

ABSTRAK

PEMBUATAN MODUL PEMBELAJARAN ELEKTRONIK KOLOID BERBASIS *PROBLEM BASED LEARNNG* (PBL) PADA PROSES PEMBUATAN SABUN EKSTRAK KULIT NANAS (*Ananas comosus L*)

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Penelitian ini dilakukan pada situasi pandemi COVID-19 dimana peserta didik melakukan pembelajaran secara daring diumah maka dibutukannya sebuah modul pembelajaran elektronik audio visual berbasis *Problem Based Learning* (PBL) yang didesain dan dapat dijadikan sebagai alat pendukung pembelajaran jarak jauh atau daring. penelitian ini bertujuan untuk menghasilkan modul elektronik koloid berbasis PBL (*Problem Based Learning*) dan pembuatan sabun ekstrak kulit nanas (*Ananas comosus L*) dengan melakukan penilaian modul elektronik dari ahli materi dan ahli media, dengan melakukan penyebaran angket kepada dosen yang mengampu mata kuliah kimia dan guru mata pelajaran kimia khususnya materi koloid. Uji kelayakan dengan masing-masing aspek, aspek materi sebesar 87.8% dengan kategori “sangat layak” dan pada aspek media sebesar 87.4% dengan kategori “sangat layak”. Hal ini menunjukkan bahwa modul elektronik koloid berbasis PBL (*Problem Based Learning*) secara keseluruhan “sangat layak” digunakan sebagai media pembelajaran.

Kata Kunci: *Modul Elektronik Berbasis Problem Based Learning, Koloid, Sabun Ekstrak Kulit Nanas (Ananas comosus L), Uji Kelayakan*

ABSTRACT

**THE MAKING OF COLLOID ELECTRONIC LEARNING MODULE BASED
ON PROBLEM BASED LEARNING (PBL) IN THE MANUFACTURE PROCESS
OF PINEAPPLE SKIN EXTRACT SOAP**

(Ananas comosus L)

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This research was conducted in the COVID-19 pandemic situation where the students are learning via online at home, so it is necessary to have an electronic audio visual learning module based on *Problem Based Learning* (PBL) which is designed and can be used as a support tool for distance learning or online. This study aims to produce a PBL-based colloid electronic module (*Problem Based Learning*) and the manufacture of pineapple skin extract soap (*Ananas comosus L*) by conducting an electronic module assessment from the material experts and the media experts, by distributing questionnaires to the lecturer who teaches chemistry courses and the teacher of chemistry subjects, especially colloid material. The feasibility test with each aspect, the material aspect was 87.8% with the "very feasible" category and on the media aspect it was 87.4% with the "very feasible" category. This shows that the colloid electronic module based on PBL (*Problem Based Learning*) as a whole is "very feasible" to be used as a learning media.

Keywords: *Electronic Module Based on Problem Based Learning, Colloid, Pineapple Skin Extract Soap (Ananas comosus L), Feasibility Test*

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