TRAINING ON DEVELOPING DIGITAL LEARNING MEDIA IN MATHEMATICS MGMP AT JUNIOR HIGH SCHOOL LEVEL

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ABSTRAK Kurikulum Merdeka mengutamakan pembelajaran yang bersifat mandiri dan merujuk pada pengembangan keterampilan abad 21, termasuk adaptasi teknologi digital. Namun, banyak guru, terkhusus di Lhokseumawe, membutuhkan bantuan untuk dapat mengintegrasikan perangkat digital ke dalam pengajaran mereka. Menurut Ketua MGMP Matematika SMP Kota Lhokseumawe, mayoritas guru matematika menghadapi tantangan yang signifikan dalam memanfaatkan teknologi digital selama proses pembelajaran setiap harinya. Untuk menyikapi hal tersebut, pelatihan pembuatan media pembelajaran digital diadakan selama dua hari bagi guru matematika SMP di Lhokseumawe. Pada pelatihan ini diperkenalkan Canva merupakan sebuah aplikasi untuk mendesain media interaktif seperti powerpoint. Pada hari pertama, peserta memperoleh materi pelatihan. Selanjutnya, pada hari kedua, para guru fokus pada praktik langsung, sehingga mereka bisa mengembangkan media digital yang sesuai dengan kebutuhan siswa dan tingkat kelas. Setelah pelatihan, diketahui bahwa keterampilan guru dalam membuat media digital meningkat, dan para guru termotivasi untuk dapat mengeksplorasi lebih banyak perangkat pembelajaran digital.

ABSTRACT The Merdeka Curriculum promotes independent learning and the development of 21st-century skills, including digital technology adaptation. However, many teachers, especially in Lhokseumawe, need help integrating digital tools into their teaching. According to the Chairman of the Lhokseumawe City Junior High School Mathematics MGMP, most mathematics teachers face significant challenges in utilizing digital technology for daily lessons. To address this, a two-day training on creating digital learning media was organized for junior high school mathematics teachers in Lhokseumawe. Canva, an application for designing interactive media like PowerPoint, was introduced. On the first day, participants received training materials. In contrast, on the second day, they were focused on hands-on practice, allowing teachers to develop digital media tailored to their students' needs and grade levels. After the training, it was reported that teachers' skills in creating digital media improved, and they were motivated to explore more digital learning tools.

INTRODUCTION

Musyawarah Guru Mata Pelajaran (MGMP) is a forum for subject teachers to share information, consult, and conduct in-house training to improve their abilities and skills in their functional roles as educators. Through MGMP, teachers can share solutions to various classroom challenges, from classroom management to managing students with special needs (1). MGMP was

formed in multiple cities with various school levels, including the Junior High School Mathematics MGMP in Lhokseumawe City.

Musyawarah Guru Mata Pelajaran (MGMP) at the junior high school level in Lhokseumawe City is an essential forum for developing mathematics teacher professionalism. This forum is for discussion and joint learning for teachers facing learning challenges, including implementing the Merdeka Curriculum. The Lhokseumawe Junior High School Mathematics MGMP continues to improve in implementing the Merdeka Curriculum learning. Many activities and trainings are planned to be carried out so that Human Resources (HR) and the infrastructure under the auspices of this forum can support—the success of the implementation of the Merdeka Curriculum. MGMP Mathematics at the Junior High School Lhokseumawe is committed to providing fun learning to students. This aligns with the essence of Merdeka Curriculumwhich provides opportunities for students to learn calmly, relaxed, fun, stress-free, and pressure-free, to show their natural talents (2). With this forum teachers can continue to develop their competencies, follow the latest developments in education, and build strong networks with fellow teachers. All of this ultimately leads to improving the quality of learning for students, which is the primary goal of education (3).

