

## ABSTRAK

**Rita Ulfa Khairani.** Inovasi Sumber Belajar Menggunakan Multimedia Berbasis Proyek Pada Materi Kesetimbangan Kimia Kelas XI Semester Ganjil. Tesis. Medan: Program Studi Pendidikan Kimia, Pascasarjana Universitas Negeri Medan, 2024.

Penelitian bertujuan untuk mengembangkan sumber belajar inovatif berbasis proyek untuk meningkatkan hasil belajar serta kemampuan berpikir tingkat tinggi siswa pada materi kesetimbangan kimia. Penelitian menggunakan model pengembangan ADDIE. Populasi penelitian yaitu seluruh siswa SMAN 1 Binjai Kabupaten Langkat dan sampel diambil 2 kelas yaitu kelas XI MIPA 3 dan 4. Validasi produk oleh 2 orang dosen Unimed sebagai validator materi dan media serta 2 orang guru kimia. Instrumen angket digunakan untuk mengetahui kelayakan sumber belajar inovatif, kemampuan berpikir tingkat tinggi dan respon siswa, instrumen test untuk mengetahui hasil belajar siswa. Hasil penelitian menunjukkan bahwa (1) Analisis sumber belajar pegangan siswa pada pembelajaran kimia berdasarkan BSNP diperoleh rata-rata penilaian 3,3 dengan kategori layak. (2) Hasil analisis validasi sumber belajar inovatif berbasis proyek yang telah dikembangkan pada materi kesetimbangan kimia diperoleh rata-rata penilaian yaitu 3,50 dengan kategori layak. (3) Peningkatan hasil belajar kelas eksperimen didapatkan rata-rata sebesar 0,71 (tinggi) sedangkan kelas kontrol diperoleh rata-rata 0,56 (sedang). (4) Kemampuan berpikir tingkat tinggi siswa kelas eksperimen diperoleh rata-rata 82,29% sedangkan kelas kontrol diperoleh rata-rata 76,77% berdasarkan aspek *interpretensi, analisis, evaluasi* dan *inferensi*. (5) Respon siswa terhadap sumber belajar inovatif berbasis proyek yaitu 81,11% (sangat baik). Hasil penelitian menunjukkan sumber belajar inovatif berbasis proyek pada materi kesetimbangan kimia mempengaruhi hasil belajar dan kemampuan berpikir tingkat tinggi siswa.

**Kata Kunci :** Sumber belajar inovatif, Hasil belajar



## ABSTRACT

**Rita Ulfa Khairani.** Innovation in Learning Resources Using Project-Based Multimedia in Chemical Equilibrium Material for Class XI Odd Semester. Thesis. Medan: Chemistry Education Study Program, Medan State University Postgraduate, 2023.

The research aims to develop innovative project-based learning resources to improve learning outcomes and students' high-level thinking abilities on chemical equilibrium material. The research uses the ADDIE development model. The research population was all students of SMA Negeri 1 Binjai, Langkat Regency and the sample was taken from class XI MIPA 3 and 4. Product validation by 2 Unimed lecturers as material and media validators and 2 chemistry teachers. Questionnaire instruments are used to determine the feasibility of innovative learning resources, high-level thinking abilities and student responses, test instruments to determine student learning outcomes. The results of the research show that (1) Analysis of learning resources for students' grasp of chemistry learning based on BSNP obtained an average rating of 3.3 with the appropriate category. (2) The results of the validation analysis of project-based innovative learning resources that have been developed on chemical equilibrium material obtained an average rating of 3.50 with the feasible category. (3) The average increase in experimental class learning outcomes was 0.71 (high) while the control class obtained an average of 0.56 (medium). (4) The high-level thinking ability of experimental class students obtained an average of 82.29%, while the control class obtained an average of 76.77% based on aspects of interpretation, analysis, evaluation and inference. (5) Student response to innovative project-based learning resources was 81.11% (very good). The research results show that innovative project-based learning resources on chemical equilibrium material influence students' learning outcomes and high-level thinking abilities.

Keywords: Innovative learning resources, learning

