Planning Southern Research on Open Educational Resources (OER)

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Introduction

Increasing demand for post secondary education and increasing cost in providing educational services is challenging developing countries to find financially affordable and pedagogically acceptable solutions.   Many commentators confirm that the EFA efforts are resulting in a million of young children completing primary school education. A fair proportion of such 'completers' can be expected to seek participation in secondary schools and from there onwards, higher education. This means increased access to secondary school education and beyond is becoming and will continue to be both a social and political challenge to many emerging country governments. Table 1 illustrates participation at the Upper Secondary level between 1999 and 2007. However, access to upper secondary education and by implication higher education is still a huge gap between the developed and developing regions of the world. Sub Sahara Africa, despite phenomenal investments in and improvement of access still shows participation rates that are particularly low. Developing country governments clearly have to confront the challenges of providing greater quality access to secondary and higher education that is affordable. Fundamental to this is the need for appropriate curriculum, higher quality learning resources and materials and knowledgeable instructors.

TABLE 1: Regional Participation Rates in Upper Secondary Schooling and Transition to HE

REGION	UPPER SECONDARY GER						RATIO OF UPPER SECONDARY GER OVER TERTIARY GER	
	1999			2007			MF	
	MF	M	F	MF	M	F	1999	2007
ARAB STATES	46.5	48.2	44.8	52.1	53.0	51.2	2.4	2.4
CENTRAL & EASTERN EUROPE	80.1	80.4	79.8	85.4	88.1	82.6	2.1	1.4
CENTRAL ASIA	82.8	85.6	80.0	89.2	91.1	87.2	4.5	3.7
EAST ASIA & PACIFIC	46.3	46.9	45.8	62.9	61.9	63.9	3.3	2.4
LATIN AMERICA & CARRIBEAN	61.6	57.6	65.7	73.5	68.8	78.3	2.9	2.1
N. AMERICA & WESTERN EUROPE	98.2	96.8	99.7	97.7	97.3	98.1	1.6	1.4
S & W ASIA	30.6	35.3	25.6	39.3	43.3	35.1	4.2	3.4
S. S. AFRICA	19.4	21.1	17.7	26.3	29.4	23.0	5.3	4.7
WORLD	45.5	47.1	43.9	54.3	55.6	53.0	2.6	2.1
Source: *Source*: UNESCO Institute for Statistics, Statistical Table 5 for 2007; UIS Data Centre (http://stats.uis.unesco.org) for 1999 Notes: Shaded Area – UIS estimates **GER** is Gross Enrolment Ratios which is a proportion of participation in education of the total population of the appropriate age group.								

Unfettered and free access to high quality educational resources is an aspiration of many countries in the developing world. This is not an unreachable goal especially seen from the perspective of the many successes of the Open Source movements championed by individuals like Richard Stallman[1], Yochai Benkler[2], Lawrence Lessig[3] and organizations such as UNESCO[4], WSIS[5], Hewlett Foundation[6] and OLNET[7] among many others. This is especially the case with the growth and availability of open source products – families of technological innovations inspired by global ambitions to reduce if not eliminate the digital divide. These networked technologies are expected to further contribute to social emancipations not seen before as more and more innovations become freely available unimpeded by protective regimes.

The ways these networked technologies are put to use, often driven by passionate concerns of egalitarianism especially in the educational services, have been changing the ways in which learning resources have been made available to millions of young and old across the world regardless of their locations through community based interactive radio[8],[9] television[10] and more lately the internet[11,12]. These technologies, besides the old analogues which still are in use, include new ones such as the ubiquitous mobile telephone and popular gaming technologies, along with the increasing and growing volume of digitized content made available on the web. Both hard and software developments continue to interest pedagogues and policy makers for different reasons but with one common objective, i.e. to increase access to learning whilst improving its quality and outcomes.

