INCREASING TEACHERS' COMPETENCE THROUGH WEB-BASED INTERACTIVE MEDIA TRAINING IN MATHEMATICS LEARNING

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ABSTRACT

Community Service Program (PKM) Improving Teacher Competence Through WEB-Based Interactive Media Training in Mathematics Learning aims to overcome the problems faced by SMAN 1 Bayah. The limited basic knowledge of teachers regarding interactive media that can be used to support the passage of an effective teaching and learning process, especially WEB-based. The solution offered is to provide mentoring and training to teachers directly regarding WEB-based interactive media. The training aims to improve teacher competence through WEB-based interactive media training in mathematics learning. The training activities are carried out for 5 (five) days by reviewing the plan of learning and training programs as well as guidance in creating and running the WEB in its role to support the learning process. The results of this PKM showed an increase in scientific capacity and competence by 19.8% for WEB-based interactive media training in Mathematics learning at SMAN 1 Bayah.

Keywords: Teacher Competence, Interactive Media

A. INTRODUCTION

In the world of education, the professionalism of a teacher is required to have good verbal skills in order to be able to communicate information and transfer knowledge conveyed to students. However, if the learning process only relies on verbal skills, there will be limitations. Science and Technology (IPTEK) is currently developing rapidly. The development of science and technology is also used in the world of education, one of which is to maximize the interactive learning process based on ICT (Information and Communication Technology) in order to improve learning activities and student learning outcomes.

The benefits of learning media are stated by Kemp and Dayton (in Purnomo: 2015), namely:

1. The delivery of learning materials can be uniformed.
2. The learning process becomes more interactive.
3. The learning process becomes more interactive.
4. The amount of teaching-learning time can be reduced

5. The quality of student learning can be improved.
6. The learning process can occur anywhere and anytime.
7. The positive attitude of students towards the learning process can be improved.
8. The role of the teacher can change in a more positive and productive direction.

This community service activity is a Community Service Program organized by Primagraha University, Faculty of Teacher Training and Education, Mathematics Education Study Program. PKM is held at SMA Negeri 1 Bayah because it is a favorite school in Bayah District. Bayah District is located in Lebak Regency, Banten Province, which is still an area far from the center of government and the city of Banten. The results of the survey at the school concluded that some of the teachers at the school had not used interactive media in the learning process, especially the knowledge about WEB was still lacking. This condition causes the learning process to only focus on face-to-face learning in the classroom and students cannot

explore learning through actual media learning through this media which they can access at any time so that the learning process will be more effective.

B. METHOD OF IMPLEMENTATION

The method of implementing activities describes the stages or steps in implementing the solutions offered to overcome the problems. Based on the problems faced by partners, one of the solutions that can be done is to provide knowledge about WEB-based interactive media in the form of training activities for mathematic teachers. All activities are planned to be carried out within 5 (five) days, which includes several stages:

Preparation of Activity Equipment
During this stage, several activities are carried out, including:

1. Preparing the place for the training, namely by preparing a room at the partner school along with supporting equipment as the main equipment in the training.
2. Prepare tools and materials used in training.
3. Prepare interactive presentation media, namely presentation slides

made by the presenters including infocus/LCD projectors and other supporting materials that will be needed by participants.

Training Implementation

In this training, participants were re-recorded based on the information obtained at the time of registration. Before the training started, each participant was given a writing utensil. During the training, each participant uses one computer. Participants will be given knowledge about how to understand WEB-based interactive media in learning mathematics.

C. RESULT AND DISCUSSION

This service activity was preceded by preparation for the implementation of activities, namely the distribution of participant forms to partner schools, and socialization activities. The socialization activity aims to provide information on the agenda of activities and the objectives of implementing the activities as well as seeking agreement on the implementation schedule and the materials presented. After the socialization was carried out which

was attended by several school building teachers, 20 (twenty) participants were obtained.

The activity was opened by the Principal and the Implementing Committee, then handed out placards as an opening for school PKM activities. The activity which took place in the class room of SMA Negeri 1 Bayah was attended by the chairperson and members of the activity implementer, the assistant team and all teachers. On this occasion also carried out the submission of modules, practice questions along with discussions that were practiced in the training

In the training activities, WEB-based interactive media were introduced which participants from partner institutions still did not understand in depth. The introduction was carried out with the help of existing presenters and modules. The activity then continued with the presenter explaining the material, then participants were given training to make WEB and then they learned to make material simulations that would be uploaded on the WEB to support teaching and learning activities.

Coaching is done after training and the process is flexible. This means that the coaching process is not scheduled and can be done through various means of communication, such as via telephone, SMS, and the WhatsApp application. The presenters provide contact persons to all participants so that if participants encounter difficulties related to problem solving web programming or computer network configuration after training, the presenters can still help solve these problems.

The closing activity was filled with hospitality and conveying impressions and suggestions from participants during the PKM activity to improve the next activity. The Organizing Committee and Presenters also motivate the training participants to continue learning and improve their competence, both individually and in groups. This is done with the hope that schools, especially teachers, can take advantage of the training module in the mentoring and debriefing process.

D. CONCLUSION

The availability of human resources in the world of education at

SMA Negeri Bayah is very important. The teacher's lack of understanding about WEB-based interactive media causes learning to run less effectively. With this kind of training, it is able to increase teacher knowledge and increase teacher competence which will later become provisions in carrying out learning. From the evaluation results, it was found that there was an increase in knowledge of 19.8%.

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