

Minimizing Learning Difficulties in Teaching Mathematics

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Abstract : Mathematics teaching in Nepal has been centralized and guided by the notion of transfer of knowledge and skills from teachers to students. The overemphasis on an algorithm-centric approach of mathematics teaching and the focus on 'rote-learning' as the ultimate way of solving mathematical problems since the early years of schooling have been creating severe problems in school-level mathematics in Nepal. In this context, the author argues that students should learn real-world mathematical problems through various interesting, creative and collaborative, as well as artistic and alternative ways of knowing. The collaboration-incorporated pedagogy is a distinct pedagogical approach that offers a better alternative as an integrated and interdisciplinary approach to learning that encourages students to think more broadly and critically about real-world problems. The paper, as a summarized report of action research designed, developed and implemented by the author, focuses on the needs and usefulness of collaboration-incorporated pedagogy in the Nepali context to make mathematics teaching more meaningful for producing creative and critical citizens. This paper is useful for mathematics teachers, teacher educators and researchers who argue on arts integration in mathematics teaching.

Keywords : algorithm-centric, rote-learning, collaboration - incorporated pedagogy, action research

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