A classic example of a successful collaborative technology that has brought significant change in the way individuals have contributed to content development is Wikipedia[13] and associated resources like the Wikieducator and Wikibooks that it spawned. This is only a beginning of the distance that such collaborative technologies can travel as demonstrated by initiatives such the ones undertaken by the Khan Academy[14], Curriki[15], Connexions[16], The Vietnam Foundation[17], The African Virtual University[18], OPAL[19], VUSSC[20], in the education

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[1] R. Stallman: http://fsfe.org/freesoftware/transcripts/rms-fs-2006-03-09.en.html

[2] Benkler, Y. (2005) *Common Wisdom: Peer Production of Educational Materials*, COSL Press, Utah State University, Utah, Available at: http://www.benkler.org/Common_Wisdom.pd

[3] R. Lessig in http://bit.ly/k8j2iL

[4] UNESCO (2006) 'Open educational resources: deliberations of a community of interest', *ICDE SCOP*, 11–13 June, Lillehammer, Norway

[5] WSIS: World Summit on Information Societies [http://www.itu.int]

[6] Hewlett Foundation: The William and Flora Hewlett Foundation [http://www.hewlett.org]

[7] OLnet at the British Open University - http://olnet.org/

[8] The University of the South Pacific which uses Satellites Technology to deliver university level courses and supported locally by community radios

[9] The University of the West Indies through its UWDITE system to deliver university level courses

[10] India NPTEL - *nptel.iitm.ac.in/courses.php*

[11] Thailand - *www.thaicyberu.go.th/*

[12] Malaysia – www.wou.edu.my

[13] Wikipedia - *www.wikipedia.org/*

[14] http://www.khanacademy.org

[15] http://www.curriki.org/

[16] http://cnx.org

[17] http://www.vnfoundation.org/

[18] http://www.avu.org/

sector. Similarly in the health sector, initiatives such as OSDD[21], CRDD[22], SYSBORG[23] have been equally active. Outside of education and health, encouraged by agencies such as the BMG Foundation[24] and CGIAR[25], supporters of Open Education Resources have also ventured into collaboratively developing training materials in agriculture as well as technology studies. In addition, *gaming and visualization technologies* once the purview of the entertainment industry are also beginning to find a new purpose in education; some of them are being made available as Open Educational Resource (OER) especially in the education of differently abled or disturbed learners.[26]

While to a great extent, a large part of these innovations have been taking place in western countries with their easy and immediate access to the new technologies, governments, institutions and individuals in the developing world have also been engaged in using technological innovations to broaden access to learning as well as contributions to sharing content development. Recent examples of such innovations include the *production* of OER for teacher training at the undergraduate level by the African Virtual University based in Kenya and supported by the African Development Bank; Video-based engineering and technology courses by a consortium of the world famous Indian Institute of Technologies [IIT] through a programme called NPTEL - National Programme on Technology-Enhanced Learning funded by the Government of India; the Cyber University of Thailand which delivers a whole range of post secondary programmes working, through e-Learning in collaboration with the major universities in that country; in China the Open Resources for Education Consortium[CORE][27], in Brazil the *MutiraoProjecto OER Brazil*[28] and in the Middle East the open courseware programmes of the King Fahd University of Petroleum & Minerals[29]. These technologies have enormous potential to bring social change and also have the ability to bring benefits to marginalized communities. However there are still gaps in terms of our knowledge on the applicability (do they increase access in poorly developed ICT environments?), relevance (do they contribute to enhanced learning performance?) and value (do they contribute to cost savings?) of this pedagogical innovation in content development and sharing. There is therefore   a need to undertake objective studies and evaluation of these potentials, if much of it is to be realized. Further, empirical research is also required to ensure enhancement, development and scaling up, of the innovation by encouraging further innovation, generating new and additional knowledge, influencing policy, and building research capacities**.**

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[19] http://oer-quality.org/

[20] http://www.col.org/progServ/programmes/Pages/VUSSC.aspx

[21] http://www.osdd.net/

[22] http://crdd.osdd.net/

[23]http://sysborg2.osdd.net/web/guest;jsessionid=B3F01416FB12B18CDC5F0DCBC4ABB2B6

[24] http://www.gatesfoundation.org/press-releases/Pages/african-education-resource-sharing-100105.aspx

[25] http://www.agropedia.net/

[26] http://mindshift.kqed.org/2011/04/can-gamification-boost-independent-learning/

[27]http://www.core.org.cn/en/

[28]http://br.wikimedia.org/wiki/Mutir%C3%A3o:Projeto_OER_Brazil:_Challenges_and_Perspectives#Brazilian_Project_on_Open_Educational_Resources

