

Socialization of the Utilization of Digital Applications as Teaching Media in State Elementary School 18 Lubuklinggau

Akmal Rijal^{a*}, Dodik Mulyono^b, Ani Fiani^c, Dewi Syafitri^d

^{abcd}Universitas PGRI Silampari, Lubuklinggau, Indonesia

*Corresponding: akmalrijal.unpari@gmail.com

Contribution to Sustainable Development Goals (SDGs): (minimum two goals)

SDG 4: Quality Education

SDG 9: Industry, Innovation, and Infrastructure

Article history: received 09-06-2025, revised 26-06-2025, accepted 26-06-2025

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Abstract

Elementary schools face challenges in improving the quality of learning. The lack of resources and limited access to relevant learning materials often become the main obstacles in the teaching and learning process. This community service initiative was carried out to enhance the digital teaching competencies of elementary school teachers at SD Negeri 18 Lubuklinggau. Teachers at the school faced various challenges, such as limited access to learning resources, inadequate technological integration in the curriculum, and a lack of skills in using digital teaching tools. The program aimed to address these issues by providing training on two user-friendly educational applications: Flip PDF Professional and Canva. These tools were introduced to help educators create interactive and engaging digital learning materials. The training was conducted in two phases: preparation and implementation. During the implementation phase, teachers participated in counseling, discussions, hands-on practice, and assessment activities including pre- and post-tests. The results showed significant improvement in teachers' understanding and application of the digital tools, as reflected in the increase of the average test score from 64.21 to 77.89. The use of Flip PDF Professional allowed teachers to convert static PDFs into interactive flipbooks enriched with multimedia elements such as images, videos, audio, and hyperlinks. Meanwhile, Canva enabled teachers to design visual learning aids with ease, leveraging its vast library of templates and graphics. The effectiveness of these tools is supported by multimedia learning theories, such as Mayer's Cognitive Theory and Paivio's Dual Coding Theory, which emphasize the value of combining verbal and visual input in education. In conclusion, the training improved teachers' digital skills and pedagogical practices, leading to more engaging, inclusive, and student-centered learning environments. The program highlights the importance of continuous professional development in educational technology for improving teaching quality in elementary schools.

Keywords

Digital teaching, Canva, Flip PDF Professional, teacher training, elementary education.

Introduction

The partner that will collaborate with the Community Service team of the Universitas PGRI Silampari is Public elementary school 18 Lubuklinggau. The situation and

conditions of the school will be explained in more detail in the next section. All subjects at the elementary education level require supporting media to maximize the teaching and learning process in schools. Elementary schools face challenges in improving the quality of learning. The lack of resources and limited access to relevant learning materials often become the main obstacles in the teaching and learning process. This presents challenges for teachers in teaching at the elementary school level (Adaktylou, [2020](#)). Therefore, collaboration with higher education institutions through community service programs is expected to provide meaningful contributions in overcoming these challenges, particularly by enhancing teachers' competencies and optimizing the use of digital and contextual learning media in the classroom.

Public elementary school 18 Lubuklinggau is one of the elementary schools in Lubuklinggau city located in Pasar Permiri, Lubuklinggau Barat II District, Lubuklinggau City, South Sumatra Province. Like many other schools in Indonesia, this school faces various challenges in teaching students. The lack of resources such as adequate textbooks, a curriculum integrated with technology, and limitations in teaching quality and educators often serve as major obstacles in efforts to improve student competencies. The educators with good skills and knowledge are a challenge in this school because there are still some teachers who have not been able to use digital applications to support the learning process in the classroom, such as the use of Canva and PDF Flip (Pastoriko & Setyaningrum, [2022](#)). Therefore, targeted community service programs are essential to support the professional development of teachers, particularly in integrating digital applications into the learning process. By equipping educators with relevant skills and tools, schools like Public Elementary School 18 Lubuklinggau can enhance the quality of teaching and ultimately improve student learning outcomes.

Public elementary school 18 Lubuklinggau, various efforts to improve the competence of educators are made to create interesting, effective, and efficient learning. One of the efforts made by the school principal is through collaboration with the Community Service Team from Universitas PGRI Silampari and students from the Teaching Campus Batch 7 to assist 2 educators in learning various relevant learning media to be implemented to their students. Therefore, in this PKM, the team took the initiative to provide several learning media applications, which are expected to be beneficial for teachers in significantly improving their elementary school

students' abilities. In addition, e-learning can help schools optimize the use of resources, such as time and teaching staff, in classroom learning (Shal et al., [2018](#)). Through this collaboration, it is hoped that the introduction and implementation of digital learning media will not only enhance the educators' teaching competencies but also foster a more engaging and efficient learning environment for students. Ultimately, this initiative aims to support the school's efforts in achieving better educational outcomes and adapting to the demands of 21st-century learning.

