

## ABSTRAK

Dessy Novianty Pakpahan : **Pengembangan Sumber Belajar Inovatif Berbasis Proyek Untuk Materi Isolasi Pemurnian Dan Identifikasi Senyawa Golongan Flavanoid**. Tesis. Medan: Program Studi Pendidikan Kimia, Pascasarjana Universitas Negeri Medan, 2021.

Penelitian ini bertujuan untuk mengembangkan sumber belajar inovatif berbasis proyek untuk membimbing siswa mempelajari Kimia Analisa Organik. Penelitian ini dilakukan dengan mengikuti model ADDIE (*Analysis, Design, Development, Implementation, and Evaluation*) untuk mengembangkan sumber belajar bagi mahasiswa S1. Penelitian ini melibatkan 35 mahasiswa Program Studi Kimia tahun ajaran 2020-2021 dengan menggunakan teknik analisis data berupa observasi langsung, angket dan tes hasil belajar, yang dianalisis menggunakan teknik analisis data statistik deskriptif dan statistik inferensial yaitu uji t one sampel. Hasil penelitian berdasarkan analisis kebutuhan terkait analisis materi pada silabus dan RPS mahasiswa membutuhkan sumber belajar untuk mengerjakan tugas rutin dan tugas proyek pada analisa kualitatif senyawa organik dan analisis bahan ajar (buku) yang digunakan mahasiswa diperoleh buku A= 2.52 (cukup layak) dan buku B = 2,91 (cukup layak), maka dibutuhkan pengembangan sumber belajar inovatif berbasis proyek. Hasil penelitian diperoleh bahwa materi sumber belajar inovatif berbasis proyek hasil pengembangan sangat layak dengan rata-rata keseluruhan 3,55, media sumber belajar inovatif berbasis proyek hasil pengembangan sangat layak dengan rata-rata 3,66. Penggunaan sumber belajar inovatif meningkatkan keterampilan mahasiswa dengan nilai rata-rata 3,25 (sangat terampil) dalam mengerjakan tugas proyek kimia analisa senyawa organik meliputi isolasi, pemurnian dan identifikasi senyawa flavonoid tercapai. Peningkatan hasil belajar mahasiswa setelah menggunakan sumber belajar inovatif berbasis proyek telah mencapai kriteria N-gain tinggi dengan perolehan nilai sebesar 0,75, dan hasil belajar yang diperoleh mahasiswa dengan rata-rata posttest mahasiswa 86,74. Sedangkan respon mahasiswa terhadap penggunaan sumber belajar inovatif berbasis proyek pada materi isolasi pemurnian dan identifikasi senyawa golongan flavanoid sangat baik dengan nilai rata-rata persentasi jawaban mahasiswa sebesar 86,82%.

**Kata Kunci** : *Sumber belajar inovatif, project based learning, Kimia Analisa Organik*

Dessy Novianty Pakpahan : *Development of Project-Based Innovative Learning Resources for Isolation Materials for Purification and Identification of Flavanoid Group Compounds*. Thesis. Medan: Chemistry Education Study Program, Medan State University Postgraduate, 2021.

*This study aims to develop an innovative project-based learning resource to guide students in studying Organic Analysis Chemistry. This research was conducted by following the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) to develop learning resources for undergraduate students. This study involved 35 students of the Chemistry Study Program for the academic year 2020-2021 using data analysis techniques in the form of direct observation, questionnaires and learning outcomes tests, which were analyzed using descriptive statistical data analysis techniques and inferential statistics, namely the t-one sample test. The results of the research based on needs analysis related to the analysis of material in the syllabus and RPS students need learning resources to do routine assignments and project assignments on qualitative analysis of organic compounds and analysis of teaching materials (books) used by students to get a score of book A= 2.52 (quite decent) and book B = 2,91 (quite decent), so it is necessary to develop learning resources project based innovation. The results showed that the innovative project-based learning resource materials developed were very feasible with an overall average of 3.55, the innovative project-based learning resource materials developed were very feasible with an average of 3.66. The use of innovative learning resources improves students' skills with an average score of 3.25 (very ingenious) in carrying out chemistry project assignments, analyzing organic compounds including isolation, purification and identification of flavonoid compounds. The improvement of student learning outcomes after using innovative project-based learning resources has reached the high N-gain criteria with a score of 0.75, and student learning outcomes with an average posttest of 86.74 students. Meanwhile, students' responses to the use of project-based innovative learning resources on purification isolation materials and identification of flavonoid group compounds were very good with an average value of 86.82% of student answers.*

**Keywords:** *Innovative learning resources, project based learning, Chemical Analysis of Organic*