[29]http://ocw.kfupm.edu.sa/

Globally there has been a significant growth in the volume of license free content especially in higher education. Most of this growth has been spurred by project-based funding philanthrophies like the Hewlett Foundation, The Bill and Melinda Gates Foundation, the Kaufman foundation and institutions such as MIT and The British Open University. Studies mostly carried out in the West indicate that the uptake of OER content is somewhat uncertain. This is even more the case in the economically emerging countries, where there is both a lack of extensive production and even less use, *reuse* and *repurposing* of such material. Clearly, the lukewarm nature of producing and adopting open content is an issue, which requires attention. As an example, there is an anomaly in the presence of seemingly a good supply of OER content from sites like the Khan Academy or *Curriki* and yet their reuse or repurposing in developing countries seems to be non-existent. Many reasons are ascribed to these anomalies, which mostly are associated with context, language, institutional culture, quality, technological and standards incompatibilities as well as the newness of the OER concept[30] and the degree of granularity of the OER material. The last of these is important as often, pedagogically well designed content loose their attractiveness to reusers because of their massive strutures [MIT OCW] as against the easier mobility of smaller sized content [Khan Academy]. While these impediments are not unique to the developing world they are further exacerbated by also a lack of knowledge and indeed, motivation of how to use and benefit from OER. Anecdotal evidence seems to suggest that this is certainly the case in India where the NPTEL makes enormous resources available to the thousands of science, technology and engineering faculties of the country via videos and webcasts with little utilization outside of the IIT community. Or, for example, as in the case of Vietnam where content repositories are being built by all public universities but severely underused by the larger community. In the few instances where OER is reused or repurposed, information on its impact on the quality of content and the impact on learning outcomes is generally not known.

CHALLENGES IN THE DEVELOPING COUNTRIES

Despite the slower growth in interest in OERs in developing countries there is an anticipation that the extensive advocacy by intergovernmental agencies like UNESCO, COL, and the Foundations mentioned earlier will witness much more activity and interest in OERs in the coming decade. Notwithstanding, the time seems to be also right for rigorous research of this technology and the changing pedagogical practices it entails. Current research is centered mostly on gathering evidence relating to the practices of creating OER and their use and reuse. Even though such research has an inherent value in itself, the assumptions that access to OERs will also lead to access to good content, increase collaborative development of curriculum, reduce costs, improve learning and teaching with corollary performance gains require greater scrutiny and evidence to substantiate.

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[30] A putative analysis of regional differences associated with these issues are found in some recent reviews such as
- Paul West [2011] Background and actionpaper on OER in http://tinyurl.com/6km22zu.
- Kanwar, Asha, Uvalić-Trumbic, Stamenka, & Butcher, Neil (2011). A basic guide to open educational resources (OER). Vancouver : Commonwealth of Learning. Retrieved July 27, 2011, from http://www.col.org/PublicationDocuments/Basic-Guide-To-OER.pdf

Presently hardly any research is taking place in the South that addresses issues relating to both the tangible and intangible benefits of OER. These issues include, among other things:

1. **Learning Outcomes:** Evidence to support improvements in learning outcomes through the use of global content, which currently is not comprehensively available.
2. **Economic Benefits**: Most of the current OER initiatives, both in developed and developing countries, are project funded, raising the question of sustainability as well as uncertainties about cost benefits. A comfortably defensible business model is yet to emerge demonstrating the cost-effective use of resources when OER is applied, especially in cases where they are incorporated into the overall curriculum development budgets of institutions.
3. **Credentialling**: Evidence is still thin regarding provisions to obtain and receive academic credits especially for non-institution based learners, who need/use OER content.
4. **Rights-Related Concerns:** There is still lack of clarity at institutional level around policies on the protection of the rights of both producers and re-users of the resources under circumstances where curriculum and content are collaboratively developed. This is especially the case when nations [e.g. Brazil[31]], begin to legislate the application of OERs into their educational policies.

