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TRAINING FOR THE PREPARATION OF DIGITAL TEACHING MATERIALS DURING THE COVID-19 PANDEMIC FOR PALU CITY CHEMICAL MGMP

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Abstract

During the Covid-19 Pandemic, there has been a fundamental change in the implementation of chemistry learning. Face-to-face lectures and laboratory practice to accommodate the connectedness of the three levels of representation can no longer be carried out. Chemistry learning is fully replaced through online learning. The Chemistry MGMP in Palu City realizes the importance of making various efforts so that the chemistry learning process runs well in terms of delivering learning material and carrying out practicums in the laboratory. One application that can be used by combining various learning media that have been used by chemistry teachers (among others: the zoom application, WhatsApp, Google Class Room, LMS, etc.) is using Ice Cream Screen Recorder. There were 40 participants in the training who were chemistry teachers who were members of the Palu City High School Chemistry MGMP group. Activities carried out in the form of training and mentoring are carried out with a participatory model. Community service activities for the Palu City Chemistry Subject Teacher Consultation (MGMP) partners in the preparation of digital teaching materials during the Covid pandemic have been carried out well thanks to good cooperation with various parties. This is illustrated by the output in the form of ice cream-based digital teaching materials and flipbooks that the participants have made from the results of this community service training and mentoring. The final result of this service is according to the expected target, namely the existence of digital chemistry teaching materials that utilize the Ice Cream Recorder application used in chemistry learning.

Keywords: Ice Cream Recorder, Digital textbook, Chemistry.

INTRODUCTION

Learning is the core of the educational process. Improving the quality of education can be done by improving the quality of learning. Online learning and working from home for educators are changes that must be made by teachers/lecturers to continue teaching students/students. Distance education has the goal of increasing the quality of education and relevance of education as well as increasing equity in access and expanding education (Argaheni, 2020).

The teacher is a figure who has an important role in the learning process to improve children's development according to their abilities. Teachers are facilitators in learning to support children's development, especially during the Covid-19 pandemic, teachers are required

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to be able to demonstrate competence in guiding children. During this pandemic, according to the instructions of the Minister of Education and Culture, schools must be able to conduct online learning. Therefore, both teachers and students must be able to do online learning. Teachers must continue to carry out their duties in teaching and educating children even without having to meet face-to-face with students. This needs to be considered so that the teacher's role in supporting the online learning process during the Covid-19 pandemic is not neglected and students can still learn happily without feeling burdened in the learning process (Sukitman, et al, 2020).

The demand to carry out the social distancing movement as well as the existence of a work-from-home policy requires teachers/lecturers to design learning that can be followed by students/students from their respective homes. In response to the above, during the Covid-19 pandemic, teachers/lecturers must change their learning strategy from face-to-face learning in the room to online learning that students can join from anywhere. This online learning is carried out both synchronously and asynchronously using web services and learning applications. Synchronous learning is carried out via video conferencing. Through this learning, lecturers and students meet and communicate in real-time using the Zoom or Google Meet application (Firman, 2020).

During the Covid-19 Pandemic, there has been a fundamental change in the implementation of chemistry learning. Face-to-face lectures and laboratory practice to accommodate the connectedness of the three levels of representation can no longer be carried out. Chemistry learning is fully replaced through online learning. (Farida, et al, 2020). That is, this condition requires chemistry teachers to innovate learning using various applications to help students not only convey chemical concepts but also carry out practicums that support these concepts. This is what the Subject Teacher Consultation (MGMP) group should pay attention to in uniting ideas and attitudes in carrying out learning innovations through the use of various online learning applications (Rahmawati, et al, 2022; Afadil, et al, 2022).

