ABSTRACT

IfziIhsan. 2019. "Development of Electronic Physics Module for Class XI High School Semester 2 UsingModel *Inquiry Based Learning* IntegratedApproach *Contextual Teaching And Learning*." Thesis. Physics Education Study Program Faculty of Mathematics and Natural Sciences, Padang State University.

Participants in the learning process are still lacking in independence and are not yet motivated and active in learning activities. One contributing factor is the teaching materials applied in the learning process not yet in accordance with the needs of students. In reality, the field still uses printed teaching materials and does not use models and integrates approaches in teaching materials. Utilization of technology can be used to convert printed teaching materials into non-printed electronic modules one of them. The electronic module is developed in the hope that students can learn anywhere and anytime independently and make students more motivated and active in the learning process. The purpose of this study is to produce an electronic module using anmodel *inquiry based learning* integrated with theapproach *contextual teaching and learning* with valid, practical and effective criteria.

This type of research is a development research with ADDIE development model consisting of the stages of *analysis, design, development, implementation, evaluation*. The research instrument consisted of validity sheets, practicality sheets and objective tests. The data analysis technique uses percentage descriptions for preliminary study analysis, validation and practicality. The effectiveness test uses N-gain analysis on knowledge competence.

The results of this study are electronic modules using anmodel of *inquiry based learning* integratedapproaches that *contextual teaching and learning* meet valid criteria with an average value of 0.89. The practicality of using electronic modules by teachers and students has an average of 97.00 and students 89.40 with very practical criteria. The electronic module is in the effective criteria seen in increasing knowledge competency by using N-gain analysis with a value of 0.67 in the medium category. The electronic module uses anmodel that *inquiry based learning* integratedapproaches *contextual teaching and learning to* meet valid, practical and effective criteria. Therefore this electronic module is suitable for use in learning in schools.

Keywords: Electronic Modules, Inquiry Based Learning, Contextual Teaching and Learning

ABSTRAK

Ifzi Ihsan. 2019. "Pengembangan Modul Elektronik Fisika SMA Kelas XI Semester 2 Menggunakan Model *Inquiry Based Learning* Terintegrasi Pendekatan *Contextual Teaching And Learning*." Tesis. Program Studi Pendidikan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Padang.

Peserta ddik dalam proses pembelajaran masih kurang mandiri serta belum termotivasi dan aktif dalam kegiatan pembelajaran. Salah satu faktor penyebabnya adalah bahan ajar yang diterapkan dalam proses pembelajaran belum sesuai dengan kebutuhan peserta didik. Kenyataannya di lapangan masih menggunakan bahan ajar cetak dan belum menggunakan model serta mengintegrasikan pendekatan dalam bahan ajar tersebut. Pemanfaatan teknologi dapat digunakan untuk mengubah bahan ajar cetak menjadi non cetak salah satunya modul elektronik. Modul elektronik dikembangkan dengan harapan peserta didik dapat belajar dimana saja dan kapan saja secara mandiri dan lebih membuat peserta didik termotivasi serta aktif dalam proses pembelajaran. Tujuan penelitian ini adalah menghasilkan modul elektronik menggunakan model *inquiry based learning* terintegrasi pendekatan *contextual teaching and learning* dengan kriteria valid, praktis dan efektif.

Jenis penelitian ini adalah penelitian pengembangan dengan model pengembangan ADDIE yang terdiri dari tahap *analysis, design, development, implementation, evaluation*. Instrumen penelitian terdiri dari lembar validitas, lembar praktikalitas dan tes objektif. Teknik analisis data menggunakan deskripsi persentase untuk analisis studi pendahuluan, validasi dan praktikalitas. Uji efektivitas menggunakan analisis N-gain pada kompetensi pengetahuan.

Hasil penelitian ini adalah modul elektronik menggunakan model *inquiry based learning* terintegrasi pendekatan *contextual teaching and learning* memenuhi kriteria valid dengan nilai rata-rata 0,89. Praktikalitas penggunaan modul elektronik oleh guru dan peserta didik memiliki rata-rata 97,00 dan peserta didik 89,40 dengan kriteria sangat praktis. Modul elektronik berada pada kriteria efektif terlihat pada peningkatan kompetensi pengetahuan dengan menggunakan analisis N-gain dengan nilai 0,67 pada kategori sedang. Modul elektronik menggunakan model *inquiry based learning* terintegrasi pendekatan *contextual teaching and learning* memenuhi kriteria valid, praktis dan efektif. Oleh sebab itu modul elektronik ini layak digunakan dalam pembelajaran di sekolah.

Kata Kunci: Modul Elektronik, *Inquiry Based Learning*, *Contextual Teaching and Learning*.