Perhaps among the most noticeable barriers to the adoption of OER as a valuable teaching and learning asset is the perception that adopting high quality content from the outside world is neither tenable (inappropriate for use culturally and lack of expertise to adapt) nor sustainable (costly to change entrenched educational systems). There is thus a need to undertake research to inquire into our assumptions in order to convince national educational bodies of the value of OER policies. We need to discover:

- The extent of the relationship between OER and quality, especially in the context of the re –using , repurposing and redistributing such learning resources .
- The association between quality OER and learning performance and outcomes.
- The relationships between OER usage and cost and administrative efficiencies as well as evidence of increased collaboration in curriculum and content development.
- The extent to which OER is facilitating increased cost effective access to learning.
- The nexus between learning performance and peer to peer learning through the social media, mobile and gaming technologies facilitated by licensing arrangements like the Creative Commons all of which are beginning to find a role in enhancing the learning environment
- Policies and arrangements to assess and credential, independent social learners, *outside* the formal system *by* the formal system that will help to increase access and motivate those wishing to return to learning through OER (*e.g. One recent[32] study still in progress in the UK is looking into impact assessments such as impact on autonomous learning communities, student engagement and achievement, staff workload, pedagogies, enhancement of existing open practice, among others).*

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[31] Creative Commons Post at https://creativecommons.org/weblog/entry/27698
[32] OER Impact Studies by the Joint Information Systems Committee [JISC] extracted from http://oerblog.conted.ox.ac.uk/?p=49 on 27 August 2011

Similar and more important issues require study in a southern context to provide the evidence required to convince governments and institutions that these innovations have both a pedagogical value and economic benefit.

The countries that are more advanced in using OER (such as S. Korea's SMART Education Strategies[33]) are in a more advantageous position to start addressing these research issues. However, their relevance, especially in developing country educational environments, is much more critical where the need to develop human capital is urgent and the demand for more learning opportunities is huge. These nations have to seriously consider their methods, means, strategies and resources to meet the increasing demand for post-secondary education. Their dilemma is further confounded by the ever increasing costs to provide quality services. These twin challenges of quality and cost require them to find financially affordable and pedagogically acceptable solutions. Foremost among these are the quality of teachers, content and instruction (UNESCO, 2009). So, one general hypothesis is the possibility to pursue educational quality and reach by increasing the availability and use of open educational resources and associated open source software. Increasingly there is a general assumption that technologies, such as mobile devices, the social web, and gaming are creating opportunities to manage learning and learning effectiveness. Better quality learning materials, learning environments, and learning results are potential outcomes in using these new media for education. Open educational resources, available as multi media learning objects provide a potential solution.

PANdora's OER Research

Since 2005, the PANdora network of partners in Asia (IDRC projects # 102791; 104917) has, through its collaborative and catalytic research activities, drawn attention to and promoted studies around Open Distance Learning (ODL). Towards the end of the last decade, when OERs started to become a part of the international dialogue on free access to knowledge, PANdora partners realized that those who stand to gain the most from OER reuse in the developing world face considerable barriers, stemming from a general lack of knowledge about the concept of OER and a paucity of technological infrastructure and institutional policies. Also, not much is known about who, in emerging economies are using OER, how, where and under what circumstances they are doing so , how beneficial and at what costs, as well as the legal and policy requirements for institutionalizing an OER culture in higher education. Furthermore, almost no analysis exists on whether there is a nexus between learning performance and the use and reuse of OER, as well as on all the issues mentioned above. Therefore, these issues represent a critical knowledge gap for innovating educational policy and program formulation to improve the learning culture in developing Asian countries. Thus, the second phase of the PANdora research shifted some of its focus to to re-examining the nature of "Openness" and Quality in the Open Distance Learning (ODL) domain. PANdora initiated mapping exercises to establish the nature, practice and challenges relating to the production and use of OER. These ongoing mapping exercises in Asia show that in the lower income countries (e.g., Mongolia, Laos, Cambodia), OER as a concept is hardly known and applied and there is also little awareness of the proliferation of

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[33] S. Korea's SMART education strategies extracted on 5 Nov. 2011 from http://www.advancedtechnologykorea.com/?p=8000

such freely available resources on the web. Even in middle income developing countries like Malaysia, Philippines and Thailand, OER applications have yet to take off as research based evidence supporting the benefits of OER is absent. In the case of others where there is a familiarity of the technology (Vietnam, Taiwan, China, India and Thailand) very little effort is being made to either promote the resources or finding out why there is little use of it in their respective communities. Recent on-line global conversations [*the UNESCO sponsored Open Educational Resources - an online discussion forum; WSIS Platform of Communities*] also seem to indicate similar situations in the other parts of the emerging world. Obviously, a great deal needs to be done at four levels if benefits are to be derived from these open source developments. The four levels are:

- Awareness building, promoting and advocating a greater use of OER in developing and improving curriculum and content;
- Building capacity in both the production and utilization of OER;
- Gathering research based evidence to support the growth of the OER movement through policy and legislative arrangements; and
- Determining the value of OERs under present practice and exploring its potential for further development from the perspectives of developing countries.

