

Development of Digital Teaching Materials based on Sasambo Ethnoscience to Improve Computational Thinking Skills of Prospective Elementary School Teachers

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Education in today's digital age requires the integration of information technology with traditional education, including the development of computational thinking skills for prospective elementary school teachers. Computational thinking is the ability to solve problems using computational concepts and techniques, which include algorithmic thinking, data analysis, and systematic problem solving. However, a technology-oriented learning approach may not be effective if it is not integrated with the values, traditions, and local wisdom of the surrounding community. Therefore, the development of ethnoscience-based digital teaching materials is important to improve the computational thinking skills of prospective elementary school teachers. The purpose of this study was to produce Sasambo (Sasak, Sawama, and Mbojo) ethnoscience-based teaching materials that facilitate the computational thinking skills of prospective elementary school teachers in ICT-based learning lectures. This study was a development study using a 4-D model consisting of four stages, namely define, design, develop, and disseminate. The test subjects in this study were students of the Elementary School Teacher Education Study Program at one of the Teacher Training and Education Institutions (LPTK) in Mataram who took ICT-based learning courses. The teaching materials developed consisted of a Semester Learning Plan (RPS), teaching materials in the form of e-books, and computational thinking tests, which were integrated into the e-books so that they could be accessed through electronic devices. The research results show that Digital Teaching Materials based on Sasambo Ethnoscience are considered practical by lecturers and students, especially in terms of ease of access, completeness of features, and ability to support computational thinking teaching and learning. Despite some technical challenges, the device operates well in an online learning context, making it worthy of further use. Thus, this tool can make a significant contribution to the development of learning that is more contextual and relevant to local culture.

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