



Contribution ID: 128

Type: Oral Presentation

PHYSICS LITERACY THE MISSING LINK TO SUSTAINABLE DEVELOPMENT IN KENYA

Thursday, 4 October 2018 12:10 (20 minutes)

Dr. Kigo J. Kariru
 Kenya Methodist University
 Email: kakmg2016@gmail.com
 Prof. Mark Okere – Egerton University
 Email: okeremark836@yahoo.com
 Dr. Christopher Maghanga – Kabarak University
 Email: cmaghanga@kabarak.ac.ke

ABSTRACT

Physics research is known to unlock mysteries of the Universe and the world we live in. Many innovations and discoveries are enabled by understanding concepts in physics. The great achievements of world physicists have not inspired many youths to enrolling for physics at secondary level or at courses requiring physics as core in tertiary institutions. A very big working and adult population is not literate in physics and this leads to under achievement of the many challenges of our times e.g. sustainable sources of future energy, understanding our changing climate and global food security, managing technologies used daily e.g. computers, smartphones, and GPS devices and sustaining quality lives for example in healthcare and treatment of diseases like cancer. A population that is not physics literate may not cope with demands and sustainability of space industry, liquid-crystal displays, optic fibers, cancer treatment, energy efficiency, data storage and detecting of explosives and pollutants among the many challenges of our time. Many reasons ranging from the quality of teachers to low motivation among the learners as well as poor teaching methods have been identified for apathy shown in the enrolment of physics at all levels. This paper aim at bringing out what needs to be done to produce a literate society in physics for sustainability of critical development in Kenya.

Key Words: Physics Literacy, Sustainable Development

Apply to be considered for a student award (Yes / No)?

No

Level for award (Hons, MSc, PhD, N/A)?

N/A

Primary author: Dr KIGO, Josephat Kariru (Lecturer Kenya Methodist University)

Co-authors: Dr MAGHANGA, Christopher (Kabarak University); Prof. OKERE, Mark (Egerton University)

Presenter: Dr KIGO, Josephat Kariru (Lecturer Kenya Methodist University)

Session Classification: Parallel Session 3

Track Classification: Track D - Teaching and Learning of Physics Concepts