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

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SSERD: PREPARING THE YOUNGER GENERATION FOR SPACE REVOLUTION IN INDIA AND BEYOND

Abstract

The interest in space exploration has seen a huge surge in the last few years. With NASA preparing for the Artemis program, ISROs Gaganyaan mission for human spaceflight, and numerous exciting new ventures within space organizations all around the world, it is natural for the rise in interest but another biggest contributing factor is also the growth of privatization of the space industry which is happening on a level never before seen. Seeing the rise of companies like SpaceX, there are more and more space startups being established with truly innovative ideas. All this is also attracting more young professionals and students to consider space as a career worth pursuing. But with the pandemic keeping everyone at home, it has become necessary to keep this interest alive and make space literacy possible for everyone. And Society for Space Education Research and Development (SSERD) has been revolutionizing the space education sector since 2016, even before online education became a part of our daily lives. This paper will discuss the successful initiatives and programs SSERD works with to bring space sciences into the lives of young children and provide growth opportunities for high school and undergraduate students through programs like the Internship and Projects Division (IPD) which aims to provide practical space projects for undergraduate university students, the Outreach program which provides a 10-day free course on interesting space topics and many more. Along with this SSERD also conducts the wonderful GirlsinSpace initiative to bring space to female high school students across India. SSERD has seen a high success rate of educating more than 50,000 students in India and even across the world over six years and has seen unprecedented growth in students participating in the programs since the pandemic. These students have gone forward to land jobs and become researchers within the space industry certifying the success of SSERDs programs. This paper presents the workings and successes of space education in India to drive up the space literacy rate and bring space to the classroom through non-traditional means. The paper will present an in-depth case study of SSERDs educational initiatives and success. It will also take a look at the next steps and propose newer larger-scale educational activities to propel India into a space era by educating the youth and giving them opportunities to get a start and grow within the global space sector.