

1st International Platform on Integrating Arab e-Infrastructure in a Global Environment

12-14 December 2011, Amman, Jordan

“Towards an era of e-Infrastructure”

1. Open Educational Resources

Open Educational Resources are learning materials that have been released under an open-content license such as [Creative Commons](#) or in the public domain that allows their free use by others. OERs allow teachers to freely use and customize training materials to best-suit the learning needs of their students.

Well-developed e-Infrastructure has a significant positive effect on the use and creation of Open Educational Resources (OER) to improve the quality of education as well as facilitate policy dialogue, knowledge sharing and capacity building. Tangible benefits for teachers and learners include:

1. Being able to perform more extensive internet searches and comprehensive reviews of training materials that are most relevant to learning needs;
2. Creating complex high value-added learning materials which lead to secondary benefits such as:
 - a. Increased global recognition leading to potential partnership and research opportunities;
 - b. Protection and promotion of indigenous knowledge, languages, and customs;
 - c. Development of new niche content export industries;
3. Reaching a far greater number of learners through the development of OERs for:
 - a. learners with learning and other disabilities, including accessibility.
 - b. learners in remote areas;
 - c. content available in multiple languages and promoted on the Internet
 - d. mobile phone access (especially in Africa and other developing countries)
4. Development of very diverse learning programs that allow for asynchronous and self-paced learning which is critical as all learners have different needs.

2. Open source models for harnessing e-Infrastructure collaborative research potential: the importance of capacity building

e-Infrastructure

- The set and eco-system of tools, resources and services allowing the production of collaborative research outputs is known as e-Infrastructure
- complex e-Infrastructure deployment

Academic research

- challenged by expanding availability and access to online resources
- high potential for collaboration among researchers (distributed research).
- E-research: virtual communities working and collaborating through online facilities and services, across the academic and industrial sectors

Research communities

- must be supported by adequate technical framework
- can potentially access, share, federate and harness the power of global facilities

Capacity building and new ways to research

- need for capacity building and organisational arrangements, in order for researchers to use its full potential
- ensure interaction and exchange between researchers and technicians: need for community building
- community development has a major role and can determine the success or failure of e-Research

Use the experience of Free and Open Source Software (FOSS)

- technical communities building and web collaboration
- building and maintaining software systems collaboratively
- sustainable distributed projects
- can respond to the need for local support: bringing technology closer to scientists
- research groups to collaborate rather than compete for funds
- share data, resources or services, such as computational time
- FOSS experience teaches that transparent, clear and well-managed projects are easier to sustain both financially and technically, and appeal external contributors

Need for systems interoperability and standards

- Need for clear policies to share software and make data interoperable
- Need coordination to apply open principles to standards and interoperability in systems and collaboration platforms, as successfully done in FOSS, open publishing and open access

3. Promotion of use of ICTs in education for teaching and learning of Persons with Disabilities:

- Policy recommendations of mainstreaming ICTs in education for persons with disabilities.
- Training of teachers on use of ICTs in education for Persons with Disabilities
- Preparing OER and other training resources which are accessible for learners with learning and other disabilities.

4. Multilingualism in cyberspace

- Promotion of multilingual scientific content (especially in countries with more than 1 official or 1-2 cross border language); and
- Training resources prepared for the promotion of the scientific content (international and local languages) and current developments available for the content sharing on the Internet.