Understanding opportunities and barriers of open and collaborative science for development in the global South (OCSDNet)

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1. Synthesis

The Open and Collaborative Science in Development Network (OCSDNet) officially launched on October 15, 2014 at the iHub, Nairobi's innovation space for the technology community. Since the last progress report, submitted in November 2014, OCSDNet has awarded 12 sub-project grants representing 26 countries in the Global South (3 proposed projects from Sub-Saharan Africa, 1 from the Middle East, 1 from the Caribbean, 4 from Latin America, and 3 from South, East and Central Asia). The projects have all largely began activities from March 2015. Details of each project and the full proposals are available on the OCSDNet website: http://ocsdnet.org/projects/.

The sub-projects allow us to begin gathering observations on whether, and if so, the conditions under which open approaches to research and collaboration could lead to various development outcomes in the Global South. The selection of case studies was guided by a hybrid framework derived from the Institutional Analysis and Development (IAD) framework (developed by Elinor Ostrom and colleagues) with integrated theories and models from related areas of openness studies, including Open Source, Open Access, Open Educational Resources, Open Data and Open Innovation. This integrated framework serves as our "Theory of Change" (ToC) that guides the continual design and development of the network. The ToC also informs an on-going development of an evaluation framework for the sub-projects, to assess the overall effectiveness of the network.

2. Network Objectives and Emerging Results

The specific objectives of OCSDNet are to:

1. Support new projects and activities so as to generate evidence on whether, and if so, under what conditions open approaches to science can enable research that contributes to development goals in the Global South.
2. Build a community of open science practitioners and leaders in different contexts, by nurturing an interactive research network.
3. Identify the structural, technical, policy and cultural barriers for individuals and organizations to participate in OCS and determine how these barriers could be addressed.
4. Contribute to the building of a new and vibrant area of study (OCS), producing knowledge to inform policy and practice, and a community of researchers who identify themselves as working on OCS.

In the past 12 months since the network project was launched, we have made significant progress towards achieving the objectives. Specific evidence emerging from each objective area is detailed in the sections below.

Towards Objective 1: "Support new projects and activities so as to generate evidence on whether, and if so, under what conditions open approaches to science can enable research that contributes to development goals in the Global South."

After receiving 91 concept note applications from across the Global South, and selecting 14 shortlisted projects for the full proposal development workshop held in mid-October 2014, we have awarded 12 sub-grantee projects. The project sub-grant agreement documents were largely signed in February 2015 and most project activities commenced in March 2015. An initial payment to all sub-grantees has been made. As the coordinators, we have also been helping to link some of the projects with relevant initiatives and opportunities such as EIFL (Electronic Information for Libraries) and Center for Open Science.

In designing and implementing M&E approaches for the network, the Coordination Team has sought to use a methodology called 'outcome harvesting,[1]' which focuses on the continuous collection of data in different forms, throughout a project's life cycle. This is different to most forms of project evaluation, which tend to focus on monitoring pre-established indicators at set intervals - such as quarterly or annual cycles, with most evaluation being performed at the project's completion.

Moreover, instead of focusing solely on 'outputs' produced, OCSDNet is focused on understanding processes of learning and reflection as a whole, in recognition of the fact that any eventual conclusions presented by the network have been shaped by an intricate process of collaboration, engagement and reflection by a diverse group of members. Current techniques used to capture progress and learning are:

1. **Short, monthly online reports** that are reflective in nature and open for all members to read; (monthly reports have so far been collected for February, March and April 2015. May reports are rolling in now)
2. Iterative and timely **blogs**, in response to arising risks and best practices in OCS;
3. **Personal/team reflections** from events and engagements relevant to the network.
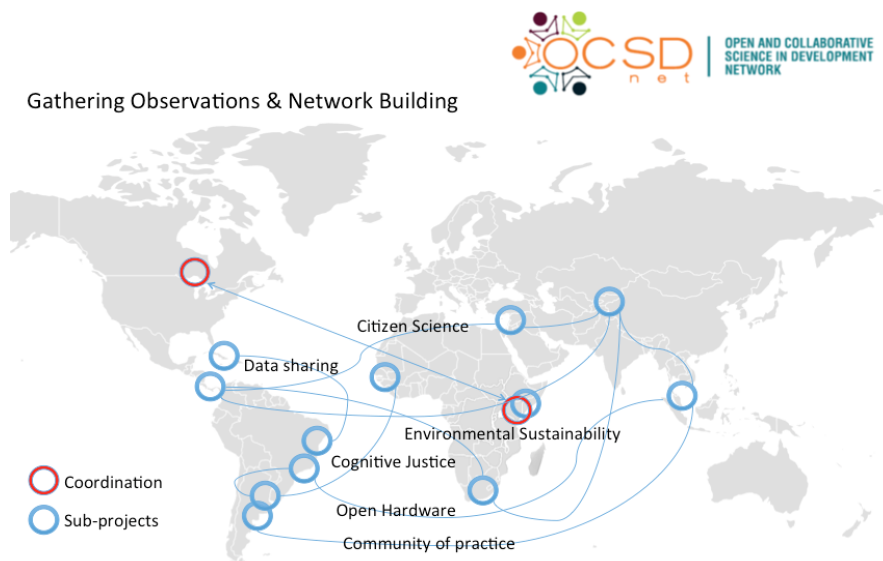4. **Network engagement via online tools** - group calls, email, website forums, etc.

Information provided by the monthly reports and direct correspondence with sub-grantees has demonstrated that all projects are proceeding well with meeting the milestones proposed in their initial timelines.

At present, OCSDNet is in the final stages of **negotiating an MoU with DECI-II.** Within this MoU, the DECI-II team has agreed to work directly with one of OCSDNet's research coordinators, based in Cape Town, to enhance the network's communication and M&E strategies. Given that the network already has its own tools and processes in place, we are looking forward to the opportunity to improve upon the tools that we have, and particularly to contribute towards refining and enhancing our chosen methodology of "outcome harvesting." In addition to the training and buy-in of the network's coordination team, one of the sub-grantees based in Latin America has also expressed initial interest in working with DECI-II for M&E capacity development.

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[1] See Wilson-Grau, R. & Britt, H. (2013). Outcome Harvesting. *Ford Foundation.* Retrieved from
http://www.outcomemapping.ca/resource/outcome-harvesting

Towards Objective 2: "Build a community of open science practitioners and leaders in different contexts, by nurturing an interactive research network."

The OCSDNet network website gathers greater traction and has begun being used for dissemination of content from subgrantee projects. The current site includes a blog as well as topical forums, providing space for interested parties to (1) share and access resources, (2) engage in discussions about issues related to openness and development, and (3) stay informed about the network activities. The next step is to use the site to crowdsource content beyond that produced by subgrantees (so that the site is not just one way in dissemination but is also a content collection mechanism). In the following months, the OCSDNet Team will continue to encourage widespread participation by organizing e-conferences to stimulate various discussions around relevant issues arising from the projects. The OCSDNet social media platforms continue to gain traction with over 390 followers on Twitter and 353 Likes on Facebook.

As demonstrated in the image above, the network has begun to organically facilitate linkages across the different projects. Some of these emerging linkages include:

- Several individuals from different projects and areas of the world have been corresponding in regards to the possibility of a joint Side Event at the United Nations Framework Convention on Climate Change (UNFCCC) at COP21 in December 2015.
- A workshop hosted by CONICET to be held in June will include two other OCSDNet project representatives based in Latin America: CENIT/STEPS and IBICT.
- A "Maker" workshop to be run by HONF (in South-East Asia) in September 2015 will include OCSDNet project representatives from Camp Alatoo/UCA, based in Kyrgyzstan.

One of the sub-grantees has explicitly said,
> "*Belonging to a network helps to explain the whole philosophy and makes our project more interesting for people. It was good to have a few exchanges in the region, including a*

conversation on Skype with Mariano (CENIT/STEPS), and we have reused a part of their flyer for our presentation because it gives, in our opinion, a clear illustration of what is ciencia

abierta (open science, in Spanish)."

