Public Engagement in Times of Open Data and Open Science

> Beyond raising awareness
> Recommendation from research: a systemic approach
> Learning ecologies: astronomy compared to music
> Open Science Clubs
> Possible roles of SKA-CH
## Perspectives in science communication

<table>
<thead>
<tr>
<th>Corporate communication</th>
<th>Project communication</th>
<th>Public engagement</th>
<th>Science education</th>
<th>Science journalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote the achievements of the institution</td>
<td>Share results, Open Data &amp; Open Science with science community &amp; stakeholders incl. public</td>
<td>Make science meaningful</td>
<td>Teach science at all levels of the educational system</td>
<td>Inform the public</td>
</tr>
<tr>
<td>Inform about institutional activities</td>
<td>Provide information about the project</td>
<td>Involve the public</td>
<td>Prepare learners for a science based society</td>
<td>Put developments in science into societal context</td>
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<tr>
<td>...</td>
<td>Internal communication</td>
<td>Help them access &amp; use open resources</td>
<td>Foster the next generation of scientists</td>
<td>Provide independent (incl. critical) reporting</td>
</tr>
</tbody>
</table>

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September 8, 2021, hanna.sathiapal@hnw.ch
Public science? Doubts

“Transparency in science does not mean that laymen can do anything with the results.”

In: Doubts about the vision of open science for all, Horizonte 127, Nov 2020
It takes a lot!

What would people need to be able to make use of the new opportunities through Open Data and Open Science?
Research in science learning outside school

Recommendations for policy makers:

Access and equity in science education outside school requires a systemic approach.

Tinkering activities involving heliophysics data at Raumschiff – the Maker Space for Astronomy raumschiff.org

SySTEM 2020 has received funding from the European Union’s Horizon 2020 Research and Innovation Programme under Grant Agreement no. 788317

Public Engagement in Times of Open Data and Open Science September 8, 2021, hanna.sathiapal@fhnw.ch
Learning ecologies

- school
- science centres
- universities
- observatories
- science festivals
- astronomy clubs
- dark sky parks
- summer camps
- telescope @home
- apps
- internet
- planetaria
- libraries
- media
-玩具
- TV

music

- music
- playing instruments
- public performances
- recordings
- sound equipment
- music symbols
- musicians

astronomy

- astronomy
- telescopes
- observatories
- planetaria
- science centres
- libraries
- schools
- universities
- summer camps
- dark sky parks
- science festivals
Pathways to long-term engagement
Project proposal: Open Science Clubs

Interlinking the learning landscape around astronomy
Pathways to astronomy at an Open Science Club

- Meet with peers, share interests, ideas, experiences
- Visit exhibitions, observatories, science centres, science fairs
- Host national & international challenges, e.g., space app challenge
- Meet with other Open Science Clubs
- Invite scientists to science cafés, talks, workshops
- Organize events for families, friends, the public, media
- Liaise with astronomy clubs
- Participate in international events

Core activity: citizen science
Universities’ roles in Open Science Clubs

1. Direct interactions
2. Contributions to the learning landscape
3. Data products and tools
SKA Switzerland and the Open Science Clubs project

- Both of national scope
- Ideal partners in public engagement

5 Open Science Clubs to start with in all regions of Switzerland
Thank you!

Please get in touch!