

Empowering Teachers Through Training in Preparing Literacy-Based Electronic Teaching Materials as an Effort to Foster Paperless Culture

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Abstract

Community service activities with the theme of teacher empowerment through training on literacy-based electronic teaching materials as an effort to foster a paperless culture in the Apala Village, Bone Regency, were held on May 20, 2023, located at Barebbo 1 Public Middle School. The main problem with partner schools in learning is the use of digital literacy, while literacy learning activities in schools are urgently needed nowadays. To make this happen, human resources who are technologically literate are needed, while there are still some teachers who experience difficulties in preparing digital-based teaching materials. This community service activity aims to provide solutions to overcome problems experienced by partner schools through training and mentoring for teachers using the FlipBuilder software so that teachers are able to create innovative and fun learning. The results of the evaluation conducted for teachers found that 76% of the responses agreed with this training and could assist teachers in preparing interesting learning tools so as to create a fun learning atmosphere as well.

Keywords: *Teacher Empowerment; Training; Teaching materials; Electronics; Paperless Culture*

Abstract

Community service activities with the theme of teacher empowerment through training in the preparation of literacy-based electronic teaching materials as an effort to foster a paperless culture in Apala Village, Bone Regency were carried out on May 20 2023 at SMP Negeri 1 Barebbo. The main problem of partner schools in learning is the use of digital literacy, while literacy learning activities in schools are really needed nowadays. To make this happen, technology-literate human resources are needed, while there are still some teachers who experience difficulties in preparing digital-based teaching materials. This community service activity aims to provide solutions to overcome problems experienced by partner schools through training and mentoring teachers using FlipBuilder software so that teachers are able to create innovative and fun learning. The results of the evaluation carried out on teachers found that 76% of responses stated that they agreed with this training and that it could help teachers in preparing interesting learning tools to create a pleasant learning atmosphere.

Keywords: Teacher Empowerment; Training; Teaching materials; Electronic; Paperless Culture

INTRODUCTION

Apala Village is a sub-district in Barebbo District with an area of 8.70 km² out of 114.20 km² of the total area in Barebbo District. Apala sub-district is an area that borders three villages and is the government center of Barebbo sub-district with a distance of 9.3 km from the center of Watampone city. The population of Apala Village, Barebbo District is 2,901 people with an annual population growth rate of 9.97% (BPS Bone, 2021). A small portion of the population works as teaching staff, both at elementary school (SD), junior high school (SMP)/equivalent, and senior high school (SMA)/equivalent.

The position of the school in the sub-district area and the distance to the center of the district capital which is quite affordable means that network access in the school is fulfilled,

making it easier for teaching staff to carry out the learning process. However, this opportunity is not utilized properly by teaching staff in optimizing the development of educational quality, especially at SMP Negeri 1 Barebbo. The quality of teaching staff related to mastery of Science and Technology (IPTEK) is still minimal. In fact, the use of technology in the digital era is currently very much needed in the field of education and makes a big contribution in supporting the success of its role in educating the nation's children.

The implementation of science and technology in the learning process also needs to be balanced with a culture of literacy so that insight and a culture of reading are maintained. Literacy is a person's language skills which include listening, speaking, reading and

writing activities so that they are able to communicate in various ways according to their goals (Pardede & Astri, 2022). However, in reality, literacy learning has not been fully implemented by partners. Even though schools' needs in terms of literacy are very much needed nowadays, including digital literacy. Therefore, efforts to implement the curriculum through literacy learning need to be collaborated by involving the role of information technology. Through the application of science and technology, it is hoped that it will be easier for teaching staff to carry out the teaching and learning process in schools.

Problems faced by partners will be solved through solutions offered by the PKM team to partners in preparing literacy-based electronic teaching materials. This can also foster Paperless Culture in the school. In fact, the quality of human resources is the main key to a country's future. The role of human resources in shaping a person's character or capability in acting will determine the direction a nation will go (Putlia et al., 2019). It will certainly be difficult for a school to develop if it lacks human resources. Apart from that, in order to realize a real form of the role of teachers in technological development, a reform is needed in the field of education.

