

The Conceptual and Procedural Knowledge of Rational Numbers in Primary School Teachers

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Abstract : The study investigates the conceptual and procedural knowledge of rational number in primary school teachers, specifically, the primary school teachers level of conceptual knowledge about rational number and the primary school teachers level of procedural knowledge about rational numbers. The study was carried out in Bauchi metropolis in Bauchi state of Nigeria. A Conceptual and Procedural Knowledge Test was used as the instrument for data collection, 54 mathematics teachers in Bauchi primary schools were involved in the study. The collections were analyzed using mean and standard deviation. The findings revealed that the primary school mathematics teachers in Bauchi metropolis possess a low level of conceptual knowledge of rational number and also possess a high level of Procedural knowledge of rational number. It is therefore recommended that to be effective, teachers teaching mathematics most possess a deep understanding of both conceptual and procedural knowledge. That way the most knowledgeable teachers in mathematics deliver highly effective rational number instructions. Teachers should not ignore the mathematical concept aspect of rational number teaching. This is because only the procedural aspect of Rational number is highlighted during instructions; this often leads to rote - learning of procedures without understanding the meanings. It is necessary for teachers to learn rational numbers teaching method that focus on both conceptual knowledge and procedural knowledge teaching.

Keywords : conceptual knowledge, primary school teachers, procedural knowledge, rational numbers

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