As well, PANdora has designed and developed an OER Training toolkit to build capacities on OER in the region in 2010. Following extensive testing through an organized workshop and seminar in Hanoi, Vietnam, in June and October 2011, respectively, and a further workshop in Penang, Malaysia in May 2011, the materials following a peer review process will be made available as an OER training toolkit through the Wikieducator and a soon to be launched portal – OER ASIA. These efforts have enabled the network to forge partnerships with other internationals, in the region and field, such as the Commonwealth of Learning, the OER Foundation, and the International Council for Distance Education all of which have strong inter-regional networks centred on distance and open education as well as OER studies and advocacy.

Like many other developing nations, Asian use of digital technologies and resources ranges from policy guided extensive use of the web and web based resources in education [e.g. S. Korea, Hong Kong, Singapore] to modest use [the middle income countries like Malaysia, Indonesia and India] and to very poor use [Bangladesh, the CLVs]. While technology infrastructure is continuously improving e-readiness and e-learning readiness has somewhat been slow. Our current PANdora Openness & Quality Assurance studies which are still in progress seem to indicate that in Asia, both OER production and use are not extensive and policy is still lacking in most countries. Our early research efforts have led us to believe that more research-based evidence is required before a widespread use of OER can be advocated.

Outside of Asia, there are several pockets of limited strength in OER development and applications in the developing world as reflected by institutions such as the African Virtual University, King Fahd University in Saudi Arabia, the *Temoa* Education Portal, Monterrey [Latin America] and in Asia, the Hong Kong based *Learn Activity*, India-based NPTEL and IGNOU [the national open university of India].

The Proposal

To explore the potential of OER for further educational development and to determine their value under present and forward practices in the "global South" of (Asia, Sub Sahara Africa, the Arab world and Latin America/Caribbean.[34],[35]) it is proposed that a major long-term multi-dimensional and faceted research project be mounted. On a broad canvass, such a research project will look at a number of aspects in their applications especially amongst low-income countries. They would include in as far as it is possible the exploration of six sets of issues, for which some of the research questions might be:

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RESEARCH FOCUS	RESEARCH QUESTIONS
LEARNING OUTCOMES	• *Who/where/how are the learners* (formal groups learning for credit, non-formal independent individuals *who can range from workers learning in non-formal environments to post graduates)* are learning in OER or OER-enhanced environments, • What drives and differentiates their learning behaviour, how can their learning performance be measured, what are the methods and tools that are needed to measure the learning outcomes of these learners? How can access and usefulness of OER be improved through use of emerging innovations of technologies (like developing better search engines and meta-data creation) and policies such as creating architecture that allows for creating, re-mixing of learning materials and credentials that *would enable community based organizations to deliver viable courses and programmes?* • What is the impact of OER use, reuse and repurpose on learning outcomes?
ECONOMIC BENEFITS	• Are there cost and other efficiencies for education delivery institutions in converting from a traditional to an OER-using environment? How are education delivery organizations maximizing efficiencies in their cost outlays? • Is there space within the OER-Open Source environment to develop business models that can contribute to both economic and community development? • Are there lessons to be learnt from the open source software movement as well as Open Access Publishing of research practice for the OER movement in terms of progressing collaborative work, which is currently not widely practiced? • How can sustainability be ensured of open source innovation in learning? Can promising relationships be built through public–private partnerships?
ACADEMIC BENEFITS	• How do collaborative arrangements in curriculum design and content development translate into easier and freer access to learning resources? • How does learning through OER provide routes for formal credentialing through structures such Prior Learning and

http://www.unesco.org/new/en/unesco/themes/icts/open-educational-resources/#topPage
[35] http://www.unfpa.org/6billion/populationissues/migration.htm

