

Polar Research in the Classroom

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Here is a challenge for you: you are now to do research on the Sun and the Northern Lights, and you will study and analyse real-time data. Is it possible that there will be any Northern Lights in week 47, 2009??

This is an example of an assignment in a Polar Year contest for secondary school pupils. An inspiring learning environment that stimulates young people's interest in science requires skilled teachers – and that is exactly what 'Polar research in the classroom', initiated by the Norwegian Centre for Space-related Education, is about. The project aims to qualify teachers in various polar-related subjects by establishing quality follow-up studies within a Nordic educational network.

Nordic cooperation

The project involves both primary and secondary schools, in addition to university colleges and universities in Norway, Denmark and Iceland. The project is financed by Nordplus Horizontal, a programme that targets Nordic and Baltic institutions and organisations at all education levels that have education and lifelong learning as their main objective. 'Polar research in the classroom' is a direct follow-up to one of the Space Centre's earlier projects, 'PolarEduSpace', which had the aim of inspiring and stimulating interest in and understanding of polar research among young people aged 13 to 18.

Formal qualifications

For two years researchers, teachers and student teachers are involved in the development of two web- and field-based teacher training courses at Nordic level, called Beneath the Polar Sky and Climate research in Polar landscape. The first training course is scheduled for August 2010. The courses give 10 ECTS credits at university level. Birgit Strømsholm is in charge of the project on behalf of the Space Centre. 'This is unique; there are no equivalent courses that focus on polar research and the use of satellite images combined with observations and ongoing research,' she explains.

Increase of competence

The headmaster of Steigen primary school in Northern Norway, Aasmund Gylseth, is pleased with the school's participation in the project, as it is of great value to both teachers and pupils.

'For our school this project represents long term modernisation of the way that scientific subjects are taught. We want the school as a whole to benefit from the knowledge that the project gives us, and to involve several teachers,' he explains. 'We have taken part in similar projects before, where our pupils used satellite pictures to map burial mounds and to follow the development of geological structures produced by glaciation. The children enjoy these assignments,' he adds.

New learning methods

The web site Sarepta (www.sarepta.org) has already proved to be an important tool in the classroom, and young students can easily access information about weather and climate, ice in the Arctic, ocean currents, Sun-Earth interactions, satellite navigation and satellite communication, as well as information about rockets, the International Space Station and space shuttles. Teachers from all over Europe make use of these resources in their teaching. The use of blogs in the communication between schools and pupils is still quite new. We know from experience that writing blogs has a positive effect on both commitment and the learning outcome of the young pupils, concludes Birgit Strømsholm.

MARGUNN INSTEFJORD/SIU



Longyear glacier | Researchers and teachers involved in Polar research in the classroom? and PolarEduSpace? visiting the Longyear Glacier at Svalbard. (Photo: Helene Eide) [Denmark](#) [Iceland](#) [Norway](#)

Coordinator:

Nasjonalt senter for romrelatert opplæring ? Norway

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- Steigens skolen Leinesfjord - Norway
- Høgskolen i Bodø - Norway
- Professionshøjskolen København University College - Denmark
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