

# FLY ME TO THE SUN: A Game-Based Learning Innovation for Solar System Education

*Thursday, 4 September 2025 11:15 (15 minutes)*

“FLY ME TO THE SUN” is an educational board game developed as part of an extracurricular astronomy club initiative to promote understanding of the Solar System. Rooted in game-based learning and the 5E instructional model, this project enhances student engagement and science literacy through interactive play and collaboration.

Students explore planetary features, simulate space travel, and collect resources by answering astronomy-related questions. The storyline casts players as space travelers journeying toward the Sun, with learning objectives embedded in the mechanics. The game is supplemented with pre- and post-classroom activities, including collaborative research and presentations on planetary science.

The project was implemented with Grade 11 students at San Kamphaeng School. Results showed a significant increase in post-test scores (from 11.3 to 15.98 out of 20), and 98.8% of students reported high satisfaction. The game also demonstrated strong potential as both a classroom tool and an extracurricular activity.

This initiative illustrates how student-designed games can foster creativity, scientific inquiry, and 21st-century skills, making astronomy education more accessible and enjoyable.

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