

**PENGEMBANGAN *WATER MANAGEMENT PROJECT SHEET* dengan
FRAMEWORK PjBLSTEM-ESD untuk PERKULIAHAN PENDIDIKAN
LINGKUNGAN BERORIENTASI PENINGKATAN LITERASI
LINGKUNGAN, KETERAMPILAN BERPIKIR KRITIS dan
SUSTAINABILITY AWARENESS MAHASISWA**

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ABSTRAK

Penelitian ini merupakan terobosan dalam perkuliahan pendidikan lingkungan yang selama ini memiliki kecenderungan berorientasi kognitif. Tujuan penelitian ini adalah mengembangkan dan menghasilkan *water management project sheet* dengan *framework Project Based Learning Science Technology Engineering Mathematics* pada perkuliahan pendidikan lingkungan untuk meningkatkan literasi lingkungan, keterampilan berpikir kritis dan *sustainability awareness*. Penelitian ini menggunakan metode penelitian dan pengembangan dengan pendekatan ADDIE: *Analyze, Design, Develop, Implement* dan *Evaluation*. Subjek penelitian ini adalah 20 orang mahasiswa pada salah satu perguruan tinggi di Riau. Instrumen yang digunakan berupa tes literasi lingkungan, tes keterampilan berpikir kritis dan tes *sustainability awareness*. Hasil implementasi menunjukkan *water management project sheet* dengan *framework PjBLSTEM-ESD* pada perkuliahan pendidikan lingkungan dapat meningkatkan literasi lingkungan, keterampilan berpikir kritis dan *sustainability awareness* pada kategori sedang. Oleh sebab itu, dapat disimpulkan bahwa *water management project sheet* dengan *framework PjBLSTEM-ESD* valid dan teruji dalam meningkatkan literasi lingkungan, keterampilan berpikir kritis dan *sustainability awareness*.

Kata Kunci: *Water management project sheet, model PjBLSTEM-ESD, literasi lingkungan, keterampilan berpikir kritis, sustainability awareness*

ABSTRACT

This research is an innovation in environmental education lectures which so far have a cognitive-oriented tendency. The purpose of this research is to develop and produce a water management project sheet with the Project Based Learning Science Technology Engineering Mathematics framework in environmental education courses to increase environmental literacy, critical thinking skills and sustainability awareness. This study uses research and development methods with the ADDIE approach: *Analyze, Design, Develop, Implementation* and *Evaluation*. The subjects of this study were 20 students at a university in Riau. The instruments used were environmental literacy tests, critical thinking skills tests and sustainability awareness tests. The implementation results show that the water management project sheet with the PjBLSTEM-ESD framework in environmental education lectures can increase environmental literacy, critical thinking skills and sustainability awareness in the medium category. Therefore, it can be concluded that the water management project sheet with the PjBLSTEM-ESD framework is valid and tested in increasing environmental literacy, critical thinking skills and sustainability awareness.

Keywords: *Water management project sheet, PjBLSTEM-ESD model, environmental literacy, critical thinking skills, sustainability awareness*

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