



# Innovative Learning Landscapes: The Impact of Canva and Problem-Based Learning on Student Engagement

Emma Rumahlewang<sup>1\*</sup>, Izak Jakobis Makulua<sup>2</sup>, Johanna Matitaputty<sup>3</sup>

<sup>1</sup> Department of Physical Education, Health and Recreation, Pattimura University, Ambon, Indonesia.

<sup>2</sup> Department of Guidance and Counseling, Pattimura University, Ambon, Indonesia.

<sup>3</sup> Department of Physical Education, Health and Recreation, Pattimura University, Ambon, Indonesia.

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Corresponding Author:

Emma Rumahlewang

[emma.rumahlewang@lecture.unpatti.ac.id](mailto:emma.rumahlewang@lecture.unpatti.ac.id)

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**Abstract:** Community service activities based on system-supported learning have become an alternative approach to maintaining effective teaching and learning processes under various conditions. However, several challenges remain, including low student motivation in system-based learning environments. Therefore, an engaging learning approach is needed to create a more interactive learning experience and improve motivation. Canva is a digital application that can be utilized by Sunday school teachers to develop creative and engaging learning media. This community service activity aimed to improve the ability of Sunday school teachers to utilize the Canva application through a Problem-Based Learning (PBL) approach. The implementation method involved training, mentoring, questionnaires, and interviews to evaluate the outcomes of the activity. This program was conducted at Nehemiah Congregation, Ambon City, Indonesia, involving Sunday school teachers and students aged 11–14 years, with a total of 40 participants. The evaluation results showed an improvement in participants' abilities before and after the training activities. Prior to the training, 8 participants (25%) were unable to use the Canva application, while 28 participants (75%) demonstrated only a moderate level of proficiency. After the training, 34 participants (96%) were able to use the Canva application effectively. In terms of usefulness, 35 participants (90%) stated that learning through the Canva application was very beneficial, while 1 participant (10%) considered it beneficial. These findings indicate that community service activities involving Canva training using the PBL approach had a positive impact on improving participants' ability to create creative and engaging learning media.

**Keywords:** Canva Application, Problem-Based Learning, Learning Media, Student Engagemen, Nonformal Education.

## Introduction

The progress of the times has significantly impacted world life, where advanced technology can help with daily activities. It is well known that technological progress continues to advance rapidly from time to time. In technology and communication, humans can communicate with others in all locations through the Internet and mobile devices. In contrast, in education, technology has provided new ways to get information and ease of learning for each user (Abednego et al., 2023). The highly recognized list of 21st-century competencies in child development

outlines that competency requirements are necessary due to technological advances, ever-changing demographics, and globalization (Pimdee et al., 2023). 21st-century skills are essential for success in education, professional development, and social and professional life beyond academia. In addition, digital learning systems have been proposed as an alternative technology-based learning solution that can be accessed by teachers and students using online learning systems. These skills should be taught starting from elementary school, high school, and college by using distance-based learning applications (Ahmed Alismail, 2023). The changing landscape of technological development has

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been a significant factor in the evolution of visual learning media. Throughout history, visual media for education has evolved from stereographs, television, and computers to the pervasiveness of online technologies today (Elena Gallagher et al., 2017).

In the United States, in 2019, 17.5% of all students enrolled in degree-granting post-secondary institutions attended only distance education. This statistic is different for other countries. For example, in some countries such as Spain, Colombia, Sweden, and Germany, the percentage of students enrolled exclusively in distance colleges is higher than 15% (15.4-25%); in others, such as Japan, Slovenia, Poland, Estonia, and Belgium, this figure is close to 0% (0%-1%); at the same time, in Turkey, Chile, Italy, and Norway only 1.1-8.7% of students are exclusively in distance education programs. During Mexico's 2019-2020 academic year, 21.5% of all university students were enrolled in distance or non-school careers (Reyes-Millán et al., 2023). Learning media is very effective in supporting active student engagement, teacher professional development, and developing a community of learners. In addition, it promotes teachers' ICT integration skills and inspires and encourages students to continue learning using technology (Jogezai et al., 2021). Study results show that students' knowledge increases by 7-46% when after completing learning by using learning media (Hamilton et al., 2016). In just a few years, advances in online-based media technology have grown on a scale never seen before, not only changing our lives. Communication and interaction with other individuals occur and open new channels and opportunities for greater engagement and cooperation. Online social networks have tremendous potential as a medium for educational purposes. Connecting with other groups of learners and educational institutions provides students with several opportunities to enhance their education and gain access to cutting-edge educational knowledge (Shabur & Siddiki, 2024).