	Assessment Recognition [PLAR]?
	• How does open access assessment like Mozilla's BADGES[36] impact on recognition of skills in the work place and enrolment in formal programmes?
PRODUCTION ISSUES	• How do cross-cultural flows of information and knowledge associated with curriculum impact on OER production and reuse? • What methods and models of practice can assist in the greater production, use and reuse of OER?
UTILIZATION ISSUES	• What are the cost implications and skills requirement to adopt multi-media OERs in the South? • Do issues like 'cultural imperialism' require special attention and what are these? • What are the measurements of quality to be employed in judging the quality of 'imported' content?
RIGHTS AND POLICIES ISSUES	• What regulatory (institutional, legal) adjustments are required to merging conventions like Creative Commons and IPR to make it easy for developing nations to adopt OER on a sustaining basis and the impact of such changes on their traditional 'for-profit' suppliers of educational resources? • How do institutions accommodate, adapt and promote (through organizational policies and practice), this changing environment and at the same time measure their impact on their structures, cultures and traditions? • What are the best practices of promoting legal frameworks and policies in least developing country situations so that OER conducive environments may be developed and sustained?

By and large these questions are not exhaustive; some have been raised in the context of open distance learning earlier[37] and more recently in fora where OER has been a topic of debate in many advance economies and international gatherings.[38], [39], [40]. Their inclusion in the above indicative listing is to reflect on the range of the research that requires consideration in depth and in a developing country environment.

Roundtable Proponents

The Wawasan Open University, a key partner in the PANdora network in Asia, proposes to bring together leading advocates and researchers interested in the field of Open Educational Resources in developing country contexts, to think out these issues and establish a research agenda; determine the ancillary supports in terms of partnerships, organizing frameworks, collaborative structures and mechanisms, and to evolve a research project proposal for IDRC funding. The main objective of the roundtable is to:

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[36] https://wiki.mozilla.org/Badges extracted on 17 Nov. 2011

[37] G. Dhanarajan and S. Timmers [1992]: Transfer and Adaptation of Self-Instructional Material: Some Issues for Consideration. Open Learning, 7 (1): 3-11.

[38] M. Diack [2010] Open Education Resources and Elearning. Keynote presentation at the International Conference on ICT for Africa 2010. Yaounde, Cameroon.

[39] UNESCO [2009] OER Research Questions extracted from http://bit.ly/uDCFVf

[40] OPAL Fact sheet http://www.google.com.my/search?q=Open%20education%20resources%20research%20questions%20OPAL&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a&source=hp&channel=np

- Bring together ***research scholars engaged in the study of Open Educational Resources to map a plan for a South – South collaborative research agenda.***

More specifically, this roundtable dialogue will:

- Examine the most critical issues confronting the OER/Open Source communities' specific to the education and training sector in various developing regions;
- Identify critical areas needed for research in each developing region; Design a series of investigations both to evaluate the validity of current practice and to advance current theory;
- Identify knowledge and skills gaps and consider strategies to address these;
- Strategise tactics to bring about policy support for the greater application of OER.
- Develop a collective global South research proposal for IDRC's consideration of funding.

Methodology

The Convener of this initiative will employ a highly consultative and participative process, with individuals who have in recent years shown leadership in OER research and or advocacy. A list of the potential candidates is given in footnote[41]. One such person each specializing on Africa, the Middle East, S. Asia/S.E.Asia/Far East Asia, Latin America and the Caribbean will be invited into a planning group, to assist in planning this research support activity. Specifically, they will be selected through consultation with the present Asian network partners and our global associates as well as in consultation with IDRC colleagues in Ottawa and in the regional offices. This planning group would help in initially identifying the larger questions relating to developmental issues and research thematics in each region. They would be expected to contribute their insightful knowledge of the regional priorities, contexts and realities to the thinking needed for a global initiative to begin research studies to influence educational policies. They are expected to be helpful in identifying and framing capacity building needs. They would be participative in the regional research and development dynamics as mentors.

The activity will span over three phases. These are:

Phase 1

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[41] Amongst individuals such as Neil Butcher and Chery-Hodgekinson-Williams from S. Africa and Bakary Diallo, Rector the African Virtual University from Kenya; Carolina Rossini of the Berkman Centre, Harvard University, XXX from the Middle East , from S. Asia Prof Vasudha Kamat of the SNDT Women's University and Prof. Savithri Singh from the University of Delhi and Prof. Manglam Sundaram of the [NPTEL]Indian Institute of Technology; Dr. Minh Do from Vietnam and the Rector of the CyberUniversity, Thailand as well Dr. V. Balaji of the Commonwealth of Learning, David Porter of BC CAMPUS, Vancouver, Rory McGreal and Susan d'Antoni of Athabasca University, Alberta; Fred Mulder UNESCO Chair Holder from The Dutch Open University; Dr. Wayne Mackintosh of the OER Foundation; and Marshall S. Smith (formerly of William and Flora Hewlett Foundation); Cable Green of Creative Commons and Mary Lou Forward of the OCW.

