

AN EFFORTS TO IMPROVE DIGITAL LITERACY TEACHERS THROUGH THE CREATION OF ELECTRONIC BOOK

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ABSTRACT

The purpose of this devotion program is for teachers at SMK YPPM Boja to have the knowledge and ability to design more creative, innovative, and exciting learning media. Besides, it can realise the reduction of paperless use in supporting environmental conservation. It is high time the learning media switched from paper book to digital book, considering paper-based books are impractical and heavy to carry, easily damaged and lost. E-book can be the right solution for practical, secure, and accessible learning media. E-book is also a great way to reduce paper use and reduce the flight of trees as paper raw materials, making it more environmentally friendly. This method of community service takes the form of lectures, discussions, and practices. The materials that are delivered include the definition of learning media, types of learning media, the introduction of Electronic Book as a digital learning medium, the excellence of e-book, the techniques and stages of the preparation of e-book, and the implementation of e-book as a learning medium. The result of this community service is the increasing understanding of SMK YPPM Boja teachers in the creation of exciting learning media as well as improving the professional competencies of teachers.

Keywords: Electronic Book, Learning Media

INTRODUCTION

Education is an essential aspect of building a nation and a country. Education can embody a nation of quality, value, and character. Without education, a nation will become left behind and blind to the development of times and civilisations. Generations of nations must be educated in order to develop their potential and capabilities and get to know their environment both at home and abroad, to be able to form a superior and dignified generation that can bring progress for the nation and the country

As mentioned in Law No. 20 of 2003, education is a conscious and well-planned effort to realise the learning atmosphere and learning process so that students actively develop their potential to have religious, spiritual strength, self-restraint, personality, intelligence, noble morals, as well as the skills necessary for themselves, society, nation, and country. Article 3 of the law explains that education serves as a vehicle for the development of ability and the formation of dignified dispositions and civilisations in order to educate the life of the nation.

The success of educational goals lies in the success of the learning process. Teachers must have good communication skills with students and be able to convey transparent learning materials. Teachers as educators should organise creative, innovative, fun learning activities and can help students understand the content of the subject quickly. In the learning process, teachers need to develop learning strategies so that students can receive the subject matter optimally by utilising various media and learning resources (Sanjaya, 2006). Learning media is everything that can be an intermediary for students to learn, such as videos, movies,

props, or books. The learning media chosen by the teacher must be precise. Following the characteristics of the students, the expected learning objectives and competencies so that the learning goals can be achieved (Wavirotin and Hadi, 2016).

The rapid development of digital technology in the 21st century has brought significant disruptions in various aspects of life, including into the sphere of education. Everything that is done today goes from real-world activity to cyberspace. Ease and speed are the priorities and demands of digitisation. The emergence of various learning resources such as online libraries, online learning media, the online bible is one of the impacts of digitalisation in the world of education. Various online activities in the digital age have driven a trend called *Paperless*, namely the reduction of paper use. Digitisation of paper-shaped documents into electronic files becomes more accessible, safe from loss, and more concise in terms of storage (Setiawan, 2017).

The digital age requires teachers to have the ability to use technology in learning activities to improve the quality of education in schools. Besides, creativity and innovation are also needed by teachers to design learning activities to be more attractive, less tedious and can be understood by students easily. According to Paul Gilster in Kurnianingsih, Rosini, and Ismayanti (2017), the ability to use digital information technology effectively and efficiently in various contexts, such as academic, career, and daily life is called *digital literacy*. It is time for learning media to switch from paper book to digital book. Based on Wavirotin and Hadi research (2016) suggests that paper-based school textbooks have many drawbacks, including impractical and heavy when carried everywhere, quickly obsolete, damaged, lost. Also, paper-based textbooks more often make students bored and lazy to read because most of the contents are only material and theory in the form of writing.

E-book (*Electronic Book*) can be the right solution in addressing the shortcomings of paper-based textbooks. E-book can be a more practical and accessible learning medium, not quickly obsolete, damaged, or lost. Besides, e-book can also be made more interesting with various images, colours and a learning video link, so it is more exciting and not monotonous in the form of writing only. Ghofur and Kustijono's research (2015) mentioned that the Ministry of Education and Culture made e-book an appropriate way to reduce paper use and reduce the flight of trees as paper raw materials, resulting in more conservatism.

In the field, SMK YPPM Boja still relies on paper-based modules or books as a learning medium for its students. When students do not have the book, the alternative the teacher chooses is to copy it. Digital Literacy teachers at SMK YPPM Boja are still relatively low. It can be seen that teachers at SMK YPPM Boja have not been able to utilise existing technology optimally to innovate learning activities, where they cannot yet turn the module book into a more enjoyable, practical, and efficient digital book. If left unchecked, SMK YPPM Boja will not progress because it does not keep up with the times, the impact of student learning interest does not increase which has an impact on the stagnation of student learning outcomes in SMK YPPM Boja. Besides, the more use of paper, the more felling trees as raw materials for papermaking that will result in various environmental problems.

Based on this background, training and mentoring are needed to improve *digital literacy* through the creation of e-book as a learning medium at SMK YPPM Boja. The goal is for teachers at SMK YPPM Boja to have the knowledge and ability to design more creative, innovative, and engaging learning media. Thus, more exciting and innovative learning media can facilitate teachers in conveying materials, increase students' interest in learning to improve students' learning achievement results. Also, by utilized e-book, it can realized the reduction of paperless and environmental conservation.

