World Academy of Science, Engineering and Technology
International Journal of Mathematical and Computational Sciences
Vol:14, No:12, 2020

Primary School Teachers' Conceptual and Procedural Knowledge of Rational Numbers and Its Effects on Pupils Achievement of Rational Numbers

Authors : Raliatu Mohammed Kashim

Abstract : The study investigated primary school teachers conceptual and procedural knowledge of rational numbers to determine how it effects on pupil's achievement on rational number. Specifically, primary school teachers' level of conceptual and procedural knowledge about rational number and its effects on their pupils understanding of rational number in primary school was explored. The study was carried out in Bauchi state of Nigeria, Using a multistage design. The first stage was a descriptive design. The second stage involves a pre-test post-test only quasi experiment design. The population of the study comprises of six mathematics teachers holding the Nigerian Certificate in Education (NCE) teaching primary six and their two hundred and ten pupils in intact class. Two instrument namely Conceptual and Procedural knowledge Test (CPKT) and Rational number Achievement Test (RAT) were used for data collection. Data collected was analyzed using ANCOVA and Scheffe's Test. The result revealed a significant differences between pupils taught by teachers with high conceptual and procedural knowledge and those target by teachers with low conceptual and procedural knowledge.

Keywords : conceptual knowledge, procedural knowledge, rational numbers, multistage design
Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development
Conference Location : Chicago, United States
Conference Dates : December 12-13, 2020