

## **Pengembangan Modul Berbasis *Discovery Learning* Terintegrasi Literasi Sains Pada Materi Laju Reaksi**

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### ABSTRAK

Modul disusun untuk menyediakan bahan ajar yang sesuai dengan perangkat kurikulum dengan mempertimbangkan kebutuhan siswa dalam proses belajar. Penelitian ini merupakan jenis penelitian *Research and Development* (R&D) yang bertujuan mengembangkan modul berbasis *discovery learning* terintegrasi literasi sains pada materi laju reaksi. Penelitian ini mengacu pada langkah – langkah Borg and Gall yang dibatasi sampai lima tahapan. Tahapan pertama dimulai dengan pengumpulan data dan informasi, perencanaan pengembangan modul berbasis *discovery learning*, pengembangan produk awal, uji coba lapangan awal, dan revisi hasil uji coba. Modul yang sudah dikembangkan divalidasi oleh validator ahli media dan ahli materi masing – masing sebanyak tiga orang dosen kimia Universitas Negeri Medan. Kemudian modul di uji cobakan dengan melihat respon menggunakan angket terhadap modul yang dikembangkan kepada 3 orang guru kimia dan siswa kelas XI SMA N 1 Bangun Purbayang berjumlah 36 orang siswa. Hasil penelitian menunjukkan bahwa modul berbasis *discovery learning* terintegrasi literasi sains pada materi laju reaksi dinyatakan layak setelah di validasi dengan memperoleh persentase rata – rata ahli media 83,2%, rata – rata ahli materi 85,4%. Dan modul dinyatakan menarik setelah memperoleh persentase dengan rata – rata respon guru 94,6% dan respon siswa memperoleh rata – rata 82%.

Kata Kunci : modul, *discovery learning*, literasi sains, hasil validasi dan respon

# **Development of Integrated Discovery Learning-Based Modules in Science Literacy on Reaction Rate Materials**

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## **ABSTRACT**

The module is structured to provide teaching materials that are in accordance with the curriculum set by considering the needs of students in the learning process. This research is a type of Research and Development (R&D) research that aims to develop a discovery learning-based module that integrates scientific literacy on the reaction rate material. This research refers to the steps of Borg and Gall which are limited to five stages. The first stage begins with data and information collection, discovery learning-based module development planning, initial product development, initial field trials, and revision of test results. The modules that have been developed validated by media expert validators and material experts, each by three chemistry lecturers at the State University of Medan. Then the module was tested by looking at the responses using a questionnaire to the module developed for 3 chemistry teachers and class XI students of SMA N 1 Bangun Purba, totaling 36 students. The results showed that the discovery learning-based module integrated scientific literacy on the reaction rate material was declared feasible after being validated by obtaining an average percentage of media experts 83.2%, average material experts 85.4%. And the module is declared interesting after obtaining a percentage with an average teacher response of 94.6% and student responses getting an average of 82%.

*Keywords: module, discovery learning, scientific literacy, validation results and responses*