

ABSTRAK

Penelitian pengembangan ini bertujuan untuk menghasilkan suatu produk bahan ajar berupa modul pembelajaran Biologi berbasis *Problem Based Learning* (PBL) pada materi sistem pernapasan kelas XI IPA SMA. Metode pengembangan modul ini adalah model Thiagarajan (4-D) yang mempunyai tahapan *define, design, development, dan disseminate*, tetapi pada pengembangan modul hanya tahap *development*. Hasil dari pengembangan modul biologi berbasis model pembelajaran PBL (*Problem Based Learning*) dari validasi ahli desain diperoleh presentase 88% (sangat baik). Hasil validasi ahli materi di peroleh presentase 94 (sangat baik). Hasil validasi ahli soal HOTS diperoleh presentase 86% (sangat baik) dan hasil uji coba peserta didik diperoleh hasil layak untuk digunakan . Berdasarkan hasil uji tersebut dapat disimpulkan bahwa keempat uji mendapatkan kategori "sangat Baik" sehingga modul ini layak digunakan sebagai salah satu bahan ajar tambahan pada pembelajaran materi sistem pernapasan di sekolah.

Kata kunci: modul;model pembelajaran PBL (*Problem Based learning*)

ABSTRACT

This development research aims to produce a teaching material product in the form of a Biology learning module based on Problem Based Learning (PBL) on the respiratory system material for class XI IPA SMA. The method of developing this module is the Thiagarajan (4-D) model which has the stages of define, design, development, and disseminate, but in the development of the module only the development stage. The results of the development of biology modules based on the PBL (Problem Based Learning) learning model from the validation of design experts obtained a percentage of 88% (very good). The results of the material expert validation obtained a percentage of 94 (very good). The results of the expert validation of the HOTS questions obtained a percentage of 86% (very good) and the results of the student trials obtained were feasible to use. Based on the test results, it can be concluded that the four tests are categorized as "very good" so that this module is suitable to be used as an additional teaching material for learning respiratory system materials in schools.

Keyword: Module;model PBL *problem Based Learning*