UNISPACE+50 Symposium

Space and Youth
- Past, present and future importance of Space for youth -

June 19th 2018 @Vienna International Centre, Vienna, Austria
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JAXA Space Education Center
About Space Education

Space Based Education

- **About space** education for future workforce of space community (i.e. Industry/Business, Academy, Government)
  - Acquisition of expertise and knowledge
  - Space science, technology, engineering and math (STEM)
- **Space based** education for all human to be equipped with social literacy
  - Ability to find own subject and to cope with it
  - Ability to leverage lessons learned
  - Attitude to continuous learning
Scope of Space Education

- Space is not only the place or phenomenon of outer the atmosphere
- Surrounding natural environment, such as weather, plants or animals, is the material for space education
- Lights of the stars are the long past days of lights
- Ancient Chinese thought form “Enanji” (approx. BC150), all of time (past, present and future) and all of expanse (up/down, right/left, NSEW) is the “UCHU” (space, cosmos, universe...)
Program – Space School for Families –

- We consider the children initial school age (5+ years old) can take the first step of space education
- They firstly learn things from families
- JAXA support local entities to host Space School for Families for local families
- Main participants are pairs of 5-10 years old children and their guardians (parents)
- They work together at home and join schoolings (2-3 times per a year)
- Closing event with home project presentations by every child
What happens...
Analysis and Outcomes

- “Some experiments were not easy but fun!”
- “We had some try and error but could feel achievements, share experiences and proud of children’s’ every effort”

- Families with Dialogical Communication style
  - Encourage proactive behavior of children

- Families with Instructional Communication style
  - Wait for commands instead of using their initiative
Create Space Education resource library? (one stop online)
To share educational materials with all nations!

http://edu.jaxa.jp/en/materialDB/
# Space Education Programs by JAXA

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<th>Informal Education</th>
<th>Elementary school</th>
<th>Junior-high school</th>
<th>Highschool</th>
<th>University/Graduate school</th>
<th>Local public entity/community</th>
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<tr>
<td>Cosmic Collage</td>
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<td>Kimission*1</td>
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<td>Collaborate with science museums &amp; local communities</td>
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<tr>
<td>(3rd graders – junior high students)</td>
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<td></td>
<td>(students)</td>
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<tr>
<td>Space School for Families</td>
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<td>Aerospace School</td>
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<td>Educator seminar (collaborate with local public entities)</td>
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<tr>
<td>(Children and parents)</td>
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<td>(students)</td>
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<th>Formal Education</th>
<th>Teachers’ development and classroom partnership</th>
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<th>Educator professional development (collaborate with local education boards)</th>
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<th>International engagement</th>
<th>APRSAF*2 Poster Contest (8-11 years old)</th>
<th>APRSAF Water Rocket Event and educator workshop (12-16 years old and educators)</th>
<th>ISEB*2 student program (Under graduates and graduates)</th>
<th>APRSAF SEWG annual session</th>
<th>APRSAF Educator Seminar (co-organize with space agencies)</th>
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<th>Content publishing</th>
<th>Website, SNS, magazine, Space Education TV, workbooks and learning materials</th>
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Thank you very much for your attention.