METHODS

The target of this devotion is the teacher of SMK YPPM Boja, Kabupaten Kendal Regency. The method applied in this service is to uncover the problems that arise among the teachers, then discuss the support team with partners to formulate the root of the agreed priority problem, as well as determine the right solution to the problem. The method of implementing the service is carried out in an outline, namely:

1. Problem

- a. Lack of teacher knowledge about the variety of learning media.
- b. Lacking the ability of teachers to choose the right and exciting learning media, the teachers of SMK YPPM Boja still rely on modules or paper-based books as a learning medium for their students. When students do not have the book, the teacher's preferred alternative is to copy it.
- c. Teachers lack mastering the techniques and steps of creating digital learning media in the form of e-book
- d. Lack of motivation for teachers to innovate learning media.

2. Method

This method of community service is in the form of lectures, discussions, and practices. The training will be conducted during two sessions: *First*, more focus on providing information on the importance of student learning media, types of learning media, accompanied by examples and introduction of electronic book. *Second*, training on engineering and the stages of preparation of e-book as a learning medium at SMK YPPM Boja. A team of devotion will accompany this session. Training modules will be given to participants as tools to use learning media products performed by the service team. The training module will be given to participants as a tool in practical activities.

3. Outer Targets

Evaluation of this activity is carried out during the training activities and see the final product of the activity. Evaluation is carried out using the appropriate instruments. Participants' attendance was evaluated based on the participant's filled attendance list, participant activity based on observation instruments and level of understanding based on answers from the given question exercise. The criteria for achievement of each aspect of the program are (1) the presence of participants, (2) categorised activities, (3) the level of understanding of materials of useful categories, and the level of understanding of materials in categories is excellent.

DISCUSSION

Results

Community service activities agreed by the Head of SMK YPPM Boja. The dedication of the Department of Economics is to increase the motivation of teachers in making engaging learning media in learning activities in schools. As for the activities, objectives and results achieved can be seen in the following table.

Table 1. Activities, Objectives and Research Results

No	Activities	Goal	Results
1.	Coordination with Head of SMK YPPM Boja	Equating the perception of the purpose of community service that the service team will	a. Mapping the priority of problems facing teachers in making learning media digitally

			b. Define troubleshooting alternatives
2.	Community Service Team Coordination	a. Mapping problem priorities b. Choosing an alternative problem	a. Draft learning media creation training module b. Training steps
3.	Coordination with Head of SMK YPPM Boja	a. Determining the implementation of community service activities	Determination of the implementation of community service activities
4.	Training	1. Can improve the professional skills of teachers, especially in creating digital learning media 2. Teachers' motivation in applying digital learning media to learning activities is increasing.	Digital learning media as a medium to help convey materials to participants to facilitate the giving of materials to students.
5.	Evaluation of Devotional Activities	a. Evaluate activities from start to finish b. Recommendations for future activities	a. Assessment of whether or not it is fit for purpose b. Determine recommendations for further devotional activities

Activity Objectives

This community service activity on digital learning media is aimed at YPPM Boja Vocational School Teachers, who number 30 people.

Output dan Outcome

The output obtained from this community service activity is: (1) YPPM Boja Vocational School teachers can apply learning media well, (2) Vocational School teacher YPPM Boja can understand about the role of teachers in learning activities, teacher assignments, and types of exciting learning models, (3) The application of the right digital learning media can improve the professional competency of teachers, (4) Increased students' level of understanding of the materials taught and the academic achievement of students.

The results obtained from these community service activities include: (1) With a community service program in the form of training on digital learning media in the form of a good e-book, this is expected to improve the teacher's understanding of learning objectives. Also, teachers can create digital learning media well, (2) With the understanding of training on the role of teachers in learning activities, teacher assignments, and the preparation of digital learning media for learning purposes helps improve the professional competencies of teachers.

Activity Process Description

Learning media training activities aimed at YPPM Boja Vocational School Teachers generally run smoothly. Devotion partners (SMK YPPM Boja) help prepare training places, facilities and infrastructure, and coordinate and delegate all teachers to participate in training activities from the beginning of the activity until completion. Before conducting training activities, the presenter introduces himself first then tries to explore knowledge about learning media. The presenter asked several questions about the understanding of learning media, the usefulness of learning media, the advantages of learning media, and explained the importance of digital learning media. After the presenter digs into the knowledge, then the presenter begins to explain the material on how to digitally design learning media in the form of e-book in the form of zmartbook for learning activities. During the training activity, there are still some participants who have not activated the zmartbook application, so it is slightly constrained in the training process of designing e-book.

The material-giving activity lasted for approximately 90 minutes. In the next session, the presenter demonstrated in designing learning media in the form of zmartbook virtually, and trainees participated in designing zmartbook directly. At the end of the session, some participants asked in the creation of digital learning media guided by speakers.

CONCLUSION

Conclusions from the implementation of community service on learning models to strengthen the professional competencies of teachers are as follows: (1) Community service activities in designing digital learning media for learning activities at SMK YPPM Boja teachers have been done well, (2) Community service activities on training to digitally design learning media for learning activities get an enthusiastic response from participants (YPPM Boja Vocational School teachers). The implementation of devotion obtained by participants can design learning media digitally by producing crossword puzzle games.

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