Learning Media is a tool that significantly supports the learning process inside and outside the room. Teachers and students need to know about learning media in the teaching and learning process to create a good, active, and valuable learning process. The benefits of teaching media for a teacher are that it establishes reasoning for students and helps students think creatively and actively. The benefits of learning media for students are trying to make something from the reasoning become real, make creative work, and become active students. Thus, it helps teachers and students achieve the essential competencies that have been determined. Learning media is a tool used to convey and distribute messages to recipients so that recipients can carry out the learning process efficiently and effectively in a planned manner to create a

conducive learning environment so that students more quickly understand learning and attract their interest in further learning. Therefore, learning media can be utilized properly if adjusted to the learning. A teacher can adapt learning media to what learning is being done. The development of increasingly advanced technology also impacts all learning activities at school, including one of them, namely, learning mathematics. In the learning process, teachers are expected to be able to use sophisticated technology, both young teachers and teachers who are just a few years away from serving, to create creative, enthusiastic, and skillful learning activities. One way to use technology in learning is by using technological resources as media in the learning process.

Canva media is one of the popular tools in online learning that allows teachers, students, and learners to quickly create various types of visual content. Canva provides a wide variety of ready-made design templates, graphics, images, and intuitive design tools, making it easy to create presentations, infographics, posters, brochures, and more without requiring advanced graphic design skills. In the context of learning, Canva plays an important role. Teachers can use Canva to create exciting and informative learning materials to help students understand complex concepts better (Yundayani, 2019). In addition, Canva also facilitates collaboration, as teachers and students can collaborate to create projects online (Hadi et al., 2021). Students can also use Canva to learn. They can use this platform to develop creative presentations, assignments, or other projects. With a wide selection of templates and design elements, Canva helps students develop graphic design skills while conveying information more engagingly. In addition, Canva also supports self-directed learning by providing tutorials and learning resources that can help students understand how to use this tool effectively. Thus, Canva Media has become a valuable tool for enhancing interactivity, creativity, and effectiveness in learning in the digital age. Canva is a graphic design tool that allows users to design creatively and accessibly. Designs include posters, brochures, infographics, and presentations. Canva can be accessed using a smartphone or computer. This media is very much in tune with students in helping to make designs practical and attractive (Andriyanto et al., 2022). Referring to the above problems, the Canva Application can improve student learning outcomes. Canva App can be a valuable addition to educational tools, improving the quality of teaching and learning and ultimately contributing to improved learning outcomes. However, it is essential to ensure that Canva is used effectively and purposefully to align with specific learning goals and objectives (Friska et al., 2023).

Nonformal education is education that takes place in various places, such as in study groups, organizations, or through training programs. Nonformal education is critical because it provides opportunities for people to acquire knowledge and skills that are useful for their lives (Rahabav & Souisa, 2021). In addition, nonformal education also provides opportunities for people to learn about topics not considered necessary by formal education, such as culture, customs, or local history, about the learning system at the Sunday school of the budding evangelist. Thus, nonformal education can help expand a person's knowledge and help them understand the world around them. It is a systematic, graded, tiered activity that starts with a structured and tiered education for toddlers, sensory, small students, responsibility students, and teenage students. The organization of formal education is a form of helping the family environment to educate and teach, improve, and expand the knowledge and behavior of Sunday school students' tunas pekabaran gospel (SMTPI) brought from the family and help develop talent.

The problem-based teaching model describes a view of education in which the school is seen as a mirror of society, and the classroom becomes a laboratory for investigating everyday life problems. Problem-based learning (PBL) has been used positively in several academic disciplines. PBL has been one of the most significant learning model innovations in education for the professions over the years (Irons & Thomas, 2014; Batlolona et al., 2019). The PBL model also has five syntaxes: directing students to the problem, organizing students to learn, assisting independent and group investigations, developing and presenting artifacts and exhibits, and analyzing and evaluating the problem-solving process. The characteristics of the PBL model are designed to help students improve investigation skills, problem-solving skills, behavior, and social skills according to the role of adults, as well as independent learning skills. The PBL model begins with real-life problems that are complex and unstructured, and it involves content that is interdisciplinary, engaging in collaborative teaching to manage an increasingly diverse student population. PBL is a critical practice that provides a suitable learning environment for students. The PBL model also sets up a student-centered learning environment that is not seen as an empty vessel but can bring its framework and differentiated learning.

