

ABSTRAK

Nurul Haliza Muchti, “Penerapan Pendekatan Etno-STEAM (*Science, Technology, Engineering, Arts, Mathematics*) Berbasis Motif Batik Sunda untuk Meningkatkan Kemampuan Berpikir Geometri Peserta Didik”

Penelitian ini dilatarbelakangi oleh kemampuan berpikir geometri yang perlu ditingkatkan berdasarkan hasil penelitian terdahulu dan studi pendahuluan. Penelitian ini bertujuan untuk mengetahui: (1) keterlaksanaan pendekatan Etno STEAM berbasis motif batik Sunda; (2) peningkatan kemampuan berpikir geometri peserta didik yang memperoleh pendekatan Etno STEAM berbasis motif batik Sunda lebih baik daripada peserta didik yang memperoleh pembelajaran konvensional; (3) respon peserta didik terhadap pendekatan Etno STEAM berbasis motif batik Sunda. Penelitian ini menggunakan pendekatan kuasi eksperimen dengan populasi terdiri dari 11 kelas VIII di salah satu SMPN Kota Bandung tahun ajaran 2025/2026 dan sampel dua kelas. Instrumen penelitian yang digunakan meliputi lembar observasi keterlaksanaan pembelajaran, tes kemampuan berpikir geometri berupa *pretest* dan *posttest*, serta angket respon peserta didik. Hasil penelitian diperoleh bahwa: (1) pendekatan Etno STEAM berbasis motif batik Sunda terlaksana dengan sangat baik; (2) peningkatan kemampuan berpikir geometri peserta didik yang menggunakan pendekatan Etno STEAM berbasis motif batik Sunda lebih baik daripada yang menggunakan pembelajaran konvensional; (3) peserta didik memberikan respon positif terhadap pendekatan Etno STEAM berbasis motif batik Sunda.

Kata kunci: Etno-STEAM, Kemampuan Berpikir Geometri, Motif Batik Sunda

ABSTRACT

Nurul Haliza Muchti, “The Implementation of an Ethno-STEAM (Science, Technology, Engineering, Arts, and Mathematics) Approach Based on Sundanese Batik Motifs to Improve Students' Geometric Thinking Skills”

The study was motivated by the need to improve students' geometric thinking skills, as indicated by previous Observe and Organize and preliminary studies. This study aimed to determine: (1) the implementation of the Ethno-STEAM approach based on Sundanese batik motifs; (2) whether the improvement in students' geometric thinking skills who received the Ethno-STEAM approach based on Sundanese batik motifs was better than that of students who received conventional learning; and (3) students' responses to the Ethno-STEAM approach based on Sundanese batik motifs. This study employed a quasi-experimental approach. The study employed a quasi-experimental approach, with a population consisting of 11 eighth-grade classes at a public junior high school in Bandung City during the 2025/2026 academic year, and a sample of two classes. The Observe and Organize instruments included an observation sheet for learning implementation, a geometric thinking ability test consisting of a pretest and posttest, and a student response questionnaire. The results showed that: (1) the Ethno-STEAM approach based on Sundanese batik motifs was implemented very well; (2) the improvement in students' geometric thinking skills who received the Ethno-STEAM approach based on Sundanese batik motifs was better than that of students who received conventional learning; and (3) students responded positively to the Ethno-STEAM approach based on Sundanese batik motifs.

Keywords: *Ethno-STEAM, Geometric Thinking Skills, Sundanese Batik Motifs*