

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

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SPACE STUDIO WEST LONDON – A PROJECT BASED LEARNING MODEL FOR SPACE
EDUCATION

Abstract

Space Studio West London (SSWL) is a new ‘Studio’ School aimed at 14-19-year olds that is based in West London, and delivers a mix of high quality scientific education and industry-related activity, equipping young people with the skills and qualifications needed to become skilled technicians, operators, engineers, scientists, inventors and entrepreneurs in aerospace and space related industries.

This paper examines many aspects of the school’s unique vision of developing independent and engaged learners through project-based learning (PBL) and by following guiding principles of Self-Worth, Engagement, and Purpose.

SSWL’s incorporation of PBL has included teaching through enterprise projects and real work, encouraging students to understand concepts such as finding solutions by working to the problem. This approach ensures that student learning is rooted in the real world and helps them to develop the skills they need to flourish in life and, also contribute to the space industry.

Past Core Projects at Space Studio have included themes such as ‘Colonisation of Mars’, ‘Is there life out there?’, ‘Theory of flight’, ‘Payload Design’ and ‘Why do we go to space?’. Students have worked in teams, both collaborating and working individually to support their team, while receiving support and master classes from staff and subject specialists. PBL learning has also been utilised successfully in the more formal aspects of classroom-based teaching with mini projects connecting curriculum subject content to the real world and the space industry. Learning outcomes of core and mini projects have been subject to continual iterations of evaluation and critical assessment (including feedback from staff and students) to aid in the development of effective project templates and lesson plans.

Space themed outreach work to primary schools by SSWL students, has also built their sense of self-worth and has allowed them to take on roles of leadership and responsibility.

SSWL students have attended workshops at various NASA centres, the British Interplanetary Society, the UK National Space Centre, Kingston University, St Mary’s University and have worked with Surrey Satellite Technology Limited, the Institute for Interstellar Studies and the National Space Academy with a view to continue building much needed links between schools, industry and university academia.

As such, this paper also documents some of the major achievements and challenges of this pioneering school in it’s opening three years.