

Enterprise In Space: Education for Everyone

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Abstract

The non-profit National Space Society (NSS) has launched Enterprise In Space (EIS), an "Education for Everyone" campaign to provide public access to orbital space experiments for students of all ages. EIS will design, engineer, build, launch, orbit, recover, tour, and exhibit a spacecraft named *NSS Enterprise* to engage the next generation in STEAM education using an artificial intelligence (AI) and student team contests to win an opportunity to orbit one of 100+ experiments. The highly publicized launch and return of the first spacecraft named "Enterprise" with the AI conversing with students in natural language about their experiments will call attention to the project and allow us to develop the AI into a tutor for every student on Earth.

EIS Program

The mission of EIS is to motivate students everywhere to reach for the stars, fostering a lifelong commitment toward building a better future for humanity, empowering teachers to drive educational change and equipping students with the skills to do it. The EIS program is developing a freely distributed online space science curriculum that will interface with an AI tutor, named Ali, and spaceflight opportunities (suborbital and orbital) to provide a robust, interdisciplinary, multi-layered learning experience. Winning experiments will orbit and return at no flight cost to teachers, schools or students.

To achieve this vision, EIS is forming partnerships with schools, organizations, business, and government agencies to:

- Develop and disseminate the EIS Academy [K-12] & Enterprise Centers for Excellence (ECE) [University cutting edge research] based on a Moodle/Google platform that has low entry barrier, easy scalability, and offers a clear benefit to stakeholders. Educators will add quality activities/lessons/courses to the EIS Academy and utilize shared materials in their programs. Students and educators will propose and operate qualifying flight experiment proposals to present/publish results. ECEs will connect students with real-life professionals as role models who will help them enhance ideas, develop inventions and prepare for a career in the new space economy of the upcoming decades.
- Identify and enable the first of a new class of master space science educator, the Enterprise Educator Emissary (EEE). They will be trained and will train other educators and students. Training combines science content and pedagogy with real-world hands-on experiences with a focus on STEAM, the microgravity environment, and space science.
- Establish and support a global network of space science educators and learners.
- Demonstrate the potential of artificial intelligence as an educational tutor. Ali will engage with students about their experiments on Earth and while in orbit and teach the scientific method.