One of the main solutions for researchers is to reduce the use of paper to support learning tools that were previously presented in hard copy form to become simpler by using electronic teaching materials in the form of e-books. Following up on this, efforts are needed to reduce paper use by fostering a paperless culture in the school. Paperless culture has the opportunity to provide more effective and efficient administrative services, especially in terms of making learning tools. Paperless culture is able to increase productivity through the process of digitizing learning tools so that information can be disseminated more quickly and can directly create a more enjoyable learning atmosphere. (Pyrenia & Wardiani, 2020). The concept of Paperless does not actually mean "without paper" but rather to make efficient use of paper (Mudrikah et al., 2021).

Facts in the field show that there are still many teachers who experience difficulties in compiling their own teaching materials. Even in preparing teaching materials, conventional media is still used. Among them are instant teaching media, namely ready-made media without any effort to plan, prepare and arrange it yourself. This results in learning materials being uninteresting, monotonous and not in accordance with students' needs, where interesting teaching materials should be able to present creative and innovative learning activities (Ambarita et al., 2021) so that training and coaching related to the development of teaching materials is needed. literacy-based electronics in accordance with developments in science and technology. The development of science and technology is the main driver for improving the quality of education as well as a reference for teachers to support the learning process in the classroom by utilizing technological developments. (Suryanti et al., 2021).

The use of science and technology is related to software which has a direct or indirect influence on education. However, in reality, the use of computer-based learning facilities in schools, especially in Apala Village, is still something strange because computers are considered a tool for solving administrative problems, such as writing exam questions, recapitulating salaries and activities of teachers and employees and other activities that are far from improving educational standards. This is due to limited skills and resources for teachers to predict scientific and technical advances in computer software. Digital developments have had a major influence on every aspect of human life, including in the field of education. One of them is helping the availability of devices to support the learning process. Therefore, the education system should be able to keep up with developments in digital technology.

IMPLEMENTATION METHOD

Implementation of this community service through training in making literacy-based electronic teaching materials for teachers was carried out on May 20 2023, located in the Hall

of SMP Negeri 1 Barebbo. The PKM implementation method is Participatory Technological Development where partners utilize technology applied based on science. Implementation of this PKM will fully involve partners in providing knowledge and improving partner skills.

Training activities for preparing literacy-based electronic teaching materials for teachers are carried out through four activity stages, including socialization of activities, workshops, preparation of teaching material sets and evaluation. Socialization of the preparation of literacy-based electronic teaching materials was carried out to partners, namely teachers at SMP Negeri 1 Barebbo. This socialization was provided directly by the proposing team with the aim of providing teachers with an understanding of the concept of digital-based teaching materials.

The next stage is a workshop on preparing literacy-based electronic teaching materials. At this stage, the PKM team provides training to teachers to prepare literacy-based electronic teaching materials. The teacher is then directed to develop teaching materials by including learning tools that have been prepared previously. The final product from this stage is literacy-based electronic teaching materials in the form of electronic books (e-books).

The final stage is assistance/evaluation of teaching materials. The aim of the evaluation is to produce a product that has been tested for suitability so that a device is produced that is ready to be used in partner schools. Furthermore, the results of the trials are used as a basis for perfecting the product development design and in the final stage, deficiencies in the teaching materials will be revised and perfected in order to obtain maximum results.

RESULTS AND DISCUSSION

This community service activity was carried out at SMP Negeri 1 Barebbo District, Bone whose address is in Apala Village, Barebbo District, Bone Regency. The activities carried out are: empowering teachers through training in preparing literacy-based electronic teaching materials as an effort to foster a

paperless culture in Apala Village, Bone Regency. This training in making teaching materials was carried out for one day, namely on May 20 2023, with 25 teachers participating and required to bring devices in the form of laptops or similar. The details of the activities include socialization of activities, workshops, preparation of electronic teaching materials and evaluation of learning tools which are described as follows.

