

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Ignition - Primary Space Education (1)

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STARTUP: AN INNOVATIVE APPROACH TOWARDS EFFICIENT PRIMARY SPACE  
STEAM-BASED EDUCATION**Abstract**

Within the circle of technological development, the evolution of science and technology has experienced great growth in emerging fields. Space education technology is one such field to which children, particularly in primary school, should be exposed. With the advancement of space technology, education in the field has become regarded as a prospective entry point for future career opportunities. Making space education accessible to the younger generation, however, remains a challenge. This study intends to develop a structured learning management system based on Space Education, Science, Technology, Engineering, Arts, and Mathematics (STEAM), which will be cost-effective and viable for young enthusiasts as young as eleven years old. It entails creating a segmented plan that incorporates detailed and easy-to-learn lesson plans, hands-on activity modules, and virtual excursions that include telescope and camera operation for astrophotography and research, among other things. One of the main areas of focus is to construct a virtual school using recorded live lectures and activity modules for future reference and pre-recorded lesson plan creation. This would help with low-effort revenue-generating and improved goodwill for technical upkeep. This paper focuses on accessibility to learning as a main subject of focus. It highlights a number of studies and workflow analyses that are relevant to Education-Technology-based enterprises working in the field. This would eventually lead to the construction of a more efficient learning platform for a group of students who are particularly vulnerable. Its goal is to inculcate learning with child psychology in order to maximize a young student's potential while maintaining low investment graphs and increased chances of a good outcome.

Keywords: Astrophotography, Education Technology, Learning Management System (LMS), Space Education