

ABSTRAK

Meilani Suci Pratiwi : Pengembangan *e-module* berbasis *creative problem solving* (CPS) pada materi larutan penyangga

Tujuan dari penelitian ini adalah mendeskripsikan tampilan *e-module* berbasis *creative problem solving* (CPS) pada materi larutan penyangga, menganalisis hasil uji validasi serta menganalisis hasil uji coba kelayakan. Metode yang digunakan yaitu metode *Research and Development* (R&D) dengan tahapan analisis, tahapan desain dan tahapan pengembangan. tampilan *e-module* terdiri dari beberapa menu diantaranya petunjuk penggunaan, pendahuluan, kegiatan pembelajaran berisi apersepsi, penemuan masalah, penemuan ide dan praktikum, latihan soal, profil penyusun dan sumber. *E-module* ini berbentuk aplikasi yang terinstal pada gawai berupa media yang disertai gambar, video, dan wacana. Kemudian uji validasi diperoleh nilai rata-rata sebesar 0,804 dan dapat dinyatakan valid. Adapun hasil uji kelayakan mendapatkan rata-rata persentase sebesar 88,01%. Berdasarkan hasil uji validasi dan uji coba terbatas maka *e-module* berbasis *creative problem solving* (CPS) pada materi larutan penyangga dikatakan valid dan layak untuk digunakan sebagai media pembelajaran.

Kata kunci : *e-module*, *creative problem solving*, larutan penyangga

ABSTRACT

Meilani Suci Pratiwi: *Development of a Creative Problem Solving (CPS)-Based E-Module on Buffer Solution Material*

The objective of this study is to describe the design of an e-module based on the Creative Problem Solving (CPS) approach for teaching buffer solution concepts, to analyze the results of its validation, and to evaluate its feasibility through limited trials. This research employed a Research and Development (R&D) methodology, consisting of three primary stages: analysis, design, and development. The e-module features a user interface comprising several key components, including usage instructions, an introduction, learning activities (which incorporate apperception, problem identification, idea generation, and laboratory experiments), practice exercises, developer profiles, and references. The CPS-based e-module that can be installed on mobile devices, and is enriched with multimedia elements such as images, videos, and narrative texts. The validation process resulted in an average score of 0.804, indicating that the e-module meets the criteria for validity. Furthermore, the feasibility test yielded an average percentage score of 88.01%, demonstrating a high level of practicality and user acceptance. Based on the outcomes of the validation and limited trial phases, it can be concluded that the CPS-based e-module on buffer solutions is both valid and feasible to be utilized as an instructional medium in chemistry education.

Keywords: *e-module*, *creative problem solving*, *buffer solution*