

47th STUDENT CONFERENCE (E2)  
Educational Pico and Nano Satellites (4)Author: Mrs. Elizabeth Brubaker  
United States

## HIGH SCHOOL TEAM DAVINCI LIGHTS UP MINDS AROUND THE WORLD

**Abstract**

North Idaho STEM Charter Academy's Project DaVinci Cubesat is a team of high school students, selected in early 2017 by NASA, to take part in the ELaNa XIX CubeSat initiative. Our goal was to construct a small satellite capable of communicating with and inspiring students around the world to ignite a passion for space and STEM education. Through Morse code messages the DaVinci team is able to communicate with anyone who has a simple dongle and antennae. Our Project DaVinci satellite was constructed to connect students, schools, businesses, and individuals alike in an educational mission. Recent research has shown a decline in students' and particularly teens' interests in both space and STEM. Project DaVinci is working to inspire people to reignite that passion. The DaVinci team is working to partner with at least one school in every country to become a space ambassador. Anyone interested can take part in our project by receiving lesson plans, monthly newsletters, and space pictures from the team. At this point in the project, the DaVinci team has had their satellite constructed by Clyde Space (based in Scotland), launched their satellite on the first Electron Rocket through Rocket Lab, and seen their satellite successfully make it into space. The team has also established a ground station at LCF Enterprises in Post Falls, Idaho, to connect with the satellite and people around the world. North Idaho STEM Charter Academy's Project DaVinci was proud to launch our satellite on December 16, 2018. The team is one of the only high schools in the nation to collaborate with companies such as NASA, Clyde Space, and Rocket Lab to design, build, and launch our satellite into space. The Project DaVinci team is currently working on communicating with the satellite through our ground station to send inspirational Morse code messages as it passes overhead. These messages can be received by anyone who has an antenna for downloading them at certain pre-scheduled times. Project DaVinci is an educational based mission, and this group plans to use the satellite to educate people about space. DaVinci has already started this with their school Space Days, filled with learning and excitement, including cosmic art, rocket launch simulators and an entertaining quiz game that teaches kids about space. Currently, the Project DaVinci team of high schoolers is communicating with the satellite to relay inspirational Morse code messages and lighting up minds around the world.