

OPEN ACCESS AND INFORMATION FOR DEVELOPMENT: SUMMARY OF ONLINE DISCUSSION MESSAGES

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Week 1 Summary

The first week of this discussion has revealed how difficult it is to separate the topic of Open Access (OA) from bigger issues of development and social justice. International trade, corporatization, colonization, corruption, and cultural differences all affect how much people around the world worry about creating/finding/using OA materials. Judging by the varied and busy discussion, such conversations about how we use information globally are an integral part of understanding how different cultures use and interpret what they use and contribute to open access. No doubt these discussions should take place more frequently.

Three main themes emerged over the course of the week. They will be outlined here and then discussed in more detail in the sections following. First: it is very difficult to worry about Open Access when people lack the basic infrastructure (electricity and Internet access - as well as food, water, safety, etc.) to use it. Second: where the infrastructure does exist, Open Access is both possible and worth pursuing. There are many different ways Open Access is used and interpreted; it influences development work, scholarly research, adult education, government information, and more. Third: content has to be reliable, valid, and, above all, relevant. Many decisions about the relevance of information are made on an individual and subjective level, based on the user's context. However, relevance also means that the information or development model has to be adaptable to local strengths and needs.

Information Infrastructure

Without proper infrastructure, the Open Access issue is not important. Olutoyin Meijiuni discusses this issue at some length in her paper, and many discussion participants were quick to challenge popular OA assumptions by pointing out that the people who lack the ability to even use OA materials won't care what it's about. Basic factors like poverty, malnutrition, lack of living space, disease, and war make a discussion about Open Access seem trivial. And Open Access is a distant world for those people who lack easy Internet access, have little IT infrastructure, are subject to strict copyright legislation, and have a difficult time getting a decent education. Low literacy rates and gendered access to education are realities in much of the Global South. The struggle at this level is much more basic. As one person said, "OA has tremendous potential ... However, how can this potential be enhanced or realized for the common good ... in light of the fact that the most basic requirement for it to work well is oftentimes missing?" The high cost of internet access was cited several times, in both the discussion and the papers (see, for example, Batchuluun Yembuu on Mongolia). One African participant proposed a continued push for "trade justice, fair trade, just and equity in the relationship between global North and South and creation of conducive environment for operation for the third world."

Open Access

Where necessary information infrastructure exists, Open Access is seen as an important part of communicating both globally and locally, though people have different ideas about what it should be based on the work they do. Development workers tend to share information quite freely, particularly through organizations such as Eldis. Arlene Whetter found that in Vietnam, development workers wanted information that was country-specific, "practical (i.e. training manuals, summaries or overviews of current situations, lists of ongoing projects in a certain field, case studies), and up-to-date." Open Access can also play a significant role in enhancing the training of development workers, as Lydia Anjiah points out in the Tanzanian context. OA materials are useful to adult educators in other types of programs (including distance education) who can share existing resources. Academics tend to prefer peer-reviewed information, and would like to see more reputable scholarly journals become Open Access, particularly as the costs of subscriptions increase. Open Access can also refer to government information which may be kept from the public by either restrictive policies or corrupt governments.

An important part of Open Access seems to be the ability to create Open Access content. Several people spoke to the problem of how images of people from the so-called third world that are used to raise money for various projects (e.g. starving children) can be very dehumanizing and destructive. If people are able to create their own media and media representations, they may be able to use Open Access principles to offer alternatives to those dominant media images. The DidiBahini Youth Forum saw great potential for sharing experiences of positive local realities and development efforts in Nepal.

Creating & Using Open Access Content: Reliable, Valid, and Relevant Information

There was a great deal of discussion about the importance of "relevant" information. There seemed to be two views on this: first, that relevance is often personally determined and is a factor of individual choice and needs; therefore, it is mostly separate from the discussion about Open Access. Second, "relevance" can refer to making Open Access systems and resources adaptable to local needs, or, "relevant" to the local culture. Language was cited by Lydia Anjiah as a significant consideration here, given Tanzania's 126 languages and the 42 tribal dialects in Kenya. While there is a need to simplify and standardize Open Access systems (to W3C rules, for example), there is little value in imposing particular Open Access, or any development models for that matter, from one community to another. Open Access should be used, as one person from Zimbabwe said, for "finding a home grown solution to access to local research information and mechanisms for making it work." Such an approach allows appreciation of local strengths and assets that would likely be ignored if standardized processes are used.

People want access to high-quality information, but they also want to create it themselves. Dissemination of knowledge has to work both with and around existing structures - so we need to send out information on compact discs as well as on the Internet while learning to build our programs with free software as much as possible.

