

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

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EMIRATES MARS MISSION 2020: EDUCATION & OUTREACH CHALLENGES AND OUTCOMES

Abstract

After the announcement of the Emirates Mars Mission (EMM) in 2015, the Mohammed Bin Rashid Space Centre (MBRSC) established a strategic planning team that undertakes education, media and outreach initiatives. The main educational objectives of the mission are promoting space science education in the UAE, engaging and involving the public from all age groups in the mission, and building capabilities in STEM fields.

EMM education and outreach initiatives include several programs and activities that target all age groups. EMM Teacher Ambassador Program, Space Camp, and AlMisbar TV are just a few examples of the programs that the team has implemented over the past two years to achieve the overall education and outreach objectives of the mission. The Teacher Ambassador Program aims to create a dynamic community for STEM teachers to represent their schools in EMM initiatives. Also, to enable and equip ambassador teachers with knowledge and material required to educate the next generation of scientists and engineers. The program includes interactive space-related workshops and trainings, STEM material and kits to support classroom activities, and teachers' awards and recognitions. To target students, the team introduced Space Camp initiatives for middle and high school students. The one week long camp provides hands-on activities and workshops for the participants to enrich their experience and knowledge in space science and engineering. Topics of interest include, but are not limited to, the following: all aspects of spacecraft subsystems, rockets and launch systems, ground operations, and instruments and science. As far as the general public, the YouTube show "AlMisbar TV" was created to introduce them to space and science concepts in a fun and exciting way. The first season of the show consisted of thirteen episodes that used different presenting approaches such as informative videos about space missions, science experiments, and answering the public's most asked questions.

This paper highlights the holistic process that the team has developed over time, which covers the outcomes achieved and challenges faced during the implementation of the initiatives. The paper also proposes a list of recommendations to effectively implement them worldwide, in addition to the lessons learned during the process.