PENGEMBANGAN LEMBAR KERJA SISWA (LKS) BERBASIS PENDEKATAN SAINTIFIK PADA PEMBELAJARAN KIMIA POKOK BAHASAN REAKSI REDUKSI DAN OKSIDASI

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ABSTRAK

Penelitian ini bertujuan untuk: (1) mengembangkan dan mendeskripsikan karakteristik; (2) mendeskripsikan dan menjelaskan validitas; (3) mendeskripsikan dan menjelaskan kepraktisan Lembar Kerja Siswa (LKS) berbasis pendekatan saintifik pada pembelajaran kimia pokok bahasan reaksi reduksi dan oksidasi. Jenis penelitian ini adalah penelitian pengembangan dengan tahapan penelitian yang dilakukan adalah: (1) pengumpulan data; (2) desain produk; (3) validasi desain; (4) revisi desain; (5) uji coba lapangan terbatas; (6) dan revisi produk. LKS yang dikembangkan terdiri dari empat subtopik bahasan. Validasi isi pada LKS dilakukan dengan melibatkan dua orang ahli isi dan dua orang praktisi. Validasi bahasa pada LKS dilakukan dengan melibatkan satu orang ahli bahasa. Uji coba lapangan terbatas melibatkan 9 orang siswa kelas X SMA Negeri Bali Mandara. Karakteristik LKS berbasis pendekatan saintifik pokok bahasan reaksi reduksi dan oksidasi yang dikembangkan yaitu: (1) LKS memuat langkah pembelajaran 5M yang meliputi mengamati, menanya, mengumpulkan data, mengasosiasi, dan mengomunikasikan; serta (2) pada masing-masing LKS disajikan sebuah fenomena yang kontekstual. Validitas LKS memenuhi kriteria sangat valid dari aspek identitas, desain, isi, karakteristik pendekatan saintifik, dan bahasa. Berdasarkan hasil uji coba lapangan terbatas, data yang dikumpulkan melalui tiga teknik yaitu observasi, angket, dan wawacara menunjukkan LKS yang dikembangkan telah memenuhi kriteria sangat praktis.

Kata kunci: lembar kerja siswa, pendekatan saintifik, langkah pembelajaran 5M, reaksi reduksi dan oksidasi

THE DEVELOPMENT OF STUDENT WORKSHEET BASED ON SCIENTIFIC APPROACH IN CHEMISTRY LEARNING REDUCTION AND OXIDATION REACTIONS TOPIC

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ABSTRACT

This research aimed to: (1) develop and describe the characteristics; (2) describe and explain the validity; (3) describe and explain the practicality of student worksheets based on a scientific approach in chemistry learning reduction and oxidation reactions topic. The type of this research was research and development with the steps carried out included: (1) data collection; (2) design of product; (3) validation of design; (4) revisions of design; (5) limited tryout; and (6) revisions of product. The developed student worksheet consists of four sub-topics. Content validation in student worksheet is done by involving two content experts and two practitioners. Language validation in student worksheet is done by involving one linguist. The limited field trial involved 9 grade X students of SMA Negeri Bali Mandara. Characteristics of student worksheet based on a scientific approach in chemistry learning reduction and oxidation reactions topic, namely: (1) student worksheet consists of 5M learning steps which include observing, questioning, collecting data, associating, and communicating; and (2) in each worksheet a contextual phenomenon is presented. The validity of student worksheet fulfills very valid criteria in terms of identity, design, content, characteristics of the scientific approach, and linguistic rules. Based on the results of limited tryout, the data collected through three techniques namely observation, questionnaires, and interviews show that the developed student worksheet has fulfilled very practical criteria.

Keywords: student worksheets, scientific approach, 5M learning steps, reduction and oxidation reactions