

ABSTRAK

Selva Afriana. Nim 8146142032. Pengembangan Penuntun Praktikum Kimia Kelas XI Semester I Berbasis Inkuiri Terbimbing Terhadap Hasil Belajar dan Keterampilan Pemecahan Masalah. Tesis. Medan: Program Studi Pendidikan Kimia Pascasarjana Universitas Negeri Medan, 2020.

Penelitian ini bertujuan untuk memperoleh penuntun praktikum kimia kelas XI SMA yang layak digunakan, melihat perbedaan hasil belajar siswa yang diajar menggunakan penuntun praktikum yang dikembangkan dan penuntun praktikum yang digunakan sekolah pada materi termokimia, mengetahui keterampilan pemecahan masalah siswa serta hubungannya dengan hasil belajar. Jenis penelitian merupakan penelitian pengembangan (R & D) mengacu pada model ADDIE, yang terdiri dari *Analysis* (analisis), *Design* (desain), *Development* (Pengembangan), *Implementation* (penerapan) dan *Evaluation* (evaluasi). Penuntun praktikum selanjutnya divalidasi oleh validator ahli yang terdiri dari 2 orang dosen dan 10 orang guru kimia. Uji coba implementasi produk hasil pengembangan dilakukan di SMAN 1 Kutacane (Kelas Eksperimen) dan SMAN 2 Kutacane (Kelas Kontrol) dengan jumlah sampel masing-masing kelas sebanyak 32 orang. Teknik pengumpulan data menggunakan lembar observasi, angket dan instrument tes subjektif dalam bentuk essay yang terdiri dari 5 soal. Berdasarkan hasil angket penilaian penuntun praktikum oleh validator ahli diperoleh nilai masing – masing aspek yaitu cakupan praktikum 3,58, sistematika penyajian 3,67, wawasan produktivitas 3,96, keingintahuan 3,75, kecakapan hidup 3,92, desain 3,87 dan bahasa 3,58 yang tergolong dalam kriteria valid dan tidak perlu direvisi sehingga layak untuk dipergunakan dalam pembelajaran. Hasil uji t-test menunjukkan ada perbedaan hasil belajar antara kelas eksperimen dan kelas kontrol. Nilai rata-rata hasil belajar pada kelas eksperimen 81,6 dan kelas kontrol 62,2. Berdasarkan hasil penilaian observer pada lembar observasi keterampilan diperoleh nilai siswa sebesar 87,05 (kategori baik). Hasil uji korelasi diperoleh nilai koefisien korelasi 0,268, koefisien determinasi 0,07, dan nilai signifikan (2-tailed) 0,644 > 0,05, kesimpulannya terdapat hubungan positif yang tidak signifikan antara hasil belajar dengan keterampilan pemecahan masalah siswa. Hanya 7% pengaruh keterampilan pemecahan masalah terhadap hasil belajar.

Kata kunci: penuntun praktikum, hasil belajar, keterampilan pemecahan masalah, inkuiri terbimbing, termokimia.

ABSTRACT

Selva Afriana. Nim 8146142032. Development of Chemistry Practicum Guide for Class XI Semester I Based on Guided Inquiry Towards Learning Outcomes and Problem Solving Skills. Thesis. Medan: Postgraduate Chemistry Education Study Program, Medan State University, 2020.

This research was purposed to obtain chemistry practicum guides for grade XI high school students that are appropriate to use, see differences in student learning outcomes taught using practicum guides that are developed and practicum guides used by schools in thermokimia materials, find out students' problem solving skills and their relationship with learning outcomes. This type of research is a research development (R & D) refers to the ADDIE model, which consists of Analysis (Design), Design (Development), Development (Implementation), Implementation (implementation) and Evaluation (evaluation). The practicum guide was then validated by an expert validator consisting of 2 lecturers and 10 chemistry teachers. The trial implementation of the development products was carried out at SMAN 1 Kutacane (Experimental Class) and Kutacane SMAN 2 (Control Class) with a total sample of 32 classes each. Data collection techniques using observation sheets, questionnaires and subjective test instruments in the form of essays consisting of 5 questions. Based on the results of the practicum assessment guide questionnaire by expert validators, the values of each aspect were obtained, namely practicum coverage of 3.58, systematic presentation of 3.67, insight into productivity 3.96, curiosity 3.75, life skills 3.92, design 3.87 and language 3.58 which is included in the criteria is valid and does not need to be revised so that it is suitable for use in learning. The results of the t-test showed that there were differences in learning outcomes between the experimental class and the control class. The average value of learning outcomes in the experimental class 81.6 and 62.2 control class. Based on the results of the observer assessment on the observation sheet, the students' score was 87,05 (good category). Correlation test results obtained correlation coefficient of 0.268, coefficient of determination 0.07, and a significant value (2-tailed) $0.644 > 0.05$, the conclusion there is a non-significant positive relationship between learning outcomes with student problem solving skills. Only 7% of the effect of problem solving skills on learning outcomes.

Keywords: practical guide, learning outcomes, problem solving skills, guided inquiry, thermokimia.