

ABSTRAK

Penelitian yang berjudul “Pengembangan Lembar Kerja Siswa (LKS) Praktikum Inkuiri Terbimbing Pada Sifat-Sifat Penyangga Minuman Isotonik” bertujuan untuk mengembangkan LKS praktikum inkuiri terbimbing dan memperoleh informasi mengenai keterlaksanaan tahapan inkuiri, respon siswa serta penilaian guru dan dosen terhadap LKS yang dikembangkan. Langkah penelitian yang dilakukan yaitu studi pendahuluan (studi kepustakaan, survei lapangan, dan penyusunan produk awal) dan pengembangan model (uji coba terbatas). Sumber data pada penelitian ini adalah 10 SMA di Kota Bandung, bahan ajar kimia, siswa kelas XII di SMAN 16 Bandung, 7 orang guru kimia SMA, serta 3 orang dosen jurusan kimia Universitas Pendidikan Indonesia. Instrumen penelitian yang digunakan adalah lembar analisis LKS praktikum, pedoman wawancara, lembar observasi keterlaksanaan praktikum, pedoman penilaian jawaban siswa terhadap tugas LKS, angket respon siswa, serta lembar penilaian LKS oleh guru dan dosen. Hasil penelitian pada tahap studi pendahuluan menunjukkan bahwa karakteristik LKS pada materi pokok larutan penyangga yang tersedia saat ini adalah LKS *cookbook*. Karakteristik LKS praktikum inkuiri terbimbing yang dikembangkan terdiri dari fenomena, arahan rumusan masalah, arahan dalam membuat hipotesis, arahan dalam mengumpulkan data (memilih bahan, memilih alat, merancang prosedur percobaan, melakukan percobaan, menuliskan hasil pengamatan dan menjawab pertanyaan analisis data), arahan membuktikan hipotesis, dan arahan membuat kesimpulan. Keterlaksanaan praktikum menggunakan LKS yang dikembangkan tergolong baik sekali 94,23% yang terdiri dari observasi keterlaksanaan praktikum (100%) dan penilaian jawaban siswa terhadap tugas-tugas dalam LKS (88,46%). Adapun respon siswa terhadap praktikum menggunakan LKS yang dikembangkan tergolong baik (78,57%). Berdasarkan penilaian guru dan dosen terhadap LKS tergolong baik sekali (88,56%) yang terdiri dari kesesuaian LKS yang dikembangkan dengan konsep larutan penyangga (88,86%) dan kesesuaian LKS yang dikembangkan terhadap tata bahasa (88,27%).

Kata kunci: LKS, Inkuiri terbimbing, Sifat penyangga, Minuman isotonik.

ABSTRACT

This study entitled “The Development of Worksheet in Guided Inquiry Lab Work on Isotonic Drink Buffer Properties” is aimed at developing worksheet in a guided inquiry lab work and gaining information regarding the implementation of inquiry steps, the students’ responses and the teachers’ as well as the lecturers’ assessment toward the students’ worksheet developed. The steps of conducting the research are prior study (literature review, field survey, and early products construction) and model development (limited try out). The data sources of the research are ten senior high schools in Bandung, chemistry materials, twelfth graders in SMAN 16 Bandung, seven senior high school chemistry teachers and three lecturers from chemistry education department, Indonesia University of Education. The instruments used in the research are analysis sheet for the worksheets in lab work, interview guidance, observation sheet for lab work, assessment guidance for the worksheets, the students’ response questionnaires and assessment sheets for the worksheets given to the teachers and the lecturers. The results from the prior study show that the worksheets characteristic available in the recent time is *cookbook*. The developed worksheets characteristics comprise phenomena, guidance for the research problem, guidance for making hypothesis, guidance for collecting data (selecting materials, selecting tools, designing experiment procedures, experimenting, writing the observation results, and answering the data analysis questions), guidance for testing the hypothesis and guidance for drawing conclusions. The implementation of the lab work using the developed worksheets is categorized very good (94,23%) that consists of the observation of the implemented lab work (100%) and the assessment of the students’ answers toward the assignments in the worksheet (88,46%). The students’ responses toward the implemented lab work using the developed worksheet are good (78,57%). The teachers’ and the lecturers’ assessment toward the developed worksheet is considered very good (88,56%) which comprises the suitability of the worksheet with the concept of buffer solution (88,86%) and with linguistic aspects (88,27%).

Keywords: Worksheet, Guided Inquiry, Buffer Properties, Isotonic Drink.