IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Calling Planet Earth - Space Outreach to the General Public (6)

Author: Ms. Sobia Nadeem McMaster University, Canada

Ms. Chimira Andres Students for the Exploration and Development of Space (SEDS-Canada), Canada Ms. Marieke de Korte University of Toronto, Canada Mr. Sepand Dyanatkar University of British Columbia, Canada Ms. Sophia Trozzo Students for the Exploration and Development of Space (SEDS-Canada), Canada

SPACE FOR ALL IN CANADA: EXPANDING OUTREACH ACROSS THE NATION

Abstract

The space community in Canada has been growing exponentially in both academic and industrial sectors, especially in regions with access to aerospace programs, space-related organizations, and industry professionals. However, there is a known lack of connectivity with the national space community outside of these regions, particularly in Northern and Atlantic Canada. Specifically, the students and young professionals in these underrepresented regions lack exposure to opportunities to engage with the Canadian space sector, resulting in barriers to entry. To combat this issue, the Students for the Exploration and Development of Space Canada (SEDS-Canada) has curated deliberate outreach opportunities for underserved communities. These programs include our 1) Space Organization Affiliates, 2) Student Chapters, and 3) Regional Representative programs. To directly target regions with less access to space (i.e. Northern and Atlantic Canada), SEDS-Canada has developed the following initiatives: 1) Canadian Arctic Research Expedition: Mars in Your Own Backyard and 2) NASA Space Apps Hackathon (Yukon Territories 1st Edition and St. John's). To evaluate the impact of these programs, we conducted five (5) cross-sectional and retrospective-type studies through online surveys and interviews. We collected participant demographics, personal anecdotes, and constructive feedback. Additionally, we conducted a comparative analysis in regions before and after receiving access to space programming to measure the effectiveness, and identify potential gaps in our outreach. Our preliminary results indicate that by implementing our programming in underrepresented regions, we are able to catalyze increased engagement in the Canadian space sector. In this presentation, we will discuss the results of our analyses to demonstrate the impact of SEDS-Canada's programming across Canada and in underserved communities. Additionally, we present a framework for curating a strong national presence in the space sector in light of the identified challenges. Ultimately, our results will guide our future programming for youth, students, and young professionals to foster the next generation of early career space professionals in Canada.