

Building Scientific Literacy in HIV/AIDS Education: A case study of Uganda

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Abstract

The term scientific literacy is defined differently in different contexts. The term literacy simply refers to the ability for one to read and write, but recent studies in language literacy have extended this definition. New literacy research seeks a redefinition in terms of how skills are used rather than how they are learned. Contemporary perspectives on literacy as a transfer of learned skills into daily life practises capture the understanding of what it means to be scientifically literate. Scientific literacy requires students to be able to use their scientific knowledge independently in the everyday world. Some models for teaching towards scientific literacy have been suggested including inquiry based learning embedded in constructivist epistemologies. The inquiry-based model is posited to be effective at bringing about in-depth understanding of scientific concepts through engaging students' preconceptions. In order to establish whether directly engaging students' preconceptions can lead to in-depth understanding of the science of HIV/AIDS, a case study was designed to elucidate students' prior knowledge. From questionnaires and classroom observations, Ugandan Grade 11 students' persistent preconceptions were explored in follow-up focus group discussions. The inquiry process was used to engage students with their own perceptions of HIV/AIDS during the focus group discussions. Findings suggest that students need to dialogue with each other as they reflect on their beliefs about HIV/AIDS. Dialogue enabled students to challenge their beliefs while making connections between 'school' and 'home' knowledge.

Key Words: Scientific Literacy, HIV/AIDS Education