

Development of Science Teaching Materials with STREM (Science, Technology, Religious, Engineering, Mathematics) Approach to Improve Science Literacy and Spiritual Intelligence of Junior High School Students

by Asri Widowati, Dita Puji Rahayu, Ekosari Roektingroem, Hamdan

ABSTRACT

Science literacy is the goal of science education reform. However, people's science literacy in Indonesia is low. In addition, it is also important for a generation that has good character, especially having spiritual intelligence. This research aims to produce science teaching material products that are feasible, effective, and practical. The teaching materials in question can be in the form of modules or LKPD. This research is a development research with 4D design (*Define, Design, Develop, Disseminate*). The subjects of the study were junior high school students in grade 7 or 8. Research instruments in the form of product validation questionnaire sheets, science literacy tests, spiritual intelligence questionnaires, and student response questionnaires to science teaching materials. The feasibility and practicality data analysis techniques are carried out descriptively, both quantitative and qualitative. For product effectiveness data, it was tested using effect size and inferential statistical tests with paired t tests. The results showed that there were significant differences in students' science literacy between before and after learning to use science teaching materials with the STREM approach.

Kata Kunci: *Science Teaching Materials, STREM, Science Literacy, Spiritual*