

EFFECTS OF MATHEMATICS KNOWLEDGE ON CHEMISTRY STUDENTS' ACADEMIC PERFORMANCE IN GAS LAW

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ABSTRACT

The study investigated the effects of mathematics knowledge on chemistry students' academic performance in gas law. The study used Ex-post facto design. A sample of 47 (male 26: female 21) senior secondary two (SS2) science students were purposively selected from Ignatius Ajuru University Demonstration secondary school Ndele in Emohua local government area of Rivers State. Data was obtained through a Test of Mathematics Knowledge in Chemistry Calculation Test (MKCCT) designed by the researchers. The reliability coefficient index $r = 0.76$. Mean scores were used in answering the research questions while t-test was employed in testing the hypotheses. The findings revealed that there is a significant difference between the mean performance of mathematics high and low achievers in chemistry. No significant gender difference between the mean performance of mathematics inclined students to chemistry. Based on the findings, it was recovered that Mathematics based courses should be taken by training teachers on chemistry to enable them understand the connection between mathematics and chemistry.

Keywords: Mathematics knowledge on chemistry, students' academic performance, gas law.