

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
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HOW CAN A SPACEPORT BE USED FOR EDUCATIONAL PURPOSES AT UNIVERSITY LEVEL?

**Abstract**

One of Europe's first space ports on European mainland is under construction on Andøya in northern Norway. Andøya has been a site for space science exploration and sounding rocket launches for more than 60 years. Now, new activity is turned towards the small satellite value chain. Since 2000, Andøya Space Education – previously known as NAROM – the Norwegian Center for Space Related Education, has been co-located with Andøya Space infrastructure. Andøya Space Education has a national mandate from the government as responsible for space-related education and outreach, from kindergarten to universities. Norwegian and international students and universities have benefited from attending courses providing hands-on training and experience within the space ecosystem at Andøya. Activities include physical and virtual courses spanning from “mission to Mars” through launching student rockets and CanSats to AIT-training by making use of modern labs and training facilities for electronics, environmental testing and integration. With the spaceport activities ramping up, we present how the emerging activities can be exploited to strengthen and enrich the education of university students and co-operation with national and international universities. The co-location with the rocket range, and now the spaceport, has been a key point arguing for an increased added value, where university students can attend courses where they “live and breathe” the vibe of the spaceport. However, this co-location, the increased activity at the spaceport and the current funding situation pose some challenges. These challenges can be categorized into several groups, such 1) the balance between logistics and security versus student access to spaceport activities, 2) funding and organizational sustainability in addition 3) the balance between the university's own courses and activities versus the added value for an on-site stay. In this work, we map and describe these challenges, as well as surveying student involvement at other similar locations. Finally, we aim to present how they can be overcome.