The role of teachers is vital in implementing the Merdeka Curriculum(4). In this curriculum, teachers act as facilitators, mediators, and motivators who can increase students' motivation to learn (5). In addition, the Merdeka curriculum also encourages teachers to create more flexible and independent learning. It focuses on developing 21st-century skills, including adapting to technology or learning that utilizes digital media. Learning with digital media allows for more active interaction between teachers and students. The available learning resources are unlimited and equipped with online media that are easily accessible and downloaded by students. This supports the effective implementation of the Merdeka Curriculum (6). However, the reality is different. Based on initial observations and interviews with the Chair of the Lhokseumawe City Junior High School Mathematics MGMP, Mrs. Sury Guswita Yani, S.Pd., information was obtained that most mathematics teachers in Lhokseumawe City still face significant obstacles in utilizing digital technology as part of the daily learning process.

The initial survey results show that the digital literacy of junior high school mathematics teachers in Lhokseumawe City still needs to be higher. Most teachers need a greater understanding of multimedia software or applications that can support the learning process. Many still need to rely on traditional teaching methods, such as lectures and textbooks, and make less use of digital resources. This low digital literacy is one of the main obstacles to implementing technology-based learning, as expected in the Merdeka Curriculum(7). In addition, teachers need clarification about the effectiveness of using digital technology. Some teachers feel that the application of technology takes longer in material preparation, while their workload is already quite heavy with administrative tasks and other demands. Infact, technology can simplify the teaching process and provide a variety of learning methods that are more interesting for students (8).

The interview results with the chairman of MGMP also corroborate this finding, where the ability of teachers to prepare digital-based learning media is still meager. As a result, digital teaching materials for mathematics subjects could be more extensive and impact the achievement of low student competence, reducing students' interest and motivation in learning. According to the results of Guntur's research, digital learning media et al. have a significant influence on improving student learning outcomes (9). Learning using digital teaching materials is very much needed in the era of the Merdeka Curriculum because it allows students to learn anywhere and anytime according to their needs (10). The inability of teachers to prepare fun teaching materials also influences students' low interest in learning mathematics subjects. Students need to be more motivated to learn mathematics. They think that mathematics is a complex subject to understand, and the monotonous learning process makes it more difficult.

In addition, from the interview results, it is also known that members of the MGMP Mathematics forum at the junior high school level in Lhokseumawe City have never received training or assistance in developing digital teaching materials. As a result, many teachers still need help accessing and utilizing digital technology, even though this technology is essential in implementing the Merdeka Curriculum. These limited access and skills are the main obstacles for teachers in adapting to the development of technology-based education. Although the Merdeka Curriculumemphasizes the importance of using digital media in learning, mathematics teachers in Lhokseumawe still need to be fully ready to integrate technology into learning practices. Integrating technology also allows teachers to use various digital resources, such as learning videos, simulations, and interactive practice questions, which can improve students' understanding of mathematical concepts (11). Therefore, capacity building through more optimal training and support is required so that teachers can effectively utilize digital technology and improve the quality of learning. This condition is one of the reasons why holding training on making digital learning media for MGMP Mathematics teachers at the junior high school level in Lhokseumawe City is essential. One of the applications that will be used in creating learning media is Canva, which allows teachers to make interactive instructional media and digital learning activities more exciting and compelling. Canva is a graphic design platform for creating various types of visual media, such as presentations, posters, infographics, and social media content. It can be accessed via the website and downloaded on mobile phones via the Playstore.

This digital learning media-making training activity was carried out for two days. On the first day, the teachers received training materials that included using Canva application to create digital learning media. Meanwhile, on the second day, the teachers were accompanied to practice directly the creation of digital media by the subject matter, student characteristics, and grade level they teach at their respective schools. This training aims to improve teachers' ability to create digital learning media using Canva digital platform and produce digital learning media for mathematics learning by the standards of the Merdeka Curriculum. Thus, this training is expected to help teachers

create innovative teaching materials relevant to student needs and the development of learning technology, improve the quality of learning in the classroom, and optimize the use of technology in the teaching and learning process.

