

CONTEXTUALIZING MATHEMATICS: CONNECTING ACADEMIC LEARNING TO CULTURAL VALUES

by:

Michael R. Firaza

Teacher III, Pablo Roman National High School

The approach to teaching mathematics has been a transformation over the years from memorization to teaching approaches that connect the learned mathematics to everyday life and moral development. The research just conducted has revealed that contextual learning and cultural values are transformative concepts in mathematics instruction.

A creative study by Harefa and Hulu (2024) focuses on how math teaching contributes to both the building of academic ability and ethical character at the same time, through a framework of Pancasila values. One finds that learning strategies such as contextualized learning, collaborative tasks, or reflective discussion will have huge positive effects on students' mathematical understanding as well as on their character. On that account, Susanta et al. illustrated how local learning contexts are very effective for mathematical literacy. Their project at Bengkulu, Indonesia, introduced a lot of mathematical literacy tasks immersed in the local environmental and cultural context. Math activities can be designed in a way to link with the experiences of the students in their everyday life to create a more authentic environment for learning. These researches point to a major flaw with the education process currently in place: mathematizing is relevance and inspiring. The traditional way of conducting school leaves the learner out of the meaning of mathematics as learned, and this will naturally cause disinterest and disillusionment. Conversely, practice that is context-specific and culturally responsive engages learners to see math as an ongoing, meaningful activity in which to engage and act for understanding and acting within their environment.

However, these strategies come with a whole list of problems. In both studies, limited time and training for teachers appeared as challenges. It means that education institutions need to invest in the professional development of teachers to enable them to design well-contextualized and morally integrated mathematical learning experiences. These findings may represent a hopeful new template for teachers and education policymakers: mathematics education as a whole of cognitive experience, combining academic seriousness and cultural relevance with development into an ethical being, turning competent students in mathematics alone into thoughtful, engaged citizens.

References:

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