ABSTRAK

Rohmaya, Nikmatur (2023). Pengembangan E-LKPD Kimia SMA/MA dengan Model Pembelajaran Berbasis Masalah Berkonteks Isu-isu sosial Sains untuk Meningkatkan Literasi Sains Peserta Didik. Tesis, Pendidikan IPA, Program Pascasarjana, Universitas Pendidikan Ganesha.

Kata Kunci: E-LKPD, isu-isu sosial sains, literasi sains, model pembelajaran berbasis masalah

Penelitian ini bertujuan mendeskripsikan dan menjelaskan karakteristik, validitas, kepraktisan, dan efektivitas E-LKPD kimia dengan model pembelajaran berbasis masalah berkonteks isu-isu sosial sains. Jenis penelitian ini adalah penelitian pengembangan untuk menghasilkan bahan ajar berupa E-LKPD Kimia SMA/MA dengan model pembelajaran berbasis masalah berkonteks isu-isu sosial sains yang valid, praktis, dan efektif untuk meningkatkan literasi sains peserta didik. Model pengembangan yang digunakan adalah adaptasi model 4D *(four D-model)* oleh Thiagarajan *et al.* (1974) yang tersusun atas tahapan *define* (pendefinisian), *design* (perancangan), dan *develop* (pengembangan). Pengumpulan data dilakukan dengan menggunakan teknik angket dan tes. Analisis data yang digunakan adalah teknis analisis data deskriptif. Hasil penelitian menunjukkan E-LKPD yang digunakan memiliki karakteristik berbentuk digital, disusun berdasarkan model pembelajaran berbasis masalah, terintegrasi isu-isu sosial sains, dan dilengkapi dengan latihan soal literasi sains. Hasil uji validitas menunjukkan E-LKPD yang disusun tergolong sangat valid ditinjau dari validitas isi dan bahasa, serta valid dari segi media. Berdasarkan penilaian guru dan peserta didik, E-LKPD tersebut tergolong sangat praktis. Hasil uji efektivitas menunjukkan E-LKPD tersebut efektif dalam meningkatkan keterampilan literasi sains peserta didik.

ABSTRACT

Rohmaya, Nikmatur (2023). Development of SMA/MA Chemistry Electronic Student Worksheets with a Problem Based Learning Model Based on Socioscientific Issues to Improve Students' Scientific Literacy. Thesis, Science Education, Postgraduate Program, Ganesha University of Education.

Keywords: Electronic Student Worksheets, Socioscientific Issues, Scientific Literacy, Problem Based Learning

This research aim to describe and explain the characteristics, validity, practicality, and effectiveness of the chemistry electronic student worksheets with a problem based learning model in the context of socioscientific issues. This type of research is development research to produce teaching materials in the form of SMA/MA chemistry electronic student worksheets with a problem based learning model based on socioscientific issues that is valid, practical, and effective for increasing students' scientific literacy. The development model used is an adaptation of the 4D model (four D-model) by Thiagarajan et al. (1974) which is consist of define, design, and develop. Data collection was carried out using questionnaires and tests. The data analysis used is descriptive data analysis technique. The results showed that the electronic student worksheets used had digital characteristics, was structured based on a problem based learning model, integrated with socioscientific issues, and was equipped with scientific literacy exercises. The results of the validity test show that the electronic student worksheets produced are classified as very valid in terms of content validity, graphics, and language. Based on the assessment of teachers and students, the electronic student worksheets are classified as very practical. The results of the effectiveness test show that the student worksheets can improve students' scientific literacy.