

ABSTRAK

Tujuan penelitian ini adalah untuk mengembangkan LKS praktikum pada topik pembuatan koloid dari susu kacang kedelai. Metode yang digunakan adalah penelitian dan pengembangan yang terdiri dari studi pendahuluan dan pengembangan model. Sumber datanya adalah tiga bahan ajar buku sekolah sekolah elektronik dan tujuh buku teks, 20 siswa kelas XI salah satu SMA di Bandung, tujuh guru kimia SMA di Bandung, dan tiga dosen Departemen Pendidikan Kimia FPMIPA UPI. Instrumen penelitian menggunakan pedoman wawancara, lembar analisis LKS praktikum, lembar optimasi, lembar observasi keterlaksanaan tahapan inkuiri, rubrik penilaian jawaban siswa terhadap tugas-tugas pada LKS, lembar penilaian guru dan dosen, serta angket respons siswa. Hasil analisis LKS praktikum di sekolah dan survei lapangan menunjukkan karakteristik LKS praktikum yang ada adalah LKS praktikum instruksi langsung/*cookbook*. Hasil optimasi prosedur pembuatan susu kacang kedelai sebagai berikut : bahan yang digunakan kacang kedelai sebanyak 7 gram yang telah direndam dengan air suhu ruang selama 12 jam, kemudian direbus menggunakan air suhu 80°C dan waktu praktikum selama 18 menit. Selanjutnya, LKS disusun berdasarkan prosedur yang sudah dioptimasi dan dievaluasi berdasarkan jawaban/respons siswa. Berdasarkan jawaban siswa terhadap tugas dalam LKS tergolong sangat baik (81,61%). Keterlaksanaan LKS praktikum yang dilihat berdasarkan keterlaksanaan tahapan inkuiri adalah sangat baik (100%) yang didukung oleh hasil jawaban siswa terhadap tugas dalam LKS yang tergolong sangat baik (81,61%). Penilaian guru dan dosen terhadap LKS praktikum pada aspek kesesuaian konsep tergolong sangat baik (82,58%), kesesuaian tata bahasa tergolong sangat baik (83,18%), dan kesesuaian tata letak serta perwajahan tergolong sangat baik (88,43%).

Kata kunci : Inkuiri Terbimbing, Lembar Kerja Siswa (LKS) Praktikum, Pembuatan Koloid, Metode Dispersi, Susu Kacang Kedelai

ABSTRACT

The purpose of this reaserch is to develop of lab worksheet on the topic make colloidal trough making soybean milk. To achieve these aim, these research applied research and development method that consist of preliminary studies and the development studies. Data source used were chemistry material, there are seven senior high school chemistry text book and three of electronic senior high school chemistry book, XI grade students in Bandung Senior High School, seven Senior High School chemistry teachers, and three chemistry lecturers in Chemistry Departement of Chemistry Education, FPMIPA UPI. The research instrumen used were interview guided, analysis sheet for making colloids lab worksheet, optimazion sheet, implementation of inquiry phases observation sheet, asesment guidelines for students' answers related to worksheet Task, asesment sheet given to teacher and lecturers and students questionnaire responses. The result of analysis about lab worksheet in the school still direct instruction/cookbook. The results of the optimization procedure of making soybean milk as follows : materials used soybeans as much as 7 grams which had been soaked with water at room temperature for 12 hours, then boiled with water at 80C and a experiment for 18 minutes. Furthermore LKS compiled based procedure has been optimized and evaluated based on answers / responses students. Based on students' responses to the task in the LKS is very good (81,61%). Lab worksheet implementation which is based on The inquiry phases that conducted by student were found very good (100%) and supported by students' responses to the task in the LKS is very good (81,61%). Assessment of teachers and lecturers against lab worksheet on the aspect of suitability concept is very good (82,58%), suitability grammar is very good (83,18%), and the suitability of the layout and appearance of is very good (88,43%).

Keywords: Guided inquiry, Lab Worksheet, Making Colloidal, Dispersion method, Soybean Milk