

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
New Worlds - Innovative Space Education and Outreach (7)

Author: Mr. Michael Andoh Afful
Space Generation Advisory Council (SGAC), Ghana, michaelafful@gmail.com

Dr. Nana Ama Browne Klutse
Ghana Space Science and Technology Institute, Ghana, amabrowne@gmail.com

SPACE SCIENCE EDUCATION, THE CURRENT STATE AND FUTURE DEVELOPMENTAL PLANS
OF OUTREACH ACTIVITIES AND THEIR IMPACTS IN GHANA

Abstract

Ghana is one of the member states of United Nation (UN) and listed as a third world country with less or no proper space infrastructure. Space science and astronomy education has always been one of the most fascinating subjects among the Ghanaian populace. Ghana has lagged behind in terms of space science education compared to other countries in Africa. This is primarily due to the minimal coverage of astronomy and space science curricula in our basic, secondary and tertiary levels in Ghana. There is also lack of training in the field of space science among science educators.

Space science education is very important if Ghana would want to succeed as a self-reliant space nation capable of addressing its own technological needs supported by the rapid economic development in the past few decades. However, in order to meet this challenge, a large workforce would be required to inspire innovative ideas in space science and astronomy education. With the rapid development of information and communication (ICT), influence of social media and participation in the International Astronautical Congress (IAC) and Space Generation Congress (SGC) in recent years has increased the level of space science awareness in the Ghanaian society. In this paper, we will present an overview of the current state of space science education and outreach activities in Ghana. Initiatives of the Government of Ghana and roadmap for the next 10 years will be presented in brief. Outreach programs of the Ghana Space Science and Technology Institute (GSSTI), an autonomous body established in 2012 to promote science and technology in Ghana. In addition, there are various misconceptions that stems from lack of exposure to space science outside the educational setting. We will address these mishaps as well as discuss the way forward. Finally, we will present the future developmental plans for astronomy and space science education in Ghana.

GSSTI experiences in support of outreach and education will be described together with further perspectives and problems encountered while executing outreach programs.