METHODOLOGY

MGMP Mathematics of Lhokseumawe Junior High School is one of the forums consisting of 46 mathematics teachers at the junior high school level in Lhokseumawe. It is located at Jalan Sulthanah Nahrisyah, Banda Sakti District, Lhokseumawe City, Aceh. The following are the stages of community service digital learning media training at MGMP Mathematics at the junior high school level in Lhokseumawe city:
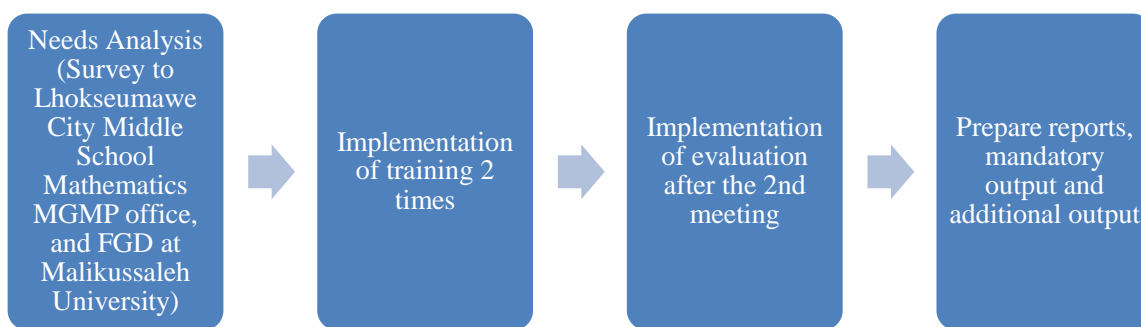

Figure 1. Flow of Implementation of Community Service

The path followed can be detailed as follows.

1. Conduct an initial survey and interview with the head of the Lhokseumawe City Middle School Mathematics MGMP regarding the current needs of teachers, especially mathematics teachers who are members of the Lhokseumawe City Middle School MGMP (Mitra). The survey was conducted once to analyze the training required by MGMP. This activity was assisted by member 1, namely Zalfie Ardian, S.Kom., M.Eng. Based on the results of the teacher needs analysis survey, it was found that there are still many teachers who have not been able to use the interactive learning media "Canva" during the learning information process. This makes mathematics learning monotonous, so teachers need this training. Eighteen teachers attended this training.

   They are preparing to implement training at the Lhokseumawe City Middle School Mathematics MGMP. The team and partners carry out this preparation. The service team prepared materials and several training support equipment. MGMP, as a partner, prepares the facilities and infrastructure needed during the training, including providing space, electricity, microphones and speakers, banners, and the internet network required during the exercise. Apart from that, MGMP also takes care of permits from the education office, prepares invitations for training participants, and writes letters to all school principals whose teachers are training participants.

2. Conduct training, mentoring, and evaluation in 2 meetings related to digital learning media, namely creating digital teaching materials using the Canva application with the following details.

   a. Meeting 1: Introduction to digital learning media created using the Canva application, and continued with training on how to create learning media delivered by speaker Zalfie Ardian, S.Kom., M.Eng. During the training, teachers (participants) also practiced making media according to the instructions of the presenter. The output of this activity is the teacher's knowledge regarding how to create digital learning media using the Canva application.

   b. Meeting 2: Assistance and evaluation in creating digital learning media using the Canva application. At this meeting, teachers design and develop digital learning media that suits the needs and characteristics of their students based on the knowledge gained at previous meetings using the Canva application. After the teacher designs the press, the teacher will continue evaluating digital learning media and revising the media if necessary. This activity will accompany speaker Zalfie Ardian, S.Kom., M.Eng, and the service team. The output obtained from this activity is an increase in teachers' abilities to develop digital learning media using the Canva application and the products produced.

3. Evaluate the second meeting. This evaluation aims to see suggestions for improvements to the implementation of mentoring that has been implemented. The evaluation results will be submitted to the Lhokseumawe City Middle School Mathematics MGMP Chair. They will be later submitted to the principal of each teacher for consideration for the teacher's performance. Apart from that, evaluations are also carried out regarding teacher attendance and activity during training. The service team also asks for feedback from the teacher at each meeting regarding the implementation of the training, for example, mastery of the material by the presenter, response to the audience, timeliness, and level of application of the material. This is done to improve the quality of training at the next meeting. Rifaatul Mahmuzah, S.Pd., M.Pd, administers all assessments. They were implementing media in schools. The service team conducted this activity by visiting several schools regarding implementing digital learning media in the learning process.

