ABSTRAK

Muhamad Ali Nurdin: Desain Pembelajaran Inkuiri Terbimbing Berbasis *Internet of Things* (IoT) pada Minuman Beralkohol untuk Meningkatkan Literasi Halal Peserta Didik

Penelitian ini bertujuan mendeskripsikan desain pembelajaran inkuiri terbimbing berbasis IoT pada minuman beralkohol, mendeskripsikan penerapan desain pembelajaran inkuiri terbimbing berbasis IoT, dan menganalisis peningkatan literasi halal peserta didik kelas setelah pembelajaran inkuiri terbimbing berbasis *Internet of Things* (IoT) pada minuman beralkohol. Metode yang digunakan dalam penelitian ini adalah *research and development (*R&D) dengan model pengembangan ADDIE *(Analyze, Design, Development, Implementation,* dan *Evaluate)* terbatas dan desain penelitian *pre-experimental design.* Jumlah sampel yang digunakan dalam penelitian adalah sebanyak 30 peserta didik kelas VIII SMP Al-Muttaqin Tasikmalaya. Pengumpulan data dilakukan melalui *pretest* dan *posttest* untuk mengukur peningkatan literasi halal. Desain pembelajaran inkuiri terbimbing berbasis IoT diawali dengan studi pendahuluan, kemudian dilakukan penyusunan perangkat IoT, modul ajar, lembar kerja peserta didik, lembar observasi, dan soal literasi halal pada minuman beralkohol. Penerapan desain pembalajaran inkuiri terbimbing berbasis IoT pada minuman beralkohol secara efektif dapat meningkatkan literasi halal peserta didik secara signifikan. Hasil penelitian menunjukkan setelah pembelajaran inkuiri terbimbing berbasis IoT pada minuman beralkohol terjadi peningkatan literasi halal peserta didik di mana diperoleh nilai *N-Gain* sebesar 0,57 dengan kategori sedang.

Kata Kunci: alkohol, inkuiri terbimbing, *internet of things*, literasi halal, pembelajaran berbasis IoT, teknologi.

ABSTRACT

Muhamad Ali Nurdin: **Internet of Things (IoT) Based Guided Inquiry Learning Design on Alcoholic Beverages to Improve Students' Halal Literacy**

This study aims to describe the design of guided inquiry learning based on IoT for alcoholic beverages, describe the implementation of the guided inquiry learning design based on IoT, and analyze the improvement of halal literacy among students after guided inquiry learning based on the Internet of Things (IoT) on alcoholic beverages. The method used in this research is research and development (R&D) with a limited ADDIE (Analyze, Design, Development, Implementation, and Evaluate) development model and a pre-experimental design. The sample size used in the study was 30 eighth-grade students from Al-Muttaqin Junior High School in Tasikmalaya. Data collection was conducted through pretests and posttests to measure the improvement in students' halal literacy. The design of the guided inquiry learning based on IoT began with a preliminary study, followed by the preparation of IoT devices, teaching modules, student worksheets, observation sheets, and halal literacy questions on alcoholic beverages. The implementation of the guided inquiry learning design based on IoT for alcoholic beverages effectively and efficiently improved students' halal literacy significantly. The research results showed that after guided inquiry learning based on IoT on alcoholic beverages, there was an improvement in students' halal literacy, with an N-Gain score of 0.57, categorized as moderate.

Key Words: alcohol, guided inquiry, internet of things, IoT-based learning, halal literacy , technology