

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Space Culture – Public Engagement in Space through Culture (9)

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## INCLUSIVE EDUCATION TO ENABLE FUTURE SPACE EXPLORATION

**Abstract**

In the near future, space commercialization and exploration will not only call for appropriate technology and operations, but widespread and accessible human training programs. To date many educational courses put forth by the ESA Education Office, NASA STEM Pathways, etc. to engage students in space, focus primarily on experiment and technology design. Current astronaut applicants have a 0.6% chance of being selected by NASA in the USA and with this understanding it seems rightly so that STEM related programs position students to focus on experiment design as opposed to training for potential first hand space exploration. In this paper we compare current program highlights and drawbacks for gaining experience in human spaceflight and identify educational and accessibility gaps. We will also explore example solutions to these gaps as demonstrated by Mission Spaceflight. Mission Spaceflight aims to enable accessible spaceflight training for those fixated on reaching altitudes higher than most humans have currently visited. Focused on affordable pressure suit operations, emergency egress, smoke and fire response, students build a basic firsthand skill set for the jobs and opportunities of tomorrow. From commercial tours, to on orbit construction, more human centered programs to fill these opportunity gaps will be needed to train the workforce for space exploration, development, and commercialization.