ABSTRAK

Frisca Zahrona Utami Harahap Inovasi Sumber Belajar Berbasis *Guided Inqury* Untuk Meningkatkan Kompetensi Mahasiswa Pada Pengajaran Analisis Kation. Program Pascasarjana Universitas Negeri Medan, 2022.

Penelitian ini bertujuan untuk meningkatkan kompetensi mahasiswa melalui sumber belajar berbasis *guided inquiry*. Penelitian ini dilakukan selama masa pandemi covid-19 dengan 30 mahasiswa S1 jurusan kimia yang sedang mengikuti mata kuliah kimia analitik kualitatif. Tahapan pada penelitian meliputi *analisys*, *design*, *development*, dan *impelementation*. Kompetensi mahasiswa diperoleh dari penilaian kemampuan bepikir tingkat tinggi (HOTS) mahasiswa dari tiga aspek yaitu, analisis, kreasi, dan evaluasi untuk mengukur kemampuan berpikir tingkat tinggi pada mahasiswa melalui rubrik penilaian kemampuan berpikir tingkat tinggi. Hasil belajar mahasiswa diperoleh dari instrument test berupa pilihan berganda. Sedangkan motivasi serta respon terhadap sumber belajar yang dikembangkan diperoleh melalui inttrumen non tes berupa angket. Sumber belajar yang dikembangkan telah mampu meningkatkan kompetensi mahasiswa baik dari segi kemampuan berpikir tingkat tinggi, hasil belajar, hubungan antara motivasi belajar dengan hasil belajar mahasiswa, serta pendapat mahasiswa terhadap sumber belajar yang dikembangkan. Berdasarkan hasil peneitian diperoleh: (1) sumber belajar yang dikembangkan telah memenuhi standar BSNP (3.58±0.45); (2) kemampuan berpikir tingkat tinggi mahasiswa tergolong sangta baik (85.07±1.70); (3) hasil belajar mahasiswa pada pembelajaran analisis kation tergoong kategori sangat baik (83.16±4.82); (4) korelasi motivasi belajar dengan hasil belajar mahasiswa tergolong positif (0.21); (5) respon mahasiswa terhadap sumber belajar yang dikembangkan tergolong kategori sangat baik (3.70).

Kata Kunci : Analisis kation, *guided inquiry*

ABSTRACT

Frisca Zahrona Utami Harahap The Development of Guided Inquiry-Based Learning Resources as a Strategy for Achieving Student Competencies in Teaching Cation Analysis. Postgraduate Program of Medan State University, 2022.

This study aims to improve student competence through guided inquiry-based learning resources. This research was conducted during the Covid-19 pandemic with 30 undergraduate students majoring in chemistry who were taking a qualitative analytical chemistry course. The stages in the research include analysis, design, development, and implementation. Student competence is obtained from the assessment of students' higher-order thinking skills (HOTS) from three aspects, namely, analysis, creation, and evaluation to measure students' higher-order thinking skills through a rubric for assessing higher-order thinking skills. Student learning outcomes are obtained from the instrument test in the form of multiple choices. While the motivation and response to the learning resources developed were obtained through non-test instruments in the form of questionnaires. The developed learning resources have been able to increase student competence both in terms of higher order thinking skills, learning outcomes, the relationship between learning motivation and student learning outcomes, as well as students' opinions of the developed learning resources. Based on the results of the research, it was obtained: (1) the learning resources developed met the BSNP standards (3.58 ± 0.45); (2) students' high-level thinking skills are classified as very good (85.07 ± 1.70); (3) student learning outcomes in cation analysis learning fall into the very good category (83.16 ± 4.82); (4) the correlation between learning motivation and student learning outcomes is positive (0.21); (5) student responses to developed learning resources are classified as very good (3.70).

Keyword : Cation analysis, guided inquiry