

Zimbabwean female participation in physics: the influence of context on identity formation

Anna Gudyanga Kathija Adam and Raj Kurup

Abstract

The influence of context on identity formation amongst young adolescent females and their subsequent participation in physics as a subject at Advanced Level (A level) is the central focus of this study. A qualitative approach grounded in an interpretivist paradigm was used for the purpose of this study. Verbal descriptions of the scientist they drew and semi-structured interviews conducted with seven participating female A level students were collated to generate narratives. This paper reports on one aspect of the data generated from the narratives, which is related to context. A di-hybrid theoretical lens comprising Wenger's notion of communities of practice and Sfard and Prusak's notion of 'telling' identities or stories enabled a rich understanding of context and its influence on the perspectives of female students. Key findings show that home experiences, mental models of who a scientist is, attitudes of male peers in their classes, and their classroom experiences at Ordinary Level (O level) influenced participants' identity development and consequent participation in physics. In conclusion, it can be ascertained that the influence of context on identity is an important factor impacting female participation in physics that cannot be negated.