Open Science pamphlets, produced by CENIT/STEPS

At the same time, other members of the network stressed that the collaboration was very important for demonstrating the legitimacy of their research as well as the importance of OCS as an emerging field of study, "Having this reputable network helps to get the buy-in/support from important stakeholders. For example, one of the critical factors that helped to get support from EKACDM[2] was the reputation of the OCSDNET partners." Others commented that the 'openness' of being able to see all teams' monthly reports, "*It is nice to see the reports written by the other OCSDNet teams, so that we can somehow take part in what everyone is working on/struggling with.*"

We have also seen the emergence of "**network champions**" - sub-grantees that have taken the lead in sharing their projects' developments, reflections and resources directly with others in the network. Within the monthly reports, many of the grantees have responded to how useful they have found this sharing - both in terms of the utility of the resources/ideas shared, but also from the perspective of motivating them to work harder on their own projects.

Towards Objective 3: "Identify the structural, technical, policy and cultural barriers for individuals and organizations to participate in OCS and determine how these barriers could be addressed."

From monthly progress reports received from the sub-grantees, we have been able to extract a set of arising risks, some of which seem to be shared among a variety of the projects. A few of the projects are starting to flag a number of issues that are not fully understood in the context of Open and Collaborative Science - including how the sector interacts with themes of gender, disability and ethics, to name a few.

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[2] Enhancing Knowledge and Application of Comprehensive Disaster Management - University of the West Indies

These issues and the ones identified below all require further articulation and analysis, as more findings and reflection emerge from the sub-projects:

Resistance to openness by academic and policy environment / Challenging North-South knowledge divides
"As we said in our previous report, we find there is resistance to the issue of openness in the academic and policy environment in science. We learned we need to find out local examples that show the potential of open science practices. Somehow the feeling we perceived in the scientific and policy community is that this is an idea imported from the north but it will not be applied in developing countries. It is believed that knowledge here should be more clearly aligned to the needs of the private sector for the sake of both funding and usefulness."

Challenge of adapting openness discourse to a larger audience for real democratisation of knowledge
"...Another challenge is conceptual. We would like to critically reflect on whether the adoption of open science practices can effectively contribute towards furthering the democratization of knowledge for sustainable development or whether it will be concerned primarily with increasing the efficiency of existing scientific practices. However, when it comes to developing arguments to justify the promotion of a more diverse participation in science: should we think about productivity/efficiency arguments as a justification for a policy promotion of more diverse participation in scientific production? Or it would be enough to argue about the potential for socially more relevant outputs? Questions of this sort were at the core of our discussions."

Communicating and translating complicated OS concepts into local languages/realities:
"It was quite challenging to develop the communication materials for the communities, since we were not sure how to explain complicated concepts such as citizen science, participation in scientific research etc. to our target audience in the villages. Additionally, the terms are very difficult to translate into Russian and Kyrgyz, so that they would keep a similar meaning that is understandable. So we look forward to the first visits in April to see if the materials work!"

Challenge of working in the field of "open" science in a world of closed knowledge
"(A challenge has been the) limit of access to the Brazilian academic databank -http://lattes.cnpq.br This is a very important academic resource and an international example of public and centralized databank on academic researchers. Despite its public character, it is not in accordance with open data formats."

Working 'openly' and 'collaboratively' can be time-consuming and resource intensive
At this point a significant challenge - although at the same time also a major strength - is the inherently participatory nature of the activities. Although we knew about this from the beginning, it appears that many future activities and decisions will depend on collective decisions that will be taken together with teachers and other stakeholders. This makes it very hard to plan ahead, at least as long as the main research topic for the citizen science activities is still under discussion. For this reason we are now working based on a step-by-step approach. When developing the proposal, we were not sufficiently aware of these causal chains, which leads to changes in the order in which the activities are being conducted

We have also noted a risk of duplication of data repositories. OCSDNet is working together with the Confederation of Open Access Repositories and The Latin American Council of Social Sciences (CLACSO: http://www.clacso.org.ar/) to put together a proposal on using existing repository networks around the world to serve as the platform for open research and dissemination. The idea is to build "value added services" on top of data/research repositories that would enable different communities to validate quality, provide mutual support, and most importantly, track usage of various outputs throughout the research lifecycle. Among the "value added services" we are planning are new "metrics" tools that would

allow better tracking of usage and reuse of materials, not just citations. This is really to address the issues of measuring "impact" raised elegantly by one of our sub-grantees in her blog post.[3]

The Research Principal Investigator is also working with IDRC on an open data pilot and it is hoped that the IDRC pilot and aforementioned work with other actors will converge in order to minimize duplication and maximize resources.

