

## IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

## Ignition - Primary Space Education (1)

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## RAMON KINDERGARTEN XPLORE; IGNITING THE INNER SPARK

**Abstract**

The concept of igniting the inner spark refers to the process of unlocking an individual's innate motivation and passion, which can lead to increased productivity, creativity, and overall satisfaction in both personal and professional pursuits. As the world changes in the 21st century, this spark is necessary for the development of essential skills such as flexibility, openness, critical thinking, problem solving, collaboration, and communication.

Given this, the Ramon Space Race educational program is designed to provide preschool children with a unique learning experience focused on space exploration. This learning experience is designed to develop STEM skills, 21st century essential qualities and to respond to the lack of scientific programs in kindergarten. The program is built upon the idea that children's natural curiosity can be harnessed to cultivate their interest in scientific and technological subjects from an early age. Over a three-year period, the program guides classrooms through a series of activities that are adapted to their developmental and cognitive stages, using a physical activity kit and teacher training course as key tools.

Beginning with teacher training by the Ramon Foundation team and providing them personal and group guidance throughout the year. The program is modular, and each kindergarten can adapt it to its daily and yearly plan. This approach ensures classroom flexibility, allowing teachers to incorporate their creativity and teaching style while keeping the knowledge within the kindergarten.

The Ramon space race program has been successfully adopted by over 160 kindergartens, reaching 4,500 children aged 3-6, and is set to reach 300 kindergartens by the end of the year, nearly 8,000 children. Analysis of the positive feedback from both kindergarten teachers and parents of participating children, indicate growing influential circles: According to a survey taken by kindergarten teachers who participated in the first two cohorts, 98% of them reported that the program helps develop a positive affinity for science and space among the children, while 93% of the kindergarten teachers reported that the program provided them the confidence to introduce the subject in class. A parental survey of 730 parents, found that 82% reported that the children share knowledge and experiences from the space program at home.

Our presentation will discuss the findings of how the Ramon Space Race program ignites children's imagination through hands-on experiments in the fields of space, paving the way early for future success in the field of science and space exploration.