Improving Teachers Professionalism through E-Learning Content Creation Training

Muhammad Fajar Marsuki[1], Isnanik Juni Fitriyah[2], Indra Fardhani[3], Firdha Cahyaningwulan[4], Febriana Nur Fauziah[5]
{muhammad.fajar.fmipa@um.ac.id}

Department of Science Education, Universitas Negeri Malang, Malang

Abstract. The Covid-19 pandemic has forced the educational process to run virtually since the beginning of 2020. Virtual learning makes it difficult for teachers to understand topics meaningfully to students. Therefore, the department of science education, State University of Malang provides training with synchronous and asynchronous methods to teachers to improve their professionalism in creating e-learning content. The results of the training show that 85% of participants who survive to the final stage can create e-learning content well. A total of 63.2% of participants are more interested in creating a Moodle-based LMS, 12.3% are more interested in creating a podcast, and 24.5% are more interested in creating a hybrid learning module.

Keywords: E-Learning, Teacher Professionalism, Training, Moodle, Podcast, Hybrid Learning

1 Introduction

The learning process in the classroom is always built by several elements, namely educators, students, learning strategies, learning media, and teaching materials. These five elements of learning are very influential on the success of a learning process. The learning process is said to be successful if students experience changes in behavior as a result of the stimuli and experiences they receive during the learning process. However, the learning process generally always has its problems. This problem is often caused by one of the five elements of the learning process. Problems in the learning process are usually specific depending on the characteristics of the class [1–3].

The central government's policy for the implementation of Distance Learning during the COVID-19 pandemic will also continue in 2021 [4–7]. The implementation of this distance learning is mandatory because it is one of the effective policies in tackling the spread of the COVID-19 virus in the Republic of Indonesia. But on the other hand, Distance Learning which has been carried out since the beginning of 2020 until now has caused several problems for various parties in the education unit. The examples are:

a. Students find it difficult to understand the learning material without meeting face to face with the teacher.
b. There are several areas where the infrastructure is inadequate to implement Distance Learning so that it has an impact on students and teachers.
c. Many students who are economically unable to have a smartphone as the main medium for distance learning.

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d. The emergence of acts of violence against students by parents/guardians of students because they are disappointed with the learning performance of students during distance learning.
e. The teacher's ability is still low in compiling and/or using various learning facilities that can be used in Distance Learning.

The problems that have arisen since the start of Distance Learning are also experienced by education units at the junior high school level in several regencies in the Republic of Indonesia. Several teachers recounted their experiences when conducting Distance Learning since the beginning of 2020. The most difficult thing for teachers in education units at the junior high school level is to prepare the content that will be given in Distance Learning [8–10].

Generally, teachers only use the Whatsapp application as a medium to give instructions to students. Likewise with the delivery of learning materials which are usually given through the Whatsapp application. This is of course very inefficient considering that Whatsapp is not an application specifically designed to support Distance Learning activities. This problem becomes a very priority because the results will greatly affect the level of understanding of students towards the learning material.

To overcome the problem of the lack of teachers' ability to use and/or compose content that is by Distance Learning, the Department of Sciences Education, Universitas Negeri Malang initiated training for these teachers. The training in question is training to develop suitable and full-power e-learning content for students. The training was carried out in 3 stages, namely the face-to-face stage to provide materials related to the development of e-learning content, the independent work stage to provide opportunities for teachers to develop the e-learning content they had previously studied, and the online consultation stage to guide and assess the products of the trainees.

2 Research Method

This research was carried out in several stages. The first stage is to screen applicants online in the form of an online registration form. The second stage is to provide online training to participants synchronously via video conference for one meeting and asynchronously through the Learning Management System for two meetings. The training provided covers the following themes:

a. Effective and Efficient E-Learning
b. Moodle-Based E-Learning
c. Podcasting
d. Scientific Research-Based on Hybrid Learning

The second stage ends with participants collecting training products. The third stage is the process of evaluating participants' products using a product assessment rubric to see the feasibility of the products developed by participants. The research instrument used in this study was a material evaluation questionnaire and committee services questionnaire. All questionnaires used in this study used a Likert scale of 1 to 4. The results of the questionnaire obtained were tested for validity using the product-moment Pearson correlation method and also tested for reliability using Cronbach's Alpha method using the SPPS application.

3 Results and Discussion

Based on the results of the data entered into the implementing team for community service activities, the Department of Science Education, Universitas Negeri Malang, the number of registrants who filled out the Google registration form on 27 and 28 September 2021 reached 608 people with details of 525 registrants from the teachers, 24 registrants from the academic community. lecturers, 49 registrants from students, and 6 registrants from education practitioners.