Some seeds of the repository proposal were present in this presentation:
> Reimagining the role of Institutional Repository in Open Scholarship
> Leslie Chan's Keynote at the OpenAIRE and COAR Joint Conference Open Access: Movement to Reality. Putting the Pieces Together. Acropolis Museum, Athens, Greece, May 12-13, 2014
> http://www.slideshare.net/lesliechan/leslie-chan-coarathens-keynote

Towards Objective 4: "Contribute to the building of a new and vibrant area of study (OCS), producing knowledge to inform policy and practice, and a community of researchers who identify themselves as working on OCS for development."

Along with highlighting risks that have arisen thus far, monthly reports submitted by project teams have also outlined a number of practices and opportunities that have seemingly helped to facilitate the successful advancement of OCS research. Indeed, as more and more of these findings emerge, they will act as key points of reflection in determining best practices for OCS researchers as well as further engagement with key stakeholders - including policy makers, academic communities, development practitioners and others.

One of the key learnings that has emerged is the importance of considering openness as a 'mindset' or an attitude. 'Openness' cannot merely be confined to just one area of work or life, but is instead a concept that is complex and multi-layered, an emerging philosophy that seeks to create a new system of research and dissemination based on transparency and collaboration. As one of the sub-grantees neatly describes:

> *"We feel sometimes all this openness discourse is mostly about software and online networks. But, what we really need to do here in the field is to work on "attitudes". It takes time. Been reflecting a lot about the importance of promoting the right mindset, a change of attitude toward science (more openness in the community to the elites and scientists, and more openness in the academia to sharing and co-creating with the community). And how a lot of this comes from our 10+ years of having been educated in a formal schooling system. So a more open education in all senses is key. **Openness is really a mindset.**"*

This realisation, consequently, has an important impact on the ways in which OCSD proponents seek to engage and communicate with key influencers - including policy makers.

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[3] See http://ocsdnet.org/the-evaluation-of-science-and-social-interest/ for the blog post on Evaluation of Science and Social Interest.

Moreover, while this report previously identified the importance of network-level "champions" for increasing levels of member cohesiveness, engagement and productivity, another important trend to emerge is that of **identifying and supporting *local* champions,** at the community-level, for advocating the importance of open science for developmental outcomes. Already, in the case of a sub-project entitled 'OCS, Empowerment and Justice in French Speaking Africa and Haiti," we have seen Thomas Mboa, a junior researcher from Cameroon, emerge as a key leader in promoting interest in OCS, locally. Indeed, Thomas wrote a blog[4] for the network, recounting the present difficulties that Cameroonians face in accessing relevant and timely research resources, while noting the important potential that open access and OCS could have in the lives of university students. At the moment, the project has acquired quite a substantial social media following - with over 800 'likes' on Facebook, and lively discussion and resources being shared amongst French-speaking African and Haitian students.

Another best practice arose from the detailed actions and reflections of one project team after encountering issues with ethical clearance from their institution's Internal Review Board (IRB). Due to the nature of OCS, which generally promotes openness and sharing around generated research data, some project teams revealed that their respective IRBs had raised concerns around data privacy issues that could potentially emerge from this form of sharing. Moreover, since the majority of projects within the network contain elements of both natural and social science (and often with a focus on participatory methodologies), some IRBs simply did not know what measures should be in place for reviewing the research plan. In at least one case though, the sub-grantee team made the IRB process into a key opportunity for negotiation and learning for both the research team *and* the hosting universities:

> *"The ethics procedures presented an interesting opportunity to open a conversation with the universities as well as the government in regards to Intellectual Property Rights and Indigenous Knowledge Systems.* **Rather than viewing the ethics procedures as a simple requirement to 'tick off' we have viewed it as a joint conversation to explore some key areas.** *The nature of our research means we cannot foresee all issues and problems that may arise, thus our focus of being mindful of the process and honestly reflecting upon ourselves and our findings is crucial. University of Cape Town (UCT) Research Ethics Committee (REC) commented that being sensitized to possible problems is key, and also that if problems arose which we can't solve that we can reach out to them for advice. Thus, they could be a useful resource going forwards. They also commented that our research methodology provided an interesting case study for them, as it was interdisciplinary, joint with an NGO, and also the first they had seen using Participatory Action Research (PAR)."*

