

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

Author: Mr. Daniel Szendrei  
Hungarian Astronautical Society (MANT), Hungary

Ms. Orsolya Pesthy  
Eötvös Loránd University, Hungary  
Dr. Andrea Strádi  
Centre for Energy Research, Hungarian Academy of Sciences, Hungary  
Mr. Istvan Arnocz  
Space Generation Advisory Council (SGAC), Hungary

EXPLORING THE POSSIBILITIES TO CREATE SPACE STUDIES IN A COUNTRY WHICH LACKS  
OF IT

**Abstract**

Our study aims to show that the project based learning (PBL) is a valid alternative in space education besides accredited academic degrees. It is even more valid in Hungary where there are no dedicated space studies in engineering nor in space science. We performed a questionnaire-based study inquiring participants in the age group of 16-35 years regarding their interest in space studies and analysed the data by applying statistical methods. The results are discussed in the view of the Hungarian higher education system. A yearly held educational event is an excellent demonstration of the idea of project based learning. The experiences acquired during these events gave the idea to write a study that aims to find the answer to the questions about the actual interests and needs of space education as postgraduate and undergraduate studies. Our study is based on a questionnaire targeting different age groups from 16 to 35 years, containing questions about the different accredited - BSc, MSc and PhD - and degrees or trainings like PBL. The questionnaire consisted two separated sections. The first part consisted questions about how important participants found different aspects of a potential future space education. In this section we did not explicitly mention the subject of the study, i.e. the accredited and PBL trainings. In the second part of the questionnaire participants were asked to read a summary of education systems and methods before answering these questions. Then they had to decide which type of training they would choose as a potential space education training. Our results have shown that there is an interest in space education in our target group, regardless of the age or the current level of education. On the one hand, based on the first part of the questionnaire, the benefits of the PBL are more preferred than the accredited education types. Based on the second part of the questionnaire, the PBL was the only form of education that attracted a majority. The interest in space education throws up the question of organizing space education in a form of a PBL training. However, further research is needed on the employment recruitment capability of Hungarian space industry and research facilities. Based on that, a market research has to be done to explore the optimal way to create a PBL education on the field. This process has already started with consultations with possible partners and a roundtable discussion was held.