With the current situation, the development of information technology currently is even more advanced and encourages renewal in the teaching and learning process. It is characterized by the development of new technologies of science data, artificial intelligence, and the increasing use of the Internet in all lifelines (Kamalov et al., 2023). Therefore, the adjustment of learning media in the era of the Industrial Revolution

4.0 is urgent because the state of learning media is one of the educational innovations that can improve skills. Improving self-learning skills and providing a more realistic picture of higher academic challenges and more confidence can improve problem-solving and critical thinking skills and increase communication and literacy skills. In this case, learning activities are carried out virtually to create active learning. Teachers are expected to be able to develop learning media that makes SMTPI students not bored because they hear, see, and are serious about the learning process. First, the digital revolution is growing rapidly, one of which is in the world of education. Second, globalization is increasingly strengthening integration between parts of the world, marked by the rapid development of information technology, communication, and transportation. Third, globalization and corporations cause the world to land. Fourth, the world changes very quickly. Fifth, the growth of new communities such as knowledge, information, and network societies. Sixth, the phenomenon of increasingly intense demands for creativity and innovation as individual capital faces ongoing competition. Mastery of this technology is one thing that needs to be owned by the younger generation now. Moreover, the current young millennial generation wants instant and fast-paced because of the development of technology (Mondal et al., 2023). The results of a joint study with teachers and students of SMTPI Jemaat Nehemia Benteng Ambon reveal that the school has never done learning using the Canva application.

## Method

This Community Service Program (PkM) employed a descriptive qualitative approach aimed at improving the ability of Sunday school teachers to utilize the Canva application through a Problem-Based Learning (PBL) approach. The descriptive approach was used to provide a comprehensive description of the implementation process and evaluate the outcomes of the training activities. This method was selected because it can provide a deeper understanding of participants' experiences, comprehension, and skill development throughout the training process. The target participants of this community service activity were Sunday school teachers and teenage Sunday school students at the Nehemiah-Benteng Congregation, Ambon City, Maluku Province. A total of 40 participants were involved, consisting of Sunday school teachers and students aged 11-14 years. Data collection techniques in this community service activity included observation, questionnaires, and interviews. Observation was conducted to identify the initial conditions and

participants' abilities in using the Canva application. Questionnaires were used to obtain information regarding participants' level of understanding and the perceived usefulness of Canva in learning activities, while interviews were conducted to gather more in-depth information regarding participants' experiences during the training.

The implementation of this Information and Communication Technology (ICT)-based community service activity was carried out through four stages, as follows:

a. Needs Analysis Stage

The initial stage involved identifying the needs and challenges faced by the partner community through field observations and questionnaire distribution. The community service team observed the learning process and identified several obstacles encountered by teachers in delivering learning materials. Discussions were also conducted with teachers and students to obtain information regarding the utilization of technology-based learning media. The results of the analysis indicated that student learning motivation still needed improvement and that teachers experienced limitations in developing creative, interactive, and engaging learning media. Therefore, training activities were considered necessary to enhance teachers' competencies in utilizing educational technology.

b. Program Design Stage

Based on the results of the needs analysis, the community service team designed a training program tailored to the needs and conditions of the participants. At this stage, training materials were developed, implementation methods were determined, supporting facilities were prepared, and learning materials were organized for the training process. The training content focused on the use of Canva as a learning media tool integrated with the PBL approach. Canva was selected because of its user-friendly interface, various design features, and flexibility in being accessed through computers and mobile devices.

c. Training Implementation Stage

The training activities were conducted offline using lectures, demonstrations, hands-on practice, and mentoring methods. The activities began with an explanation of the importance of using creative learning media to improve students' learning motivation. The community service team then introduced the Canva application and its features that can be used to create learning media, including interactive presentations, visual learning materials, and other supporting instructional content. Following the theoretical session, participants

received demonstrations on the use of Canva, including account creation, template selection, use of design elements, text and image editing, animation features, and saving design outputs. Participants were then guided to practice directly by creating learning media based on specific topics using the PBL approach. Throughout the activity, intensive mentoring was provided by the community service team to ensure that participants could effectively understand and apply the concepts and skills introduced during the training.