Open Access, as Heather Morrison writes in her introductory paper, is "free online for anyone, anywhere, to read, download, and use, providing that the author is properly cited." Perhaps we can borrow from some of the participants and expand the requirements for Open Access for our own

purposes:

- content should also be accessible offline
- content should not only be accessible but easily so: therefore, formats should be free and open, and software should be "easy to mirror, copy, use, localize"
- structures and content should be subject to local needs, preferences, and recommendations
- and finally: while we make our calls for Open Access, we should do so at the same time that we challenge both the lack of basic communication infrastructure and the commodification of public services that turns that infrastructure into a distant dream.

Week 2 Summary

As the week began, participants were invited to discuss what they have done or are doing to overcome barriers to information access, what kinds of information they are looking for, and how information can be made relevant to different groups.

Like last week, there was a general sense among participants that issues of infrastructure were very important to building Open Access. At the same time, people recognized that the two ideas are not necessarily mutually exclusive. It is, however, worthwhile to highlight the recurring problem of a lack of basic information technology infrastructure (lack of computers, internet access, electricity, and training often coupled with poverty, war, corruption, low literacy rates, and cultural barriers) which makes Open Access a secondary issues in many communities. Infrastructure is the main concern of those who do not have it. As one person said, "the right infrastructures will perform the right functions that will liberate the people and give them access that would have already been opened at the primary levels." But without that infrastructure, many will find it difficult to make use of the Open Access resources that are presently available.

Early in the week, an Indian correspondent described the knowledge exchange system (citing Prof. Swaminathan of the M.S. Swaminathan Research Institute in India) with four communication components:

- 1.Lab-to-Lab: researchers share information with each other
- 2.Lab-to-Land: citizens obtain information from researchers
- 3.Land-to-Lab: researchers get direction from citizens about what research needs to be done
- 4.Land-to-Land: citizens share information with each other

In the interests of separating the many topics we discussed this week into manageable pieces, the following summary of the discussion will be arranged around Prof. Swaminathan's system. Some of the problems and solutions we encountered cover all levels – and wherever possible, we explain what those overlaps may be.

Lab-to-Lab

Lab-to-lab is the kind of transfer where Open Access is most likely to be used before information is disseminated to citizens and other public user communities. Most documents in lab-to-lab transfers will be refereed research papers and theses, and this transfer results from both the willingness to share information and the pressure to do so from the increasingly high costs of journals and

subscriptions (as one Ugandan participant pointed out).

Several people addressed the need to make medical information a priority for Open Access, especially for work with major problems like avian flu and HIV/AIDS where Open Access could help facilitate “easy information exchange and change strategies.” Another concern is about the importance of Open Access infrastructure and the necessary standardization of metadata. Online repositories, and for medicine, PubMedCentral (<http://www.pubmedcentral.nih.gov/>) are important ways to share information among research institutions; they are also important for lab-to-land sharing.

While Open Access publishing is most often associated with lab-to-lab information exchange, the concept applies just as well to the other categories, particularly where development work is concerned.

Lab-To-Land

A lack of infrastructure can also make lab-to-land information-sharing difficult. In our discussion about the need for Open Access medical information, one person made the point that people should ask for access to the research they need: “Waiting for goodwill from the publishers should not be the only strategy. They don’t have a good incentive to cooperate. It is the responsibility of the stakeholders (the scientists and health workers) to learn to communicate with each other without a gatekeeper.” Note that this is true for all research, not just in the health care sector.

In response to this statement, a Canadian participant provided letter templates that people can use to request, directly from authors, papers that are not freely available. The sample letters can be found at the end of this summary.

These letters are not only requests for specific articles, they also encourage authors to place their research in repositories. As one participant explained, this kind of grass-roots encouragement may “feed upwards to policy makers.” Encouraging institutions to require that their researchers place their work in repositories is another very important part of making information freely available and ensuring the transfer of research to citizens and communities. One good search engine for finding information held in repositories is OAIster (<http://oaister.umdl.umich.edu/o/oaister>).

There are also many projects that aim to make development resources freely available. One example is HINARI (Health InterNetwork Access to Research Initiative at the World Health Organization) which works with publishers to provide free or cheap access to biomedical and health information to developing countries.

