ICT-Based Learning Media Implementation Training to Improve Digital Literacy of SMA Negeri 1 Tanjung Raja Teachers

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Abstract: Training on the use of ICT-based learning media was held to improve teachers' digital literacy at SMA Negeri 1 Tanjung Raja. This program is divided into two stages to strengthen teachers' ability to create and apply digital learning media that is interesting, interactive, and relevant to their needs. The goal is to give teachers practical skills in using digital platforms such as Canva, Wordwall, Wayground (Quizizz), and CapCut when teaching. The method of implementation includes opening, explanation of the material, direct practice, and assessment through pretest and posttest to measure the improvement of participants' understanding. The results of the assessment showed an increase in the average score of participants from 50.52 to 55.05 from a total of 57 people, indicating a significant increase in mastery of ICT-based learning media. The response of the participants was very good, as evidenced by the activeness in the discussion, the willingness to try the media, and the seriousness in making learning products. The program is planned to be continuous with the product presentation stage, the application of media in the classroom, and practical guidance and assessment. It is hoped that this activity can be an important step in supporting digital learning changes at the high school level.

Keywords: Training, Learning Media, ICT, Digital Literacy, High School Teacher.

Introduction

Learning media is everything that can be used to convey information from teachers to students, so that it can trigger their thoughts, emotions, attention, and interest in the learning process (Tafonao, 2018). Learning media *berbasis Information and Communication Technology* (ICT) or Information and Communication Technology (ICT) is increasingly used as a form of adjustment rather than technological advancement.

Information and Communication Technology (ICT) is composed of two important parts, namely information technology and communication technology. Information technology encompasses all aspects related to how information is processed, utilized as a means, managed, and regulated. Meanwhile, communication technology includes everything related to the use of tools to process and transfer data between various devices. Thus, mastering ICT means that we are able to understand and use various ICT devices in general, including computer skills, and have a good understanding of information (Muhammad et al., 2011).

With access to the internet and various online learning resources, ICT opens up opportunities to get more teaching materials. Teachers can use a variety of information sources, such as learning videos, educational websites, and online learning platforms, to improve the quality of teaching and learning activities in the classroom (Wahyu et al., 2024). An effective, efficient, and engaging learning process can be realized by making ICT part of the learning media. The use of ICT in the learning process is also considered a method to prepare the younger generation to face future challenges and opportunities connected to digital media. The learning experience will also feel much more memorable if we use the right means. This will motivate students to cultivate an interest in the knowledge being studied (Nursamsu & Kusnafizal, 2017).

However, in its implementation, teachers at the high school level often encounter challenges when trying to utilize learning tools supported by *Information and Communication Technology* (ICT). A number of significant obstacles that teachers face when integrating technology in activities teaching and learning. One of them is that many teachers, regardless of age or experience, are not very proficient in using digital learning media. They find it difficult with simple applications such as PowerPoint, Canva, CapCut, Wordwall, Wayground (Quizizz) and also online learning platforms. In addition, many teachers still choose

Method

Activity model: ICT-based training and mentoring to improve teachers' digital literacy at SMA Negeri 1 Tanjung Raja. This activity was carried out through several stages, including opening by the school and the service team, socialization of creative and innovative ICT-based learning media, providing materials, and evaluation through pretest and posttest. In the initial stage, a pretest is carried out to measure the teacher's initial understanding of digital learning media and digital literacy in general.

Furthermore, ICT-based media creation training was conducted with a focus on four main platforms: Canva, Wordwall, Wayground (Quizizz), and CapCut. Canva material was delivered by Camellia, S.Pd., M.Pd., Wayground (Quizizz*)* by Dra. Umi Chotimah, M.Pd., Ph.D., Wordwall by Dr. Farhan Yadi, S.T., M.Pd., and CapCut by the Student Team consisting of Try Satya Novriantara and Klarissa Yulianda. All training is carried out interactively and adjusted to the needs of teachers in developing contextual and interesting learning media.

To ensure the success of the program and provide constructive feedback, a posttest was conducted to see the extent to which the teacher's understanding was improved

After the training, as well as identifying obstacles that may be faced in the digital learning process. This activity is designed to continue to the next stage which includes exposure to learning media products by teachers, the implementation of media in the learning process, as well as further mentoring and evaluation as a form of sustainability of the training program. This series of activities is expected to be a strategic step in strengthening teachers' digital competence and improving the quality of ICT-based learning.

Result and Discussion

The first day of the training activity "ICT-Based Learning Media Implementation Training to Improve Digital Literacy of SMA Negeri 1 Tanjung Raja Teachers" was held on Saturday, July 26, 2025, from 08.00 to 16.00 WIB, located in one of the classrooms of SMA Negeri 1 Tanjung Raja.

Figure 1. Submission of learning media books, internet quotas, and application subscriptions to SMA Negeri 1 Tanjung Raja

This event is part of the Community Service initiative initiated by the PKM Team of Sriwijaya University and supported by the Ministry of Higher Education and Science. and Technology (Ministry of Education and Technology of the Republic of Indonesia) through the 2025 Science Partnership scheme. This training consists of two sessions, where the first session is held on July 26, 2025 and the second session is scheduled on August 09, 2025 at the same time, namely at 08.00–16.00 WIB.