Socialization of the preparation of literacy-based electronic teaching materials

The training activity for preparing literacy-based electronic teaching materials for teachers at SMP Negeri 1 Barebbo was held on Saturday, May 20 2023. This activity was attended by 25 teachers as training participants. Training takes place from 08.00 - 17.00 WITA. The activity began with preparations and continued with the opening and welcoming speech by the Head of SMP Negeri 1 Barrebo, Mr. Baharuddin, S.Pd. as well as remarks from the head of the service team. In his remarks, the Principal of SMP Negeri 1 Barebbo said that activities like this were really needed for a number of teaching staff to take advantage of technological developments to create creative and innovative learning materials. It is hoped that the use of technology will be able to create a pleasant learning atmosphere and motivate students to participate in this pleasant learning atmosphere. Apart from that, through this training teachers can increase their knowledge and skills in creating electronic teaching materials (Rafiudin et al., 2021). The opening of the activity is shown in Figure 1.



Figure 1. Opening and remarks from the Principal of SMP Negeri 1 Barebbo

The next activity was socialization and delivery of material by the head of the service team, Mrs. Sri Wahyuni, S.Pd., M.Pd. about the basic concepts of electronic teaching materials, components of teaching materials and steps for preparing electronic teaching materials. Basic concepts from making electronic teaching materials, namely the development of information and technology must be utilized as best as possible by teaching staff to create teaching materials that are in line with current developments and reduce the use of paper (paperless culture). Apart from that, there is a need to strengthen literacy for students through electronic teaching materials created by teaching staff. The implementation of activities can be seen in Figure 2.



Figure 2. Socialization/exposition of basic concept material for literacy-based e-books

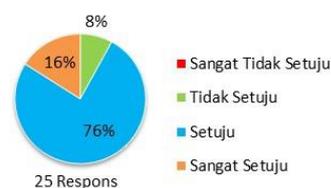
The next material is an introduction to the FlipBuilder software by Mr. Ahmad Nurul Ihsan BSPd.I., M.Pd. This device can be accessed and used offline and aims to change the appearance of e-books which generally scroll up & down to flip right & left (open right-left/vice versa) (Noviyanti, 2018). There are several things that need to be prepared, starting from downloading the device and ready-made electronic teaching materials. To use this device, teachers only need to upload teaching materials in PDF format and the appearance of the book will automatically change and look like a printed book. Apart from that, teaching materials can be modified in such a way to make them look more interesting and seem different from ordinary e-books. An explanation of the FlipBuilder software is shown in Figure 3.



Figure 3. Presentation of material about FlipBuilder software

Workshop on preparing literacy-based electronic teaching materials

The next activity is a workshop/training by Muh. Inspiration. In this activity, teachers are asked to create teaching materials that are adapted to the lesson material, then these teaching materials are uploaded into the Flip Builder software and then modified in appearance. The finished flip book can be accessed via each student's cellphone and used in learning activities. Through these teaching materials, it is hoped that it can increase enthusiasm for reading and increase student literacy (Yulaika et al., 2020). Workshops



training in making teaching materials can be seen in Figure 4.



Figure 4. Workshop/training on making electronic teaching materials

Assistance/Evaluation of devices teaching materials

The next activity is for the PKM team to assist teachers in compiling and creating literacy-based electronic teaching materials

and modifying these materials using Flip Builder software. The results created by the teacher are then presented to see the extent of the teacher's ability to create electronic teaching materials and use the software. Mentoring activities can be seen in Figure 5.



Figure 5. Assistance in creating literacy-based electronic teaching materials

The final activity is an evaluation carried out by the PKM team. From the evaluation results, it was found that 76% of teachers agreed that this workshop/training could help teachers create electronic teaching materials that could increase students' interest in learning. The following data is presented in the graph.