4. Yulia Zahara, S.Si., M.Mat, submits news of service activities to print media. Fitri Ayu Ningtiyas, S.Pd., M.Pd., and Nurul Afni Sinaga, S.Pd., M.Pd. prepare and compile articles for publication in national journals. External parties edit videos of activities.

   Lhokseumawe City Middle School Mathematics MGMP is very open and welcomes plans for service activities to be carried out by the service team. According to the head of MGMP, Sury Guswita Yani, S.Pd, this service is needed by current teachers, especially mathematics teachers who are members of the Lhokseumawe City Middle School MGMP to improve the quality of learning by

presenting exciting and meaningful learning material so that it can increase interest and motivation to learn. Students will have an impact on the level of competency achievement. The MGMP Chair coordinates with the school principal to strengthen the evaluations carried out so that teachers are motivated to take part in training and are serious about developing digital learning media that suit the needs and characteristics of their students because the results will be linked to the level of teacher performance in that year.

After this service program is completed, it is hoped that teachers can design and develop more digital learning media for other materials (apart from those created during training) using the Canva application that has been studied. Thus, this service activity will have a long-term impact on both teachers and schools to improve the quality of learning, especially in mathematics lessons, where so far mathematics is still considered one of the boring subjects by students. So, with digital multimedia that will be used by teachers in the learning process, it is hoped that it can increase student interest and learning outcomes.

RESULT

The following are Digital learning media Training activities carried out by the service team as an effort to strengthen the implementation of the independent curriculum in mathematics MGMP at the middle school level throughout Lhokseumawe City.

1. Initial Survey

    Initial survey and interview with the head of the Lhokseumawe City Middle School Mathematics MGMP regarding the current needs of teachers, especially mathematics teachers who are members of the Lhokseumawe City Middle School MGMP (Mitra).

Figure 2. Initial Survey and Discussion of Training Preparation

2. Digital learning media Training

    a. Meeting 1: introduction to digital learning media created using the Canva application and continued with training on how to make learning media.

Figure 3. Canva Training

    b. Meeting 2: Assistance and evaluation in creating digital learning media using the Canva application. At this meeting, the teacher designs and develops digital learning media that suits the students' needs and characteristics based on the knowledge gained at the previous meeting using the Canva application. After the teacher designs the media, they continue with digital learning media evaluation activities and revise the media according to input from the presenters and other training participants.

Figure 4. Canva Assistance

3. Carry out an evaluation

Evaluation is carried out to determine participant satisfaction with the training that has been carried out. The service team collects participants' opinions through questionnaires. The results of the questionnaire analysis can be seen in the following image.
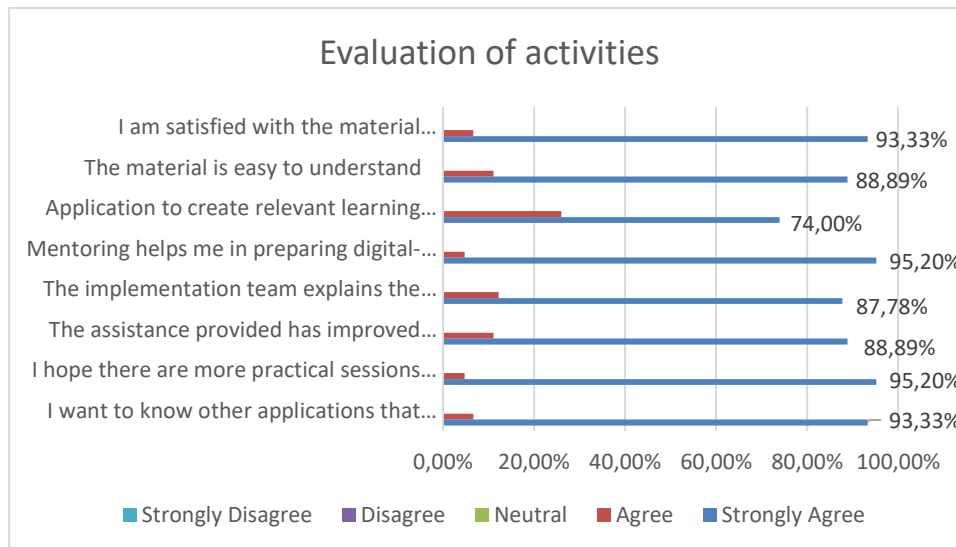