As a network, we *do* recognise that there are indeed ethical issues engrained in processes of openness, particularly when working with communities that have been traditionally marginalised from mainstream processes of knowledge production. For instance, one project seeks to understand the ways that Indigenous knowledge can be harnessed for a better understanding of the effects of and mitigation practices around climate change; while also recognising that full 'openness' of this knowledge could lead to its appropriation away from the indigenous communities who have created it. Thus, a **strong**

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[4] See http://ocsdnet.org/project-soha-extended-a-helping-handand-we-reached-out-and-grasped-it/ for Thomas's blog on the potential of OCS in Cameroon

understanding the ethical dimensions of Open Science for development based on specific local contexts and realities has been identified as an essential component of legitimate and ethical OCS in development practices.

In terms of next steps for the network, one outcome of the ICTD2015 conference[5] was a clear **need for an OCS manifesto.** During discussions with project teams in attendance, several OCSDNet members indicated challenges in explaining the OCS concept in everyday language(s) to their research participants and communities. The creation of a manifesto for the network, generated through collaborative e-debate and joint writing sessions with sub-grantees, would help to lay out the explicit vision for the network, as well as further articulating and refining our shared understanding of just what *is* open and collaborative science. Once we have a draft outline of the manifesto created, we plan to put out a call to the wider Open Science community for debate and endorsement.

With regards to policy, the South African government released a call for public comments on the Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill, 2014[6]. One of our sub-projects has contributed to the bill[7], as well as a blog post written in a more accessible way for the public. The team's approach was to engage with the IKS Bill in a sympathetic and constructive yet critical manner. The Bill's intention to establish a sui generis approach to the protection of indigenous knowledge was welcomed. However, it was also noted that historically indigenous knowledge has been characterized in the public domain in order to appropriate such knowledge. Given such histories, the IKS Bill raises concerns over how to meet the interests of indigenous communities and attend to the interests of third parties to access such knowledge. These tensions could be addressed by developing a robust set of exceptions and limitations.

Another of our sub-projects has also been engaging closely with several Kenyan government bodies including the National Commission for Science, Technology & Innovation (NACOSTI), Ministry of Education, Science & Technology, and Kenya Industrial Property Institute (KIPI). The sub-project has an MOU with NACOSTI and under the MOU NACOSTI will now be a formal partner on the project. NACOSTI will attach some of their staff to the project and the Director General will be one of the advisors on the sub-project. This process will ensure that the government body feels buy-in to the project and process and learn along with the researchers with the aim that when the project eventually ends, there is someone within the Commission that has the drive to push forward.

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[5] See http://ictd2015.sched.org/ for more information about the conference
[6] See http://www.gov.za/sites/www.gov.za/files/38574_gen243.pdf for the Bill.
[7] See http://ip-unit.org/wp-content/uploads/2015/05/IKS_PromotionProtectionBill2014_UCTComments_final.pdf for the Bill comments.

3. Project outputs and dissemination

Between November 28th, 2014 - May 27th, 2015, we have the following outcomes and outputs:

Conference Presentations/ Speaking Engagements

Upcoming

- Liber 2015, London, June 2015 http://www.liber2015.org.uk/

- ICTS AND SUSTAINABLE DEVELOPMENT IN THE CARIBBEAN TRACK AT AMCIS (Puerto Rico, August 2015; http://amcis2015.aisnet.org/2-uncategorised/46-icts-and- sustainable-development-in-the-caribbean-track)

- Science in Society Conference (Chicago, Oct. 2015; http://science-society.com/the-conference?utm_source=Y15CFPB&utm_medium=Y15CFPB&utm_campaign=Y15CFPB)

- 4S (Society for Social Studies of Science) Annual Meeting (Denver, Nov. 2015; http://www.4sonline.org/meeting)

Recent

Tech4Dev Conference, Switzerland Lecture: Towards a Global Knowledge Commons: Why Open Access is Necessary but not Sufficient (Leslie Chan at NTU, Singapore) Lecture on Scientific publications and open science (lecture by Florence Piron, Sub-grantee, for Haitian/West-African junior researcher audience)	http://cooperation.epfl.ch/2014Tech4Dev
Tropixel Ubatuba Open Science festival (hosted by sub-grantees in Brazil; intro by Leslie Chan)	Event program: http://tropixel.ubalab.org/en/tropixel-open-science
"Festival of Education" in Bishkek, Kyrgyzstan (Project presentation by sub-grantee)	
ICTD Conference, Singapore (break-out session led by OCSDNet members and coordinators)	http://ictd2015.sched.org/
Force11 International Conference 'Valuing the Diversity of Scholarly Impact in a Networked World'	https://www.force11.org/meetings/force2015/session-abstracts/all#block-views-39222461823cebeb50b283b1f9caa352

