

ABSTRAK

Sardes Yosua Silaban, NIM 4213131005 (2025). Pengembangan Modul Asam-Basa Inovatif Berbasis *Problem Based Learning* Terintegrasi Kearifan Lokal Batak Toba Dekke Naniura.

Penelitian ini bertujuan untuk mengetahui analisis kebutuhan awal pada modul asam-basa inovatif berbasis *problem based learning* terintegrasi kearifan lokal batak toba dekke naniura, mengetahui kelayakan (validitas) berdasarkan Badan Standar Nasional Pendidikan (BSNP) serta memperoleh respon guru dan siswa terhadap modul asam-basa inovatif berbasis *problem based learning* terintegrasi kearifan lokal batak toba dekke naniura. Jenis penelitian yang digunakan dalam penelitian ini adalah *Research and Development* (R & D) dengan menggunakan model 4-D melalui 4 tahapan yaitu tahap *define, design, development* dan *disseminate*. Subjek dalam penelitian ini adalah seluruh siswa kelas XI-F1 SMA Negeri 1 Lintongnihuta dengan jumlah 32 siswa dan penelitian ini dilaksanakan di SMA Negeri 1 Lintongnihuta. Analisis data dilakukan dengan hasil validasi ahli, respon guru dan siswa. Berdasarkan hasil penelitian diperoleh analisis kebutuhan awal bahwa sekolah hanya menggunakan buku paket dan buku referensi yang terbatas dalam kegiatan pembelajaran serta belum menerapkan model pembelajaran pada bahan ajar, sehingga pentingnya pengembangan bahan ajar berupa modul yang dirancang dengan model pembelajaran *problem based learning* serta mengintegrasikan kearifan lokal batak toba dekke naniura yang dekat dengan kehidupan sehari-hari pada materi asam-basa sebagai sumber belajar yang memudahkan siswa memahami materi dan sebagai penambahan bahan ajar. Hasil validasi modul yang divalidasi oleh 4 validator ahli berdasarkan kriteria BSNP yaitu kelayakan isi, kelayakan penyajian, kelayakan kontekstual, kelayakan kegrafikan dan kelayakan bahasa diperoleh persentase dari keseluruhan aspek sebesar 89,17% dengan kriteria “sangat layak”. Hasil respon guru kimia dan 32 siswa kelas XI-F1 SMA Negeri 1 Lintongnihuta terhadap modul asam-basa inovatif berbasis *problem based learning* terintegrasi kearifan lokal batak toba dekke naniura dari keseluruhan aspek secara berurut sebesar 96,67% dan 91,28% dengan kriteria “sangat baik”, sehingga modul yang dikembangkan layak dan dapat digunakan dalam pembelajaran.

Kata Kunci: Pengembangan modul, asam-basa, kearifan lokal, dekke naniura, instrumen BSNP

ABSTRACT

Sardes Yosua Silaban, NIM 4213131005 (2025). Development of Innovative Acid-Base Module Based on Problem Based Learning Integrated with Local Wisdom of Batak Toba Dekke Naniura.

This study aims to determine the initial needs analysis on the innovative acid-base module based on problem-based learning integrated with local wisdom Batak toba dekke naniura, determine the feasibility (validity) based on the National Education Standards Agency (BSNP) and obtain teacher and student responses to the innovative acid-base module based on problem-based learning integrated with local wisdom Batak toba dekke naniura. The type of research used in this study is Research and Development (R & D) using the 4-D model through 4 stages, namely the define, design, development and disseminate stages. The subjects in this study were all students of class XI-F1 SMA Negeri 1 Lintongnihuta with a total of 32 students and this research was conducted at SMA Negeri 1 Lintongnihuta. Data analysis was carried out with the results of expert validation, teacher and student responses. Based on the results of the research, the initial needs analysis obtained that schools only use limited package books and reference books in learning activities and have not applied the learning model to teaching materials, so the importance of developing teaching materials in the form of modules designed with problem-based learning models and integrating local wisdom of the Batak toba dekke naniura which is close to everyday life on acid-base material as a learning resource that makes it easier for students to understand the material and as an addition to teaching materials. The results of module validation validated by 4 expert validators based on BSNP criteria, namely content feasibility, presentation feasibility, contextual feasibility, graphic feasibility and language feasibility obtained a percentage of all aspects of 89.17% with the criteria 'very feasible'. The response results of chemistry teachers and 32 students of class XI-F1 SMA Negeri 1 Lintongnihuta to the innovative acid-base module based on problem-based learning integrated with the local wisdom of the Batak toba dekke naniura from all aspects were 96.67% and 91.28% respectively with 'very good' criteria, so that the developed module is feasible and can be used in learning.

Keywords: *Module development, acid-base, local wisdom, dekke naniura, BSNP instruments*