

## Contextualized science teaching and student performance: the case of a Kenyan girls science class

This paper is about a case study that investigated the impact of contextualized science teaching and learning on performance of a Form three (Grade 11) class in one of Kenya's girls high schools. The class experienced nine weeks of contextualized science learning. This involved a full day visit to Jua Kali where they interacted with artisans. "Jua Kali" is a small-scale manufacturing and technology-based service sector where artisans manufacture equipment and other household items that are ubiquitous in everyday Kenyan culture. The visit was followed by organized classroom-based group discussions about what they had learnt and considered most relevant and meaningful. Following this highly engaging student learning discourse, their creativity and innovative abilities in science improved tremendously as reflected in the quality of class presentations and participation in the National Science Congress. Moreover, the school's performance in the Kenya Certificate of Secondary Education (KCSE): a final national exam at the end of Form 4 (Grade 12) improved from a mean of 9.3 in the previous year to 10.4 in the intervention year ( $p = 0.022$ ). This was further attributable to significant improvement in all science subjects: biology, chemistry, physics and mathematics. Besides the critical insights about the Jua Kali's richness in scientific phenomena, there is also great potential for contextualized science experience to enhance students' deeper understanding of science.