The utilization of media in learning at primary schools can have a significant positive impact, including: 1) an overall increase in competencies, including the development of skills in learning; 2) enhanced learning motivation through interactive and engaging material can increase students' motivation to learn, as they become more involved and active in the learning process; and, 3) reducing educational disparities, where learning media, whether online or offline, can help reduce the access gap to education between different schools, especially in areas with limited resources. The use of learning media in primary schools promises positive changes in education. With broader accessibility, more interactive learning, and a more holistic development of language skills, the use of learning media has the potential to enhance the quality of education at the primary level. However, successful implementation requires collaboration between schools, teachers, parents, and the community, as well as a commitment to address the challenges that may arise (Hermansyah et al., [2023](#)).

Through this community service, by optimally utilizing the potential of e-learning, education in elementary schools can be transformed into a more effective, engaging, and inclusive experience for all students, leading to a significant improvement in the quality of education at the primary level. This will not only enhance the competencies of teachers and students at SD Negeri 18 Lubuklinggau but also prepare them to face global challenges in the future.

Public elementary school 18 Lubuklinggau has several issues related to the use of learning media. First, there is a lack of resources with good skills in using various applications that can be utilized in the teaching and learning process at the school. This school also has limitations in textbooks and adequate learning materials. Second, the quality of learning in the school, one of which is the conventional teaching method, often does not suffice to facilitate optimal interaction between

teachers and students in studying the teaching material. This makes subjects unenjoyable and less engaging for students. To address these issues, collaborative efforts between schools, educators, and relevant parties can be conducted.

It is necessary to provide special educational or training programs that facilitate teachers and students in enhancing their abilities and skills in the teaching and learning process. In addition, it is important to increase the awareness and interest of students and teachers in English through events or activities that can broaden their insights as well as inspire interest and participation. Schools also need to allocate adequate resources to provide the necessary facilities and resources for the improvement of education quality. The expected output target is that teachers can apply the use of e-learning in the teaching and learning process in elementary schools so that it can attract students' interest. Teachers are also expected to have varied teaching resource references that are suitable for the abilities of the students. The expected outcome from this Community Service is publication in one of the nationally accredited community service journals. The illustration of the implementation activity can be seen in [Figure 1](#).



Figure 1. illustrate community service activities.

Method

This activity was held at Public elementary school 18 Lubuklinggau on Saturday, May 29, 2024, with the participation of 19 individuals consisting of teachers and school principals. To support this goal, a team from Universitas PGRI Silampari collaborated with 'Teaching Campus' (KM) Class 7 students to conduct community service activities divided into two stages: the preparation stage and the training

implementation stage. Preparation Stage During the preparation stage, a location survey and coordination with the Public elementary school 18 Lubuklinggau were carried out to determine the implementation of the training activities. Community training activities included materials on e-learning media used for learning, specifically Canva, the use of PDF Flip, and practice or simulation questions.

Stage of Training Implementation The stage of training implementation conducted by the resource persons includes several stages, namely counseling, discussion, and practice (Rijal & Valen, [2024](#)). This stage includes counseling for the community service team and teaching campus students from batch 7, conducting socialization/counseling about strategies and learning media. The steps to be taken include conducting a pre-test, doing an ice-breaking session with the teachers of Public elementary school 18 Lubuklinggau, explaining the objectives of the activities being conducted, and the materials on strategies and e-learning media for elementary school learning such as utilizing Canva and PDF Flip. This activity encourages the teachers of Public elementary school 18 Lubuklinggau to ask questions and share the advantages and challenges they face while utilizing e-learning media for learning. The practice will guide the teachers to use the e-learning media for the learning they have studied. Then conduct a post-test of the activities that have been carried out. The location of the activities can be seen in the following

[Figure 2.](#)



Figure 2. The distance between the location and the partner.

Result and Discussion

The Flip PDF Professional software is an application used to convert files in PDF format into digital flipping pages that allows us to create interactive learning content

with supportive features. Flip PDF Professional is different from regular PDF in terms of appearance; it has the same look as an ebook that can be flipped while reading. Electronic modules can be designed using Flip PDF Professional software.

The features provided are quite diverse, such as the combination of text, images, audio, and video, making the creation of electronic modules more interactive and producing interesting results. Based on the explanation above, flip pdf professional allows someone to create a flipbook with various types of files available. Flip pdf professional makes it easier for someone to be creative with interactive features and effects such as images, videos, links, and various sources of knowledge that the author wishes to add. The advantages of this flip pdf professional application are: a. Interactive publishing. With an attractive display, by adding videos, images, links, and others, it makes the flipbook interactive (Rahayu et al., [2021](#)). In conclusion, Flip PDF Professional offers a powerful and user-friendly platform for creating engaging and interactive electronic modules. With its ability to integrate various multimedia elements such as text, images, audio, and video, this application enhances the learning experience and supports creative content development. Its features not only simplify the publishing process but also allow educators and creators to present material in an innovative and captivating way.

