing interesting and innovative learning materials. Participants expressed that actively using e-books in teaching provides new variations that enhance student interest and engagement in the learning process. Additionally, the support from the PKM team and the sharing of experiences among teachers were considered significant contributions to the improvement of teaching quality.

CONCLUSION

In the context of e-book creation training at SMP IT Insan Permata Bojonegoro, the achievement of a 85% benefit for teachers signifies the success and relevance of the training program. The increased creativity of teachers by 97.6% reflects the effectiveness of the

approaches and methods applied in the training process. Thus, this training not only provides numerical advantages but also substantially enriches the skills and understanding of teachers regarding the development of technology-based learning media.

As an effort to respond to the demands of the times, the expectations of this training go beyond individual skill levels and encompass aspirations to stimulate innovation in the use of learning media. In addition to providing additional insights to teachers, this training is aimed at encouraging the implementation of more dynamic and interactive learning strategies. By introducing innovative and technology-responsive learning concepts, this training has the potential to bring about positive changes in the student learning experience and teacher effectiveness.

The next training is anticipated as a continuation of efforts for refinement and skill development. With a focus on enhancing teacher competence, upcoming training is expected to bridge the skill gaps needed in the context of 21st-century learning. Thus, this training program is expected to play a key role in producing educators who are not only creative but also capable of facing the challenges of modern education with all its complexities.

ACKNOWLEDGMENT

Many thanks are addressed to English Education Department, Universitas Nahdlatul Ulama Sunan Giri, Bojonegoro, Indonesia, for supporting the community service program.

REFERENCES

- Afandi, A. (2020). Participatory Action Research (PAR) Metodologi Alternatif Riset dan Pengabdian Kepada Masyarakat Transformatif. *Workshop Pengabdian Berbasis Riset Di LP2M UIN Maulana Malik Ibrahim Malang*. Afandi, A., Laily, N., Wahyudi, N., Umam, M. H., & Kambau, R. A. (2022). *Metodologi Pengabdian Masyarakat* (1st ed., Vol. 1). Kemenag RI. <http://diktis.kemenag.go.id>
- Ahmad, T. A., Sodik, I., & Suryadi, A. (2014). Kendala-Kendala Guru Dalam Pembelajaran Sejarah Kontroversial di SMA Negeri Kota Semarang. *Paramita: Historical Studies Journal*. <https://doi.org/10.15294/paramita.v24i2.3128>
- Ambarita, J., Helwaun, H., & Houten, L. Van. (2021). Workshop Pembuatan E- book Sebagai Bahan Ajar Elektronik Interaktif Untuk Guru Indonesia Secara Online di Tengah Covid 19. *Community Engagement and Emergence Journal (CEEJ)*, 2(1), 44–57. <https://doi.org/10.37385/ceej.v2i1.136>
- Atmi, R. T., Gunarti, E., Mutia, F., Prihatini, I. C., & Penulis, K. (2022). Peningkatan literasi masyarakat melalui perpustakaan desa berbasis inklusi sosial. *Jurnal Inovasi Hasil Pengabdian Masyarakat (JIPEMAS)*, 486(3), 486–497. <https://doi.org/10.33474/jipemas.v5i3.15559>
- Ayundasari, L. (2017). Urgensi pembelajaran sejarah berbasis potensi lokal bahari untuk menumbuhkan minat wirausaha di Pesisir Selatan Kabupaten Malang. *Sejarah Dan Budaya: Jurnal Sejarah, Budaya, Dan Pengajarannya*, 11(2). <http://dx.doi.org/10.17977/um020v11i22017p211>
- Azra, A. (2011). Konsep Kesejarahan Kuntowijoyo, Pentingnya Imajinasi, Emosi, Intuisi, dan Estetika Bahasa yang Khas dalam Penulisan Sejarah. *INSANIA: Jurnal Pemikiran Alternatif Kependidikan*, 3(2). <https://www.researchgate.net/publication/279500163>