Figure 5. Evaluation Graph's Activity

Based on Figure 5 above, it can be seen that the training participants are delighted with the training activities that have been carried out; this is proven by: (1) the majority of participants, namely 93.33%, want to know more about applications that use digital teaching materials. This shows a high interest in further exploration of learning technology. (2) 95.20% of participants hoped there would be more practice sessions in mentoring. This indicates that although the material was helpful, participants strongly desired to get more hands-on training or practice in its application. (3) 88.89% of participants strongly agreed that mentoring had improved their ability to create digital teaching materials. This indicates that the mentoring is very effective in improving participants' skills. (4) 87.78% of participants strongly agreed that the implementation team explained the material clearly and was responsive to questions. This shows extraordinary effectiveness in the implementation team's delivery of material. (5) As many as 95.20% of participants thought the training helped them prepare for digital-based learning. This shows that the majority of participants felt helped by digital learning training. (6) 74% of participants stated that the application used was relevant in preparing learning. This indicates that the tools used are suitable and helpful in supporting digital-based learning. (7) 88.89% of participants stated that the material was easy to understand. This means that the material presented during mentoring was considered straightforward and easy for participants to understand, and (8) 93.33% of participants were delighted with the material presented during training activities.

This level of satisfaction shows that most participants felt the training activities were beneficial. Apart from that, teachers/participants were asked to provide suggestions for improvements to the mentoring process that had been carried out, while some of the information obtained was as follows: 1) additional time for mentoring and 2) more applications given to participants.

DISCUSSION

The initial step taken in this community service was a survey. The survey was conducted once to analyze the training required by MGMP. The survey was conducted on 6 September 2024. Through this survey, information was obtained that MGMP teachers were ready to take part in the digital learning media training that would be held. A total of 18 teachers will take part in Canva training.

The next step is training activities delivered by speaker Zalfie Ardian, S.Kom., M.Eng. The speaker introduces the features found in the Canva application and the differences between the Canva web and the mobile application. This meeting was held on 26 September 2024. Training activities start at 08.00 WIB and run until 17.00 WIB. During the training, teachers (participants) also practiced making media according to the presenter's instructions. Training continued on the second day, 27 September 2024, from 08.00 WIB to 17.00 WIB. This activity was accompanied by speaker Zalfie Ardian, S.Kom., M.Eng. , and the service team. The teacher responded positively and showed further interest because he already understood Canva and could create interactive media that could be applied in the learning process. This understanding makes teachers more creative in designing interesting teaching materials, making students more enthusiastic about participating in lessons. Using Canva allows teachers to present material visually and dynamically, increasing student engagement and making learning more effective (12).

Overall, teachers realize that the training they have participated in has provided benefits to the development of teachers' professional competence. Teachers who continue to develop their competencies tend to use teaching methods that are more innovative, interesting, and appropriate to students' needs. Understanding the benefits of competency development makes teachers more motivated to update learning materials and methods so that students' learning experiences become more meaningful (13). Apart from that, based on the activity evaluation survey, it is known that teachers need more training related to interactive learning media to make the learning process in class more interesting. This is because technology in education has long been recognized as a factor that can increase learning effectiveness, expand access to information, and create a more attractive learning environment for students (14). Digital media training is also an effort to improve teacher competence in using technology-based learning tools. Arifin emphasized that teacher competence in information and communication technology (ICT) is essential to support the successful implementation of a curriculum adaptive to current developments (15). In the context of the training,

providing technical skills regarding Canva increases teachers' technical competence. It offers practical experience in designing learning media adapted to suit student needs.

CONCLUSIONS AND SUGGESTIONS

The conclusion that can be drawn from the training is that digital learning media training activities using the Canva application have been carried out well at the Lhokseumawe City Middle School Mathematics MGMP. There is an increase in the understanding of mathematics teachers who are members of the Lhokseumawe City Middle School Mathematics MGMP regarding digital learning media using the Canva application, and there is an increase in teachers' abilities in developing learning media using the Canva application. Apart from that, suggestions that can be given for the future are that digital learning media training can be continued with a longer duration for various other web applications.

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