

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Lift Off - Secondary Space Education (2)

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AN EVALUATION OF THE IMPACT OF HANDS-ON SPACE-BASED STEM ACTIVITIES ON THE  
ATTITUDES OF YOUNG WOMEN IN SINGLE-SEX EDUCATION TO STEM CAREERS.**Abstract**

The gender divide in STEM is a prevalent issue which has been studied extensively over the past number of years. Throughout these studies, it has been identified that single-sex schools have been shown to negatively impact young women's attitudes towards STEM careers. This paper looks at addressing the adverse effects of single-sex schooling in this regard using a novel space-themed STEM intervention. The intervention aims at increased participant awareness of role-models in the field to tackle the issue of representation while also building confidence in STEM skills through a hands-on workshop. The closing of the intervention aims to connect participants with further engagement, education and representation opportunities such as initiatives by Space Generation Advisory Council and Women in Aerospace. The study is conducted on a several classes of young women aged 11-12 in a primary school in Ireland, the country with the most single-sex education facilities in the Western world. Attitudes to STEM careers are assessed before and after the intervention itself with results compared alongside a control group. Attitude assessment is conducted using the STEM-CIS instrument which has been shown to be a valid and reliable tool for this purpose.