

Project Based Learning using **LEGO® MINDSTORMS® EV3** through **Space Elevator Robot Race**

Project Based Learning through Space Elevator Robot Race



KANAGAWA UNIVERSITY
HIGH SCHOOL

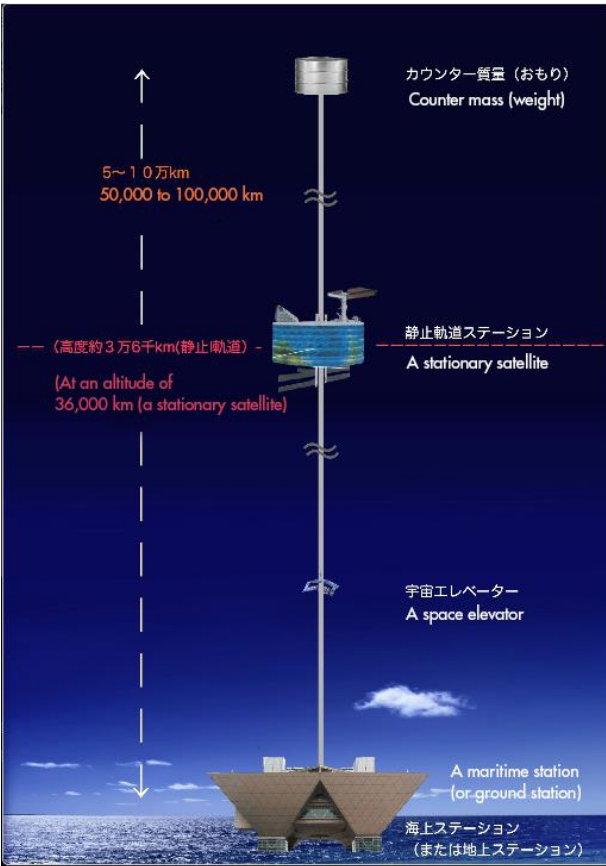
Why bring Space Elevator into the classroom?

There are 3 Important Factors of “Active Learning” for students

1. Increase Metacognition skill using LME robotics tool
2. Motivation for learning; Space and Future Technology theme
3. Effective Learning Process

Effective Learning Process

- 1st Define what is a Space Development and Space Elevator and find a problems and theories related to that
- 2nd Create a Space Elevator model with EV3
- 3rd Write a Flow Chart and Make a program with EV3 sw, learning coding Algorithms
- 4th Understanding functions of sensors, how to use them
- 5th Trial and Error
- 6th Competition and Presentation
- 7th Reflection and Self assessment



More details for Space Elevator Robot Race
<http://space-elevator.tokyo/> English available