This data shows that the training courses offered can attract the interest of people working in the field of education, especially teachers. However, of the 608 registrants who filled out the Google registration form, only 500 participants took the initiative to enter the participant's Whatsapp Group which had been provided by the community service implementation team of the Department of Science Education, Universitas Negeri Malang and it can be said that these 500 people indeed intend to participate in training activities for the creation of e-learning content for teachers carried out by the implementing team for community service activities, the Department of Science Education, Universitas Negeri Malang.

Of the 500 participants who have entered the participant's Whatsapp Group, only 482 participants confirmed their attendance at the synchronous activity of e-learning content creation training for teachers which was carried out by the implementing team for community service activities of the Department of Science Education, Universitas Negeri Malang. However, on the day of the synchronous activity (October 2, 2021), only 354 participants were able to attend as evidenced by filling in the attendance given by the implementing team for community service activities for the Department of Science Education, Universitas Negeri Malang in the form of a Google Form.

All participants who attended the synchronous activity of the e-learning creation training for teachers also managed to join and participate in accessing the Google Classroom which had been provided by the community service implementation team. for teachers. Even though until the last day of collecting training bills, only 155 participants were able to complete the invoices and collect their products through Google Classroom for further evaluation by the training lecturers.

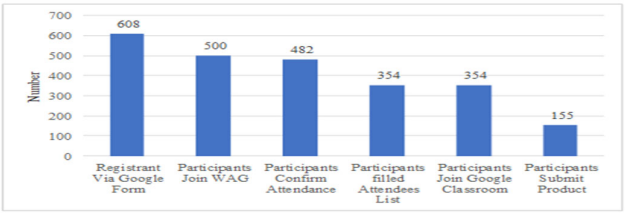

Fig 1. Distribution of Participants at All Training Stages

If described in more detail, for Moodle-based LMS products using the Moodlenesia Platform, 82 products were declared eligible, while the remaining 16 products were declared unfit by the Moodle-based LMS training lecturer, Muhammad Fajar Marsuki, S.Pd., M.Sc. For podcast products, 17 products were declared eligible and the remaining 2 products were declared unfit by the training lecturer, Indra Fardhani, S.Pd, M.Sc, M.I.L., Ph.D. And for the product of the Hybrid Learning practicum module, 33 products were declared eligible and the remaining 5 products were declared unfit by the raining lecturer, Yessi Affriyenni, S.Pd., M.Sc.

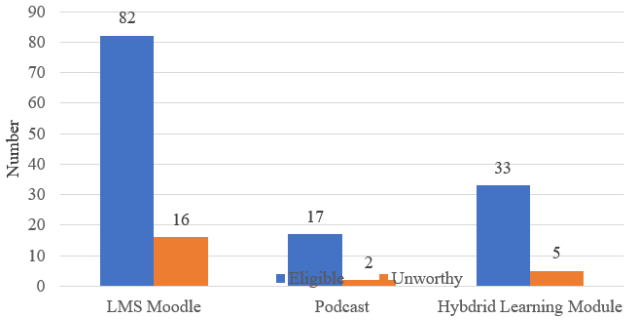

Fig 2. Number of Eligible and Unworthy Products

After the implementation of the synchronous activity of training in the creation of e-learning content for teachers, the team implementing community service activities for the Department of Science Education, Universitas Negeri Malang gave an evaluation questionnaire for the implementation of activities to participants in the form of a Google Form. The results of the questionnaire evaluation of the implementation of the activities showed that 42.9% of participants gave the very good category and 52% of the participants gave the good category for the aspect of the ease of participants accessing information about the training. For the ease of registration process, 49.7% of participants gave the very good category and 44.4% gave a good category, while the remaining 5.9% gave the category quite good or not good.

The main reason was that many participants felt that they did not receive an invitation letter after filling out the Google registration form. It was the participant who wrote the wrong email address on the Google registration form so that the Autocrat application could not send the invitation letter automatically. Some participants who experienced this case were given direction by the implementing team for community service activities, the Department of Science Education, Universitas Negeri Malang, to fill out the Google registration form with the correct data.

For the aspect of ease of communication with the committee, 41% of participants gave the very good category and 51.7% gave a good category. This cannot be separated from the presence of 3 participant Whatsapp groups that have been prepared by the implementing team for community service activities of the Department of Science Education, Universitas Negeri Malang as a medium of communication between the committee and participants. All forms of problems faced by participants can be directly monitored by the committee through the participant's Whatsapp group. For the aspect of information disclosure from the committee to participants, 45.8% of participants gave the very good category and 47.5% of the participants gave a good category.

