

Training of ICT-Based Learning Media Creation to Increase SMP Negeri 2 Pakem Sleman Teachers' Competence

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ABSTRACT

SMP Negeri 2 Pakem is located at Jalan Kaliurang Km. 20 Pakem Sleman Daerah Istimewa Yogyakarta. The school has 377 students and 19 teachers. ICT facilities and infrastructure in this school is sufficient, namely, there are two LabKom (Computer Laboratory) with LAN (Local Area Network) and internet connection. The number of computers is 28 units (26 hosts and 1 main server and 1 backup server) in each lab. The utilization of computer lab in schools has not been optimal yet, because it is only used for ICT learning and online test of national examination, so the lab is still rarely used. This condition makes the school headmistress take the initiative to further empower the lab in instructional processes by improving the competence of the teachers in the field of ICT in creating ICT-based learning media, especially in creating learning materials and online test questions through e-learning.

With these conditions, PPM (Community Service) activity was performed including identification and analysis of LAN and internet in schools and training of ICT-based learning media, especially creating online test questions. Results of LAN and Internet analysis in SMPN 2 Pakem were that every lab already had to LAN and WLAN for internet connection, but there is no link between lab 1 and lab 2. The school has Internet subscription from IndiHome with 1 Mbps of bandwidth. With this amount of bandwidth, it would be very slow for the training using internet connection. Therefore, before training sessions, some activities such as building a web server, database server, mail server, DNS server, FTP server, and router for LAN were carried out. Subsequently, local access (LAN) school e-learning, web, and email were built. Next activities is to conduct training of learning media on all teachers SMPN2 Pakem with learning media materials and e-learning, introduction of e-learning, login, and lessons creation, creation of resources, quiz, question bank, importing questions using Gift and Aiken format, and creation of quizzes with images. Following teachers training on e-learning, students were also trained to use the e-learning. There were 24 students representing classes in the school. They were trained on the introduction of e-learning, login, and opening the course, and doing online quiz.

The result of the program is a local Moodle-based e-learning system containing subject matters and the various quizzes. Besides, local web and email were also created. In the future, it is expected that the school will be able to develop and own school homepage fully online to be accessed via the internet anywhere at anytime.

Kata Kunci: *Keywords: e-learning, courses, quizzes.*