ABSTRAK

Fitri Yati Sa'diah : Pembelajaran Berbasis Proyek Terintegrasi STREAM *(Science, Technology, Religion, Engineering, Arts, Mathematics)* dalam Pembuatan Jelly untuk Meningkatkan Literasi Halal dan Kreativitas Peserta Didik Pada Materi Koloid

Rendahnya literasi halal dan kreativitas siswa menunjukkan perlunya pendekatan pembelajaran yang integratif dan aplikatif. Pembelajaran yang masih bersifat teoritis dan tidak dihubungkan dengan kehidupan nyata membuat siswa kesulitan memahami konsep kimia yang bersifat abstrak. Rendahnya literasi halal menjadi masalah nyata dalam kehidupan, sehingga diatur dalam UU No. 33 2014 untuk mengatur sertifikasi halal produk di Indonesia. Penelitian ini bertujuan untuk mengembangan pembelajaran berbasis proyek terintegrasi STREAM melalui pembuatan jelly untuk meningkatkan literasi halal dan kreativitas siswa pada materi koloid. Metode penelitian menggunakan R&D tahapan 4D *(Define, Design, Develop, Disseminate).* Partisipan penelitian yaitu siswa, guru, validator, dan observer. Analisis penelitian meliputi lembar validasi, observasi keterlaksanaan, tes literasi halal, rubrik kreativitas, dan angket refleksi. Hasil menunjukkan perangkat sangat valid (0,87), keterlaksanaan pembelajaran sangat baik ≥ 87,5%. Literasi halal mengalami peningkatan nilai *N-gain* lebih besar pada kelas eksperimen 0,67, dibandingkan kelas kontrol 0,31. Level kreativitas kategori *Expressing* 62% dan *Exceliing* 32%. Refleksi pembelajaran tertinggi pada aspek *Finding* 94,6%. Melalui implementasi pembelajaran berbasis proyek terintergasi STREAM, siswa mampu memahami konsep ilmiah yang berkaitan dengan kehidupan nyata serta memiliki kesadaran terhadap konsumsi produk halal. Temuan ini juga mendukung program sertifikasi halal nasional di Indonesia serta implementasi Kurikulum Merdeka untuk mendukung pembelajaran abad 21.

Kata Kunci: kreativitas, koloid, literasi halal, pembelajaran berbasis proyek, STREAM

ABSTRACT

Fitri Yati Sa'diah : *Project-Based Integrated STREAM (Science, Technology, Religion, Engineering, Arts, Mathematics) Learning in Jelly Making to Enhance Halal Literacy and Creativity of Students on Colloid Material*

The low level of halal literacy and student creativity shows the need for an integrative and applicable learning approach. Learning that is still theoretical and not connected to real life makes it difficult for students to understand abstract chemical concepts. Low halal literacy is a real problem in life, so it is regulated in Law no. 33 2014 to regulate halal product certification in Indonesia. This research aims to develop STREAM integrated project-based learning through jelly making to increase students' halal literacy and creativity in colloidal materials. The research method uses R&D stages 4D (Define, Design, Develop, Disseminate). Research participants are students, teachers, validators and observers. Research analysis includes validation sheets, implementation observations, halal literacy tests, creativity rubrics, and reflection questionnaires. The results show that the device is very valid (0.87), learning implementation is very good ≥ 87.5%. Halal literacy experienced a greater increase in the N-gain value in the experimental class, 0.67, compared to the control class, 0.31. The creativity level in the Expressing category is 62% and Excelling 32%. The highest learning reflection in the Finding aspect was 94.6%. Through the implementation of STREAM integrated project-based learning, students are able to understand scientific concepts related to real life and have awareness of the consumption of halal products. These findings also support the national halal certification program in Indonesia as well as the implementation of the Merdeka Curriculum to support 21st century learning.

Keywords: *colloid, creativity, halal literacy, project-based learning, STREAM*