- Desyanti, Suhaidi, M., & Fitra. (2019). Meningkatkan kemampuan menghafal juz amma melalui media pembelajaran audio visual. *Unri Conference Series: Community Engagement*, 1, 297–303. <https://doi.org/10.31258/unricsce.1.297-303>
- Febbrizal, F., & Aman, A. (2019). Mata Pelajaran Sejarah SMA di Kurikulum 2013. *Lentera Pendidikan: Jurnal Ilmu Tarbiyah Dan Keguruan*, 22(2), 203–212. <https://doi.org/10.24252/lp.2019v22n2i2>
- Hakim, P., Kurniawan, A., & Vianahar, N. M. (2019). Media Interaktif Belajar Budaya di Museum Lumajang. *Jurnal Desain Idea: Jurnal Desain Produk Industri Institut Teknologi Sepuluh Nopember Surabaya*, 18(2), 69–72. http://dx.doi.org/10.12962/iptek_desain.v18i2.6208
- Mentari, D., Sumpono, S., & Ruyani, A. (2018). Pengembangan media pembelajaran e-book berdasarkan hasil riset elektroforesis 2-d untuk mengukur kemampuan berpikir kreatif mahasiswa. *PENDIPA Journal of Science Education*, 2(2), 131–134. <https://doi.org/10.33369/pendipa.2.2.131-134>
- Mufarrokhah, L., & Pramusinta, Y. (2022). Tnd Box Uno Stacko Media Development On Thematic Lessons. *Fikroh: Jurnal Pemikiran Dan Pendidikan Islam*, 15(1), 106–119. <https://doi.org/10.37812/fikroh.v15i1.383>
- Pang, W. (2015). Promoting creativity in the classroom: A generative view. *Psychology of Aesthetics Creativity and the Arts*, 9(2), 122–127. <https://doi.org/10.1037/aca0000009>
- Pramanik, P. D., Achmadi, M., & Nasution, D. Z. (2021). Media Belajar Inovatif Bagi Siswa SDN 05 Pesanggrahan Jakarta: PkM Dengan Konsep Service Learning. *Jurnal Pengabdian Masyarakat (Pemberdayaan, Inovasi Dan Perubahan)*, 1(3), 1–11. <https://doi.org/10.1234/jpm.v1i3.43.g58>
- Prastowo, A. (2015). *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Diva Press. Rahman, F. Y., Karyadiputra, E., Setiawan, A., & Purnomo, I. I. (2021). Pelatihan Pembuatan Media Pembelajaran Buku Digital Menggunakan Flipbook Pada SDIT Sullamul ‘ Ulum. *ABDINE: Jurnal Pengabdian Masyarakat*, 1(2), 87–93. <https://doi.org/10.52072/abdine.v1i2.214>
- Sapto, A., Ayundasari, L., Ridhoi, R., & Khakim, M. N. L. (2019). Pengembangan Kajian Sejarah Tematik Sebagai Alternatif Bahan Ajar Sejarah Tingkat Menengah Atas di Blitar. *Jurnal Praksis Dan Dedikasi Sosial*. <https://doi.org/10.17977/um032v0i0p13-18>
- Sardiman, S. (2015). Menakar Posisi Sejarah Indonesia pada Kurikulum 2013. *ISTORIA: Jurnal Pendidikan Dan Ilmu Sejarah*. <https://doi.org/10.21831/istoria.v1i1i2.7555>
- Suryanullah, A. S., Agung, D. A. G., & Ridhoi, R. (2021). Perubahan ekologi pantai paciran-brondong di lamongan tahun 1930-2010. *Historiography: Journal of Indonesian History and Education*, 1(3). <http://journal2.um.ac.id/index.php/JDS/article/view/20828/pdf>
- Wibowo, T. U. S. H. (2017). Membangun Literasi Sejarah Lokal di Kalangan Siswa melalui Pembelajaran Sejarah Berbasis Keunikan Toponimi Kawasan Banten Lama. *Proceeding of The 1st ICoLLiT*. <http://hdl.handle.net/11617/8953>

Conflict of Interest Statement: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2023 Tauchid. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.