

**Causes of performance difference in science subjects among advanced level secondary schools in Tanzania**

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The aim of this study was to determine causes of performance difference in science subjects among advanced level secondary schools in Tanzania. The study was conducted at four secondary schools involving 360 respondents. Qualitative research approach particularly descriptive survey genre was used and data were collected by triangulation method. Findings revealed that teachers and a few laboratory technicians found in poor performing schools faced many students, which led to ineffective teaching/learning and hence poor performance. Despite few teachers in high performing schools, sufficient laboratory technicians and a few students led to effective teaching/learning and hence high performance. Insufficient physical resources were found. Instructional methods employed in teaching/learning were found to be another cause. In poor performing schools, the instructional method used were mostly teacher-centered particular lecture method. In high performing schools, although the same approach was found to be used, however use of other alternative methods such as questions and answer method, science clubs and science exhibitions made teaching /learning highly effective. In poor performing schools, there were insufficient equipment, small sized laboratories, and overcrowding contrary to high performing schools. In additions, some continuous assessments in poor performing schools were not conducted properly and where conducted, students were not provided feedback. That was not the case for high performing schools. In high performing schools continuous assessments. Students' characteristic was found to be another cause. High performing schools enrolled students with high performance in certificate of Secondary Education Examination (CSEE) while poor performing schools enrolled the rest of the students. It is recommended that, the government should provide sufficient human resources particularly professional teachers, laboratory technicians as well as librarians to ensure effective teaching/learning for better performance. Secondly, the government should provide more funds for adequate physical resources. Thirdly, teachers should use instructional approach, which is learner centered for the teaching/ learning process. Fourthly, the government should revise merits and demerits of

grouping students according to their abilities. Finally, there should be equal learning environment for all students.