There are various types of templates, themes, scenes, backgrounds, and plug-ins to complete the e-module. The e-module can be supported with text and audio. Flexible output formats, such as html, exe, zip, Mac App, mobile versions, and burning to CD. To create a professional flip pdf, the steps outlined on the official application website explain the stages to be followed, namely creating a new project. Open the flip pdf professional program, click the 'Create New' button, then click 'browse' and select the PDF file from your computer. Image files can also be imported to create a flip pdf photo book. Customizing the desired flipbook in the 'design template' window, we can design the flip book with templates, themes, backgrounds, animations, guides, and plugins. Moreover, in the design settings tab, we can customize the flip book with various types of custom settings such as logo, language, and social media for sharing (Zaniyati & Rohmani, [2024](#)). In conclusion, Flip PDF Professional offers a comprehensive set of features that support the creation of interactive and visually appealing e-modules. With a wide selection of templates, themes, backgrounds, and plug-ins, as well as flexible output formats, users are provided with creative freedom and technical versatility. The step-by-step process available on the official website

makes it easy to start new projects, whether using PDF documents or image files. Additionally, the customization options for design, branding, language, and social media integration further enhance the professionalism and accessibility of the final flipbook product.

Adding a flipbook with videos, audio, images, and page editor links in PDF Professional allows editors to enrich the flipbook with videos (including YouTube and Vimeo videos), audio, flash, images, links, text, shapes, buttons, and printable areas to enhance and make the pages more engaging. Publishing 8 flipbooks in various formats, Flip PDF Professional provides several formats that can be used such as HTML, EXE, ZIP, applications for Mac, mobile versions and can be transferred to CD. It can also publish searchable books and share them for online reading.

Canva is an online graphic design application that allows users to create professional designs, even without any design experience. By using the Canva application, you can create designs for posters, pamphlets, social media posts, and much more. You can also easily add text and images. Canva can be accessed through both mobile and desktop devices. Therefore, you can create anywhere and anytime. In fact, the Canva application has two versions: free and paid. However, you can already use Canva's features for free, although not as complete as the premium version (Fahrudin et al., [2025](#)).

Benefits of CanvaAs previously mentioned, Canva is known as a user-friendly graphic design software. However, the advantages and benefits of Canva are not limited to just 9 things. There are various kinds of designs that you can create with Canva. Among them are logos, posters, social media content, newsletters, YouTube thumbnails, and product packaging designs. The best features of Canva or free features that you can use for your designs include more than 250,000 free templates. One of Canva's advantages is that it has hundreds of thousands of templates available for various types of visual content. There are over 250,000 that you can enjoy even in the free version. 5 GB storage capacity: For free users, Canva provides a storage capacity of up to 5 GB. Although it is not as much as the Premium version of Canva, which is 100 GB, you can still utilize this storage capacity to save commonly used content formats (Maulana et al., [2024](#); Putri & Astiwi, n.d.; Strand, [2020](#)).

Flip PDF Professional is software that converts static PDF documents into interactive flipbooks, enriching them with multimedia elements. Teachers are trained to design e-modules tailored to the needs of elementary school students. The output format is compatible with web, offline, and mobile devices. Canva allows teachers to create visual aids such as posters and worksheets. Its drag-and-drop interface and template library enable non-designers to produce professional teaching visuals, enhancing lesson delivery. This training boosts teachers' confidence and ability to use these applications, fostering a more engaging and student-centered learning environment. The scores from the pre-test and post-test of the activities can be seen in the following [Table 1](#).

Table 1. Pretest and posttest results of participants

Participant	Pre test	Post-test
AF	70	90
AL	70	80
FA	90	100
IQ	70	80
PA	60	80
RA	50	50
RR	50	70
SU	50	70
AFA	70	80
AM	70	80
ANR	70	100
AL	70	80
DI	50	70
MY	50	70
NA	50	70
NU	90	100
RAI	90	100
YU	50	60
JAF	50	50
Average	64,21	77,89

Table 1 presents the comparison between pre-test and post-test scores of 19 participants who took part in the training on the use of digital applications as teaching media. The data indicate a general improvement in participants' performance following the intervention. The average score increased from 64.21 in the pre-test to 77.89 in the post-test, signifying a notable enhancement in participants' understanding and skills after the training session. Several participants, such as FA, NU, and RAI, who already demonstrated high performance in the pre-test (scoring 90), achieved perfect scores (100) in the post-test, indicating consolidation of their prior knowledge.