CONCLUSION

The training for creating literacy-based electronic teaching materials using Flip Builder software for teachers at SMP Negeri 1 Barebbo went smoothly according to the activity implementation method. The activity began with socialization of the basic concept of e-books, then continued with workshops/training in making and compiling as well as assistance with literacy-based electronic teaching materials and ended with evaluating the activities. The results of the activity evaluation showed that 76% of teachers agreed and were helped by the training in making literacy-based electronic teaching materials. The level of success is seen from the teacher's ability to create electronic teaching materials to explain the lesson material. Based on the very good response from teachers or activity participants, this training target has been met. It can be concluded that the implementation of this training activity was successful in providing new understanding for teachers about the use of Flip Builder software and supporting

teachers to create creative and interesting teaching materials.

SUGGESTION

Based on the results of implementing service activities, teachers should be able to develop literacy-based electronic teaching materials that are as interesting and creative as they are paperless in order to attract students' interest and motivation to learn by using the Flip Builder website or application which is available for free on the internet.

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BIBLIOGRAPHY

- Ambarita, J., Helwaun, H., & Houten, L. V. (2021). Workshop Pembuatan E-Book Sebagai Bahan Ajar Elektronik Interaktif Untuk Guru Indonesia Online di Tengah Covid 19. *Community Engagement & Emergence Journal*, 2(1), 44-57.
- Badan Pusat Statistik Kabupaten Bone. (2021). *Kecamatan Barebbo Dalam Angka 2021* (Badan Pusat Statistik Kabupaten Bone, Ed.).
- Mudrikah, S., Kusmuriyanto & Kardiyem. (2021). Upaya Menumbuhkan Budaya Paperless Melalui Pemanfaatan Ispring Quiz Maker di SMK YPPM Boja. *Jurnal Pengabdian Kepada Masyarakat: PANRITA_ABDI*, 5(1), 89-99.
- Noviyanti, W. (2018). Pengembangan Bahan Ajar Elektronik berbasis Flipbook Maker pada Materi Program Linear Kelas X SMK. *Jurnal Ilmiah Pendidikan Matematika*, 6(2), 41-49.
- Pardede, O. B., & Astri, N. D. (2022). Penerapan Pembelajaran Literasi di SMP Negeri 2 Sitiotio dengan Memanfaatkan

- Teknologi Informasi. *Jurnal Mitra Prima (JMP)*, 3.
- Putlia, G., Sundoro, H. S., Wijaya, B., Wardhana, A., & Rowena, J. (2019). Menyiapkan Masa Depan Di Masa Dini. *Jurnal Pengabdian Dan Kewirausahaan*, 3(2).
- Pyrenia Iskandar, T., & Wardiani, W. (2020). Penerapan Paperless Sebagai Media Komunikasi Digital. *Jurnal Ilmiah LISKI (Lingkar Studi Komunikasi)*, 6(2), 2442–4005.
- Rafiudin, Mansur, H., Mastur, Utama, A.H., & Satrio Adrie. (2021). Pelatihan Pengembangan Bahan Ajar Elektronik (*E-Book*) di SMKN 1 Banjarmasin.
- Bubungan Tinggi: Jurnal Pengabdian Masyarakat*, 3(1), 9-15.
- Suryanti, S., Sutaji, D., . M., Arifani, Y., & Zamzamy, M. (2021). Peningkatan Kompetensi Guru Daerah Terpencil Melalui Pelatihan Pengembangan Konten E-Learning. *Martabe : Jurnal Pengabdian Kepada Masyarakat*, 4(1), 85.
- Yulaika, N. F., Harti & Sakti, N. C. (2020). Pengembangan Bahan Ajar Elektronik Berbasis Flip Book Untuk Meningkatkan Hasil Belajar Peserta Didik. *Jurnal Pendidikan Ekonomi, Manajemen dan Keuangan: JPEKA*,4(1), 67-76.