

ETHNO-REALISTIC MATHEMATICS EDUCATION: THE PROMISING LEARNING APPROACH IN THE CITY OF CULTURE

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Abstract

Freudenthal's idea of Realistic Mathematics Education (RME) and D'Ambrosio's idea of Ethnomathematics must share some common principles. Both aim to create mathematics learning that eases students to understand concepts by discovering them and makes them understand the use of mathematics in response to their surrounding reality. I have implemented the RME by utilizing real contexts in mathematics learning all this time. However, the contexts have been used just to reinvent the mathematics concept, not explored further to earn the socio-cultural values which could be internalized by—and are helpful for—students. There have been various attempts to implement Ethnomathematics contexts in mathematics learning. So far, philosophers, researchers, and educators have not yet been comfortable with the role of Ethnomathematics in learning due to the absence of a procedure to implement the explored Ethnomathematics context. This gap inspired me to combine the theory of RME and Ethnomathematics, focus on their advantages, and name it Ethno-Realistic Mathematics Education (E-RME). This research aims to develop a theoretical framework of E-RME using an integrative literature review to fill the gap. The results could be a basis for researchers to implement RME using previously explored ethnomathematics contexts. As a result, I could expect an exemplary implementation of RME, rich in socio-cultural values used to build the student's character and ethics in utilizing science, especially mathematics.

Keywords: Ethno-Realistic Mathematics Education; Ethnomathematics; Integrative literature review; Realistic Mathematics Education