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IGNITING COSMIC CURIOSITY: ORGANIZING SUSTAINABLE AND CONSISTENCE SPACE EDUCATION OUTREACH TO BUILD MALAYSIA'S SPACE INTEREST THROUGH THE ARTEMIS MISSION

Abstract

The Malaysia Space Industry Blueprint, a vital part of the country's Space Exploration Mission 2030, reflects Malaysia's dedication to advancing its position in the space sector. Central to this blueprint is the focus on talent development, essential for realizing Malaysia's space ambitions and fostering a robust space ecosystem within the country.

Talent development stands as a cornerstone for Malaysia's space goals, ensuring a skilled workforce capable of navigating the complexities of the growing space industry. Apadilangit plays a crucial role in this endeavor, nurturing space talent from early education stages, including kindergarten, primary, and secondary school levels. The program offers a comprehensive curriculum covering space engineering, astronomy, and digital space, utilizing various methods such as physical classes, space camps, and online learning.

Apadilangit's innovative approach aligns strategically and leverages NASA's Artemis mission, capturing students' imagination with humanity's return to the moon after 54 years. The mission's focus on new technology development and establishing a sustainable human habitat on the moon ignites enthusiasm for space technology and innovation while deepening understanding of space science.

A significant achievement is the Artemis Space Camp, which attracted 4000 students within 1 year. The camp focuses on essential subjects like rocketry with the Space Launch System (SLS) rocket, basic escape velocity, orbital mechanics, lunar rover operations, robotics missions, and lunar habitat development.

Additionally, Apadilangit provides hands-on experiences through DIY SLS rocket projects, building solar lunar rovers, and observing celestial bodies through telescopes. These practical activities reinforce space science concepts and foster a genuine interest in space technology.

The Artemis Space Camp has yielded positive outcomes, with students embracing the excitement of space exploration, astronomy, rocket science, and engineering. Hands-on activities have honed mechanical skills, translating theoretical knowledge into practical applications. Consequently, both students and parents are enthusiastic about the program's engaging and transformative learning experiences, leading to increased enrollments and interest in the program.