

## **Teachers' teaching status and achievements of students of teaching and learning of Mathematics and Science in English (PPSMI) in primary and rural secondary schools.**

### ABSTRACT

This study is done through observation of the teaching and learning process in classrooms involving 183 Primary School Teachers and 241 Rural Secondary School Teachers. The main objectives of the study are to; (1) measure teachers' teaching status in Science and Mathematics subjects, (2) evaluate students potential in mastering the contents or in Science and Mathematics achievement, and to (3) determine the status of Computer Technology usage cum the teaching support materials in Science and Mathematics subjects. A total of 4410 primary school students and 4946 secondary school students are involved in the study by sitting for two types of Standard Tests for the primary schools, i.e. the Science and Mathematics while in the secondary students' case, 5 types of Standard Tests are implemented, i.e. Mixed Science, Modern Mathematics, Chemistry, Physics and Additional Mathematics. The primary schools are categorized in 7 types of schools, while the secondary schools on the other hand are categorized in 6 types of schools. The results of the study shows that 42.5 percent of primary school teachers and 50.8 percent of secondary school teachers failed in the English Language Proficiency Level Evaluation. This situation is critical as it directly affects the pedagogy and teaching efficiency using English as the teaching medium. The teachers teaching observation status through the researchers shows that the beginning of teacher's teaching is average (min=5.1), interaction between teachers and students are also average (min=5.2), interaction between students and teachers are poor (min=3.8), Computer Technology usage is at average level (min=5.7) and the English Language within teachers are average (min=5.5). Generally, the teachers' teaching status is poor (min=4.9;sp=1.8) and the level of Computer Technology usage as teaching support materials are at average level (min=5.7;sp=1.7). The results of the study shows that the PPSMI teachers possess average competency (min=5.3). The effectiveness in the teaching and learning of Science and Mathematics mainly relies on the teachers' command in the English language. Students in urban schools produced better achievement results compared to the students in rural schools based on 12 tested subjects tested, whereby students in rural schools are left behind in 10 subjects (except in Physics 1 and Chemistry 1) with the average mark difference of between 3.3 to 19.7. Through the whole study, students in secondary schools and primary schools in rural areas are behind in PPSMI.