ANALISIS PROFIL LITERASI ENERGI MAHASISWA CALON GURU VOKASI

TESIS

Diajukan untuk Memenuhi Salah Satu Syarat
Memperoleh Gelar Magister Pendidikan Teknologi dan Kejuruan

Disusun oleh:
Iis Rahmania Putri (2010425)

PROGRAM STUDI PENDIDIKAN TEKNOLOGI DAN KEJURUAN
SEKOLAH PASCASARJANA
UNIVERSITAS PENDIDIKAN INDONESIA
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Sebuah Tesis yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Magister Pendidikan (M.Pd.) pada Program Studi Pendidikan Teknologi dan Kejuruan

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ABSTRAK

Kajian mengenai literasi energi banyak diteliti oleh peneliti terdahulu. Sejumlah peneliti telah mengkaji tentang literasi energi di kalangan masyarakat, siswa sekolah menengah, mahasiswa perguruan tinggi, tenaga pendidik dan orang tua siswa. Namun, belum ditemukan kajian tentang literasi energi pada calon guru vokasi. Padahal calon guru vokasi memiliki peran penting untuk menanamkan konsep literasi energi dan mempersiapkan siswa agar memiliki pengetahuan dan keterampilan teknis, kepekaan dan kesadaran, serta bijak dan bertanggung jawab dalam menggunakan energi. Oleh karena itu, dalam penelitian ini penulis bertujuan untuk mengkaji profil literasi energi mahasiswa calon guru vokasi ditinjau dari 3 domain literasi energi yaitu pengetahuan, sikap dan perilaku. Kemudian mengkaji perbedaan literasi energi mahasiswa calon guru berdasarkan variasi kelompok jenis kelamin, bidang keilmuan IPA dan Teknik, dan asal prodi. Dilanjutkan dengan kajian tentang arah dan kekuatan hubungan antara 3 domain literasi energi. Penelitian ini menggunakan pendekatan kuantitatif dengan desain deskriptif-komparatif, yang dilakukan pada 234 mahasiswa dari 6 prodi Universitas Pendidikan Indonesia. Hasil yang diperoleh ternyata pengetahuan literasi energi mahasiswa calon guru vokasi berada pada level rendah dengan ketercapaian 44,5%, sikap pada level tinggi dengan ketercapaian 83,4%, dan perilaku pada level sedang dengan ketercapaian 65,3%. Kemudian berdasarkan kelompok jenis kelamin, mahasiswa wanita lebih unggul pada domain pengetahuan dan sikap, namun mahasiswa pria lebih unggul pada domain perilaku. Berdasarkan bidang keilmuan, kelompok IPA lebih unggul pada domain pengetahuan dan sikap, namun kelompok Teknik unggul pada domain perilaku. Sedangkan berdasarkan asal prodi diketahui bahwa mahasiswa ke-6 prodi mendapatkan konten energi dari matakuliah yang berbeda dan hasil literasi energi mereka dipengaruhi oleh faktor perbedaan isi dan kedalaman konten energi yang diberikan oleh masing-masing prodi. Selanjutnya hasil analisis hubungan antara 3 domain literasi energi diperoleh hasil domain sikap memiliki hubungan positif yang signifikan dengan domain pengetahuan dan perilaku. Berdasarkan hasil penelitian ini, perguruan tinggi dapat mengembangkan model pendidikan dan pembelajaran literasi energi untuk mahasiswa calon guru vokasi. Perguruan tinggi perlu memperhatikan kebutuhan, isi, dan kedalaman konten energi pada masing-masing prodi, terutama prodi yang masuk kualifikasi sebagai calon guru SMK Program Keahlian Teknik Energi Terbarukan. Perguruan tinggi juga dapat mem-pertimbangkan untuk membuka jurusan atau prodi baru khusus energi baru dan terbarukan untuk memenuhi kebutuhan pendidik di SMK Program Keahlian Teknik Energi Terbarukan.

Kata Kunci: Pendidikan Energi, Literasi Energi, Calon Guru Vokasi

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ABSTRACT

Studies on energy literacy have been much researched by previous researchers. A number of researchers have studied energy literacy among the community, high school students, college students, educators and parents of students. However, no studies have been found on energy literacy in vocational teacher candidate. While vocational teacher candidate has an important contribute to embed the concept of energy literacy and prepare students to have technical knowledge and skills, sensitivity and awareness, as well as be wise and responsible in using energy. Therefore, in this study, the author aims to examine the energy literacy profile of vocational teacher candidate in terms of 3 domains of energy literacy, namely knowledge, attitudes and behavior. Then examine the differences energy literacy of vocational teacher candidate based on variations in sex groups, science and engineering scientific fields, and the field of study programs. Continued with a study of the direction and strength of the relationship between the 3 domains of energy literacy. This research uses a quantitative approach with a descriptive-comparative design, which was conducted on 234 respondents from 6 study programs of the Indonesian University of Education. The results obtained turned out that the energy literacy knowledge of vocational teacher candidates was at a low level with an achievement of 44.5%, an attitude at a high level with an achievement of 83.4%, and behavior at a moderate level with an achievement of 65.3%. Then based on gender groups, female group have better knowledge and attitudes, but male group have better behavior. Based on the scientific field, the science group have better knowledge and attitudes, but the Engineering group have better behavior. Meanwhile, based on the field of the study program, it is known that vocational teacher candidate get energy content from different courses and their energy literacy results are affected by differences in the content and depth of energy content provided by each study program. Furthermore, the results of the analysis of the relationship between the 3 domains of energy literacy obtained the results of the attitude domain having a significant positive relationship with the domain of knowledge and behavior. Based on the results of this study, universities can develop models of energy literacy education and learning for vocational teacher candidate. Universities need to pay attention to the needs, content, and depth of energy content in each study program, especially study programs that qualify as teacher candidate of SMK renewable energy engineering expertise program. Universities may also consider opening new majors or study programs specifically for new and renewable energy to fulfill the needs of educators in the SMK renewable energy engineering expertise program.

Keywords: Energy Education, Energy Literacy, Vocational Teacher Candidates

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