Participants with lower initial scores also showed significant gains. For instance, RA, RR, SU, DI, MY, and NA scored 50 in the pre-test, with most of them improving by 20 points or more in the post-test. The only participants whose scores remained the same were RA and JAF, both scoring 50 on both occasions, which might indicate barriers to learning that warrant further investigation. Overall, the increase in average score by 13.68 points suggests that the training was effective in enhancing the participants' competency in utilizing digital tools like Canva and Flip PDF in the teaching process.

The integration of digital tools such as Flip PDF Professional and Canva into teacher training significantly contributed to enhancing teaching competencies among educators at SD Negeri 18 Lubuklinggau. The Flip PDF Professional software allows the conversion of static PDF files into interactive, multimedia-rich flipbooks. Learners gain a deeper understanding when instructional content is delivered through both verbal and visual channels. Flip PDF aligns with this principle by enabling the integration of text, images, audio, video, and hyperlinks—thus creating a more engaging and multisensory learning experience for students. Furthermore, Flip PDF's capability to simulate the format of a physical book (via digital flipping) adds to learner interaction and mimics real-life reading habits, which enhances cognitive engagement and retention. It also offers various export formats (HTML, EXE, ZIP, and mobile applications), increasing accessibility and flexibility in classroom use (Andava & Reinita, [2023](#)).

Complementing this tool, Canva serves as a powerful, user-friendly graphic design platform that empowers teachers to create visually appealing teaching materials. Visual and verbal information processed simultaneously can improve memory and comprehension. Canva, by offering drag-and-drop functionality and thousands of templates, facilitates the creation of posters, worksheets, infographics, and social media content without requiring prior design expertise. This directly supports the development of multimodal resources that can cater to diverse learner preferences and improve instructional delivery (Fahrudin et al., [2025](#)).

The training intervention, therefore, focused on both content creation and technology integration, consistent with TPACK (Technological Pedagogical Content Knowledge) framework, which emphasizes the necessity of teachers mastering the intersection of content knowledge, pedagogical knowledge, and technological knowledge. By

understanding not only how to use Flip PDF and Canva but also when and why to use them, teachers can develop more effective and student-centered lessons .

As shown in Table 1, the effectiveness of this training is evident from the increased post-test scores. The average score rose from 64.21 to 77.89, demonstrating measurable gains in digital competence. High-performing participants like FA, NU, and RAI reinforced their prior knowledge with perfect post-test results. Meanwhile, participants with initially lower scores (e.g., RA, RR, SU, DI, and NA) showed substantial improvements, indicating the accessibility and relevance of the training content. The few cases with unchanged scores suggest areas for differentiated support or follow-up training.

In line with constructivist learning theory, the hands-on practice and collaborative learning environment encouraged teachers to build new knowledge upon their existing experiences. The combination of theoretical input, demonstration, and immediate application aligns with adult learning principles (Atika Aini Nasution et al., [2022](#); Rijal & Frima, [2024](#)), fostering ownership of learning and long-term impact on teaching behavior (Hermansyah et al., [2023](#)). The implementation activities can be seen in the following [Figure 3](#).



Figure 3. documentation of activity implementation.

Conclusion

This community service program demonstrated a significant impact on enhancing teachers' competencies in integrating digital technology into their teaching practices. The use of Flip PDF Professional and Canva proved to be effective tools in creating engaging and interactive learning materials. Through structured training, participants

developed the ability to design e-learning content that supports student-centered learning and addresses the limitations of conventional teaching methods.

The improvement in participants' average scores—from 64.21 to 77.89—reflects the effectiveness of the training program in equipping teachers with essential digital skills. Beyond measurable outcomes, the program fostered greater confidence among teachers in utilizing technology, paving the way for more innovative and inclusive teaching practices.

In conclusion, incorporating accessible and user-friendly applications like Canva and Flip PDF into primary education can significantly enrich instructional delivery, enhance learner engagement, and contribute to the broader goals of educational quality and digital literacy. Continued training and support are recommended to sustain the integration of digital tools in the classroom and to address individual learning gaps among educators. The hope is that in the future, the teacher learning community in the field of educational technology that has been formed will meet regularly to share good practices, discuss, and support each other's professional development.

Declarations

The authors declare no competing interests.

Data Availability

All data supporting this study are included in the article or available from the corresponding author upon request.

Acknowledgement

The authors thank Public elementary school 18 Lubuklinggau and LPPM Universitas PGRI Silampari for their support and collaboration.

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