One problem with lab-to-land transfer method, as well as with the others, is that it requires training and information literacy instruction. While this need may be an extra burden for some, one participant pointed out that online resources are often cheaper and more up-to-date than books, so training people to use them is actually both important and economical. There is a need to “educate the educators” at secondary and tertiary levels, through workshops, peer education, and other methods, depending on the community situation and teaching environment, so that people can teach each other to use computers and online resources. There is a particular need, as one participant explained, to make this kind of instruction available to young women, whose needs are

often overlooked in such environments. Another participant told the group about the E-LIS repository of Open Access library and information science research and encouraged "development workers who have expertise in this area . . . to share their work with others through E-LIS."

Land-To-Lab

While there was not much discussion specifically about this particular form of exchange, we can address it in the context of Open Access: we do know that citizens and development workers need to demand OA from authors, publishers, and institutions. Because research is used so widely all over the world, and has become so international, efforts to support Open Access in one region must be supported by people from other places. Incorporating indigenous knowledge could also be very important for this kind of communication. The importance of sharing local knowledge was raised in the discussion paper developed by the DidiBahini Youth Forum, but we didn't explore this topic at length.

Land-To-Land

Perhaps development workers are most likely to operate using land-to-land information sharing, and for them, Open Access may be particularly important for this type of communication. It is a "horizontal transfer of knowledge" and includes development workers sharing all kinds of information with each other and with other citizens. Again, lack of infrastructure is often a barrier to communication, but as a Serbian participant explained, "I do not want to say that we should forget about developments of infrastructure because there is free software and personal computers with weaker specifications. Quite contrary, but until that will happen there are alternatives and we should use them because there is no time for waiting, since Open Access may help communities to improve health, nutrition, agriculture, education system, etc." We might add to that other cultural, social, and economic dimensions, as well.

While several people pointed out that computers are generally becoming cheaper, in many places, such as Mongolia, they still cost far more than the average person makes in a month and so, are not yet an every-day reality for most people. There was some discussion of the One Laptop Per Child program, which has potential as a user-friendly, low-electricity, environmentally-friendly networked system. But while some are optimistic about projects like this one, others say that there is still a need to ensure the computers can work on existing infrastructure and, at the same time, avoid government corruption in their distribution.

Computers are used in different ways. In Nepal, yak farmers use wireless technology "to keep in touch with their families, to buy and sell livestock, and exchange vet tips." Five communities in the country are currently connected, and people hope the network will soon be used for distance learning projects. In Argentina, the government has set up about 1,350 Community Technological Centres with equipment and trained staff. In Vietnam, government-sponsored Vietnam Information for Science and Technology Advance (VISTA, <http://www.vista.gov.vn>) has developed an agricultural CD package with information for farmers about crop plants, crop management, and animal husbandry. The story in parts of Mongolia is slightly different, where funding from organizations like the Soros Foundation helped connect schools to the Internet, but as the funds were exhausted, schools were left struggling trying to sustain their computer networks. In India,

Village Knowledge Centres (see <http://www.mission2007.org>) act as hubs to distribute information in all sorts of lab and land combinations. One correspondent declared that the future is in wireless technology, podcasting, and distance learning via iTunes U and Lectopia, and another asked if, until everyone has access to the technology, there might be a way to translate podcasts into radio or television broadcasts. While wireless technology is seen as the “future” of communication technology, the extent to which the prediction will become a reality depends a great deal on how well reliable infrastructure can be built. Other organizations, particularly from Serbia, go to schools to teach people how to use resources like Wikipedia and "train teachers and the students to contribute to the public knowledge that is free to use."

But computers aren't the only kind of technology people use to communicate. Countries such as Mongolia have satellite telephones networks, but they are so expensive (to the extent that they are only used in emergencies) that they are being slowly replaced with cell phones which are becoming both cheaper and more prevalent. However, radio and television, even in Mongolia, are still the primary modes of communication, especially for cultures with oral traditions. Participants received an extended e-mail from a Somali worker where organizations (such as the Somali Organisation for Community Development Activities – SOCDA) are trying to build civil society and develop various social capacities. There, mobile phones are also becoming cheaper than satellite phones. While only about 30% of people have home computers, most towns have at least one FM radio station.

Information in local languages is also very important to the horizontal transfer of information (and to the other forms as well). Many organizations make their resources available in several languages (the Open Knowledge Network, for example). And, as one person said, “community media also has a major role here in communicating through the same languages to the listeners for those who can not read or write.” There was brief discussion about a "coalition of translators" but there was no elaboration or expansion on the idea.

Locally-relevant information is also important. One development worker suggested that Open Access might help develop "home-grown case studies," and several addressed the need to relocalize standardized programs.

Finally...