The Chemistry MGMP in Palu City realizes the importance of making various efforts so that the chemistry learning process runs well in terms of delivering learning material and carrying out practicums in the laboratory. The Chemistry MGMP group consists of 40 chemistry teachers spread across the state, private, and Madrasah Aliyah high schools who seek to share information and online learning materials so that all members can carry out the learning process well. Members of the chemistry MGMP have owned various teaching materials available online, be it teaching materials (e-books), learning modules, practicum modules (e-modules), and various other forms of e-learning. However, the obstacle is how to convey these teaching materials to students easily and according to the expected learning objectives. Chemistry teaching materials are not enough to be taught through zoom applications, WA, Google classrooms, and LMS because 80% of chemistry material is abstract. This requires teachers to use learning applications that are simple but can be directly felt and understood by students. Based on the results of interviews with the head of the MGMP and several of its members, it was explained that these limitations were very disturbing and affected the achievement of the learning objectives at each meeting.

The Palu City Chemistry MGMP has an important role in responding to government policies regarding the implementation of online learning through the use of information technology that is easily implemented by teachers and students. The Ministry of Education and

Culture echoes the spirit of increasing productivity for students to increase job opportunities when they graduate from school. This is a challenge that must be answered by chemistry teachers in teaching concepts and practical implementation. Various challenges that must be overcome include: (1) limited mastery of information technology by teachers and students, (2) inadequate facilities and infrastructure, (3) limited internet access, and (4) unprepared budget provision.

One application that can be used by combining various learning media that have been used by chemistry teachers (zoom, WA, Google Class Room, LMS, etc.) is using Ice Cream Screen Recorder. This software works as a compatible laptop screen recorder or can be used on various OS such as Windows, Mac, and Android and it is free (free) to use. This application is reliable for recording screens of various activities such as making tutorials, games, YouTube videos, webinars, zoom meetings, live streaming, Netflix movies, Skype, and many others that you can try. Besides that, it can also be used to save screenshots to the clipboard and send them quickly and automatically directly via email or skype. This application is suitable for learning chemistry during the Covid-19 pandemic. Based on this situation analysis, the justification for the problems faced by teachers who are members of the Palu City Chemistry MGMP in terms of priority scale is as follows: (1) the availability of e-books, e-modules, and forms of e-learning on the internet has not been able to teachers put them to good use in the learning process during the Covid-19 pandemic; (2) have not utilized the existing facilities on laptops, learning applications on the internet, and the use of Android to make it easier for teachers to carry out online learning activities; (3) Teachers who are members of the Palu City Chemistry MGMP do not understand the use of the Ice Cream Recorder application in preparing digital teaching materials. Therefore the service team feels compelled to carry out a community service activity, with the title "Training for Preparation of Digital Teaching Materials during the covid pandemic for the Palu City Chemistry MGMP."

METHOD

Approach method

The approach method offered to solve partner problems is: Providing training on preparing digital-based teaching materials using the Ice Cream Recorder application which can be used during the Covid pandemic, at this stage the service team acts as a teacher in presenting material and examples of using the Ice Cream Recorder application. Furthermore, practical work on making teaching materials using the Ice Cream Recorder application for teaching materials during the Covid pandemic, accompanied by a community service team. Doing assistance. After receiving the material as in the first stage, the participants will then work and learn to make these digital-based teaching materials.

Based on the foregoing, in the implementation of activities, the following steps will be taken:

1. Socialization with related agencies, in this case, the department, school principals, and chairperson of the Palu city chemistry MGMP
2. Presentation of material/training for making digital-based teaching materials using the Ice Cream Recorder application.
3. The teacher learns to make his teaching materials using the Ice Cream Recorder application, accompanied by a community service team.

4. At the end of the activity, each teacher submits the results of his work.

Implementation of Activities

The service program for the Palu city chemistry MGMP partners was carried out at SMAN 4 Palu. Service activities carried out are:

1. Socialization with schools and the Office
2. Explanation to participants about the importance of digital teaching materials during a pandemic in understanding chemistry lessons, as information and additional knowledge for partner groups
3. Practical work on making digital teaching materials for high school chemistry materials using the ice cream recorder application which is carried out directly by teachers who are members of the Palu city chemistry MGMP accompanied by a service implementing team

PKM IMPLEMENTATION RESULTS

Implementation of training

The service begins with socialization with the relevant agency, the Palu City Chemistry MGMP. This socialization aims to provide information to relevant agencies regarding service so that participants know the purpose of implementing the program by the implementing team so that there is no misinformation. Furthermore, after submitting the program plan as a whole, it will be continued with the provision of training related to the theme of service, namely Training on Compiling Digital Teaching Materials during the Covid-19 Pandemic for the MGMP Chemistry in Palu City

The training was held at SMAN 4 Palu. In carrying out the training, the participants involved were members of the Palu City Chemistry MGMP. The number of participants who participated in this training was 30 people.

