



SPACE AND YOUTH

"CATCHING THEM YOUNG"

UNISPACE +50 SYMPOSIUM
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Space Economy & Youth

- ▣ Space economy is growing at a high rate
- ▣ Need for developing countries to tap into this resource for societal development
- ▣ Satellite technology offers opportunities to address most of the challenges in developing world
- ▣ Satellite industry and its spin-offs offers job opportunities for youth as well as start-ups

Indigenous Space Industry

- ❑ Africa needs to realize the potential of space science and technology
- ❑ Two common approaches are: top-down and bottom-up.
- ❑ The top-down approach addresses issues of policy and legislation and bottom-up approach has a component that seek to promote STEM at different levels of learning

Primary & Secondary School

- Kenya has adopted NASA's GLOBE (Global Learning and Observation to Benefit the Environment) program to promote STEM in schools.
- GLOBE program introduces students to Earth Science (atmosphere, hydrosphere, biosphere & pedosphere)
- GLOBE students, with the assistance of teachers, collect, record and analyze Earth Science data.

GLOBE Program activities



Students collecting Environmental data (precipitation & water temperature)

GLOBE Students Activities

- Once the students collect data they are encouraged to do research using the data
- Students present their findings in Science Fairs
 - ❖ GLOBE International Virtual Science Symposium (IVSS)
 - ❖ RCMRD Space Challenge
- Students participate in Learning Expeditions where they interact with scientist and the local environment

Water Rocket challenge

- ❑ Introduction of students to rocket science using water rocket challenge
- ❑ Organizing water rocket designing and launching events in schools
- ❑ Competition on design and target launching



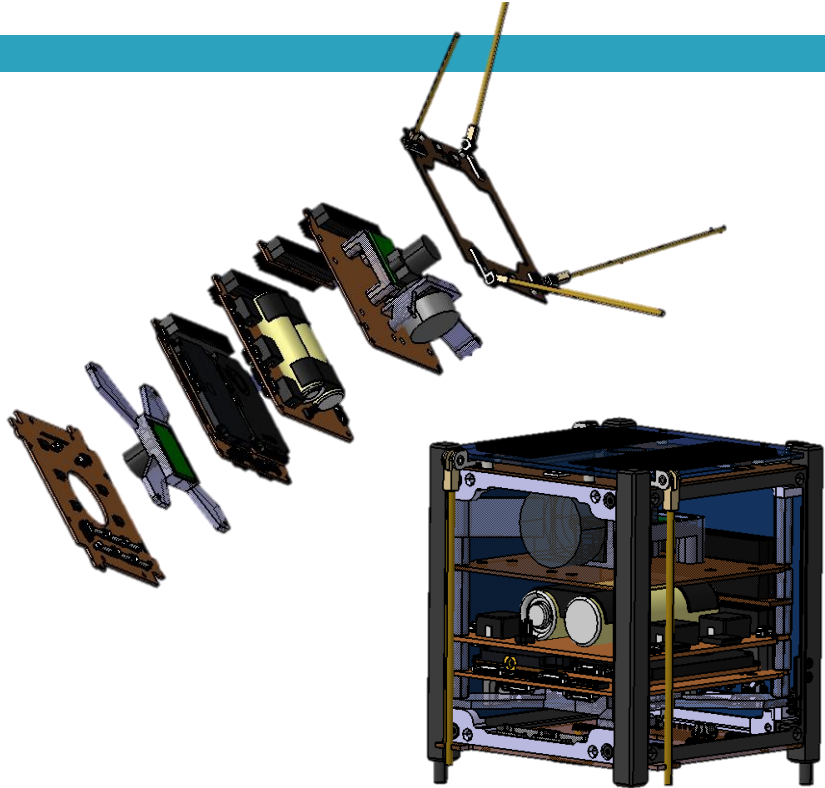
Weather Stations for Schools



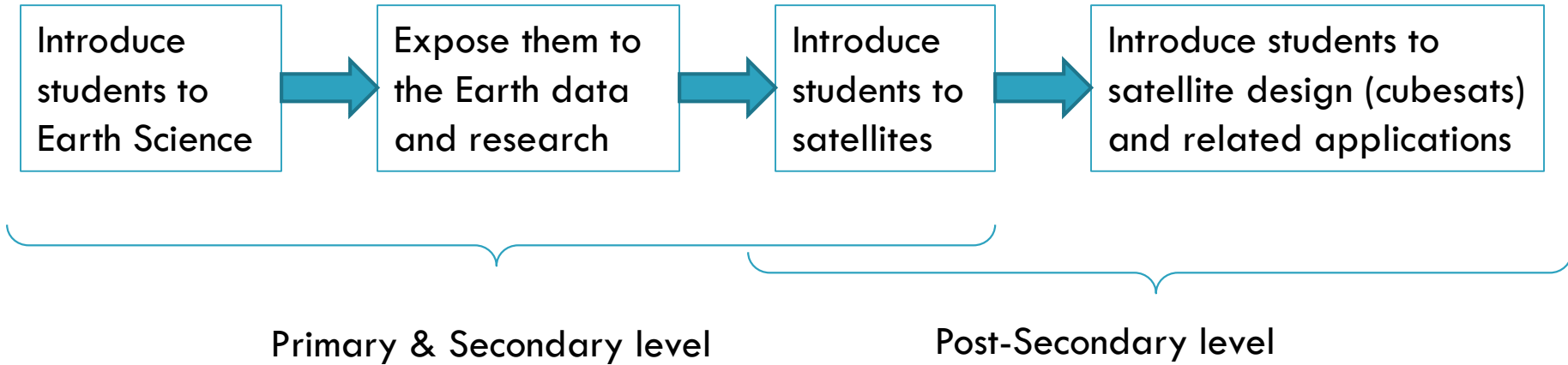
- ❑ 3D-Printing of low-cost Automatic Weather Stations for schools.
- ❑ Students have access to the weather data collected for their research and analysis.
- ❖ Link: 3d-kenya.chordsrt.com

Cubesat

- ❑ Expose students to entry-level satellite design and assembly
- ❑ Collaboration with Space faring countries to benefit from their experience
- ❑ First Kenyan space object, called 1KUNS-PF, launched with support from UNOOSA, JAXA and ASI,



Envisioned Approach



Space and Youth

- We appreciate and support the potential of our Youth to grow our space industry and that's why we want to “catch them when young”
- We are providing opportunities for them to be exposed to the space industry (San Marco Centre)
- We are working to engage them in Research and Development in space related applications

Thank you...