During this phase, the planning group will, through virtual discussions and one face –to- face meeting, accomplish the following:

- Dialogue and identify the major research themes to form the framework for establishing a southern OER research network/community.
- Formulate an agenda for a wider consultative roundtable on this framework.
- Identify 4 additional individuals from their respective regions to be invited to the roundtable. Since the global OER community is still a small community, there is expectation that those identified to participate in the roundtable (below) will already have a presence and reputation as innovators in educational delivery, using OER.
- Design and develop guidelines and commission regional thematic position papers on the current state of OER play in their regions, for presentation and discussion at the roundtable. These position papers will also identify gaps in knowledge in the respective regions and sub-regions that merit investigation. It is anticipated that some 25 such papers will be tabled at the roundtable for discussion. The Convener, with the assistance of the regional planners, will develop advisories for the roundtable contributors on the focus of each one of the 25 papers.
- Consider alternative strategies to take the research agenda further into proposal development.   The proposal is expected to be framed with a dual objective of building capacity in the least developing countries that have high prospects of policy change to create OER-conducive environments, as well as motivating high quality research from the more mature OER environments. High quality research might be derived from   offering open and equal opportunities to the meritorious through an open small grants competition or be awarded to selective higher performing research institutions.
- Agree upon an initial set of criteria to select and prioritize proposals received through the open competition route, when the project research grant is operational and a set of criteria for selecting countries/partners to be involved through the capacity building and mentoring route. It is envisaged that the budget made available for research by IDRC would be split equally for the small grants open competition programme and for the selective capacity-building programme.

Phase 2: The Convener, the planning group and invited participants who are deemed innovators, experienced in and familiar with OER development and application would form the group discussants at a roundtable dialogue. To promote interdisciplinarity and cross systems thinking, and infuse R & D perspectives outside the education domain proper it would be useful to have the IDRC-supported *Ecology of Access* project partners or others participate in the roundtable discussion. Together, they would:

- Reflect collectively on the regional presentations to determine the most critical research issues to form a Southern research agenda;
- Discuss and agree upon a set of criteria to select and prioritize proposals for a longer term research programme with focus on low and middle income countries;
- Reflect collectively, on the regional presentations with a view to publishing the proceedings as it is a significant roundtable convened to define a global south OER research agenda; and

- Envision a future educational ecosystem for mass education that is driven by Open Educational Resources.

Phase 3: is the post-roundtable phase. In this phase, steps will be taken to develop the full research proposal, a large part of which will be grounded on the decisions taken during the roundtable. It is expected that the research proposal will adhere (thematically) to the framework determined during the roundtable and be made up of a number of related sub components. The methodology and logistics of resourcing the research framework will discussed at the roundtable and resolved by the planning group. The component issues to be decided would include these alternatives:

A. Best Performing Research Institutions Programme

50% of the available grant funds will be reserved for supporting the institutions that are capable of delivering high quality research. The research institutions/teams might be selected from an open competitive small grants programme or through a selection of the proposals coming from the participants selected by the Planning Group to participate in the roundtable.

(1) Open Competitive Small Grants

If it is decided to take the competitive route, the Convener will set up a Research Review Panel [RRP] to be selected from the roundtable discussants. The Research Review Panel will draft a set of criteria for proposal selection. The criteria will be informed by the knowledge gained during the roundtable. Research that gathers evidence for policy-making by educational institutions will be most crucial in demonstrating the value of open resources to education. Thus, the type of research aimed at, is high quality/high value in terms of national impact. While the criteria for final selection of projects will be determined at the roundtable, it is envisaged that it will include a number of the following:

i. Proposals that fit within the research framework determined by the roundtable and are unique in themselves, thereby avoiding unnecessary repetition.
ii. Submissions that are accompanied by institutional commitment to and support for OER development
iii. Submissions from researchers who have an understanding and capacity to execute the proposals through track record, publications and experience.
iv. Proposals that have a high /real potential to influence national policies

The Research Review Panel [RRP] will also assist in developing a Performa to solicit proposals through an open competitive process. (Eventually when the research project is on-going, this Research Review Panel would review the research proposals by applying the defined Research Framework / Criteria / and Proforma.)

