

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan LKS praktikum berbasis inkuiri terbimbing pada topik pengujian kualitas minyak jelantah menggunakan PK. Penelitian ini menggunakan metode evaluatif. Tahapan penelitian ini meliputi tahap pengembangan, tahap pelaksanaan, dan tahap analisis data. Instrumen yang digunakan dalam penelitian ini adalah desain optimasi prosedur percobaan pengujian kualitas minyak, lembar validasi (aspek kesesuaian dengan indikator keterampilan inkuiri, aspek kesesuaian konsep, aspek tata letak dan perwajahan, serta aspek tata bahasa), lembar observasi keterlaksanaan praktikum, rubrik penilaian jawaban terhadap tugas-tugas dalam LKS praktikum, dan angket respon siswa terhadap penggunaan LKS praktikum. Penyusunan LKS praktikum yang dikembangkan meliputi optimasi prosedur percobaan dan penyusunan arahan-arahan dalam membimbing siswa menemukan konsepnya secara mandiri. Hasil validasi LKS praktikum berbasis inkuiri terbimbing yang dikembangkan pada aspek kesesuaian konsep dikategorikan baik dengan skor 79,58%, aspek kesesuaian indikator keterampilan inkuiri, aspek tata letak dan perwajahan serta aspek tata bahasa dikategorikan sangat baik dengan skor berturut-turut 87,69%; 80,96% dan 81,67%. Hasil keterlaksanaan praktikum dengan menggunakan LKS praktikum berdasarkan observasi terhadap tahapan-tahapan inkuiri dan jawaban siswa terhadap tugas-tugas dalam LKS dikategorikan sangat baik dengan skor berturut-turut 97,64% dan 97,91%. Hasil respon siswa terhadap penggunaan LKS praktikum pengujian kualitas minyak dikategorikan baik dengan skor 78,13%. Berdasarkan hasil penelitian, LKS praktikum yang dikembangkan dapat digunakan dalam praktikum kimia pada topik pengujian kualitas minyak jelantah menggunakan PK.

ABSTRACT

This study aims to develop a guided inquiry-based student's laboratory worksheet on the topic of quality testing of waste cooking oil using Potassium Permanganate (PK). This research uses evaluative method. The stages of this research include the development stage, the realization phase, and the data analysis phase. The instrument used in this research is the optimization design of oil quality testing experiments, validation sheet (conformity aspect with inquiry skill indicator, conformity aspect concept, layout aspect, and grammatical aspect), observation sheet of practicum implementation, tasks in student's laboratory worksheet, and questionnaire of student response to the use of student's laboratory worksheet. The preparation of the developed student's laboratory worksheet includes the optimization of procedures and the preparation of directives in guiding students to find the concept independently. The results of validation of guided inquiry based student's laboratory worksheet developed in the aspect of conformity of the concept are categorized either with a score of 79.58%, the suitability aspect of inquiry skill indicators, layout aspects and grammatical aspects are categorized very good with successive scores of 87.69%; 80.96% and 81.67%. The results of practical implementation by using student's laboratory worksheet based on observation on the inquiry stages and students' answers to the tasks in the student's laboratory worksheet are categorized very good with the scores of 97.64% and 97.91% respectively. Results of student responses to the use of student's laboratory worksheet testing of oil quality are categorized good with a score of 78.13%. Based on the results of the research, student's laboratory worksheet developed can be used on the topic of quality testing of used cooking oil using PK.