PAPER NAME

Scopus.pdf

WORD COUNT

303 Words

CHARACTER COUNT

1942 Characters

PAGE COUNT

1 Page

FILE SIZE

129.1KB

SUBMISSION DATE

Nov 19, 2024 5:15 PM GMT+8

REPORT DATE

Nov 19, 2024 5:15 PM GMT+8

5% Overall Similarity

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

- 5% Internet database
- 0% Publications database
- Crossref database
- Crossref Posted Content database

Excluded from Similarity Report

- Submitted Works database
- Bibliographic material
- Quoted material
- Cited material
- Abstract
- Methods and Materials
- Small Matches (Less then 15 words)
- Manually excluded sources

Analytic Geometry Problems Are Completed by Symbolic Visualization of Representation: A Case of a Future Teacher

Sonny Yalti Duma'
The University of Malang

Cholis Sa'dijah
The University of Malang

Erry Hidayanto
The University of Malang

Santi Irawati
The University of Malang

One of the most important fundamental mathematical concepts for both students and teachers is mathematical representation. This study uses a qualitative method with a case study approach to examine aspiring teachers use visual and symbolic representations when addressing geometry problems. The participants in this study were 27 pre-service teachers from Indonesian Christian University (UKI) Toraja who were in their fourth semester. The processes of data reduction, data presentation, conclusion-making, and verification were applied to the data. The results of this study demonstrated that the pre-service teachers still lacked as they were provided inaccurate and non-detailed representations in symbolic imagery. Even though the responses are only half correct, the teachers with average academic competence have a semi-detailed symbolic visualization of capturing good visualization skills. Students with strong academic aptitudes have detailed representations in their symbolic representations, as well as great visual and symbolic representation skills. In order to assist students in teaching and studying geometry and resolve difficulties requiring mathematical expressions, pre-service teachers should have strong visual and symbolic representation skills.

Keywords: case study, analytic geometry, visual representation, symbolic representation

INTRODUCTION

In mathematics instruction, the psychological notion of representation is frequently utilized to explain several significant phenomena related to the nature of thought. One of the fundamental skills in mathematics that must be fostered by students or teachers is mathematical representation. There are various definitions of representation among mathematicians. Representation abilities, in the opinion of Hwang, Chen, Dung, and Yang (2007), are essential for solving mathematical problems successfully. The pupils' understanding

5% Overall Similarity

Top sources found in the following databases:

- 5% Internet database
- Crossref database
- 0% Publications database
- Crossref Posted Content database

TOP SOURCES

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

1	**repository.uhamka.ac.id** Internet	5%

Excluded from Similarity Report

- Submitted Works database
- Quoted material
- Abstract
- Small Matches (Less then 15 words)
- Bibliographic material
- Cited material
- Methods and Materials
- Manually excluded sources

EXCLUDED SOURCES

articlegateway.com Internet	100%
articlegateway.com Internet	73%
discovery.researcher.life Internet	65%