

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Enabling the Future - Developing the Space Workforce (5)

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IMPACT OF THE ESA EDUCATION PROGRAMMES ON DEVELOPMENT YOUNG SPACE  
WORKFORCE IN POLAND

**Abstract**

From a long time there were no professional specializations dedicated straight to space technologies at polish technical universities. From a couple of years number of space related courses were initiated. However, quantity of the courses, organization and methodology still did not prepare graduate student to start work in space sector. Skills expectations imposed from research institutions, business entrepreneurs towards a young graduate are utmost different. Time required to train inside a company a new hired employee is high.

From students – space enthusiasts point of view, the only opportunity to have hands-on, practical experience in space disciplines was to apply for foreign educational programmes, like projects organized by ESA Education Office. Polish students have started to participated in ESA projects in 1995 and from this time they took part in almost every available mission.

Except of the personal benefits, participation in ESA projects gave students technical and management knowledge which is required to start small space projects at their local universities. One of such projects was first polish satellite PW-Sat, was launched on 13th February 2012. An idea of starting PW-Sat project was made after participation in one of the European Students Earth Orbiter (ESEO) workshops.

In last two years the results of students participation in ESA Educational programmes can be seen more clearly than ever before. Alumnes of projects such as Parabolic Flight Campaigns, YES-2 satellite, REXUS/BEXUS campaign have already worked in all space-related institutions, universities and SMEs. They cooperate in creating national strategy of space industry development, effectively promote space in public and launching theirs owns SMEs. Most of the youngest engineers who were participated in ESA Educational projects are working in Centre of Space Research Polish Academy of Sciences where were developed another polish scientific satellites: Lem and Hevelius.

This paper will show on a Polish example, what impact can have an international educational programmes on progress of young space workforce and on space industry in ESA non-member state, which for long time did not have strong national space structures and space policy. An individual examples and statistics will be presented.