

## **ABSTRAK**

**Hanna Grace Sembiring, NIM 4183331023 (2022). Pengembangan Modul Berbasis *Problem Based Learning (PBL)* Terintegrasi Literasi Sains Pada Materi Laju Reaksi Kimia**

Penelitian ini merupakan jenis penelitian *Research and Development* (R&D) yang bertujuan untuk mengembangkan modul berbasis problem based learning (PBL) terintegrasi literasi sains pada materi laju reaksi. Subjek pada penelitian ini adalah modul berbasis PBL terintegrasi literasi sains. Objek pada penelitian ini adalah materi Laju Reaksi kimia. Penelitian ini mengacu pada langkah- langkah *Borg and Gall* namun dibatasi sampai 5 langkah atau tahapan. Langkah- langkah dimulai dengan pengumpulan data dan informasi, perencanaan pengembangan modul berbasis PBL, pengembangan produk awal, uji coba lapangan awal, dan revisi hasil uji coba. Modul yang telah dikembangkan divalidasi oleh 3 validator ahli materi dan 3 validator ahli media. Kemudian, modul diuji cobakan kepada 2 orang guru dan siswa kelas XI-IPA 2 berjumlah 30 siswa SMA Negeri 7 Medan. Sementara ntuk melihat kemenarikan modul tersebut dilakukan metode pengumpulan data menggunakan instrumen penelitian berupa angket. Hasil penelitian menunjukkan bahwa modul berbasis PBL terintegrasi literasi sains pada materi laju reaksi kimia dinyatakan layak setelah di validasi dengan diperoleh persentase rata- rata ahli materi sebesar 84,63% dengan kategori valid/layak dan persentase rata- rata ahli media sebesar 84,41% dengan kategori valid/ layak. Dan dinyatakan menarik setelah memperoleh persentase rata-rata respon guru sebesar 93,45 % dengan kategori sangat menarik dan persentase rata-rata respon siswa sebesar 86,77% dengan kategori sangat menarik.

**Kata Kunci :** Modul, PBL, Literasi sains, Kelayakan, Kemenarikan Modul



## **ABSTRACT**

**Hanna Grace Sembiring,NIM 4183331023 (2022). Development of Problem Based Learning (PBL) Based Modules Integrated with Science Literacy on Chemical Reaction Rate Materials**

This research is a type of Research and Development (R&D) research that aims to develop a problem-based learning (PBL) module integrated with science literacy on reaction rate materials. The subject of this study is an integrated PBL-based module of science literacy. The object of this study is the material of the Chemical Reaction Rate. This study refers to the steps, Borg and Gall but is limited to 5 steps or stages. The steps begin with data and information collection, PBL-based module development planning, initial product development, initial field trials, and revision of trial results. The modules that have been developed are validated by 3 material expert validators and 3 media expert validators. Then, the module was tested on 2 teachers and class XI-IPA 2 students totaling 30 students of SMA Negeri 7 Medan. Meanwhile, to see the attractiveness of the module, a data collection method was carried out using a research instrument in the form of a questionnaire. The results showed that the PBL-based module integrated science literacy on chemical reaction rate materials declared eligible after validation by obtaining an average percentage of material experts of 84.63% with a valid / feasible category and an average percentage of media experts of 84.41% with a valid / feasible category. And it was declared interesting after obtaining an average percentage of teacher responses of 93.45% with a very interesting category and an average percentage of student responses of 86.77% with a very interesting category.

**Keywords :**Module, PBL, Science literacy, Feasibility, Module Availability

