ABSTRAK

Rd Indah Rofi'ah Al Zahro : Pengembangan Bahan Ajar *"Local Potential Fermented Product"* (LPFP) Berbasis STREAM untuk Meningkatkan Literasi Halal dan Keterampilan Pemecahan Masalah

Media pembelajaran IPA berbasis STREAM yang dirancang khusus untuk membantu peserta didik memahami konsep fermentasi dan merancang eksperimen pembuatan produk fermentasi secara efektif. Tujuan penelitian dilakukan untuk membuat inovasi bahan ajar *"local potential fermented products"* (LPFP) berbasis STREAM untuk meningkatkan keterampilan pemecahan masalah dan literasi halal, menaganalisis kelayakan bahan ajar, menganalisis keterlaksanaan, peningktan dan respons peserta didik setelah diterapkan dalam pembelajaran IPA. Metode penelitian R&D menggunakan tahapan *three D* (3D), yaitu pendefinisian *(define)*, desain *(design)* dan pengembangan *(development)*. Desain penelitian yang digunakan *one-group pretest-posttest design*. Teknik pengumpulan data dan analisis data dilakukan dengan validasi perangkat pembelajaran, lembar observasi keterlaksanaan pembelajaran, soal pretest-posttest dan angket respon peserta didik. Hasil uji kelayakan menunjukan bahwa nilai rata-rata r_{hitung} sebesar 0,85 dinyatakan sangat valid dengan kriteria tinggi serta dapat dilakukan uji coba terbatas terhadap bahan ajar. Keterlaksanaan pembelajaran menggunakan bahan ajar peserta didik memperoleh skor rata-rata keterampilan pemecahan masalah sebesar 91,25 %, sedangkan skor rata-rata literasi halal peserta didik sebesar 90% dengan kriteria baik sekali. Pembelajaran menggunakan bahan ajar *"local potential fermented products"* (LPFP) terjadi peningkatan keterampilan pemecahan masalah dan literasi halal peserta didik dengan nilai *N-Gain* sebesar 0,75 dengan kategori sedang. Peserta didik merasakan relevansi bahan ajar dengan kehidupan sehari-hari dan mudah dipahami dengan nilai respon peserta didik sebesar 0,91 dengan kriteria sangat baik.

Kata kunci : Bahan ajar, *Local potential fermented product*, STREAM, Keterampilan pemecahan masalah dan Literasi halal

ABSTRACT

Rd Indah Rofi'ah Al Zahro : Development of STREAM-Based "Local Potential Fermented Product" (LPFP) Teaching Materials to Improve Halal Literacy and Problem-Solving Skills

STREAM-based science learning media is specifically designed to help students understand the concept of fermentation and design experiments to make fermented products effectively. The aim of the research was to create innovative STREAM-based "local potential fermented products" (LPFP) teaching materials to improve problem solving skills and halal literacy, analyze the suitability of teaching materials, analyze the implementation, improvement and response of students after being applied in science learning. The R&D research method uses three D (3D) stages, namely definition, design and development. The research design used was a one-group pretest-posttest design. Data collection and data analysis techniques were carried out by validating learning tools, learning implementation observation sheets, pretest-posttest questions and student response questionnaires. The results of the feasibility test show that the average r value of 0.85 is declared very valid with high criteria and limited trials can be carried out on teaching materials. The implementation of learning using teaching materials for students obtained an average score for problem solving skills of 91.25%, while the average score for halal literacy for students was 90% with very good criteria. Learning using "local potential fermented products" (LPFP) teaching materials resulted in an increase in students' problem-solving skills and halal literacy with an N-Gain value of 0.75 in the medium category. Students feel the relevance of teaching materials to everyday life and are easy to understand with a student response value of 0.91 with very good criteria.

Kata kunci : Teaching materials, Local potential fermented products, STREAM, Problem solving skills and Halal literacy