

## IMPLEMENTATION OF INTERACTIVE LEARNING MEDIA AND UTILIZATION OF TECHNOLOGY BY USING THE WORDWALL APPLICATION

Laqma Dica Fitriani<sup>1\*</sup>, Mohammad Al Hafidz<sup>2</sup>, Muazaroh<sup>3</sup>, Rr. Iramani<sup>4</sup>,  
M. Anang Karyawan<sup>5</sup>

<sup>1,2</sup>Departement of Information System, Universitas Hayam Wuruk Perbanas

<sup>3,4</sup>Departement of Management, Universitas Hayam Wuruk Perbanas

<sup>5</sup>Departement of Informatics, Universitas Hayam Wuruk Perbanas

*email:* Laqma.fitrani@hayamwuruk.ac.id

**Abstract:** One of the impacts of the Covid-19 Pandemic is the change of learning process in elementary schools from offline learning to online learning. The results of the observations at Al-Khoiriyyah Islamic elementary school show that partners still had difficulties in utilizing information technology facilities besides there was also a decrease in the enthusiasm of teachers and students in the learning process. The community service team offers solutions by providing training related to interactive learning media and the utilization of technology using the wordwall application. The wordwall application can attract the enthusiasm of teachers and students in the learning process by utilizing various features. This training was attended by 8 participants located at UHW Perbanas on June 24, 2022. The methods used were discussion, independent practice, and evaluation obtained from filling out the pre-test and post-test. The results of the training and mentoring show that 100% of the training participants are able to use wordwalls. The learning media using this wordwall had a significant effect and this was shown by the practical results of each participant who successfully completed the tasks given by the community service team which is 8 participants successfully made a quiz using the wordwall application.

**Keywords:** educational games; learning media; wordwall.

**Abstrak:** Salah satu dampak dari Pandemi Covid-19 adalah perubahan proses pembelajaran di SD dari pembelajaran offline menjadi pembelajaran online. Hasil observasi di SD Islam Al-Khoiriyyah menunjukkan bahwa mitra masih mengalami kesulitan dalam memanfaatkan fasilitas teknologi informasi. Selain itu, terjadi penurunan antusiasme guru dan siswa dalam proses pembelajaran. Tim pengabdian masyarakat menawarkan solusi dengan memberikan pelatihan terkait media pembelajaran interaktif dan pemanfaatan teknologi menggunakan aplikasi wordwall. Aplikasi wordwall dapat menarik semangat guru dan siswa dalam proses pembelajaran dengan memanfaatkan berbagai fitur. Pelatihan ini diikuti oleh 8 peserta yang bertempat di UHW Perbanas pada tanggal 24 Juni 2022. Metode yang digunakan adalah diskusi, praktik mandiri, dan evaluasi yang diperoleh dari pengisian pre-test dan post-test. Hasil pelatihan menunjukkan bahwa 100% peserta pelatihan mampu menggunakan aplikasi wordwall. Media pembelajaran dengan menggunakan wordwall ini memberikan pengaruh yang signifikan dan hal ini ditunjukkan dengan hasil praktik setiap peserta yang berhasil menyelesaikan tugas yang diberikan oleh tim pengabdian yaitu 8 peserta berhasil membuat kuis menggunakan aplikasi wordwall.

**Kata kunci:** game edukasi; media pembelajaran; wordwall.

## INTRODUCTION

Learning process is basically interpreted as a process of communication between educators and students in a conducive learning environment in order to optimize the potential of students so that they can have good attitudes, behaviors, abilities, and skills (Nenohai et al., 2021). This learning process must also adapt to technological advances. Technology helps the learning process to increase work effectiveness, efficiency, and interaction (Lestari, 2018).

An effective learning process is a structured and planned process where the results will be in accordance with predetermined standards (Nadia et al., 2022). Motivation and mastery of learning materials of the students can be used as parameters of how effective is a learning process. In independent learning practices teachers have the task of planning, implementing, and assessing the process and outcomes of student learning. Moreover, teachers are also expected to be able to provide material explanations to students in an interactive, interesting, and motivating way so that the students are enthusiastic about the learning process (Nurrita, 2018).

The COVID-19 pandemic has changed learning patterns from offline (face to face) to online learning. The results of the observations at Al-Khoiriyyah islamic elementary school show that partners still had difficulties in utilizing and optimizing information technology facilities, especially in online learning, and there was also a decrease in the enthusiasm of teachers and students in the learning process. Media technology should play a role in optimization of online learning (Winanti et al., 2018).

Based on the literature review, teachers do have to master classroom management, especially in digital literacy and the use of interactive learning media (Puspito, 2017). There are many learning technology platforms and they are very

easy to implement, one of which is wordwall. Wordwall is a website platform with an educational game method that is used as an interesting and interactive learning media for students that can be easily accessed online via wordwall.net (Sari & Yarza, 2021).

