

ABSTRACT

Blended Learning Module Development of Web-Based Learning Centric Course Moodle On Colloidal Lesson in Class XI Specialisation School of Mathematics and Natural Sciences

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Colloidal lesson is the competency that should be mastered class XI students on the subjects of chemistry at the Mathematics and Natural Science Specialisation Program (MIA). Learners need to gain the experience of direct learning in the form of colloidal knowledge and skills of producing it, it can be facilitated through the use of blended learning modules centric web-based learning course using moodle. Website the aims of the study is to develop learning modules blended learning web-based centric course moodle to be valid, practical, and effective.

This type of research is the development research. Model and procedures development using 4-D model (four models) comprising the steps define, design, develop, and disseminate. In the define phase, analysis of curriculum and analysis of learner are done, the design phase is to design learning modules blended learning web-based centric course Moodle. At the stage of develop, validated by linguists, design experts, media specialists and subject matter experts and trial limited to SMAN 2 Pangkalan Kerinci MIA.2 class XI, to determine the validity, practicalities and the effectiveness of learning modules centric web-based blended learning course developed moodle, phase disseminate is not done. Data obtained to determine the validity of the learning modules centric web-based blended learning Moodle course derived from the questionnaire validation. The data that is used to determine the practicalities of the questionnaire obtained from the practicalities of professors, teachers, and learners. Efficacy data is obtained from the output of study of the students. Efficacy data obtained from the study of students both the knowledge, skills, and attitudes.

The results show that the development of learning modules for webcentric blended learning based on the Moodle course colloidal material in class XI mathematics specialization natural sciences by linguists valid (77.65%) with good language quality, design experts very valid (87.59%) with quality the design is very good, very valid media experts (88.00%) with excellent quality media, and subject matter experts very valid (84.00%) with a very good quality material. Practicalities modules for lecturers very practical to the average of all aspects of 90.11%. Results of research by implementing the module in the learning showed 90.24% active learners and learning outcomes of students an average of 93.24 with 100% classical completeness. It can be concluded learning blended learning modules centric web based Moodle course on colloidal material proved effective.

ABSTRAK

Pengembangan Modul Pembelajaran *Blended Learning* Berbasis Web Centric Course Moodle Pada Materi Koloid di Kelas XI SMA Peminatan Matematika Ilmu Alam

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Materi Koloid merupakan kompetensi yang harus dikuasai peserta didik kelas XI pada mata pelajaran kimia di Program Peminatan Matematika Ilmu Alam (MIA). Peserta didik perlu mendapatkan pengalaman belajar secara langsung berupa pengetahuan koloid dan keterampilan pembuatannya, hal ini dapat difasilitasi melalui penggunaan modul pembelajaran *blended learning* berbasis *web centric course* dengan menggunakan *website moodle*. Penelitian ini bertujuan untuk mengembangkan modul pembelajaran *blended learning* berbasis *web centric course moodle* yang valid, praktis, dan efektif.

Jenis penelitian ini adalah penelitian pengembangan. Model dan prosedur pengembangan menggunakan 4-D model (*four models*) yang terdiri dari tahap *define*, *design*, *develop*, dan *disseminate*. Pada tahap *define* dilakukan analisis kurikulum dan analisis peserta didik, pada tahap *design* dilakukan perancangan modul pembelajaran *blended learning* berbasis *web centric course moodle*. Pada tahap *develop* dilakukan validasi oleh ahli bahasa, ahli desain, ahli media, dan ahli materi dan uji coba terbatas pada SMAN 2 Pangkalan Kerinci kelas XI MIA.2, untuk mengetahui validitas, praktikalitas dan efektifitas modul pembelajaran *blended learning* berbasis *web centric course moodle* yang dikembangkan. Tahap *disseminate* tidak dilakukan. Data yang diperoleh untuk menentukan validitas modul pembelajaran *blended learning* berbasis *web centric course moodle* berasal dari angket validasi. Data untuk menentukan praktikalitas diperoleh dari angket praktikalitas dosen, guru, dan peserta didik. Data efektivitas diperoleh dari hasil belajar peserta didik baik pengetahuan, keterampilan, dan sikap.

Hasil pengembangan menunjukkan bahwa modul pembelajaran *blended learning* berbasis *web centric course moodle* pada materi koloid di kelas XI peminatan matematika ilmu alam oleh ahli bahasa valid (77,65%) dengan kualitas bahasa baik, ahli desain sangat valid (87,59%) dengan kualitas desain sangat baik, ahli media sangat valid (88,00%) dengan kualitas media sangat baik, dan ahli materi sangat valid (84,00%) dengan kualitas materi sangat baik. Praktikalitas modul untuk dosen sangat praktis dengan rata-rata semua aspek 90,11%. Hasil penelitian dengan mengimplementasikan modul dalam pembelajaran menunjukkan keaktifan peserta didik 90,24% dan hasil belajar peserta didik rata-rata 93,24 dengan ketuntasan klasikal 100%. Dapat disimpulkan pembelajaran modul *blended learning* berbasis *web centric course moodle* pada materi koloid terbukti efektif.