

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

Author: Mrs. Alina Vizireanu
Space Generation Advisory Council (SGAC), United Kingdom, alina@avinterra.com

Mr. Alev Sönmez
Blekinge Institute of Technology, Germany, alev.soenmez@gmail.com

Ms. Yumna Majeed
Space Generation Advisory Council (SGAC), Pakistan, yumnamajeed963@gmail.com

Prof. Alejandro J. Roman Molinas
Paraguayan Space Agency, Paraguay, aroman@aep.gov.py

Mr. Alimamy Lewis Seray Conteh
Space Generation Advisory Council (SGAC), Sierra Leone, Alimamy.conteh@spacegeneration.org

Mr. Muhammad Rayan Khan
Moon Village Association (MVA), Pakistan, muhammad.khan@moonvillageassociation.org

CRITICAL SPACE EDUCATIONAL ACTIVITIES IN THE POST-COVID-19 RECOVERY
CURRICULUM

Abstract

Concerned that the COVID-19 pandemic displayed inequalities in education worldwide, it is widely recognised that it represented both a crisis and an opportunity. One positive aspect of the educational system is that although schools worldwide have closed during lockdowns, innovative measures to address and improve learning from home have been implemented. In addition, students of all ages have used technology to participate in their virtual classes, do their homework, connect and measure their progress. However, COVID-19 has radically altered many of our social behaviours. In the mid-2010s (accordingly 2015 and 2017), UNESCO published new guidance on Education for Sustainable Development and Global Citizenship (ESDGC), grouping the learning objectives for sustainable development goals (SDGs) in three categories: cognitive (knowledge and thinking skills), behavioural (action competences), and socio-emotional. Moreover, during the pandemic, people across the globe showed solidarity with one another and saw how enhanced collaboration could build back a solid foundation for humanity's future. Therefore, in the shadow of the pandemic, the Future of Education campaign presented by UNESCO (2021) introduces the "Next Normal" initiative to change the unsustainable forms of development and education. Its focus would be to use new innovative tools and technology to allow societies to understand environmental challenges and our Planet's fragility. The key characteristics that will distinguish new educational courses and lectures developed by environment protection NGOs and companies are the ones that offer guidance on global citizenship education that addresses ethically responsible behaviour engaged in individual or collective action. This research paper unequivocally addresses the UNESCO ESDGC and the UN SDG "Decade of Action" campaigns to create new opportunities for Teachers to use Space Education and Geospatial technologies in class. Using GIS and Earth Observation materials to develop an educational framework designed to gather, manage, present and analyse spatial data for students to develop spatial thinking and problem-solving skills creates the possibility of Space Workforce Career development. To better understand variable data types, the study will address a quantitative analysis to emphasise and identify patterns in how schools and teachers worldwide are implementing space education activities. Finally, the paper presents the fundamental role school Geography and Science teachers play in developing students' understanding of Planet Earth.