Wordwall has some free basic features, games that have been made by the teacher can later be sent directly through Google Classroom, WhatsApp, or other platforms. The uniqueness of wordwall can increase teacher creativity in making learning models as well as create a fun and various types of educational games such as quizzes, random cards, crowdword, and many more (Hafidz et al., 2022). The professionalism of a teacher one of which can be seen from his creativity in determining the learning media (Handayani et al., 2021).

Therefore, in this community service program, we propose mentoring and training activities for teachers as a solution to the main problems in teacher human resources (HR) in supporting the implementation of the online learning process. The mentoring was done by assisting teachers to independently practicing how to access and create materials using the applications in order to make the learning process more interesting, interactive and effective for the students. One of those applications was Wordwall.

## METHOD

The implementation method used by community service team to solve partner's problems at Al-Khoiriyyah islamic elementary school consists of several stages, namely:

### Observation

In April 2022 the community service team visited the Al-khoiriyyah islamic elementary school to identify part-

ner's problems by conducting interviews with the principal. In addition to interviews, the team also made observations to see the condition of the school and learning media before implementing the program.

### **Planning**

Preparing material requirements, making pre-test and post-test questions, as well as creating interactive learning modules using wordwall applications that will be used for training.

### **Implementation**

The implementation of learning media and technology training using the wordwall application carried out on June 24, 2022, located at Hayam Wuruk Perbanas University. There were 8 participants in this training, including 1 principal and 7 active teachers at Al-Khoiriyyah Islamic elementary school. These activities included: first, participants were asked to fill in a pre-test to find out the participants' knowledge regarding wordwall learning media before the training was provided. Second, providing training in the form of presentations using the lecture method accompanied by discussions to increase activity and enthusiasm of the participants (Maurin & Muhamadi, 2018). Third, the resource person gave a challenge for participants to practice independently in making a quiz in the wordwall feature. Fourth, filling out the post test to determine the participants' knowledge after the training was carried out. The outcomes of the pre-test and post-test were used as a comparison so as to assess participant learning achievements. Indicators of the success of this program were analyzed by taking the paired sample t test.

### **Evaluation**

The evaluation of this program was indicated by the comparison of the outcomes of the pre-test and post-test, the

completion of tasks given by the resource persons, as well as the implementation of training materials in the classroom learning process which can be seen in the mentoring process.

## **DISCUSSION**

### **Observation**

Observations and interviews were carried out by the team in April 2022, this was done with the aim to identify the problems that were being experienced by Al-Khoiriyyah Islamic Elementary School. Based on situation analysis and interviews, it was found that the main problem for teachers is the difficulty in designing learning using technology media, this has been realized since the covid 19 pandemic has changed learning patterns from offline or face-to-face learning to online learning.

The difficulties faced by teachers in creating and using learning media are described as follows: (1) Limited knowledge about technology-based learning; (2) Limited skills and difficulties in optimizing technology in learning activities; (3) The motivation of teachers to implement innovations in learning activities is very low, because they are rarely included in related scientific activities

Based on the problems faced by Al-Khoiroyyah Islamic Elementary School, several alternative solutions that can be offered are as follows:

1. Enhance the knowledge of teachers about the application of technology to produce learning media in the establish of skilled online learning media, namely through technical training in making learning media with the wordwall application
2. Helping teachers overcome problems related to the use of technology as a

learning medium. In this case, the assistance is provided in the form of training and mentoring for teachers at Al-Khoiriyyah Islamic Elementary School.

3. Enhance the understanding and competence of teachers to implement media in learning activities, namely through assistance in making learning designs using the wordwall application and mentoring the implementation of learning activities using wordwall media.

### Planning

This community service activity is conducted in the form of training and mentoring that is carried out offline. The methods used include workshops (exposure to material, questions and answers, and discussions), training, and mentoring.

The preparations made prior to the implementation of the training are as follows:

#### 1. Preparing material related to learning media using the wordwall application

The training materials include several theoretical and practical materials that support the conceptual and practical understanding of teachers related to interactive learning, learning media, and the introduction of wordwall applications as technology-based learning media.

#### 2. Preparing pre-test and post-test questions

The questions given to participants are packaged in a Google Form with multiple choices. The list of questions can be seen in table 1.

Table 1. Pre-test and Post-test questions

No	Pre-test and post-test questions	Point
1	Everything that can con-	10

	vey messages, can stimulate the mind, feelings, and readiness of students so that it can drive the creation of a learning process in students is....	
2	Media that uses charts, cartoons, posters, diagrams, posters, comics, and graphs are learning media that....	10
3	The basic abilities that a teacher must have related to the skills of choosing learning media are ....	10
4	Interactive learning model is....	10
5	The following are the benefits of technology in education, except:	10
6	Examples of Interactive Learning Media devices are as follows, except:	10
7	The definition of word-wall is....	10
8	The following are features on the wordwall.net website, except:	10
9	Setting options for games are ....	10
10	What can teachers do using this wordwall application? Except:	10

Each correct answer will get 10 points, when all the answers are correct then the participant will get 100 points.

