ABSTRACT

The limited study time in class, or sudden Affairs until the teachers could not be present in the classroom, sometimes blocking in conveying all the subject matter. In addition, teachers are constrained in awarding problems exercises or quizzes manually with the examination results. This led to his learning process is inefficient, due to limitations of time and place. Where is the current information and communication technology is growing very rapidly, but there is still that have yet to optimize the process of teaching and learning in ICT and is also still the lack of Telecommunications Engineering Science among vocational high school. Based onthis, it needs a solution.

Therefore, to overcome the problems that have been presented before, made a E-learning applications, as well as being the final project by lifting the title "design andimplementation of E-learning-based LMS Moodle (Case studies SMK Prakarya Internasional)". E-learning is based on Moodle LMS and use Hosting services Indonesia i.e. Qwords.com, where apache web server and PHP as a server and its databases.

In this final project, there is a functionality test results indicate that the system is running properly, and performance test results showed 0% error of 10-20 user access at the same time, as well as the results of the questionnaire there are 80% stating this application helps the process of teaching and learning. So it can be inferred, this e-learning applications can help in the process of teaching and learning and facilitatethe time learn more about the science of telecommunications engineering among Vocational High School, without necessarily limited by distance and time.

Keywords: e-learning, LMS, Moodle, Server