

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
On Track - Undergraduate Space Education (3)

Author: Ms. Saira O. Williams

Space Generation Advisory Council (SGAC), Costa Rica, roxysairawilliams@spacegeneration.org

Mr. Randy Williams

Space Generation Advisory Council (SGAC), Costa Rica, ranwilliams2017@gmail.com

SPACE EDUCATION EVOLUTION IN NICARAGUA THROUGH A MULTILINGUAL WEBINAR  
SERIES ON DIFFERENT SPACE FIELDS

**Abstract**

Space is one of the subjects that often awakens the curiosity and imagination and motivates students across the world to get involved in STEM (Science, Technology, Engineering and Mathematics) fields. Nicaragua's youth have seen space and technology as unreachable fields; however, there is significant interest and potential. Space education is not advocated in Nicaragua by institutions or schools which leads to a continual erosion of motivation and capability across the industry. To address this concern, the Space Generation Advisory Council (SGAC) through the National Point of Contact (NPOC) of Nicaragua, in collaboration with its partner NICA Woman Tech started a multilingual webinar series on different space fields such as satellite technology, space medicine, commercial space and more. The aim of the webinar series is to bring space education to undergraduate students in Nicaragua and to showcase the fields and opportunities that exist in the industry.

The webinar series, started at the end of 2020 and has already made a big difference. Nicaragua has been going through political issues since 2018 and has affected the student population, especially undergraduate students who are concerned about the future of their education. The webinar series encouraged students to continue their education and to put some focus on space and STEM related projects. In addition, the webinars were free and attracted world renowned guest speakers. Also, it is important to mention that the main language in Nicaragua is Spanish and one of the only areas that English predominates is in the Caribbean Coast of Nicaragua. Therefore, we had an interpreter who helped translate the webinars from English to Spanish simultaneously. The webinar series was created by the NPOC of Nicaragua Ms. Saira Roxana O. Williams who has experienced the lack of space (and STEM) education in Nicaragua firsthand. The webinar series is now considered an important way to break the glass ceiling and hopefully to eventually have a Nicaraguan work in space related projects and reach space.

This paper covers the methodology used to design the webinar series, the strategy for the language interpretation, and the value of collaborating with partners. In addition, it presents the lessons learned from organizing it and the importance of capacity building in space technology and science careers for undergraduate students from an emerging country. The results and recommendations of this project will be outlined so that others who would like to replicate this in their countries can do so.