

ABSTRAK
PENGEMBANGAN *LEARNING MANAGEMENT SYSTEM* (LMS)
BERBASIS *GOOGLE SITES* TERINTEGRASI
MODEL POE (*PREDICT, OBSERVE, EXPLAIN*)
UNTUK MENINGKATKAN EFEKTIFITAS
PEMBELAJARAN KIMIA

OLEH
UMI MASRUOH

Tujuan penelitian ini adalah (1) Mendeskripsikan proses dan hasil pengembangan LMS berbasis *Google Sites* terintegrasi Model POE untuk meningkatkan efektifitas pembelajaran Kimia ditinjau dari kemandirian belajar peserta didik kelas XI di SMAN 4 Tumijajar; (2) Menganalisis efisiensi penggunaan LMS Berbasis *Google Sites* terintegrasi Model POE untuk meningkatkan kemandirian belajar peserta didik kelas XI di SMAN 4 Tumijajar; dan (3) Menganalisis efektifitas penggunaan LMS berbasis *Google Sites* terintegrasi Model POE untuk meningkatkan kemandirian belajar peserta didik kelas XI di SMAN 4 Tumijajar. Penelitian ini dilatar belakangi berdasarkan hasil observasi di sekolah dengan analisis perlu adanya pengembangan untuk mengatasi masalah pembelajaran atas dasar kesenjangan antara JP intrakurikuler yang berkurang 30% karena pelaksanaan P5, dokumen hasil belajar peserta didik yang perlu di tingkatkan, penggunaan *smartphone* dan *handphone*, media pembelajaran yang disesuaikan dengan kondisi zaman, serta kemandirian belajar yang masih perlu ditingkatkan. Metode penelitian yang digunakan mengadaptasi dari penelitian dan pengembangan (*R&D*) Thiagarajan yang terdiri dari *Define, Design, Develop* dan *Disseminate*. Model POE diimplementasikan kedalam media pembelajaran sebagai model pembelajaran yang digunakan. Populasi dalam penelitian ini adalah peserta didik kelas XI berdasarkan teknik *purposive sampling*. Teknik pengumpulan data menggunakan kuesioner, observasi, angket dan dokumentasi. Teknik analisis data dalam penelitian ini menggunakan teknik analisis statistik deskriptif dan uji *t* untuk meninjau kemandirian belajar peserta didik. Pengembangan media ini menghasilkan media pembelajaran LMS Berbasis *Google Sites* Terintegrasi Model POE untuk meningkatkan efektifitas pembelajaran kimia. Hasil validator ahli materi memberikan persentase nilai sebesar 89,47%, validator ahli media memberikan persentase nilai sebesar 90,91%, dan validator ahli desain memberikan persentase nilai sebesar 94,12%, Pelaksanaan kegiatan pembelajaran yang dilakukan dikelas XI di SMAN 4 Tumijajar oleh peneliti dengan menerapkan produk yang dikembangkan diperoleh hasil yang efisien berdasarkan waktu pembelajaran yang dilakukan dengan indek nilai sebesar 1,2 dimana rasio waktu yang dipergunakan lebih dari 1 maka produk dikatakan efisiensinya tinggi; dan pelaksanaan kegiatan pembelajaran yang dilakukan dikelas XI di SMAN 4 Tumijajar oleh peneliti dengan menerapkan produk yang dikembangkan diperoleh hasil yang efektif diterapkan di kelas XI dengan analisis hasil peningkatan (*indeks gain*) sebesar 63,52% dengan kriteria pembelajaran cukup efektif serta adanya peningkatan kemandirian belajar yang di analisis dengan uji *t* diperoleh tingkat signifikan 0,00 kurang dari 0,05 yang menunjukkan adanya perbedaan rerata kemandirian belajar peserta didik sebelum dan sesudah pembelajaran menggunakan LMS Berbasis *Google Sites* terintegrasi model POE.

Kata kunci: *LMS, Google Sites, Model POE, Kemandirian Belajar.*

ABSTRACT

DEVELOPMENT OF LEARNING MANAGEMENT SYSTEM (LMS) BASED ON INTEGRATED GOOGLE SITES POE MODEL (PREDICT, OBSERVE, EXPLAIN) TO INCREASE EFFECTIVENESS CHEMISTRY LEARNING

By

UMI MASRUROH

*The objectives of this research are (1) to describe the process and results of developing an LMS based on Google Sites integrated with the POE model to increase the effectiveness of chemistry learning in terms of the learning independence of class XI students at SMAN 4 Tumijajar; (2) Analyzing the efficiency of using an LMS based on Google Sites integrated with the POE model to increase the learning independence of class XI students at SMAN 4 Tumijajar; and (3) Analyzing the effectiveness of using an LMS based on Google Sites integrated with the POE model to increase the learning independence of class XI students at SMAN 4 Tumijajar. This research is based on the results of observations in schools with an analysis of the need for development to overcome learning problems based on the gap between intracurricular JP which has been reduced by 30% due to the implementation of P5, student learning outcomes documents that need to be improved, the use of smartphones and cellphones, learning media which is adapted to current conditions, as well as learning independence that still needs to be improved. The research method used was adapted from Thiagarajan's research and development (R&D) which consists of Define, Design, Develop and Disseminate. The POE model is implemented into learning media as the learning model used. The population in this study were class XI students based on purposive sampling technique. Data collection techniques use questionnaires, observation, questionnaires and documentation. The data analysis technique in this research uses descriptive statistical analysis techniques and the *t* test to review students' learning independence. The development of this media produces LMS learning media based on Google Sites Integrated POE Model to increase the effectiveness of chemistry learning. The results of the material expert validator gave a score percentage of 89.47%, the media expert validator gave a score percentage of 90.91%, and the design expert validator gave a score percentage of 94.12%. Implementation of learning activities carried out in class XI at SMAN 4 Tumijajar by researchers by applying the product developed obtained efficient results based on the learning time carried out with an index value of 1.2 where the ratio of time used is more than 1, so the product is said to have high efficiency; and the implementation of learning activities carried out in class which was analyzed using the *t* test, a significant level of 0.00 was obtained, less than 0.05, which shows that there is a difference in the average learning independence of students before and after learning using the LMS based on Google Sites integrated with the POE model.*

Keywords: LMS, Google Sites, POE Model, Learning Independence.