SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
New Worlds - Innovative Space Education and Outreach (7)

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USING SCIENCE FICTION TO MOTIVATE LEARNING AND INNOVATION

Abstract

This paper discusses innovative approaches for the space industry to contribute to space education through partnerships with the science fiction industry. Unlike any genre, science fiction inspires imagination, innovation, and positive progress. It draws young people to the disciplines of science, technology, engineering, and math, and challenges them to make artistic visions into scientific reality. Among science fiction's creators, Jules Verne first imagined electric submarines, television newscasts, and video conferencing in his works. Arthur C. Clarke imagined modern-day telecommunication satellites. Isaac Asimov's works influenced our expectations for robotic technology. No doubt many space missions were also influenced by science fiction. The paper provides a brief history of space and science fiction industry partnerships, and explores new partnership opportunities for the coming decade. In particular, the paper will discuss how the space industry and the world's first comprehensive science fiction museum are working together to promote space education through science fiction.

The paper presents an overview of the new Museum of Science Fiction's educational mission with emphasis on the role of industry partners in contributing to its programming and outreach efforts. The Museum of Science Fiction's educational mission is to use science fiction to inspire and motivate careers in science, technology, engineering, arts, and math. The scope of the museum's educational program is broad and designed to reach learners of all ages, from pre-kindergarten through higher education. Through interactive exhibits, project-based learning, and in-house programming, the museum leverages donations of talent, artifacts, and funds. The museum's partnership efforts also include concerted community outreach and advocacy to increase: the quality of STEM education, support for early stage technology development, and hands-on technology projects for early career individuals. By supporting space education through science fiction, the industry could gain cache, increase the STEM education and workforce pipelines, and improve workforce retention.