#### 3. Preparing interactive learning media modules using the wordwall application

This module was prepared prior to the implementation of the training. The materials discussed in the module are as follows:

- a. Introduction to technology-based interactive learning

- b. Complete explanation regarding the wordwall application and its features
- c. Make questions in a quiz model on the wordwall
- d. Make questions in a model of sentence correction on the wordwall
- e. Make questions in a model of matching game on the wordwall
- f. How to use the link that has been shared on the Wordwall application

The above topics will also be discussed during the training and will be delivered by resource persons and this module will also be given to all participants who take part of the training.

### Implementation

The training was held on Friday, June 24, 2022, located at Hayam Wuruk Perbanas University. First, the training began with filling out a pre-test by participants which contained of 10 questions regarding interactive learning media materials and the use of wordwalls technology. Second, the resource person distributed modules on interactive learning media that had been made by the community service team, then the material was delivered by the resource person using the lecture presentation method and provided practices related to the use of wordwall as interactive learning media. Participants followed the practice carried out by resource person regarding wordwall tutorials from creating an account to the final process, namely sharing links to students. Third, participants were given time to do independent practices related to making quizzes using wordwall feature according to the subjects taught. Fourth, after doing independent practices, participants were asked to do a post-test with the same questions as the pre-test to measure the ability and the understanding of partici-

pants regarding interactive learning media of wordwall application. The results of the pretest and posttest can be seen in Figure 1.

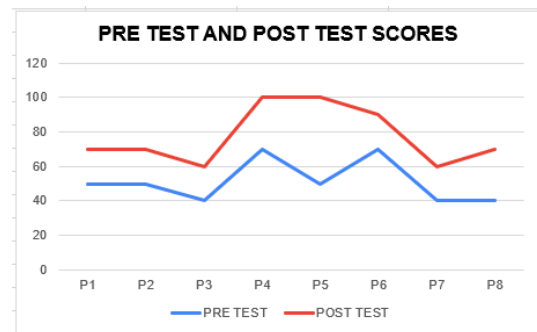


Figure 1. Pre Test and Post Test Results

The results indicate raise in the post-test score appealed to the pre-test score of all participants. The graph explains that 100% of the training participants are able to use interactive learning media application of wordwall. The implementation of training related to interactive learning media and the adopt of technology can be seen in Figure 2.



Figure 2. Implementation of Interactive Learning Media Training

This training gave positive results for the participating teachers. Based on the interview carried out to the teachers, the wordwall application has never been used as an interactive learning media. After this training was held, all participating teachers were able to use the wordwall application.



### 1. Independent Practice

After receiving the training and tutorial on using the WordWall application from the instructor, participants were doing independent practices.

The participants were given independent practice assignment including making a quiz consist of 10 questions according to the subjects taught by utilizing the features on the wordwall. The results of independent practices are shown in table 2.

Table 2. The Analysis of Assignment Results

Assignment	Analysis of Assignment Results
Registering an account on the wordwall.net site	Successfully created an account on wordwall.net site
Creating activities	Be able to make learning activities
Selecting and changing templates	Be able to select activity templates and replace existing activity templates
Creating a quiz	Be able to create a quiz according to the selected template
Providing settings	Be able to provide settings for various features in the wordwall
Giving a rating to student results	Be able to give a rating to the results after the quiz
Distributing to students	Be able to share questions they have made to students

### 2. Mentoring in Using Technology Media

After getting the material and knowledge from the training, the next

activity was mentoring the teachers which was carried out on July 1, 2022. The mentors assisted the teachers in utilizing the wordwall application that has been created.



Figure 3. Implementation of Mentoring

Figure 3 shows the mentoring activities carried out in utilizing interactive learning media of wordwall application. This is expected to enhance the student interest in learning and become a positive change in the teaching and learning process at Al-Khoiriyah Islamic Elementary School, and students should be more enthusiastic about the learning process because this wordwall application can be used to establish learning media such as word search, pairing pairs, random words, anagrams, quizzes, and so on.

### 3. Evaluation

In this training, an evaluation was carried out using pre-test and post-test related to knowledge about interactive learning media and wordwall applications. The data from the pre-test and post-test results will be tested by t test with the help of the Statistics software. The first treatment data in this study was determined by the value of pre-test results and the second treatment data was determined by the value of post-test results.

Table 3. Pre-test and Post-test Value Data

Value Data of Pretest	Value Data of Post Test
50	70
50	70
40	60
70	100
50	100
70	90
40	60

## CONCLUSION

The implementation of community service activities at Al-Khoiriyyah Islamic Elementary School went well and smoothly. The training participants consisting of 8 teachers responded very well to the training. From the evaluation results and the findings obtained during the implementation of this community service activities, it can be concluded that this training program has been able to provide enormous and targeted benefits for Al-Khoiriyyah teachers and in accordance with the needs of teachers in overcoming difficulties in using technology as an interactive learning media.

The results of the pre-test and post-test indicated that 100% of the training participants were able to use interactive learning media applications of wordwall. The results of the evaluation with the Paired sample t test indicated a significance value of 0.000. The learning media of wordwall had a significant effect and this was shown by the practical results of each participant who successfully completed the tasks given by the community service team, it shown from eight participants successfully made a quiz using the wordwall application.

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