

The Importance of Using Cube Satellites for Educational Outreach

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While CubeSatellites are not necessarily in the Alberta school curriculum, or in any curriculum, cube satellites offer a more accessible option for the study of space science. AlbertaSat, a student group at the University of Alberta focused on cube satellite design, has created an educational outreach program that brings space and science related content out into the community through sessions related to our cube satellite. The outreach program, which was created in 2014, recognized that since an understanding of cube satellites is not embedded in the Alberta curriculum, many teachers would not have the content knowledge for this area, while we lacked the pedagogical knowledge to teach this. Our program has become very collaborative as we have relied heavily on people from an educational background and a STEM background working together.

Over the course of the past few years, the program has undergone a great deal of growth and change. What started out as one session in 2014, has since grown into eight different program options for teachers at various grade levels, ranging from kindergarten to grade twelve. Each session contains a small lecture component as well as a hands-on activity. The program itself focuses on a variety of STEM topics which mainly focus on space science and project design. Throughout the past year, we have been compiling our sessions into a program booklet which can be used as a resource for teachers interested in teaching our sessions themselves. This program booklet was designed to make our content more accessible which in turn makes space science and STEM fields seem that much more accessible to students and young people out in the community. While teachers have access to our content, we also bring our programming right into classrooms, free of charge. By getting our program out to students and teaching about our cube satellite, we can inspire young students to believe that work like this and space itself is much more attainable than it used to be.