The discussion was an excellent one for getting a sense of where global development workers stand on the idea of Open Access. Some are ready and already using whatever they can; others lack even basic electricity to turn on a computer; many are doing phenomenal work by using whatever resources they have to give people the means to go online. Although many of the barriers seem formidable, one discussion participant secured the optimism by saying, “it is our efforts as development workers that will push this Open Access agenda in the right direction.”

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Letter Templates to Request Information from Authors

If writing to an author that one either doesn't know or doesn't know well:

Dear [AUTHOR],

Your article, [INSERT TITLE], sounds very interesting. I would very much like to read it, but do not have ready access as my library does not have a subscription to the journal in which it was published. Can you tell me if you have self-archived a copy, and if so, where I might find it?

If there is no such copy, it would be most appreciated if you could send me one. If you are interested in learning more about self-archiving, please see the Self-Archiving FAQ written by Stevan Harnad and colleagues at <http://www.eprints.org/self-faq/>.

Sincerely,
[YOUR NAME]

If writing to an author who is also a friend or colleague:

Dear [AUTHOR],

Your article, [INSERT TITLE], contains some very important information, and I believe that many people could benefit from reading it. [elaborate on why you think it is an important article]. Have you thought about self-archiving a copy? [insert suggestion as to venue – e.g. URL to the institutional repository at the author's institution]. If you are interested in learning more about self-archiving, please see the Self-Archiving FAQ written by Stevan Harnad and colleagues at <http://www.eprints.org/self-faq/>.

Sincerely,
[YOUR NAME]

Projects and Open Access Resources Cited in Discussion

DOAJ (Directory of Open Access Journals): an online collection of more than 2200 Open Access journals in a variety of languages and covering many disciplines. Hundreds are searchable at the article level.

<http://www.doaj.org>

Eldis OnDisc: Eldis has over 18,000 development-related online publications from a variety of sources; the content is now being made available on CD-ROM.

<http://community.eldis.org/eldisondisc/>

E-LIS: an Open Access archive for scientific or technical documents, published or unpublished, on Librarianship, Information Science and Technology, and related areas.

<http://eprints.rclis.org/>

E-PRINTS Self-Archiving FAQ (Frequently Asked Questions): by Stevan Harnad & colleagues

<http://www.eprints.org/openaccess/self-faq/>

HINARI (Health InterNetwork Access to Research Initiative): program set up by the World Health

Organization (WHO) working with publishers to provide free or low-cost access to health and biomedical information to 113 countries.

<http://www.who.int/hinari/en/>

HIV/AIDS toolkit: from the International HIV/AIDS Alliance to support the increasing work and focus on 'scaling up' responses to HIV/AIDS. Available free either online

(<http://www.ngosupport.net>) or on CD (<http://www.aidsalliance.org/sw33972.asp> to order).

iTunes U: a free, hosted service for colleges and universities that provides easy access to your educational content, including lectures and interviews provided by Apple Computers.

http://www.apple.com/education/solutions/itunes_u/

Lectopia: lecture capture and electronic delivery system.

<http://ilectures.uwa.edu.au/>

OneWorldRadio: a global radio community sharing programmes and ideas on development.

<http://radio.oneworld.net>

OAIster: an online search engine for a "collection of freely available, previously difficult-to-access, academically-oriented digital resources that are easily searchable by anyone." Searches repositories, Open Access journals, and more.

<http://oaister.umdl.umich.edu/o/oaister>

One Laptop Per Child: have developed a \$100 laptop which will be sold to Ministries of Education all over the world and are intended to be used by children, especially in impoverished countries.

<http://laptop.org>

Open Knowledge Network: an initiative to support the creation and exchange of local content in local languages across the South, supported by a range of information and communication technologies (ICTs).

<http://www.openknowledge.net/>

PubMedCentral: the U.S. National Institutes of Health's (NIH) free digital archive of biomedical and life sciences journal literature.

<http://www.pubmedcentral.nih.gov/>

Village Knowledge Centres: a network of information kiosks in rural India "that would connect village level communities to the Government functionaries or to the market. The overall objective of the initiative is to leverage technology to reach the rural communities and convert the knowledge receivers into knowledge creators, with emphasis on user-friendly connectivity, locally relevant content and low-cost affordable technology."

<http://www.mission2007.org>

VISTA (Vietnam Information for Science and Technology Advance): website of the National Centre for Scientific and Technological Information. VISTA developed a CD with database information about cultivated crops, domestic animals, and crop plants for distribution among rural Vietnamese farmers.

<http://www.vista.gov.vn>