Conference "Critiquer la science aujourd'hui: pourquoi, comment?", congrès de l'ACFAS, 25-23 May, organized by Florence Piron, including papers by Florence and Thomas Mboa and other research assistants, about Open science in The Global South	http://www.scienceetbiencommun.org/?q=node/82

Articles - Network Level

- "Network targets open research's development impacts" http://www.scidev.net/global/networks/news/network-open-access-research-development-impact.html
- "Open Science Network to spur development launched" http://m.scidev.net/sub-saharan-africa/networks/news/open-science-network.html
- "What role for open and collaborative science in development?" http://www.universityworldnews.com/article.php?story=20140905132026576&query=OCSDNet)

Project Announcements / Sub-project articles:

Type of media	Title	Link
Sub-project Wiki Page	Pesquisa:Ciência Aberta Ubatuba	https://pt.wikiversity.org/wiki/Pesquisa:Ci%C3%AAncia_Aberta_Ubatuba
Sub-grantee project announcement	Aprobación de un proyecto de Ciencia Abierta y Colaborativa en dos Bosques Modelo	http://www.bosquesmodelo.net/es/aprobacion-de-un-proyecto-de-ciencia-abierta-y-colaborativa-en-dos-bosques-modelo/
Sub-grantee project webpage	PROYECTO CIENCIA ABIERTA COLABORATIVA	http://www.bosquesmodelo.net/category/ciencia-abierta/
Sub-grantee project announcement	Open Collaborative Science and Landscape Governance	http://www.imfn.net/open-collaborative-science-and-landscape-governance
Zotero shared resource library on Open Science	Ciencia abierta y colaborativa para el desarrollo	https://www.zotero.org/groups/ocsdnet_en_espaol__ciencia_abierta_y_colaborativa_para_el_desarrollo/items
Sub-grantee project	KYRGYZ MOUNTAINS ENVIRONMENTAL	http://camp.kg/en/kyrgyz-mountains-environmental-education-and-citizen-

announcement	EDUCATION AND CITIZEN SCIENCE PROJECT (KMEECS)	science-project-kmeecs/
Facebook Group	Open and Collaborative Science in French Speaking Africa and Haiti	https://www.facebook.com/groups/13988 75467085123/
		http://www.scidev.net/america-latina/desarrollo-de-capacidades/opinion/ciencia-abierta-beneficios-colectivos.html
Youtube video interview feedback on participants who had attended a sub-project event	Open science as a collective tool of empowerment and cognitive justice in Haiti and French-speaking Africa: building the roadmap.	https://www.youtube.com/watch?v=Jgzc0 jhL-yI
Sub-project website	Open and Collaborative Science in French Speaking Africa and Haiti	http://www.projetsoha.org/
News article in response to conference on open science in Haiti	L'Université d'Etat d'Haïti en route vers la science ouverte	http://lenouvelliste.com/lenouvelliste/artic le/143176/LUniversite-dEtat-dHaiti-en-route-vers-la-science-ouverte
Sub-grantee project announcement	Open and Collaborative Science in French Speaking Africa and Haiti	http://www.scienceetbiencommun.org/?q =node/77
New article in response to lecture in Port au Prince	Florence Piron de l'Université Laval à Café Philo	http://lenouvelliste.com/lenouvelliste/artic le/142959/Florence-Piron-de-lUniversite-Laval-a-Cafe-Philo

Partnership / Collaboration Requests - Network Wide

- Mozilla Science Lab
- FORCE11 (The Future of Research Communication and E-Scholarship)
- African Centre for Technology Studies

- OCSDNet has joined the Open Data pilot at IDRC
- Centre for Open Science
- DECI2
- EIFL
- CAMES (with one sub-grantee)
- AUF (association des universités francophones) : a sub-grantee obtained a grant to organize a symposium on Open science in March 2016, Port au Prince (Haiti)

