turnitin unesa1

58 Similarity check

DPE

Document Details

Submission ID
trn:oid:::3618:112950369

Submission Date
Sep 18, 2025, 5:33 PM GMT+7

Download Date
Sep 18, 2025, 5:48 PM GMT+7

File Name
58 Similarity check.pdf

File Size
126.9 KB

1 Page

513 Words

3,293 Characters

6% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography

Exclusions

- 4 Excluded Matches

Match Groups

0 Not Cited or Quoted 0%
Matches with neither in-text citation nor quotation marks

1 Missing Quotations 6%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

6% Internet sources
6% Publications
0% Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **0** Not Cited or Quoted 0%
  Matches with neither in-text citation nor quotation marks
- **1** Missing Quotations 6%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

6% Internet sources
6% Publications
0% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1 Internet

dokumen.pub **6%**

Journal of Current Studies in SDGs
Homepage : https://journal.i-ros.org/index.php/JOCSIS
Email : jocsis@i-ros.org

e-ISSN 3089-7564
Vol.1, No.3, August 2025

Ethnomathematical Insights into Student Errors: Javanese Calendar and Pigeonhole Principle

Ahmad Ryan Hidayat[1*], Ali Shodikin[1], Salma Hasna Hamiyda[2]
[1]Universitas Negeri Surabaya, Surabaya, Indonesia
[2]Al-Azhar University, Cairo, Egypt

Check for updates OPEN ACCESS

DOI : https://doi.org/10.63230/jocsis.1.3.58

Sections Info

Article history:
Submitted: June 14, 2025
Final Revised: August 12, 2025
Accepted: August 17, 2025
Published: August 27, 2025

Keywords:
Ethnomathematics;
Javanese Calendar;
Students Error;
Pigeonhole Principle.

ABSTRACT

Objective: *This article aims to examine the implications for student learning by investigating student errors through the lens of the pigeonhole principle and the Javanese calendar.* ***Method:*** *The study used a descriptive qualitative research method and included six high school students and vocational students. Data collection involved tests and interviews. The researchers focused on Ethnomathematics problems related to the Javanese calendar system.* ***Result:*** *The analysis of student responses revealed several types of errors based on Watson's criteria for error analysis in problem-solving. These errors included inappropriate data, inappropriate procedure, and undirected manipulation. Students struggled with understanding the given information, selecting appropriate procedures, and applying logical reasoning.* ***Novelty:*** *Interestingly, the researchers found that when the students were provided with guidance and assistance, they were able to grasp the concepts and successfully solve the problems. This suggests that the students had the potential to understand the material but lacked prior exposure to the concepts, particularly the pigeonhole principle.*

INTRODUCTION

Ethnomathematics has gained increased attention in mathematics education research due to its recognition of the influence of culture and social context on mathematical practices. It highlights the importance of embracing cultural diversity and incorporating various mathematical traditions, acknowledging that mathematics is not a universally applicable and neutral discipline, but rather a product of specific cultures (D'Ambrosio, 2001). As a result, it becomes crucial to consider cultural contexts and social interactions that influence the development of mathematical understanding (Radford, 2017).

Ethnomathematics goes beyond traditional mathematics education by recognizing and embracing the mathematical wisdom present in various cultural contexts. It encompasses a broad concept that includes the socio-cultural environment, including language, specialized vocabulary, symbols, behaviors, and myths (D'Ambrosio, 1990). It is considered a way to contextualize mathematical ideas since it is related to the techniques developed as a study of mathematical procedures practiced by the members of distinct cultural groups (Rosa, 2017). It provides a multicultural perspective on mathematical ideas, highlighting the mathematical knowledge embedded within different cultural communities (Ascher, 1991). The idea of mathematics in cultural practices involves designing tasks that are contextualized in the cultural heritage based on different ways of knowing in order to help us reflect on certain mathematical notions as well as on the nature of mathematical knowledge. (English, 2013; Rosa, 2017). However, much of the literature remains descriptive, focusing on showcasing cultural practices without sufficiently addressing how these contexts can be systematically leveraged to improve students' mastery of formal mathematical concepts.