

This study seeks to contribute to our understanding of the relative importance of selected student, teacher and school characteristics on student achievement and attitudes towards science. The sample included 424 Form 4 students and 144 science teachers from ten secondary schools in Kenya. Data were collected on school type, location and science resources; teacher experience, training and expectation; and student gender, science experiences, attitudes and aspirations with respect to science, and science achievement. The results indicate that the school and teacher characteristics play a more significant role in shaping science attitudes and achievement in developing countries like Kenya, than in developed countries.

There were significant differences between boys and girls in student motivational orientation and achievement, but the relationship between gender and achievement is indirect and mediated through variations in the resources of different types of secondary schools and the teachers assigned to them.