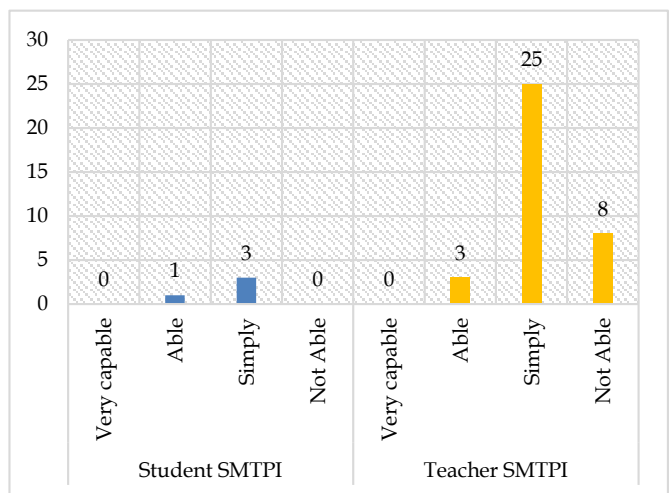
d. Evaluation Stage

The evaluation stage was conducted to determine the effectiveness of the program implementation and measure participants' level of understanding after completing the training. Evaluation activities included observations of participants' work, questionnaire distribution, and direct interviews. The community service team assessed the learning media designs created by participants based on several aspects, including creativity, content relevance, utilization of Canva features, and alignment with the PBL approach.

In addition, participants were given opportunities to share their feedback, challenges, and experiences during the training process. The evaluation results were used to determine the impact of the activity on improving participants' abilities to utilize Canva as an innovative and engaging learning media tool.

**Result and Discussion**

Before the Canva application training, 40 teachers and students were presented with a questionnaire on their ability to use the Canva application. The level of ability to use the Canva application before the action can be seen in Figure 1.



**Figure 1.** Level of Ability to Use Canva Application Before

Based on the questionnaire results obtained prior to the training, it was found that 100% of participants were not yet proficient in using the Canva application and did not understand the procedures for editing designs using the features provided by Canva. The data also indicate that only 22% of teachers demonstrated a basic understanding and limited ability to operate the Canva application, while only 3% of students were able to use Canva independently. Furthermore, the findings show that 88% of SMTPI teachers were categorized as having sufficient ability, whereas 20% of teachers were still unable to use the Canva application at all, particularly in terms of creating and editing instructional media. These results clearly illustrate the low initial level of digital design literacy among both teachers and students, emphasizing the need for targeted training and assistance. Following the implementation of the Canva application training, an evaluation was conducted using a post-training questionnaire to measure the improvement in participants' abilities. The questionnaire involved 40 participants consisting of teachers and students, and focused on their understanding of Canva features, editing procedures, and the application of Canva for educational purposes. The results of the post-training questionnaire demonstrate a noticeable improvement in participants' ability to use the Canva application effectively. The level of participants' ability in utilizing the Canva application after the training intervention is presented in Figure 2, which shows the overall enhancement in digital skills and participants' readiness to integrate Canva into teaching and learning activities.

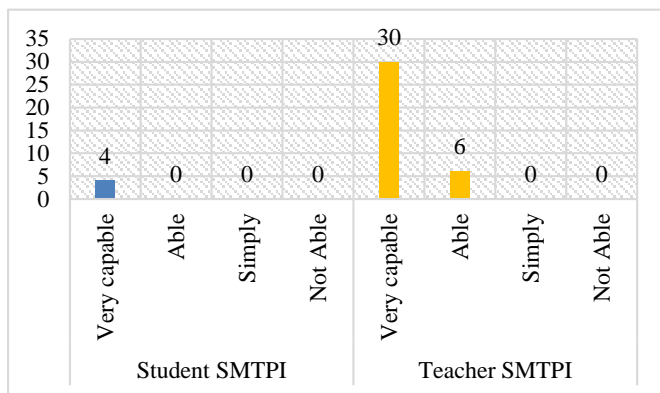


Figure 2. Ability level to use the Canva app, after use

The questionnaire results show that 96% of 34 SMTPI teachers and students are very capable of using the Canva application, and 6 SMTPI students, or 4% of students, can use the Canva application, in using the Canva application. Therefore, there was an increase from before using the Canva application to after using the Canva application. Based on the questionnaire

results, conclusions regarding the benefits of using the Canva application were obtained, as shown in Figure 3.