(2) Selective Research Institutions

Research that gathers evidence for policy-making by educational institutions will be most crucial in demonstrating the value of open resources to education. Thus, the type of research aimed at, is high quality/high value in terms of national/regional impact. For this reason, it is presently envisaged that the Roundtable would posit for discussion, the issue of upping the scales for those partners who have already been developing OER so that they focus on research generating evidence to motivate policy making. It is anticipated that those selected partners who are deemed innovators, experienced in and familiar with OER development and application would form the core group at the Roundtable. The core suite proposals will thus come from these experienced and established research scholars in the field , sitting around the roundtable. The proposals would undergo peer review processes to be established by the Planning Group.

B. Selective Country Capacity Building Programme

The other 50% of the grant funds will be reserved for assisting lower capacity developing countries to influence educational policy change through applied research and development.

- The Convener would visit the selected countries and sites identified by the Planning Group and affirmed from the round table discussion, to ascertain needs, capacities and institutions. Each country capacity–building proposal will be developed jointly by the appointed mentor from the Planning Group and by the Convener.

- Grantees in this category would come from the least developed economies where we can cultivate contacts with educational authorities so as to work closely with them in achieving change in education policies. Collectively, the selected proposals should reflect a regional spread of institutions and individuals located across the southern nations.

- All selected proposals would undergo the peer review processes either through the Planning Group or the Research Review Panel and must fit the defined research framework determined at the roundtable. The Convener, with the support of the Planning Group of the roundtable as well as the Research Review Panel, will attempt to mobilize funds from donors who are active in supporting OER, to augment the funding that may be made available by IDRC.

- The Convener will negotiate the final suite of capacity-building proposals.

- The Convener will package the Umbrella Proposal and Budget with the Planning Group and the Research Review Panel.

Outputs and Outcomes

The following results can be expected from this pre-project proposal:

1. Identification of gaps in our knowledge on OER which are of special interest to developing countries; generation of ideas for policy design and change in making learning materials freely accessible to all.

2. Identification of empirical studies that can strengthen the quality of Open Learning through collaboration and testing the hypotheses of positive effects in cost and productivity

3. A modest sized publication synthesizing the significant OER issues identified by the global south that warrant research and development to support policy.

4. A comprehensive 'umbrella' proposal that details a vision, a research framework, objectives, strategy, design and implementation plans, including a budget for a series of research studies on and about the theories and practices around OER among developing country institutions in Sub Saharan Africa, Middle East, South America (including the Caribbean) and Asia.

5. A starting point for a potential global network of developing country partners to pursue the proposed studies organized around a research framework with intent to 'build the field' of active research around the thematic of "Openness in Education".

6.   A starting point for a potential network of researchers from the developing countries constituting the Southern critical voice to be the stakeholders, keepers and advisers of OER development and trend-setting and to set the pace for educational authorities in the developing regions.

Suggested citation

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Activity	Time Line [In Months]													
	0	1	2	3	4	5	6	7	8	9	10	11	12	
Discussion with IDRC	█	█												
Research Support Proposal Submission		░	░											
Identity Experts/ Regional Experts Meeting			█	█	█									
Commission Regional Briefs				▒	▒	▒								
Identify Invitees					█	█								
Commission Discussion Papers					░	░	░							
Plan Logistics & Agenda					█	█	█							
Roundtable							▒							
Report Writing/Publication								█	█					
RESEARCH PROPOSAL DEVELOPMENT														
· Set Up Research Review Panel							▒	▒						
· Develop Proforma to Solicit Proposals from the core partners present at the roundtable							█	█						
· Define Selection Criteria; announce competitive research grants inviting proposals; identify and work with new scholars from developing countries on research topics.							▒	▒						
· Shortlisting exercise; Selective Site Visits to Ascertain Capacities; Panel to Select Successful Sub- Proposals								█	█	█				
· Package Proposal and Budget											▒	▒	▒	