IJORER : International Journal of Recent Educational Research
Homepage : https://journal.ia-education.com/index.php/ijorer
Email : ijorer@ia-education.com

p-ISSN : 2721-852X ; e-ISSN : 2721-7965
IJORER, Vol. 5, No. 6, November 2024
Page 1533-1552

The Implementation of Ethnomathematics-Based Student Worksheet "Surya Majapahit" on the Circle Elements Material to Build Creative Thinking of Elementary Students

Annisa Rizqi Hendrada Putri[1], Wiryanto[1], Rooselyna Ekawati[1*], U Srinivasarao[2]
[1]State University of Surabaya, Surabaya, Indonesia
[2]GITAM University, Hyderabad, India

Check for updates

DOI: https://doi.org/10.46245/ijorer.v5i6.712

Sections Info

Article history:
Submitted: October 25, 2024
Final Revised: November 19, 2024
Accepted: November 23, 2024
Published: December 07, 2024

Keywords:
Creative Thinking;
Ethnomathematics;
Student Worksheet;
Surya Majapahit.

ABSTRACT

Objective: The application of an ethnomathematics-based student worksheet can be associated with Surya Majapahit's cultural heritage in the material of the elements of a circle. The purpose of this study is to describe the application of Surya Majapahit ethnomathematics-based worksheet as a mathematics learning resource, in addition to knowing the perceptions of teachers and students on the results of the application of Surya Majapahit ethnomathematics-based student worksheet carried out, as well as knowing the effect of applying Surya Majapahit ethnomathematics-based student worksheet in building students' creative thinking skills through the evaluation stage **Method:** This research uses descriptive qualitative research. This study's research subjects were 6th-grade students of Lengkong II Public School, Mojokerto Regency. **Results:** The results of data analysis through material validation in this study show that geometry concepts and values in Surya Majapahit ethnomathematics are seen through values and patterns in each period of government and culture that entered the archipelago. Student learning outcomes show "complete" above the criteria for achieving learning objectives. The results showed an average summative evaluation of 90 and a formative of 92.8, so students can optimize creative thinking skills on local wisdom content with geometry material elements. **Novelty:** The research innovatively incorporates ethnomathematics, precisely the "Surya Majapahit" Circle elements, into elementary school mathematics learning. This cultural integration can enhance students' engagement and understanding of mathematical concepts. The study seeks to foster a more imaginative and innovative approach to creative problem-solving using ethnomathematics and engaging activities.

INTRODUCTION

Mathematics is a field of science that includes measurements, numbers, and symbols (Daga, 2020). The purpose of implementing mathematics learning is to be carried out so that students can understand the concept of counting and more easily understand symbolic material and its benefits for daily activities. Students are the main subject of the purpose of making the learning media. So that students do not only receive information (Kurniawan et al., 2023; Magdalena et al., 2020). However, in learning, there can be active interaction between students, both with teachers and students, as well as students with other students in teaching and learning activities.

Teaching materials support learning and realize the goal of learning mathematics. Teaching materials are all types of resources used by instructors, lecturers, and teachers as teaching materials to help deliver lessons and learning activities in the classroom to achieve mathematics learning goals. Student worksheets are one type of teaching material used by teachers. The student worksheet is a written learning facility

15. 712-Annisa et al.doc

ORIGINALITY REPORT

11%	9%	7%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	journal.ia-education.com Internet Source	2%
2	j-cup.org Internet Source	1%
3	online-journal.unja.ac.id Internet Source	1%
4	Wulan Patria Saroinsong, Muhamad Nurul Ashar, Irena Y. Maureen, Lina Purwaning Hartanti et al. "Reimagining Innovation in Education and Social Sciences", Routledge, 2023 Publication	1%
5	e-journal.stkipsiliwangi.ac.id Internet Source	<1%
6	jurnal.iicet.org Internet Source	<1%
7	mathline.unwir.ac.id Internet Source	<1%
8	www.researchgate.net Internet Source	