



## Using Synfig Studio as an Interactive Learning Media: A Study of Senior High School in Rural School

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### Abstract

*The ability to make learning media is expected to motivate teachers and students in more exciting learning. But in reality, there are still many teachers who experience obstacles, especially in making learning media. The purpose of this learning assistance activity aims to provide knowledge and skills using interactive learning media in the teaching and learning process in the classroom. It is to maximize learning media (specifically Synfig Studio) that is available in the learning process. Besides, it is to help the teachers be able to make learning media more enjoyable to achieve the learning objectives to be completed. Participants in the Community Service program were 15 teachers in one of the high schools in the rural area, Bangun Purba. The learning assistance using Synfig Studio was done with lecture, demonstration, and practice methods accompanied by questions and answers. The availability of adequate expert in assisting instructional media, the enthusiasm of participants, the support of school principals in the implementation of activities, and supporting funds from the university were the critical success of the application of this activity realization. The obstacles faced are the teachers do not have prior knowledge about computer operations and limited time for training. The participants can take part in the practice from beginning to end. Besides, all teachers can complete independent tasks well, which can make computer-based learning media.*

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### 1. Introduction

In the process of learning, there are several difficulties faced. Teachers face difficulties in finding the right media to teach. They need creativity to develop material. In general, they only use Student Worksheets and books. According to the results of a survey conducted by [Lidiana, Tambunan, and Yuningsih \(2017\)](#) learning systems that use student worksheets do not attract and make students bored. Some teachers use images obtained from newspapers or magazines. This media is not enough to make students interested in the learning process. For that, we need learning media to increase the motivation of teachers and students in the learning process.

In learning, there are two most prominent aspects, namely learning methods and learning media, as a tool in teaching. Teachers are expected to be able to design learning that provides opportunities for students to actively interact and communicate, both with fellow students and with teachers. One way that can make the learning process more enjoyable, useful, and expected to improve student learning outcomes in the learning process is the use of learning media. Learning media is a tool or means of a messenger from learning resources to recipients of learning messages (students), so that two-way or more communication occurs, and is able to simulate audio-visual material so that it looks real through images or animation. Media is everything that is used to channel messages from the sender to the recipient so that it can stimulate the thoughts, feelings, attention, and interests of students to learn. The results of the study show that the learning process using learning media, namely computer media, can increase students' motivation and achievements, and of course, the teacher needs creativity in the use of this learning media.

The use of learning media is one of supporting the achievement of learning objectives (Sari & Setiawan, 2018). The study conducted by Safitri (2013) shows that computer-based interactive teaching media on the subject of triangles in junior high schools developed are very influential in student learning achievement. This can be seen from the results of trials on one to one and small groups obtained by the average student learning outcomes in good categories. Based on the field test, it is known that computer-based interactive teaching media on the subject of triangles in junior high schools have a potential effect on student learning outcomes. The previous study conducted by Ahamad, Mohamad, Sakat, Zaid, and Ahmad (2012) also described that computer usage can stimulate effective learning and improve the performance of Jawi education, enhancing the high level of interactivity among students.

But until now, interactive learning media have not developed optimally in Indonesia. One of the obstacles to the development of interactive learning media is the lack of mastery of technology in the development of interactive learning media by teachers so that the development of interactive learning materials with computers is less than optimal. This also happened in the Bangun Purba area. The results of the interview with one of the teachers at one of the schools in Bangun Purba showed that the teacher had difficulty teaching English because students had less motivation to learn. This is caused by several factors. One of the factors is monotonous and conventional teaching. Conventional learning is generally dominated by the paradigm of teaching, where the teacher actively communicates information and passive students receive. Students are also forced to learn what the teacher teaches by applying various types of punishment, not with an awareness of the meaning of learning, and added that learning focuses (oriented) on teachers, not students.

Through light discussions, the community service team suggested using computer media as a learning media so that the learning process was more interesting for teachers and students. But even more, shocking things happened. One of the teachers said that the average teacher did not have the ability to use computer media. One teacher revealed the following:

"... how do we want to teach using a computer, Mam. Just holding a computer is rare, let alone using a computer for learning media. Very rarely do we use computers to study in class, ma'am. We can't operate it. If possible, training is needed for that. So that we can be taught "(High School Teacher).

To ensure this, the dedication the team made a questionnaire to be distributed to English teachers in Bangun Purba. The results of observations from questionnaires filled out by around high school teacher's show that it is true that teachers rarely use computers as learning media and do not have the ability to use computer applications. And from the results of interviews conducted, it was shown that teachers still use simple lecture learning methods and media so that they tend to be passive during the learning process. From the explanation of the above problems, the team proposing dedication activities offered assistance for the use of Synfig Studio.

Synfig Studio is a graphic design application for 2D animation which can be a tool for education (Kainz, Kardos, & Jakab, 2013). This application can create or make animated films that are good enough. The Synfig studio application was originally developed by Robert Quattlebaum under the name of the animation studio Voria Studios. Voria Studios uses Synfig for internal purposes, but in its journey, Voria Studios was closed, and finally, the 2D animation maker software application was released as an open-source application called Synfig studio.

Synfig Studio is an application for making 2D animations that are open source and can be obtained free of charge. The Synfig application is available on several platforms such as Windows, Mac OS, and Linux. The Synfig application interface consists of 7 windows: toolbox, canvas, layer, navigator, transform tool, time tracking, parameters. To use the Synfig application, we can download it from the official website of Synfig Studio, <http://www.synfig.org/> the installer file size is relatively small, only 89MB. The steps to install it are also quite easy; just run the installer and follow the flow in the installer. After the installation is complete, we can immediately use the Synfig application.