The training materials include the Preparation of digital teaching materials using the ice cream application and flip book, the practice of making teaching materials based on these two applications for chemistry classes 10 to 12 as well as assistance in completing chemistry teaching materials for classes X - XII.

Figure 1 Implementation of Training on Making Digital Teaching Materials Using the Ice Cream Recorder Application

Practical Work for Compilation of Teaching Materials

In the practice of compiling digital teaching materials, the participants were divided into 3 groups, namely: class X material group, class XI material group, and class XII material, with each group accompanied by a team of service implementers and field staff. The activities carried out in the practical work are the participants are guided/accompanied starting from identifying the material to be made and teaching materials based on ice cream and flipbooks, so that the desired learning objectives can be achieved. Next, they are guided to make digital teaching materials using ice cream applications and flipbooks that students can use during the Covid pandemic. All of these activities are carried out in such a way as to make it easier for the trainees to do this on an ongoing basis.

Figure 2 The practice of making Digital Teaching Materials, accompanied by the Community Service Team

Accompaniment

Mentoring activities are carried out to ensure that the material/technology delivered to partners can be implemented properly so that the results obtained can reach the target.

Figure 3 Group photo of teachers who are members of the Palu City Chemistry MGMP

The outputs that have been achieved are ice cream-based digital teaching materials and chemistry flip books for grades X, XI, and XII from MGMP Chemistry partners in Palu city.

CONCLUSION

Community service activities for the Palu City Chemistry Subject Teacher Consultation (MGMP) partners in the preparation of digital teaching materials during the Covid pandemic have been carried out well thanks to good cooperation with various parties. This is illustrated by the output in the form of ice cream-based digital teaching materials and flipbooks that the participants have made from the results of this community service training and mentoring.

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REFERENCES

Argaheni, N. B. (2020). Sistematik review: Dampak perkuliahan daring saat pandemi COVID-19 terhadap mahasiswa Indonesia. Placentum: Jurnal Ilmiah Kesehatan Dan Aplikasinya, 8(2), 99-108.

Afadil, A., Rahmawati, S., Nuryanti, S., M. Diah, A., & Nurmayanti, Y. (2022). Pelatihan Pengembangan Bahan Ajar Digital Untuk Kelompok MGMP Kimia Kota Palu Menggunakan Ice Cream Recorder. Abdi Dosen : Jurnal Pengabdian Pada Masyarakat, 6(2), 337-343. doi:10.32832/abdidos.v6i2.1091

Farida, I., Sunarya, R. R., Aisyah, R., & Helsy, I. (2020). Pembelajaran Kimia Sistem Daring di Masa Pandemi Covid-19 Bagi Generasi Z (Karya Tulis Ilmiah (KTI) Masa Work From Home (WFH) Covid-19). UIN Sunan Gunung Djati Bandung.

Firman, F. (2020). Dampak covid-19 terhadap pembelajaran di perguruan tinggi. BIOMA: Jurnal Biologi Dan Pembelajarannya, 2(1), 14-20.

Rahmawati, S., Hamzah, B., Nuryanti, S., & Afadil, S. (2022). Pelatihan Penyusunan Lembar Kerja Peserta Didik (LKPD) Untuk Praktikum Dimasa Pandemi Covid Bagi MGMP Kimia Kota Palu. Abdi Dosen : Jurnal Pengabdian Pada Masyarakat, 6(1), 1-6. doi:10.32832/abdidos.v6i1.1034

Sukitman, T., Yazid, A., & Mas' odi, M. (2020, September). Peran guru pada masa pandemi Covid-19. In Prosiding Seminar Nasional Pendidikan Biologi.