

ABSTRAK

NURUL HAJIZAH PANE: Pengembangan Modul Ajar Kurikulum Merdeka Berbasis Pendekatan *Phenomenon based learning* Pada Materi Laju Reaksi Terhadap Kemampuan *Learning*. **Program Studi Pendidikan Kimia FKIP Universitas Malikussaleh, 2025.**

Salah satu alat yang diperlukan untuk mencapai tujuan pendidikan adalah kurikulum. Adanya pergeseran dan perubahan seiring dengan dinamika perubahan sosial menyebabkan perubahan pada kurikulum. Dalam sejarah perkembangan kurikulum di Indonesia, tercatat sebanyak sebelas kali perubahan kurikulum hingga saat ini muncul Kurikulum Merdeka. Kurikulum Merdeka mengubah empat prinsip menjadi arahan kebijakan baru, salah satunya adalah perubahan RPP menjadi modul ajar. Modul ajar pada kurikulum merdeka merupakan perangkat krusial yang mempermudah implementasi pembelajaran dengan paradigma baru. Perubahan Kurikulum Merdeka yang berorientasi pada kebebasan dan kreativitas peserta didik menyebabkan beberapa guru mengalami kesulitan untuk menentukan pendekatan pembelajaran yang cocok untuk dapat mewujudkan prinsip kemerdekaan belajar yang sesuai dengan karakteristik peserta didik dan materi pembelajaran. Salah satu pendekatan pembelajaran yang dapat mengaktualisasi kemerdekaan belajar serta mengaitkan dengan kehidupan nyata adalah pendekatan *phenomenon based learning* (PhBL). PhBL ini memberikan pemahaman siswa akan literasi yang lebih luas.

Penelitian ini merupakan penelitian pengembangan dengan menggunakan Model ADDIE (*Analysis, Design, Development, Implementation, and Evaluation*). Tujuan dari penelitian ini adalah untuk menyelidiki dan mengetahui kelayakan, respon guru, serta hasil literasi siswa pada implementasi modul ajar Kurikulum Merdeka berbasis pendekatan PhBL pada materi laju reaksi kelas XI SMA. Untuk mengevaluasi hasil literasi siswa, dilakukan *posttest* setelah pembelajaran selesai.

Hasil validasi materi, media dan soal masing-masing memperoleh persentase 82.08%, 88.43%, dan 89.58% sehingga dapat dikatakan layak pada materi, sangat layak pada media dan soal. Berdasarkan hasil uji respon guru modul ajar berbasis PhBL pada materi laju reaksi memperoleh persentase 92.08% atau dalam kategori sangat baik. Hasil yang diperoleh dalam kemampuan literasi siswa kelas eksperimen lebih tinggi dibandingkan kelas kontrol. Terdapat hasil uji *mann-whitney* hasil test siswa dengan nilai sig. (*2-tailed*) = 0,001. Berarti dalam hal ini nilai sig. (*2-tailed*) $0,001 < 0,05$, artinya H_0 ditolak dan H_1 diterima, Dengan demikian, dapat disimpulkan bahwa modul ajar berbasis Kurikulum Merdeka dengan pendekatan *Phenomenon Based Learning* (PhBL) pada materi laju reaksi terbukti layak dan baik digunakan sebagai perangkat pembelajaran Kurikulum Merdeka. Selain itu, terdapat pengaruh terhadap kemampuan literasi siswa kelas XI SMA.

Kata kunci: Kurikulum Merdeka, Modul Ajar, Pendekatan *Phenomenon Based Learning*.

ABSTRACT

NURUL HAJIZAH PANE: *Development of Independent Curriculum Teaching Modules Based on Phenomenon-based Learning Approach on Reaction Rate Material on Learning Ability. Chemistry Education Study Program, FKIP, Malikussaleh University, 2025.*

One of the tools needed to achieve educational goals is the curriculum. Shifts and changes along with the dynamics of social changes have led to changes in the curriculum. In the history of curriculum development in Indonesia, there have been eleven curriculum changes until the emergence of the Merdeka Curriculum. The Merdeka Curriculum modifies four principles into new policy directions, one of which is the change from Lesson Plans (RPP) to teaching modules. Teaching modules in the Merdeka Curriculum are crucial tools that facilitate the implementation of learning with a new paradigm. The changes in the Merdeka Curriculum, which focus on the freedom and creativity of students, have caused some teachers to face difficulties in determining the appropriate learning approach to realize the principle of independent learning, in line with the characteristics of the students and the learning materials. One of the learning approaches that can actualize independent learning while linking it to real-life situations is the Phenomenon-Based Learning (PhBL) approach. PhBL helps students develop broader literacy skills.

This study is a development research using the ADDIE Model (Analysis, Design, Development, Implementation, and Evaluation). The purpose of this study is to investigate and determine the feasibility, teacher responses, and student literacy outcomes from the implementation of a teaching module based on the Merdeka Curriculum with the PhBL approach on reaction rate material for 11th-grade high school students. To evaluate students' literacy outcomes, a post-test was administered after the lesson.

The results of the validation of the material, media, and questions each obtained percentages of 82.08%, 88.43%, and 89.58%, respectively, indicating that the material was feasible, while the media and questions were very feasible. Based on the teacher response test, the PhBL-based teaching module on reaction rate material received a percentage of 92.08%, categorized as very good. The results showed that the literacy skills of the experimental class students were higher compared to the control class. The Mann-Whitney test results showed a significance value (2-tailed) of 0.001, meaning that the value of sig. (2-tailed) $0.001 < 0.05$, which indicates that H_0 is rejected and H_1 is accepted. Thus, it can be concluded that the teaching module based on the Merdeka Curriculum with the Phenomenon-Based Learning (PhBL) approach on reaction rate material is proven to be suitable and effective as a teaching tool for the Merdeka Curriculum. Furthermore, it has a positive impact on the literacy skills of 11th-grade high school students.

Keywords: Merdeka Curriculum, Teaching Module, Phenomenon-Based Learning Approach