6. Impact

Based on our interactions with stakeholders in Open Science as well as the shortlisted project organisations and individuals, the vast majority see this research and network as something of great value to communities, researchers and practitioners in the Global South and Global North. During each of our network events, we have been gathering reflective responses from those present, in an attempt to understand and capture the impact of the interactions. Some of these reflections are articulated below:

Successfully building on the different backgrounds and strengths of network members:

"As someone relatively new and somewhat inexperienced to the Open and Collaborative domain at first I was wondering if I fitted in as a researcher with a background in computer science and who has spent most of my time doing "design science" researcher. However, I enjoyed the process immensely and as Pablo mentioned the diversity of backgrounds and cultures provided an enriching experience. I hope my background can continue to provide some different perspective to the process and that we all continue to engage in dialogue that will bring these perspectives together to develop some useful solutions."

"I can confess that I did not fully understand the ultimate reason indicated in the call, that 'Any Concept Notes that are not represented at the workshop will be disqualified from final proposal submission/consideration.' Now, I see that it was not only a formal requirement, but also a substantial step in the building a new network and, last but not least, a very pleasant activity! ***We are very heterogeneous: different countries of origin, different disciplines and backgrounds, different experience and different ages. And it's really good."***

Creating a space for collaborative and innovative discovery:

"This space is a rare thing - a space where there are truly deep intellectual and technical challenges and where progress can make a real difference. ***To me the best scholarship is playful****. It is serious play with real consequences but just as a child does, a researcher is testing ideas and boundaries, exploring the ways in which it might be possible to think about the world. At the root of both is the joy of discovery. I wanted to thank you all for reminding me of that."*

Creation of a stimulating intellectual space for junior researchers:

"As I get back into the groove of things here in Thailand and reflect upon my experience in Nairobi, my emotions are nothing short of ecstatic, excited, and hopeful for what's to come for this network. As a young scholar (and maker and citizen scientist), ***I am excited to be beginning my career with an open and collaborative lens as diverse, experienced, and interesting as the***

one represented by the participants of the OCSD Network. I recognize, though perhaps I cannot yet fathom, the amount of work you have all done to reach this point in your careers, and I can't help but feel such gratefulness that I was able to learn immensely from you all during this short and intense time in Kenya. All of this learning will go towards incorporating greater strength, cohesion, and grounding into the research team and full proposal for the MOBIOL project"

At present, the core impact of the network can be seen in the internal cohesion that we have sought to establish amongst and between members of the network and within/between the Coordinating Team and Advisors. Given the positive feedback that we have received from members of the network, we seem to be working effectively towards creating a safe and productive space that minimizes the vertical power dimensions present in more traditional scientific communities and funder-donor development initiatives. By creating a working space built on iterative reflection and transparency, we have sought to allow for opportunities to re-think and revise work plans and projects as learning develops, instead of covering up mistakes.

As the projects develop and findings begin to emerge, we will begin to spend more time and resources expanding the external impact of our network by developing key partnerships and communication strategies with targeted external stakeholders, including relevant policy makers.

7. Recommendations (for IDRC)
- Advice on tools and perspectives for integrating a gendered approach into network monitoring / research analysis would be appreciated. At the moment, we have realised that the majority of sub-projects in the network are headed by women. We think that Open Science research could provide a more inclusive space for both women's and men's voices and it would be great to have someone with a background in gender analysis to provide us with advice and insight on how to ensure that we are developing gender responsive projects and M&E processes within the network.
- Advice and/or resources on ethics protocols for projects who do not have Internal Review Boards (IRBs) in place would be useful. While most of the projects have gone through official IRB processes within their respective institutions, there are some instances where this has not been the case. It would be great to have IDRC's insight on what sort of support and reflection could be available for supporting these projects.
- Better facilitation of linkages and interactions with other relevant projects funded by IDRC. We have seen that there are other IDRC-funded networks doing work that likely overlaps with OCSDNet. We would love to have more opportunities for engagement with them to share our learning.
- Translation funding into local languages from the South. The sub-projects are working in diverse languages - including French, Spanish, Arabic, Kyrgyz, Portuguese and others. While English is the common language amongst researchers, we recognise that in order to be inclusive, it is important to represent the communities that we work with. Additional funding and/or access to IDRC's translation services would be most appreciated.