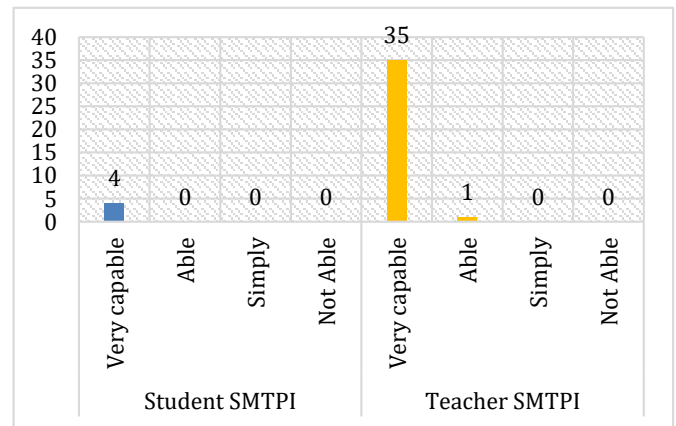


Figure 3. Benefits of apps with models for learning implementation

The results of the questionnaire on the usefulness of using the Canva application in the learning process showed that 39 students, or 97%, stated that it was beneficial, 1 student, or 3%, noted that it was capable, and the Canva application was beneficial. Overall, nonformal education is critical as it provides opportunities to acquire knowledge and skills that are useful for their lives and helps to expand one's understanding of the world around them. Nonformal education has several essential pillars that are very beneficial. Some of these pillars include: (1) Accessibility. Nonformal education is easily accessible to anyone, as it is not bound by entry requirements like those in formal education. This allows people who are not qualified to enter a school or college to be still able to get an education. (2) Flexibility. Nonformal education can be conducted in various places and multiple times to suit everyone's needs and abilities. It allows people who are busy working or have other responsibilities to attend nonformal education programs. (3) Relevance. Nonformal education usually focuses on valuable daily life topics, thus matching individuals' needs and interests. It enables people to acquire practical knowledge and skills for work or activities. (4) Engagement. Nonformal education usually involves active involvement from participants, thus providing opportunities for people to learn directly and develop practical skills. It enables people to acquire knowledge and skills that are useful for their lives.

The government is conducting a hybrid-based learning policy, combining online and face-to-face delivery. This condition has a significant impact on nonformal education. Every school conducts online learning or online learning. From this situation, technology is needed to facilitate the learning process, even though it is online. For this reason, the Sunday

school of Tunas Pekabaran Gospel must try as much as possible to make learning from home active even though it is not face-to-face. Teachers and students of Sunday School Tunas Pekabaran Gospel can interact well, and the knowledge given can be responded to well by children-students even though there must be times when boredom arises because they only stare at the laptop or cellphone screen (Anderson-Umana, 2022).

Many teachers still need to gain the skills to utilize technology to support the teaching and learning process to improve student learning outcomes. Using appropriate learning media is one-way learning materials can be conveyed effectively. Media is everything that contains information between the source and the receiver. It concerns the learning process, the teacher as an informant, and students as recipients. Media conveys messages by teaching students so that the learning process runs effectively and learning objectives can be achieved (Pintakhari et al., 2022). Canva learning media provides features or uses for education, explaining that Canva is a creativity and collaboration tool for all classes (Nabillah & Tanjung, 2023). It is the only design platform needed in nonformal classes. Develop creativity and collaborative skills in solving learning problems by making visual learning and communication easy and fun (Canva, n.d.). In this discussion, the role of teachers, SMTPI students, and learning media using models is very supportive in the teaching and learning process in learning; besides that, learning media must be adapted to teachers and SMTPI students also adjust to the learning model, and the interest of SMTPI students in a learning media.

Therefore, in this age of rapid and advanced technology, teachers must choose what learning media and models suit students. In this development, the learning media discussed is the Canva application. This media is more suitable for SMTPI students at the level of teenagers. For this reason, Canva was chosen for this discussion because it is felt that at this level of education, SMTPI students and SMTPI teachers are familiar with technology and can apply it in the learning process. This application can also be used through a device or laptop in various places, including education.

Canva has some benefits for SMTPI Teachers and Students. As a technology-based application, Canva provides a learning space for every teacher by relying on learning media to carry out a lesson. It has media that provides more interesting templates to attract SMTPI students to the learning process. There are many examples that teachers can use in the Canva application to present to SMTPI students, one of which is a variety of exciting templates to present in PowerPoint. Microsoft Office PowerPoint is a slide show application program (worksheets that are alternating objects) used to demonstrate concepts and arguments that you want to

