Group #4

Prospective of CanSat Hands-on Education Projects

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Let’s discuss “Ideal CanSat Curriculum”

Ideal curriculum may include…

✓ Various engineering disciplines (EE, structures, programming..)
✓ Systems Engineering and Project Management etc…
✓ International cooperation ➔ Standardization of CanSat education!
Meaning of CanSat Education

- CanSat
- Nano Satellites
- Stepping up
- Larger spacecraft

University to Space Agency
Meaning of CanSat Education

CanSat

Nano Satellites

Larger spacecraft

Stepping up

University

Space Agency

What will be the next-step curriculum?
Systems Engineering/Project Management educational program in Japan (2010-)

- **Mission Definition**: Clarification of mission definition & requirement specification
- **User Requirement**
- **System Requirement**
- **Component Design**
- **Component Manufacture**
- **Component Assembly & Test**
- **System Integration & Test**
- **System Validation**

(T1) Clarification of mission definition & requirement specification

(T2) Management of schedule allowing for verification

(T3) Clarification of verification plan & verification item
Summary of Existing CanSat Hands-on Curriculum

- Elementary school
- Junior High
- High school
- University students
- Graduate students
- Young professionals (Alumni)

Water Rocket etc.

Review

Outreach

Teach

Review

UNISEC’s SE/PM program (in Japanese)

UNISEC’s iCanSat (in Japanese)

S4 CanSat

http://s4.sonoma.edu/

English version of CanSat study materials are needed.
Issues and possible solutions:

- **Lack of Instructors** ➤ (1) Continue CLTP in Japan, (2) Start more Local CLTP, (3) CanSat education at 3rd UNISEC-Global meeting?
- **Hardware import restrictions** ➤ We want to ask for **UN certificate**
- **Lack of coordinators** ➤ We recommend to form UNISEC-Global Education Committee
- **Lack of funding** ➤ UNISON-global can look for corporate sponsors
Group #4 are:

Essien, Fatima, Koki, Masaaki, Shunsuke, Taiwo, Ted, and Hiraku

Thanks for the intensive discussion!

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