SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Ignition - Primary Space Education (1)

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FIRST STEPS TO SPACE THROUGH MULTIMEDIA EDUCATION

Abstract

When it is about educating students under the age of 11, using solid instruction can't be the best way. Besides, Students tend to get more involved during learning and become more eager to be part of education and research program if a good approach is considered. Teaching technical issues which are not tangible needs suitable assistance that shall be chosen based on target audience. Multimedia has been proved to be an effective tool since it creates a visual and interactive experience for the students and they can suppose themselves in the media and get more engaged. In this paper, we discuss about how we get assistance from multimedia to introduce space technology and science to preliminary students. To get this goal, some videos were produced for depicting the earth, solar system and galaxy to cover the concept of space and orbital mechanics. Arousing national pride, using a video of successful country's manned mission, steps to getting into a real manned mission were explained, then. At the end, the space applications and effects in daily life and satellite systems, as the solution to get into the space, were illustrated. To make the work more impressive and practical, simple and attractive hands-on tools were utilized to involve the students touch and make what they have learned and enhance the learning experience. While building paper models of national remote sensing and communication satellites, as instruments for two main applications of space technology, they got familiar with two important concepts. First how needs of a country leads to define space missions and second, how to use technology demonstration missions for improving technology readiness to get to level in which commercial missions can be accomplished.