

## ABSTRAK

Atmojo, Felisita Marcelliana. 2022. **Pengembangan Bahan Ajar Project Based Learning Berbasis Etno-STEM pada Usaha Kerajinan Pahatan Batu di Muntilan**, Tesis. Yogyakarta: Program Studi Magister Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan. Universitas Sanata Dharma, Yogyakarta.

Perkembangan jaman membawa perubahan dalam bidang pendidikan. Perubahan tersebut terkait` kurikulum yang diterapkan pada jenjang pendidikan di Indonesia yang disesuaikan dengan perkembangan abad 21. Abad ini diperlukan empat kecapakan yang harus dimiliki peserta didik dalam kehidupan sehari-hari.

Tujuan dari penelitian ini adalah (1) Mendeskripsikan pengembangan bahan ajar berbasis etno-*STEM* pada usaha kerajinan pahatan batu di Muntilan, (2) Mendeskripsikan kelayakan hasil produk pengembangan bahan ajar berbasis etno-*STEM* pada usaha kerajinan pahatan batu di Muntilan. Jenis penelitian menggunakan *Research and Development R&D* model ADDIE. Di mana ADDIE merupakan tahapan *Analyze* (analisis), *Design* (desain), *Development* (pengembangan), *Implementation* (implementasi), dan *Evaluation* (evaluasi).

Hasil yang didapatkan pada penelitian ini terkait tahap *analyze* adalah analisis kebutuhan, dengan wawancara dan observasi. Tahap *design* adalah merancang produk yang akan digunakan dalam penelitian berupa lembar kerja peserta didik. Tahap *development* menjelaskan pengembangan dari validasi data dengan hasil produk secara umum “sangat baik” dengan penilaian empat aspek yaitu aspek tampilan, isi, tata bahasa dan pembelajaran. Tahap selanjutnya adalah *implementation* di mana produk diujicobakan oleh 17 peserta didik di SMP Pangudi Luhur Srumbung selama 3 kali pertemuan. Tahap evaluasi didapatkan beberapa catatan mengenai ujicoba produk yaitu alokasi waktu yang membutuhkan waktu tambahan dalam uji coba dan kendala jaringan saat akses internet. Kelayakan produk ditinjau dari tiga aspek yaitu validasi, kepraktisan dan keefektifan. Aspek validasi mendapatkan hasil “sangat baik”, aspek kepraktisan dari segi tata bahasa mendapatkan kategori baik kemudian aspek keefektifan dari skor peserta didik diatas KKM yakni 70 dengan rata-rata 80,23.

**Kata kunci: Bahan Ajar, R&D, Etno-STEM, Pahatan Batu.**

**ABSTRACT**

*Atmojo, Felisita Marcelliana. 2022. Development of Ethno-STEM-Based Project Based Learning Teaching Materials for Stone Sculpture Craft Businesses in Muntilan, Thesis. Yogyakarta: Mathematics Education Masters Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education. Sanata Dharma University, Yogyakarta.*

*The times have brought changes in the field of education. These changes are related to the curriculum applied at the level of education in Indonesia which is adapted to developments in the 21st century. Century, four skills are needed that students must have in everyday life.*

*The aims of this study were (1) to describe the development of ethno-STEM-based teaching materials in a stone carving craft business in Muntilan, (2) to describe the feasibility of developing ethno-STEM based teaching materials in a stone carving craft business in Muntilan. This type of research uses the ADDIE Research and Development R&D model. Where ADDIE is the stage of Analysis (analysis), Design (design), Development (development), Implementation (implementation), and Evaluation (evaluation).*

*The results obtained in research related to this analysis stage are needs analysis, by interviews and observations. The design stage is designing products to be used in research in the form of student worksheets. The development stage describes the development of data validation with product results in general "very good" with four assessment aspects, namely appearance, content, grammar and learning aspects. The next stage was implementation where the product was tried out by 17 students at Pangudi Luhur Srumbung Middle School for 3 meetings. In the evaluation stage, several notes were obtained regarding product trials, namely the time allocation that required additional time for testing and network constraints when accessing the internet. Product feasibility is reviewed from three aspects, namely validation, practicality and effectiveness. The validation aspect gets "very good" results, the practicality aspect in terms of grammar gets a good category then the effectiveness aspect of the student's score above the KKM is 70 with an average of 80.23.*

**Keywords:** *Teaching Materials, R&D, Ethno-STEM, Stone Sculpture.*

