

ABSTRAK

Meida Esterlina Marpaung. **Pengembangan Penuntun Praktikum Stokiometri Inovatif Sesuai Kurikulum 2013 Berbasis Keterampilan Proses Sains. Tesis.** Medan: Program Studi Pendidikan Kimia; Pascasarjana Universitas Negeri Medan, 2017

Penelitian ini bertujuan untuk mengembangkan penuntun praktikum stoikiometri inovatif sesuai kurikulum 2013 berbasis keterampilan proses sains. Bentuk penelitian yang dilakukan adalah penelitian deskriptif. Jenis penelitian termasuk penelitian dan pengembangan (*research and development*). Subjek penelitian adalah buku penuntun praktikum kimia stokiometri. Populasi dalam penelitian ini adalah buku penuntun praktikum kimia SMA yang beredar di sekolah, seluruh guru kimia di SMA/SMK se-Sumatera Utara, seluruh dosen Kimia Dasar di Universitas Negeri Medan dan seluruh siswa kelas X Cinta Budaya. Sampel penelitian diambil secara purposive sampling. Penelitian ini bersifat deskriptif dan pengembangan eksperimen. Langkah penelitian meliputi: (a) analisis penuntun praktikum stokiometri, (b) pengembangan penuntun praktikum stokiometri inovatif (c) validasi penuntun praktikum stokiometri inovatif, (d) uji coba penggunaan penuntun praktikum stokiometri berbasis keterampilan proses sains. Hasil penelitian menunjukkan (1) analisis penilaian terhadap penuntun praktikum berdasarkan BSNP yang digunakan disekolah sebesar 3,24 dengan predikat baik, (2) hasil penilaian terhadap penuntun praktikum yang telah dikembangkan berbasis keterampilan proses sains yang sudah diresponsensi oleh 2 dosen dengan rata-rata 3,6 dan nilai dari 20 orang guru sebesar 3,73 berdasarkan BSNP. (3) Berdasarkan hasil uji coba yang dilakukan diperoleh bahwa hasil belajar kelas eksperimen 2 dengan nilai rata-rata sebesar 84,65 lebih tinggi dari pada hasil belajar siswa pada kelas eksperimen 1 dengan nilai rata-rata sebesar 80,9. Sehingga diperoleh penuntun praktikum inovatif berbasis keterampilan proses sains lebih efektif diterapkan dalam pembelajaran dibandingkan dengan penuntun praktikum yang digunakan di sekolah.

Kata Kunci : *Penuntun Praktikum, Stokiometri, Keterampilan Proses Sains, Kurikulum 2013*



Abstract

Meida Esterlina Marpaung. **Development Of Stoichiometry Practical Guidance Innovative Based Curriculum 2013 Integrated Science Process Skill Thesis.** Medan: Chemistry Education Studies Program, Postgraduate School of University of Medan, 2017

This research aims to develop practical guidance in stoichiometry innovative curriculum 2013 based on science process skills. The shape of research is descriptive research including research and development. The subjects were chemistry lab stoichiometry handbook. The population in this research is the study guide of outstanding high school chemistry lab at the school, chemistry teachers at the high senior school in North Sumatera, the basic chemistry lecturer at the State University of Medan and the rest of the class X Senior High School Cinta Budaya. Samples were taken by purposive sampling. This study is descriptive and experimental development. Step research includes: (a) analysis of the stoichiometry practical guidance, (b) the development of practical guidance innovative stoichiometric, (c) validation of innovative stoichiometric practical guide, (d) test the use of stoichiometric practical guidance based on science process skills. The results showed (1) an analysis of assessment of practical guidance based on BNSP used in school by 3,24 with a good rating, (2) an assessment of practical guidance that has been developed based on science process skills that has been corresponded by two lecturers with an average of 3,6 and the value of the 20 teachers of 3,73 based on BSNP, (3) based on the results of tests conducted showed that the learning outcomes of the experimental class 2 with an average value of 84,65 higher than learning outcomes for students in the experimental class 1 with an average value of 80,9. Thus obtained guiding innovative lab-based science process skills more effectively applied in learning compared to practical guides that are used in schools.

Keywords : *Practical Guidance, Stoichiometric, Science Process Skills, Curriculum 2013*