These results explain that the committee shows a transparent nature of all processes related to the implementation of e-learning content creation training activities for these teachers. In terms of time management, 28% of participants gave a very good category and 59.3% gave a good category, while the remaining 12.7% gave a fairly good or poor category. This figure is quite high and the main cause of 12.7% giving the category quite good or not good is that participants think that the time for carrying out synchronous activities is too long. The synchronous activities do not last too long, starting at 07.30 to 12.15 AM or about 5 hours and even then it is appreciated as much as 8 hours by the implementing team of community service activities.

The results of the validity test using the Product Moment Pearson Correlation method in the Committee Services questionnaire showed a significance value of 0.000 for the five aspects asked in the questionnaire. This value is smaller than α = 0.05 so that all questionnaires are considered valid and accurate for use in research [11–13]. The results of the reliability test on the committee's service questionnaire data resulted in a Cronbach's Alpha value of 0.928 and this value was greater than 0.6, which means the data is reliable or trustworthy [14, 15].

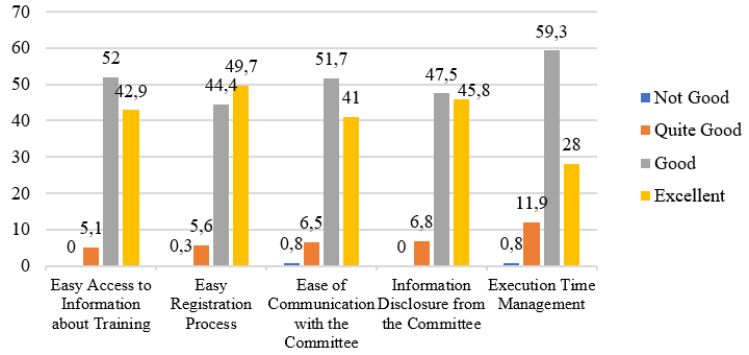

Fig.3. Results of the Evaluation of the Implementation of Activities by Participants

A part from the management of the implementation of activities, the team implementing community service activities of the Department of Science Education, Universitas Negeri Malang also asked participants to provide an evaluation of the implementation of the delivery of material from each training subject. The results of the evaluation showed that about 45.2% to 53.7% of the participants had given the very good category and about 42.7% to 48.3% of the participants gave the good category for delivering the material.

These results indicate that most of the participants considered that the four teaching lecturers had been able to convey their training subjects to a level that was easily understood by the participants. Although there were still around 3.1% to 5.1% of participants considered that the delivery of the material was still quite good or not good enough. This phenomenon may be because the training lecturers are too fast in presenting the material or the participants' initial abilities which may be low in technology so they are unable to follow the explanations of the training eye teachers.

Whatever the cause, this becomes an evaluation material for the team implementing community service activities for the Department of Science Education, Universitas Negeri Malang in carrying out similar activities in the future. The results of the validity test using the Product Moment Pearson Correlation method in the Evaluation Questionnaire showed a significance value of 0.000 for the five aspects asked in the questionnaire. This value is smaller than α = 0.05 so that all questionnaires are considered valid and accurate for use in research [11–13]. The results of the reliability test on the Evaluation Questionnaire data resulted in a Cronbach's Alpha value of 0.943 and this value was greater than 0.6, which means the data is reliable or trustworthy [16, 17].

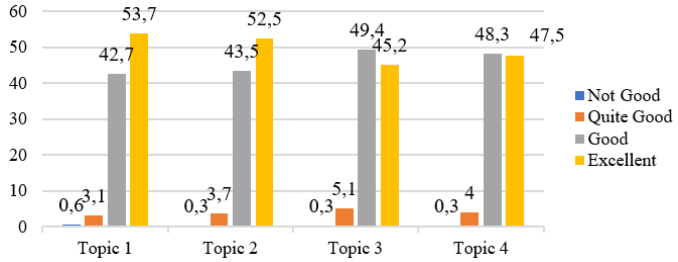

Fig 4. Results of the Evaluation Questionnaire for Submission of Materials by Participants

4 Conclusion

The team implementing community service activities for the Department of Science Education, Universitas Negeri Malang, has successfully carried out training on e-learning content creation for teachers. A total of 354 participants participated in synchronous activities and 155 of them succeeded in working on the training bill asynchronously. Of the 155 participants, 132 participants produced products that were suitable for use in the learning process in the Education unit based on the assessment of the training eye lecturer who served in these community service activities.

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