Impact of Open Education in Global South

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**Linking Research to Practice**

**Strengthening ICT for Development Research Capacity in Asia**

Edited by Arul Chib - Roger Harris

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**Impact of Information Society Research in the Global South**

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**Media Asia: an Asian Communication Quarterly**

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**Analyzing the Impact of Information and Communication Technology for Development: Lessons Learnt from the SiRCA II Program**

Eliza Creliner, Maria Gurdeeva Renteria

**Abstract**

During recent years, we have witnessed revolutionary developments in Information and Communication Technologies (ICTs) and their impact on people’s lives. The way in which such developments contribute to socio-economic development and empowering people depends highly on the absorptive capacity of different societies. While in developed countries, firms and organisations have the capacity for exploiting these advances through innovative actions and enhanced interactions and, in turn, for creating growth in developing countries, such opportunities are often limited by human, social, and institutional constraints. In this context, capacity building programs on ICTs’ development (SiRCA), such as Strengthening Information Society Research Capacity (SiRCA), are of utmost importance to developing countries. In this introduction to the SiRCA special issue of The Electronic Journal of Information Systems in Developing Countries, we discuss the evolution of ICT4D policy and research, explain the objectives of the SiRCA program, and summarise the lessons learnt from it.

**Keywords**

SiRCA, SiRCA II Program; Impact; Global South; Development
SIRCA I

- Research capacity building in ICT for development
- Supported 13 Asian emerging researchers
- Theoretically-based research under mentorship arrangement
- Focused on social science research
SIRCA II

- Impact of information society research
- Awards 15 research grants from Asia, Africa and Latin America
- Inter-disciplinary mentorship with senior research experts
- Partnered with UWC, South Africa, and IEP Peru
Impact of Research

How do we define impact?

* Commitment to the analysis of developmental change beyond economic dynamics of the marketplace

* Impact as a criterion for judging the excellence of research for enabling positive change

* Commitment to participatory action research

* Topics: Policy Influence, Poverty, mFinance, eLearning
SIRCA III

- Develop, interdisciplinary theoretical frameworks around digitally-enabled openness, inclusion, and rights, generating seminal output

- Interrogate, validate, and test emergent theoretical frameworks of Open Development with empirical evidence from the Global South

- Build leadership and critical research skills amongst emerging researchers in developing countries through mentorship

6 Theoretical teams – Sep 2015
Call for Empirical Proposals – Q1 2016
Open Development review – Focus on Open Education

Arul Chib and Caitlin Bentley
**Impact review: Methodology**

*How and why does openness enable development impact?*

Keyword search for articles relating to open development themes and practices between 2010 and 2015.

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<th>Thing</th>
<th>Process</th>
<th>An assemblage of things and processes</th>
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<td>Open educational resources</td>
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*Based on Smith & Reilly taxonomy; SIRCA III presentation at ICTD 2015*
Impact review: Work in Process

Keyword search
- SCOPUS & ICTD journals
- >4000 articles between 2010 & 2015

Article screening
- Open development themes or practices in LMIC
- 259 articles were included after initial screening

Article coding
- Pathway of effects model (Chib, van Velthoven, & Car, 2014; Chib, Leon, Rahim, 2015)
- Content analysis (Gomez, 2014)
Impact review: Types of Openness

- Open educational resources: 19%
- Open source software: 19%
- Open data: 14%
- Open government: 14%
- Crowdsourcing: 12%
- Open access: 7%
- Open participation: 2%
- Open hardware: 2%
- Peer production, collaboration and sharing: 5%
- Open innovation: 5%
- Open development: 1%
- Open hardware: 2%
- Open data: 14%
- Open development: 1%
- Open innovation: 5%
- Open access: 7%
- Crowdsourcing: 12%
- Open government: 14%
- Open educational resources: 19%
- Open source software: 19%
Impact review: Framework

For a comprehensive mapping of OER, see Zancanaro et al., 2015
Impact review: Implications

- Focus on creating a supporting architecture and offered recommendations and advice on policy creation and planning and implementation methodologies
Inputs

- **Barriers** identified were legal factors, quality of OER or how it fit into existing curriculum, technology infrastructure, lack of time and/or skills. Some conflicting results related to performance and effort expectancy.
- **Incentives**: Credit towards promotion, and willingness were found to be incentives. Intrinsic motivation and whether a reward system for teachers was experienced in a supportive or controlling manner made a difference.
- **Facilitating conditions**: Quality instruments, trust in searching the system and relationships with co-creators, and creating a supportive sharing culture

Mechanism

- Students use OERs when enriching, of good quality, and have the freedom to use in a self-directed manner
- Students from marginalized backgrounds use if they transform relationships between teachers and students

Impact
Impact review: Implications

- Some support for improved learning outcomes via OER
- Typically a severe neglect of poor and marginalized perspectives, and also gendered perspectives
Impact review: Issues

- **Lack of clarity about OER**, with traditional distance learning, eLearning and MOOCs being conflated
- **Concern with limitations to equal access**, with closed ODL networks being available selectively. ASEAN has both inter-national and intra-national disparities in resources, firewalls restrict free distribution
- **Issues of corporatization, copyright, and competing technologies** – Coursera / EdX
Impact review: Conclusions

- Lack of shared definition of open development (education)
- Development aims as research rationale yet low engagement

Without such clarity, three immediate difficulties are present:
- Methodological problems related to the inclusion criteria (e.g. social media; mobile; marginalized populations)
- Research design weaknesses (e.g. weak conceptualization of education processes and outcomes)
- Policy weaknesses (e.g. commercialization, cross-border issues)