

CITIZEN SCIENCE

SDG

CONFERENCE

14.–15.10.2020

Knowledge for Change: A decade
of Citizen Science (2020–2030)
in support of the Sustainable
Development Goals

Openness as a pathway to support SDGs : an exploration of science-society mediation spaces

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Disclaimer

This presentation is a personal thinking and does not in any way engage the institutions to which I am affiliated.

Outline of my presentation

- › My standpoint
- › I- Decolonial approach of SDGs
- › II- About Openness
- › III- Citizen science and science-society mediation spaces
- › IV- Practical examples: an exploration of the maker movement in Africa
- › The challenge: Recognition of citizen science initiatives.

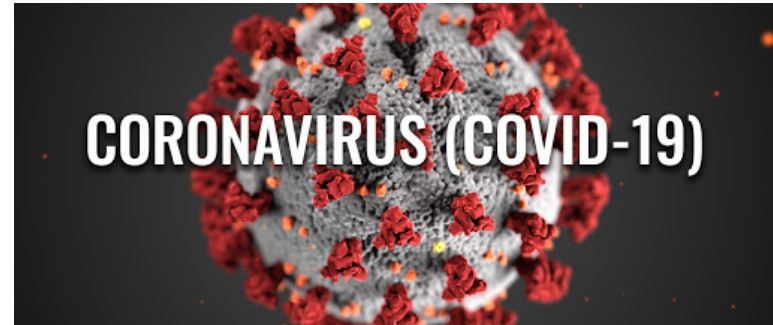
Decolonial approach of SDGs

Be confident!

This is not a call to rewrite SDGs, but an invitation to seize the opportunity this decade (2020-2030) offers citizens, to fully contribute in the achievement of fair and contextualized SDGs.

Is global governance relevant to address local development needs?

Learnings from the COVID19 Pandemic



Should we portray SDGs as imperialists?

A small group
(international experts, big
institutions, universities)

Defines
SDGs for

All the world
Citizen

Can we still reverse the process in this decade?

We can make efforts, **and openness seems to me to be an interesting avenue to explore.**

A small group
(international experts, big institutions, universities)



Define
SDGs for

Citizens

About Openness

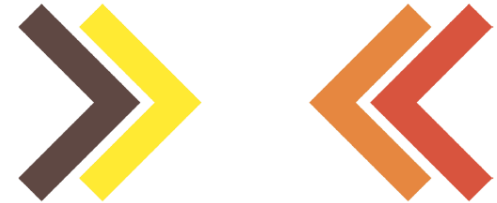
According to Chan et al. (2020), considered together, the three following dimensions of openness constitute Open Science:

1. openness to publications and data,
2. **openness to society**
3. openness to excluded knowledge and epistemologies



Open Science Beyond Open Access: For and with communities

A step towards the decolonization of knowledge



Prepared for the Canadian Commission for UNESCO
By Leslie Chan, Budd Hall, Florence Piron, Rajesh Tandon and Lorna Williams
Ottawa, July 2020

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Citizen science and science-society mediation spaces

Citizen science is a good approach to contextualize SDG and anchor them in Commons. However, we must avoid falling into the trap of the **instrumental citizen science** by exploiting citizens through their pseudo-participation.

That is why science-society mediation spaces are so important to enable a fair engagement of citizens in support of the SDGs. Such spaces can be :

- events, associations,
- public debates bringing together researchers and non-researchers,
- popular journals and magazines,
- virtual platforms,
- visits by researchers to schools or high schools, information watch activities,
- **science shops and makerspaces;**
- Etc.



Practical examples through the maker movement in Africa

- The maker movement is a combination of the hacker ethics, Do It Yourself and the freedoms conveyed by free software.
- The collaborative manufacturing spaces where the maker movement is taking place are known under different names such as makerspaces, hackerspaces, fablabs, etc.

AfricaOSH summit

- › Africa OSH Summit is a grassroots effort to explore alternative paths to education, research, scholarly communication, science and technology.
- › AfricaOSH is a community of makers, hackers, practitioners and researchers of government officials, private sector players and civil society across the African continent, the global south and the world.
- › Africa OSH Summits
 - › 2018 –Kumasi, Ghana (Kumasi Hive)
 - › 2019 –Dar es Salaam, Tanzania (STICLab)-2020
 - › (2020 –2021?) –Yaoundé, Cameroun (MboaLab)



**AFRICA
OPEN SCIENCE
HARDWARE**

<http://africaosh.com/>

African Makers Against COVID-19

August 5, 2020

Report Open Access

African Makers Against COVID-19: Exploring Open Source Responses to a Global Crisis

Adzaho, Gameli; Christensen, Michelle; Conradi, Florian; Bellinger, Katharina; Wirsching, Lukas; Owoyele, Rashid

Initiated by Africa Open Science & Hardware, the Berlin University of the Arts (Weizenbaum Institute), the Technische Universität Berlin (Einstein Center Digital Future), and in dialogue with the GIZ Togo and GIZ Ghana, the inaugural 'African Makers Against COVID-19' digital roundtable on 29 May 2020 brought together makers responding to the pandemic across the African continent to discuss approaches, opportunities and challenges. By identifying and connecting makers, researchers and development professionals, we sought to highlight:

A report by Gameli Adzaho (Founding member of AfricaOSH)

<https://zenodo.org/record/3973724#.X4gak0JKi>

w4

Nadine Mowoh, Mboalab in Cameroon - How to coordinate humanitarian COVID-19 response?

posted by @rebel | 17 sept. 2020

This week's debate was around the important discussion about coordinating international efforts in the humanitarian field. Representatives from initiatives around the world brought their experiences on how each can support and learn from each other's efforts on the ground, and what resources are available to build upon for effective resource as a global community.

In this session of VR, Nadine shares the importance and challenges of organizing people or volunteers into groups and finding out information available for the local population. She also mentions that not sharing the data on educational resource would not help the population, so they found ways to be able to share with locals.



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Environmental & climate change

- › Engaging Kids in Environmental Issues using Open Science



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Open source hardware

- **The DIY incubator**

Incubators are useful piece of equipment, however, most of them are expensive to get in biology and medical labs in many places in the Global South.



Other activities at Mboalab

- > [MboaLab](#) is community Lab and makerspace based in Yaoundé, Cameroon. Mboalab always pays attention to the needs of local populations and strives to empower them with the tools they need to tackle their own problems.

Community education



Library



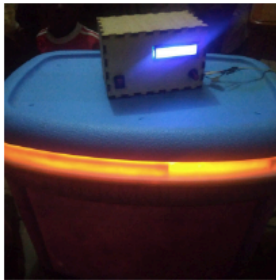
Training for promoters of scientific journals



Open science for peacebuilding



DIYBio



Medical diagnostic



Enzyme production



Collaboration with local universities



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The challenge: Recognition of citizen science initiatives.

- ›The discourse on citizen science is very beautiful, however, many of the resulting initiatives often remain as prototypes that must ultimately be validated by experts.
- ›So we are back to our experts. In other words, our efforts seem to be in vain and we are in dead-end street.

- ›Hence the call for experts to get out of their offices and the ivory towers of universities and open up to other knowledge: this is the third dimension of Open science: **openness to excluded knowledges and epistemologies**

Thanks