The event was officially opened by the school and the PKM implementation team, and was welcomed with high enthusiasm from the teacher participants. Figure 1 showed that the participants were very active and excited during the training. This program focuses on the introduction and practice of using various digital learning media

ICT-based that is practical and in accordance with current educational needs. Materials taught include:

Canva as a teaching material design tool, Wordwall as a tool for interactive quizzes and evaluations, Wayground (Quizizz) as a game-based evaluation tool, and CapCut as a video editing app for creative learning content. The selection of this material aims to help teachers design an innovative and fun learning process.

Participants are required to bring their own devices and immediately practice the use of each platform.

Figure 2. Socialization related to ICT-based learning media, as well as the delivery of materials related to the use of the Canva application.

The atmosphere during the training was very dynamic, as not only did the material be delivered one-way, but it also encouraged discussion, questions and answers, and collaboration. The teachers worked enthusiastically on the assignments given, and some of them had already managed to prototype their learning media by the end of the session.

As a measure of the success of the training, checks were carried out through pretest and posttest for all participants. Based on data from 57 respondents, the total pretest score was recorded at 4050 with an average of 71.07 out of a maximum score of 90, while the posttest reached 4950 with an average of 86.84. There was an increase in the average understanding of 15.77 points, which shows that there is a significant increase in mastery of ICT material after training. Some participants even experienced a significant increase in scores, such as the example of a participant with the initials RA who initially got a score of 42 and increased to 90. Although there are still some posttest data that are not completely complete, the current data has shown positive changes to the impact of the training carried out.

The response of participants to the training was very positive. The teachers were not only present, but also showed a high interest in understanding and applying the material being taught. This can be seen from their involvement in discussion sessions, courage to ask questions, and seriousness in trying out the applications introduced. Some participants even gave suggestions on how to use these media in the context of learning the lessons they were teaching. At the end of the first day of the training session, a symbolic handover of

learning media in the form of learning media books, internet quotas, and twenty Canva application subscription accounts was also carried out to the school as a form of real contribution from the PKM Team.

As a follow-up to this activity, several follow-ups have been planned for the second meeting, including: presentation of learning media products by the participating teachers, the application of these products in real learning in their respective classes, as well as assistance and evaluation of direct practice by the PKM Team of Sriwijaya University. This stage aims to ensure that the skills acquired can really be applied in a sustainable manner and have a direct impact on improving the quality of learning in schools.

Table 1. Comparison of Pretest and Postest Scores

Respond	Pretest	Posttest
NTA	84	90
IN	84	90
AT	84	90
AY	78	78
IS	78	90
RN	72	84
K	60	54
SP	90	90
AA	66	78
Or	84	78
D	78	90
AH	84	84
H	66	84
AQ	84	90
RE	84	90
CMF	84	90
N	84	90
RRS	66	90
SSPA	90	90
RF	72	90
MHW	84	90
ALSO	84	84
RA	72	84
RA	42	90
RN	84	90
S	84	90
SO	66	90
N	66	90
A	90	90
BAG	84	90
IG	90	90
HP	90	90
EY	30	84
WS	90	90
And	90	90
KF	90	90
F	60	90
SG	78	90
OF	60	90
KM	60	90
WH	72	90
S	60	84

S	78	90
TS	80	84
T	60	84
H	72	90
BG	42	84
European Championships	66	84
OFF	72	90
EA	84	90
LS	60	90
EG	72	90
R	60	90
WA	78	90
D	78	90
H	84	90
THE	72	84
Shoes	**4.050**	**4.950**
Average	71,07	86,84

Figure 3. Group Photo of the Sriwijaya University PKM Team with the Training Participants at SMA Negeri 1 Tanjung Raja.

Overall, this training program has had a significant impact on improving teachers' digital capabilities, providing them with insights and practical skills in using technology for the learning process. It is hoped that this activity will not just be a one-time event, but can be a trigger for learning changes that are more innovative, interactive, and in accordance with the times.

Conclusion

Training on the implementation of ICT-based learning media to improve the digital literacy of SMA Negeri 1 Tanjung Raja teachers has proven effective in improving teachers' digital abilities and technical skills in utilizing technology in the teaching and learning process. In a systematic training session, participants are not only introduced to the four main platforms, such as Canva, Wordwall, Wayground (Quizizz), and CapCut, but also actively engage in relevant hands-on practice.

The results of the initial test and the final test conducted on 57 participants showed an average score increase of 4.53 points. This finding is proof of the program's success in improving teachers' understanding and mastery of digital learning media. The positive response from the participants and the high level of participation in the training sessions showed that the program was beneficial both in terms of theory and practice.

It is hoped that this training can be a driving force for the transformation of learning methods that are more innovative, interactive, and in accordance with the needs of the times. Follow-up plans such as product presentations, the application of media in classroom learning, and mentoring processes are essential in ensuring the sustainability of the impact of these trainings. Thus, this program has made a strategic contribution to improving the quality of education through strengthening digital competencies among educators.

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