Based on the analysis of the situation described above, the service team found the main problems faced by partners in Bangun Purba 1 High School, namely (1) partners did not have optimal understanding and skills in using computer media, (2) teachers had used the lecture method in learning. Learning so far uses print media in the form of textbooks and is less varied which makes students less motivated in learning English, (3)

teachers less able to use computer media, (4) teachers experience difficulties in finding effective learning to develop language learning materials England so that learning activities lead to boredom.

## 2. Method

The assistance that was provided includes understanding the use of media in the learning process and deepening planning to create media in learning using computer media, in this case, the Synfig Studio program. There were three methods applied in this training, namely presentation methods, demonstration methods, and practice methods. Presentation methods are applied in the introduction of software, their usefulness, and their application in the manufacture of interactive learning media, demonstration methods concerning the operationalization of programs, and practice methods where teachers practice directly making the learning media using Synfig Studio.

The steps to be taken in this service activity include the following stages.

### 1. Preparation

The preparation stage is the initial stage before the implementation of service activities. In this stage, there are several things that are done; namely, Internal Coordination, carried out by the team to plan the conceptual, operational, and job description of each member, determining and recruiting mentoring participants. In the recruitment of participants, it is required that those who have adequate skills in the field of computers, the making of assistance instruments for making Synfig Studio media, such as attendance sheets, questionnaires, worksheets, preparation for consumption, publication, location, documentation, and so on.

### 2. Implementation of Mentoring

This stage is the stage of assistance provided to the teachers at the school in Bangun Purba. This assistance includes the following.

#### a. Material Presentation

The material presented is related to the introduction and use of the Synfig Studio program for making learning media. The implementation of this program involves students to assist the mentoring and practice process so that activities can run smoothly. Question and answer activities are carried out simultaneously with the presentation of material. The participants can directly discuss with the speakers directly to understand the material and share experiences related to the problems being discussed in the material concerned.

#### b. Practice Assignment

At the end of the material, the participants were given practical assignments according to the material presented to explore the absorption and understanding of the material and see their creativity in work. In this mentoring, the teachers were assigned to make a learning media related to the topic to be taught in accordance with the lesson plans. The service team accompanied guided and directed and provided solutions when problems arose during practical assignments.

#### c. Evaluation and Improvement of Learning Media

At the end of the mentoring, the media that had been created by the teachers was collected and assessed by the service team and then refined by the team to be returned back to the participants so that they could be used to teach. This action was taken considering that the media works produced by the teachers still needed improvement, and the service team wanted the learning media to really be immediately used for teaching.

#### d. Reflection and Closing of the Activity Program

At the end of the activity, the participants and the Team reflected on the results of the training, and the participants also gave an evaluation of this training. Participants get corrections and evaluations directly related to their work. After all the planned activities were carried out, the head of the service team closed the program and gave a message to all trainees to apply what had been obtained to improve the learning media in their respective schools. It is expected that in the future service activities, this program can be continued again and can reach the number of schools not only at the high school level so that the benefits of this program can be felt by more schools.

## 3. Discussion

The results of the activities in the outline include the following components:

1. The success of the target number of mentoring participants.
2. Achieving the purpose of assistance.
3. Achievement of planned material targets.
4. The ability of participants in mastering the material.

The target of the trainees as previously planned, was at least 15 teachers, according to the number of computers available in the laboratory. In its implementation, this activity was attended by 15 participants.

Thus it can be said that the target audience has reached 100%. The figure shows that this activity can be seen from the number of participants who participated can be said to be successful/successful.

Achievement of the purpose of assisting the development of instructional media, in general, is good, but the limited time provided causes not all material on the development of instructional media can be delivered in detail. But seen from the results of the training of the participants, namely the quality of learning media that has been produced, it can be concluded that the objectives of this activity can be achieved.

The achievement of the material targets in this activity is quite good because the mentoring material has been delivered in its entirety. Assistance materials that have been delivered are:

1. Introduction to professional teachers.
2. Learning media theory.
3. Making computer-based learning media.

The ability of participants viewed from the mastery of the material still lacks due to the short time in the delivery of material and the different abilities of the participants. This is due to the large amount of material that is only delivered in one day so that there is not enough time for participants to fully understand and practice all the material provided.

Based on the evaluation of the implementation and results of activities, it can be identified supporting and inhibiting factors in implementing the community service program. Broadly speaking, the supporting and inhibiting factors are as follows:

1. Supporting Factors.

- a. There are sufficient experts in the development of instructional media.
- b. The enthusiasm of the teachers is quite high for the activities of mentoring this learning media because, apparently, there are still many teachers who have not mastered the making of instructional media.
- c. The support of the Principal of SMA Negeri I Bangun Purba, who welcomed the implementation of the mentoring activities and helped the service team organize the time and place of the implementation of the activities.
- d. Availability of supporting funds from the University for organizing community service activities.

2. Inhibiting factors.

- a. There are still many trainee teachers who do not have prior knowledge about computer operations.
- b. Limited time for the implementation of the training so that some material cannot be delivered in detail.
- c. The catching abilities of the participants varied, some were fast, but some were slow so the time spent was less than the maximum.

As a whole, the assistance activities in making this learning media can be said to be successful. This success is measured in addition to the four components above; it can also be seen from the satisfaction of the participants after participating in the activity. The benefits obtained by the teacher are able to compile and make learning media with better quality, and hopefully, these qualities can increase teacher competence and student motivation to learn.

#### 4. Conclusion

The assistance program can be implemented well and runs smoothly in accordance with the planned activities that have been prepared even though not all participants of the mentoring have mastered the material presented well. This activity was very well received, as evidenced by the activeness of the participants in participating in the mentoring by not leaving the place before the training time ended.

Based on the evaluation that has been done, it is suggested that the existence of follow-up activities periodically in the form of similar training is always held so as to improve the ability of teachers to carry out teaching and learning.

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