

Students' understanding of basic mathematical concepts in ordinary level secondary schools in Tanzania: A case of Kibaha District

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This study investigated students' understanding of basic mathematical concepts in ordinary level secondary schools in Tanzania, focusing on students' understanding of basic mathematical concepts for improvement of their performance in the subject. The study was conducted at six ordinary level secondary schools in Kibaha district Coast region. It employed both qualitative and quantitative research approaches through cross-sectional survey and co-relational designs. Stratified, simple random and purposive sampling procedure was used to draw sample of mathematics teacher and students. Data were gathered through classroom observation, questionnaires, tests and documentary review. Respondents were 242. They included six academic masters, twelve mathematics teachers and two hundred and twenty four students. Qualitative information was subjected to content analysis, while for quantitative data, frequencies, percentage and Pearson correlation moment were calculated with the help of SPSS computer software package. Findings revealed that although mathematics is so important and compulsory for ordinary level students, there is inadequate understanding of basic mathematics concepts to majority of students. In classroom observation, mathematics teachers briefly, hurriedly and very inadequately devoted on teaching and learning basic mathematical concepts were not available in observed classrooms. Furthermore, basic mathematical concepts questions were rarely featured in normal classroom exercises and tests as well as in school, zonal and national examinations. Resulting from all this is that students have very little exposure on understanding of basic mathematical concepts. It was recommended that MoEVT should provide regular in-service training for mathematics teachers in order to manage and implement the curriculum effectively. Appropriate teaching materials should be provided to facilitate teaching and learning of basic mathematical concepts. Furthermore, assessment at school, and national levels should feature some testing for understanding of basic mathematical concepts.