show to others. Canva media is very suitable to be taught with the PBL model. In this student-centered approach, students are exposed to real-life problems destined to trigger appropriate responses and develop dispositions in complex, diverse, and realistic situations. In the active, self-directed, and cyclical process of PBL, students typically work in small groups to explore and discuss uncertainties arising from learning. Each student discusses their own learning needs and is tasked with examining specific issues that may occur. PBL aims to help students develop flexible knowledge, effective problem-solving, independent learning, effective collaboration, and intrinsic motivation (Yu et al., 2015). This study found significant positive effects of PBL on problem-solving ability, critical thinking disposition, self-confidence, and learning satisfaction (Kang & Lee, 2023). Media-based learning with the PBL method significantly improves students' collaborative skills and cognitive competence (Hidayatullah & Setiawan, 2024). In addition, results show that self-directed learning (SDL) and self-regulated learning (SRL) are critical processes in self-development, and PBL can foster SDL. It was concluded that conceptual clarity on what SDL entails and guidance for teachers and student teachers can help PBL to produce self-directed learners (Loyens et al., 2008).

Usually, in delivering and explaining material either directly or online, a teacher uses PowerPoint learning media to present the material in the learning process. On the other hand, to attract SMTPI students in the learning process, the teacher must be clever in delivering the presentation attractively. The Canva application is a supporting factor in creating attractive templates, giving colors, images, letters, and so on so that the PowerPoint made by the teacher is more appealing. By opening the Canva application, selecting search, and typing "Presentation," exciting and diverse templates will appear automatically. After completion, the template or the design results can be moved into PowerPoint. In Christian religious education, the Sunday School institution is essential in shaping the new generation's moral fiber and spiritual beliefs, especially among the Alpha Generation born in 2011 (Wasserman et al., 2020). The educational curricula of these institutions are carefully designed to be acceptable within the parameters of the ecclesial community, thoughtfully addressing the diverse emotional, spiritual, and intellectual needs of students through creative and developmentally appropriate methodologies (Jemmy & Effendi, 2024).

The use of PowerPoint templates in Canva is for teachers and SMTPI students if they want to deliver the material required to use PowerPoint. Furthermore, in addition to PowerPoint, teachers can also make certificates for SMTPI students to be given at events or

competitions. In Canva, certificate designs also provide a variety of choices. The next is a template for the video. Usually, a teacher offers videos for examples, references, or explanations to SMTPI students. With Canva, teachers can use templates with attractive colors and additional fonts to beautify the video background when displayed. Likewise, posters, infographics, resumes, handouts, and so on can be used and utilized. Not only teachers can use it, but also SMTPI students. Teachers can provide teaching using this Canva application to SMTPI students if the teacher recommends making a video, presentation, poster, and so on that contains an explanation, tutorial, or otherwise. SMTPI students are expected to be able to operate and create an attractive design. The advantage gained is that, in addition to gaining knowledge in learning, SMTPI students also learn to be skilled, creative, and innovative in developing a lesson or material that is taught. To foster students' skills, many outlets have begun adopting new technologies to communicate internally and externally about their services. Smartphones are everywhere, and indeed, so are advances in new media technology, particularly with the introduction of the Internet. Knowledge enhancement and new media innovations are part of the process (Naidoo, 2023).

## Conclusion

The implementation of the Community Service Program (PkM) through Canva application training integrated with the PBL approach was successfully carried out and provided positive impacts on Sunday school teachers and students at Nehemiah-Benteng Congregation, Ambon City. The activity was designed to address challenges related to the limited use of technology-based learning media and the need to improve participants' abilities in developing more engaging and interactive instructional materials. Through a series of activities involving needs analysis, program design, training implementation, mentoring, and evaluation, participants gained practical experience in utilizing Canva as a learning media tool. The results of the activity demonstrated a significant improvement in participants' competencies before and after the training process. Prior to the implementation of the training, many participants had limited knowledge and skills regarding the use of Canva and experienced difficulties in creating and editing instructional media. However, after participating in the training activities, the majority of participants were able to effectively use Canva and apply its features in developing creative learning materials. This indicates that the training activities successfully enhanced participants' digital literacy and practical skills in utilizing educational technology. In addition, participants showed positive

responses toward the implementation of the program and considered the activity useful in supporting teaching and learning processes. The integration of Canva with the PBL approach not only improved participants' technical abilities but also encouraged creativity, active participation, problem-solving skills, and learning motivation. The use of attractive visual media contributed to creating a more interactive and enjoyable learning environment for both teachers and students. Therefore, Canva can be considered an effective and innovative learning tool that supports educational activities, particularly in nonformal education contexts. Future community service activities are expected to expand the implementation of similar technology-based training programs in other educational institutions to strengthen teachers' competencies and improve the quality of learning processes in the digital era.

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