ABSTRAK

Tujuan dari penelitian ini adalah mengembangkan dan menghasilkan LKS praktikum berbasis inkuiri terbimbing pada pokok bahasan titrasi asam basa serta memperoleh informasi mengenai tingkat keterlaksanaan praktikum, respon siswa, dan penilaian oleh guru dan dosen terhadap LKS praktikum berbasis inkuiri terbimbing pada pokok bahasan titrasi asam basa 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 bahan ajar (buku, LKS dan petunjuk praktikum) yang ada saat ini, sekolah, siswa-siswa kelas XI pada salah satu SMA di kota Bandung, guru kimia SMA di Bandung dan dosen kimia FPMIPA UPI. Instrumen penelitian yang digunakan adalah lembar analisis LKS praktikum, pedoman wawancara, lembar observasi keterlaksanaan tahapan inkuiri, pedoman penilaian jawaban siswa terhadap tugas-tugas yang terdapat pada LKS, angket respon siswa, dan lembar penilaian oleh guru dan dosen. Hasil penelitian menunjukan bahwa potret pelaksanaan praktikum berdasarkan survei lapangan pada pokok bahasan titrasi asam basa umumnya sering dilakukan, namun pada subpokok bahasan titrasi asam lemah basa kuat sangat jarang dilakukan. Sedangkan potret LKS praktikum yang terdapat dalam bahan ajar dan penelitian sebelumnya masih berbentuk instruksi langsung (*cook book*). Karakteristik LKS praktikum berbasis inkuiri terbimbing yang dikembangkan yaitu orientasi (fenomena), merumuskan masalah, membuat hipotesis, mengumpulkan data, membuktikan hipotesis, dan membuat kesimpulan. Tingkat keterlaksanaan praktikum menggunakan LKS praktikum pada pokok bahasan titrasi asam basa yang dikembangkan termasuk kedalam kategori baik sekali (90,9%) yang terdiri dari observasi keterlaksanaan tahapan inkuiri (98,9%) dan penilaian jawaban siswa terhadap tugas-tugas yang terdapat dalam LKS (83,0%). Adapun respon siswa terhadap pelaksanaan praktikum titrasi asam basa menggunakan LKS praktikum yang dikembangkan tergolong baik sekali (81,3%). Dari penilaian guru dan dosen diketahui bahwa LKS praktikum berbasis inkuiri yang dikembangkan sangat sesuai dengan konsep titrasi asam basa (84,1%) dan syarat kebahasaan (tata bahasa) yang digunakan dalam LKS termasuk ke dalam kategori baik sekali (83,2%).

Kata kunci : Lembar Kerja Siswa (LKS), inkuiri terbimbing, titrasi asam basa.

ABSTRACT

The aim of this study was to develop and produce guided inquiry lab-based worksheet (*LKS*) on the topic of acid-base titration, and gaining the information of lab-practice feasibility, student responses, and assessment by teachers and lecturers against worksheets that is being developed. Research steps conducted a preliminary studies (literature studies, field surveys, and preparation of the initial product) and the development of the model (within limited testing). Data sources in this study were teaching materials (books, worksheets and lab-practice work instructions) that existed up to this present day, schools, senior high school students of class XI in Bandung, senior high school chemistry teachers in Bandung, and chemistry lecturers of FPMIPA UPI. The research instrument used was a sheet analysis for lab worksheets, interview guides, inquiry stage implementation observation sheets, assessment guidelines for students' answers related to the worksheet tasks, student questionnaire responses, and assessment sheets given to teachers and lecturers. The results showed that the portrait of lab-practice implementation using field survey on the sutopict material of strong acid and strong base titration is often done, but the implementation on subtopic material of weak acid strong base titration is rarely done. Meanwhile, the portrait of lab-practice worksheets contained in the instructional materials and previous research is still in the form of direct instruction (*cook book*). Characteristics of the worksheet that is being developed are orientation (*phenomenon*), formulating problem, making hypotheses, collecting data, proving hypotheses, and making conclusions. Lab-practice feasibility achieved by using worksheets developed in this research on the topic of acid base titration were 90,9%, which means it is included into excellent category, consisted of inquiry stage progress observation (98,9%), and students' answer related to the worksheet tasks (83,0%). Students' responses to the implementaion of acid-base titration lab using guided inquiry lab-based worksheets results in excellent category (81,3%). The assessment from teachers and lecturers shows that the worksheets developed is in accordance with the concept of acid-base titration (84,1%) and the terms of language (grammar) used in the worksheets results in excellent category (83,2%).

Keywords: Student Worksheet (LKS), guided inquiry, acid-base titration.