



CLUSTER INNOVATION CENTRE

(UNIVERSITY OF DELHI)

M.Sc (Mathematics Education)

A Joint Degree under the Meta University Concept by

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A Qualitative Study of the Nature of Examples in Grade 8 Mathematics Textbook

(A research dissertation submitted at Cluster Innovation Centre, University of Delhi)

ABSTRACT

This project, titled "A Qualitative Study of the Nature of Examples in Grade 8 Mathematics Textbook," examines the examples in Grade 8 NCERT mathematics textbooks. The study aims to evaluate how these examples align with learning outcomes, assess their cognitive complexity using Bloom's Taxonomy, and determine their overall effectiveness in promoting mathematical understanding and higher-order thinking skills. A qualitative approach was used, involving detailed content analysis of selected textbook chapters.

The findings revealed that the examples are generally well-aligned with the learning outcomes, ensuring relevance and targeted instruction. The cognitive complexity analysis showed a predominant focus on application and analysis-level tasks, promoting problem-solving skills and critical thinking. However, examples at the synthesis and evaluation levels were limited, suggesting an area for improvement. The study highlighted the need for a balanced distribution of cognitive levels across all chapters and more real-world examples to enhance practical application. These insights have significant implications for curriculum development, instructional strategies, and assessment practices, aiming to enhance the quality of mathematics education.

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