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THE IMPORTANCE OF SPACE THEMED COMPETITIONS AND ACTIVITIES AT HIGH SCHOOL
LEVEL FOR PUBLIC AWARENESS OF THE IMPORTANCE OF SPACE ACTIVITIES: CASE STUDY
OF LAUNCHPAD CHALLENGE

Abstract

Many scientists and engineers in the profession understand the importance of space sciences and space technology not only for the sake of space exploration but also for the essence of developing science and technology in the world. Many science historians will agree that since the inception of the first human settlement at Gobeklitepe, humans have looked at the stars with the concept of Le rêve des étoiles or the Dream of Stars. Hence, we can look at the concept of space science and technology as the dynamo of mankind. However, it must be understood that this concept is more important than ever as mankind is at the precipice of great developments and space plays a critical role. Unfortunately, it can be said that due to varying problems across the world, there is not a homogenous consensus overall in the world about the importance of advancing space sciences and technologies. Thus, this awareness must be given at high school level to highlight STEM activities and to help young minds, who will become adults of the future, to comprehend how space activities can help boost science and technology in every field, while also helping to improve the lives of the general public. This paper discusses the importance of having these activities and provides a case study of an activity supervised with a team including the author on creating a new space related competition last year. A competition named Launchpad Space Challenge was launched last year to reach high school students and to especially connect with young minds of the developing countries. Students were encouraged to provide their ideas on the competition format on settling in Mars and to provide innovative solutions for challenges in Mars settlement. The students provided exquisite ideas from biology, agriculture to chemistry to engineering ideas including mechanics and robotics and especially the high school students from developing countries contributed in various novel ways. There was a large panel of judges from various disciplines of science and the final ceremony was conducted in World Space Week of 2021 by organizing it with the World Space Week Committee. The winner and the two other finalists were announced by the NASA Astronaut Scott Parazynski, who is a veteran of five space shuttle missions and part of Astronaut Hall of Fame since 2016. The three winner teams were given 5000 USD each and also given an opportunity to pitch their ideas of space companies. Participants were 13-17 years old, and