

ABSTRACT

Yusuf Satryo Utama. Development of Mobile Learning Based on Chemo-entrepreneurship Approach Integrated Learning Management System on Colloidal System Material. Thesis. Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Jakarta State University, August 2022.

This study aims to develop a mobile learning media design based on the Chemo-entrepreneurship approach which is integrated with a learning management system on colloidal system. This research was conducted at SMA Negeri 106 Jakarta from December 2020 to August 2022. The research method used in this study was Research and Development (R&D) from Borg and Gall which was modified into 3 main stages, namely the needs analysis stage, the model development planning stage, and the validation, evaluation, and revision stages. The developed mobile learning media is in the form of an application that can be used for mobile phone users with an android operating system named "ML Koloid CEP.apk". The developed mobile learning media contains competencies, materials, learning videos, quizzes, games, discussions, and bibliography on colloidal system materials using a chemo-entrepreneurship approach. At the validation test stage by media experts, the average percentage of assessment is 90% with $r = 0,92$. Meanwhile, at the validation test stage by material and language experts, an average rating percentage of 87,43% with $r = 0,94$. The results of small-scale media trials on students amounted to 86,70% and the results of large-scale media trials on students amounted to 88,71%. Overall the assessment of the overall test results get the criteria very good. So it can be said that the mobile learning media based on the chemo-entrepreneurship approach which is integrated with the learning management system on the colloidal system material that has been developed is feasible to be used as a learning medium.

Keywords: Mobile Learning, Chemo-entrepreneurship, Colloid System