

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Ignition - Primary Space Education (1)

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SPACE CLUBS FOR KENYA

Abstract

According to their 2020 strategic plan, when the Kenya Space Agency came in to operation in 2017, an assessment of the state of the Kenyan Space sector indicated the need for capacity building in infrastructure and human resource as is the case with many other African countries. With this in mind, several initiatives were put forth to encourage innovation, education and awareness on space related matters. Space Clubs for Kenya was founded in 2020 as an educative program that involves interactive scientific activities, competitions, events and learning sessions with students from schools around Kenya. The program is aimed at creating awareness and educating the next generation on Geo-STEAM and the significance of these subjects in supporting the space industry. It seeks to broaden and enhance the quality of education for Kenyan students and allow them to understand and actively pursue the opportunities that Space holds for them. With the help of local teachers in primary school (our current target audience), we created an all-rounded program that encompasses a variety of aspects pertaining to space. The club prioritized four areas of focus which support the country's growing space sector. These include; Space Systems Engineering, Information Technology, Space Science and Astronomy and Earth Observation. Literacy content was developed in 2020 in these areas (completed in November 2021). Phase 1 of the project included 12 topical student's books and 4 comics. Some of the book titles include, The fundamentals of Space Flight, Earth Observation and its Applications, Robotics and The Solar system for students. The most popular comic is titled 'Sereya and Manu journey to Jupiter' which I hope to showcase at the 2022 IAC education and outreach symposium in addition to some of our other materials. These materials are free for use in all learning institutions. The Space Club team also hosts a mentorship program (since September 2021) where local industry professionals facilitate monthly events and make use of tools such as Cube-satellite models, water rockets, robotics kits, telescopes and portable planetariums to engage students in hands-on activities. These events have been noted to ignite interest and curiosity amongst students with many expressing interest in Space related careers. The team has learned the significance of student mentorship for the space industry and would recommend that programs of a similar nature be developed all around the continent to build up and establish Africa's position in the Space ecosystem.