

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan LKS praktikumberbasis inkuiri terbimbing topikkelarutan dan hasil kali kelarutan pada konteks pembuatan magnesium hidroksida. Metode penelitian yang digunakan, yaitu metode pengembangan. Tahap penelitian yang dilakukan meliputi tahap studi pendahuluan (analisis KD hingga analisis LKS yang beredar di sekolah), tahap pengembangan (pelaksanaan optimasi prosedur praktikum hingga penyusunan LKS), tahap uji coba pengembangan (uji coba terbatas), dan terakhir tahap pelaporan (pengolahan data dan penarikan kesimpulan). Sumber data yang digunakan, yaitu tujuh buku kimia SMA/MA kelas XI, dua guru kimia SMA, 15 siswa SMA kelas XI di Kota Bandung, dan tiga dosen Departemen Pendidikan Kimia FPMIPA UPI. Instrumen yang digunakan adalah lembar analisis kesesuaian indikator keterampilan inkuiri, lembar validasi oleh guru dan dosen, lembar observasi keterlaksanaan tahapan inkuiri, pedoman penilaian jawaban siswa, dan angket respon siswa. Hasil pengolahan data kemudian dikategorisasi. Hasil penelitian terhadap kesesuaian konsep terhadap LKS praktikum yang beredar masih sangat kurang baik (2,19%) dalam memenuhi kriteria keterampilan inkuiri. Hasil optimasi diperoleh jumlah volume larutan $MgCl_2$ sebanyak 5 mL dengan konsentrasi 0,01 M dan volume larutan NaOH sebanyak 7 mL dengan konsentrasi 0,02 M. Hasil validasi guru dan dosen terhadap LKS praktikum yang dikembangkan berkategori sangat baik (92,98%). Keterlaksanaan praktikum menggunakan LKS yang dikembangkan berdasarkan hasil observasi berkategori sangat baik (94,12%). Hasil keterlaksanaan berdasarkan hasil penilaian jawaban siswa berkategori sangat baik (83,24%), dan dari angket respon siswa berkategori baik (74,91%). Secara umum, LKS praktikum yang dikembangkan ini dapat diterapkan di sekolah.

Kata kunci: LKS praktikum, inkuiri terbimbing, hasil kali kelarutan, magnesium hidroksida.

ABSTRACT

This study aims to develop Lab-worksheet practice based on guided inquiry model on the context of making magnesium hydroxide in solubility product learning. The research method used is the development method. The research phase includes preliminary study stage (KD analysis to Lab-worksheet analysis circulating in schools), development stage (implementation of practicum procedures to preparation of LKS), development testing phase (limited trial), and finally the reporting phase (data processing and conclusions). Sources of data used were 7 chemistry books for high school class XI, 2 high school chemistry teachers, 15 high school class XI students in the city of Bandung, and three lecturers at the Department of Chemical Education FPMIPA UPI. The instruments used were the conformity analysis sheet of inquiry skills indicators, validation sheets by teachers and lecturers, the observation sheet of the inquiry stages, assessment appraisal, and student response questionnaires. Data processing results are then categorized. The results of the research on the conformity of the concept of the outstanding practicum worksheets are still very poor (2,19%) in meeting the criteria of inquiry skills. The optimization results obtained the volume of MgCl_2 as much as 5 mL with a concentration of 0.01 M and the volume of NaOH solution as much as 7 mL with a concentration of 0.02 M. The results of the teachers and lecturers validation of the developed lab worksheet were in very good category (92.98%). Implementation of practicum using developed worksheets based on observations is in very good category (94.12%). The results of the implementation based on the results of the student's answers were categorized as very good (83.24%), and from the questionnaire responses of students in good category (74.91%). In general, the developed Lab-worksheet can be applied in schools.

Keywords: Lab-worksheet, guided inquiry, solubility product, magnesium hydroxide.

