UNESCO International Institute for Educational Planning Internet discussion forum Open Educational Resources: open content for higher education

Session 3 – Draft discussion summary Perspectives of the users and issues related to use 14 - 25 November 2005

The third session of the forum organized by UNESCO's International Institute for Educational Planning (IIEP) on **Open Educational Resources: open content for higher education** allowed a focussed discussion of the use of OER with the presentation of a number of examples. This was followed by the consideration of two specific use-related issues – Learning Object Repositories and cultural and language concerns.

During the first week, four examples of the use of OER were presented. The discussants were:

- Mohammed-Nabil Sabry, Director, Centre for Research, Development and International Cooperation, Université Française D'Egypte
- Peter Bateman, Manager, Instructional Technology and Design, African Virtual University (AVU)
- Pedro Aranzadi, Director of Projects, Universia
- Derrick Tate, Assistant to Chairman, China Open Resources for Education (CORE)

All four initiatives have utilized MIT's OpenCourseWare (OCW), allowing for comparison between different approaches to adapting OER across a wide range of organisations, languages and cultures. Information on each OER initiative and the lessons learned to date were provided in the background note for the session. Forum participants were also invited to comment on their own experiences of using OER.

In the second week, the role of Learning Object Repositories was explored through the example of MERLOT (Multimedia Educational Resource for Online Learning and Online Teaching). The cultural and linguistic implications surrounding the adaptation or translation of OER were also examined in more depth. The discussants were:

- Gerry Hanley, Executive Director, MERLOT
- Mamadou Ndoye, Executive Secretary, Association for the Development of Education in Africa (ADEA)

It should be noted that this overview is not meant to be an exhaustive summary of Session 3 discussions, but rather a distillation of the key themes and some of the related issues.

The provider/user dichotomy

Mohammed-Nabil Sabry began the session by presenting the French University of Egypt's experience of adapting and using four OCW courses. He set the agenda for much of the week's discussion, by arguing that OER use could be improved most effectively through a shift from a "provider"/"user" paradigm to a community model of collaborative development. The artificial provider/user/organiser/sponsor roles attributed to different actors in the first

deliberations on OER are constraining and misleading: the reality of OER creation, adaptation, use, advocacy and financing is less neat, but provides far more scope for creativity and sustainable development. As one participant characterised it, it would represent a move from "knowledge for all" to "construction of knowledge by all".

Dr. Sabry suggested that the collaborative development model could learn from the Free and Open Source Software movement (systems for tracing contributions and maintaining multiple versions), and Wikipedia's model for open content creation (modularity of content, systems for tracking changes and ease of modification, especially for those with limited IT skills). Thus, he advocated for the creation of a collaborative environment, featuring two content spaces: a "sandbox" area where users can contribute to content, and a database of "frozen" stable content that had achieved some level of consensus from the community. Such an environment, however, requires an initial "capital" of OER, which initiatives like OCW provide.

OER promotion and use in developing countries

The potential of OER for developing countries was addressed by discussants and participants, including Mamadou Ndoye, the Executive Secretary of the Association for the Development of Education in Africa (ADEA). According to Dr Ndoye, "The production and dissemination of educational resources for open learning create new opportunities for accelerating progress toward education for all, narrowing the knowledge divide around the world, and combating inequality and poverty".

Fellow discussant Peter Bateman, of the African Virtual University, highlighted some of the key challenges of introducing OER in Africa. He picked up two strands of discussion: technological constraints, and issues of local relevance and the adaptation, or "sensitization", of materials to very different cultural contexts.

Technology

Participants questioned whether individuals in developing regions have adequate resources and support to create new OER materials and access existing ones. It was pointed out that African academics are using and producing educational materials, but in many cases they remain "locked up" or inaccessible to new users, through a combination of poor ICT infrastructure, and lack of familiarity or confidence with technology. The institutions featured in the discussion have attempted to address these imbalances in a variety of ways. For example, the AVU has established pilot OCW mirror sites (i.e. sites stored on the Local Area Network) at two institutions in Kenya and Ethiopia to widen access in areas where low bandwidth would make it difficult to fully utilise the MIT website. One participant asked if the technological constraints of Africa could be similar to the problems of the "frontier" areas of rural America in the early 1990s. If they are, it is doubtful that African governments would have the financial capacity to match the speed and scale of investment that these regions benefited from.

Training and support for new users was felt to be key to the success of OER in developing countries. Participants were reminded that the success of this forum has been incumbent on their own IT skills. Many faculty in developing countries do not have a similar facility, or confidence, with technology. The development of support structures for potential users (and providers) is therefore a central feature of the AVU's OER strategy.

Cultural issues

Several discussants indicated that faculty at their respective institutions expressed reservations about publishing content produced by a foreign institution. According to Peter Bateman, "While most were clearly appreciative of being able to access such a wealth of resources so easily now, some African academics expressed a resentment of these 'imported' materials, asking 'Why can't we produce these materials here?"". There was some concern that institutions in developing countries would become dependent on externally generated content, rather than that content serving as a catalyst for the production of new, local OER. As Peter Bateman noted, this resonates with concerns about the nature of North-South relationships in the wider development community. Some of this tension may be resolved, however, by moving from a model of benevolent, developed country "providers" and passive, developing country "users", towards one of collaborative development.

Translation and adaptation

The translation and adaptation of OER for use in new contexts was introduced by Pedro Aranzadi of Universia, a consortium that maintains higher education portals for Spanish- and Portuguese-speaking countries, and Derrick Tate of China Open Resources for Education. Both organisations began their involvement with OER by translating MIT OCW courses, with the aim of making high quality content available in their respective regions. And both organizations have addressed issues of cultural "sensitization" and local content generation. For Universia, this has resulted in a shift in focus away from translation, to the development of an application to help member universities publish their own OER. CORE, on the other hand, has continued to champion the translation of MIT materials, while also working to promote the OER movement in China and bring Chinese content to the rest of the world.

There was recognition of the importance – and difficulties – of the translator's job. Localising OER material is not only a question of language: as one participant noted, "Culture and language [are] so closely embedded within each other that the issue of translation/location is no longer the issue of language but the issue of culture". It is important to be aware of cultural and pedagogical differences between the original context of use and the intended new use of the material. One participant shared his organisation's difficulties in producing multilingual OER that incorporate local examples, suggesting that even those translators who are native speakers and are living in the country may find it difficult to provide context for an unknown audience. In addition, translators are not necessarily instructors, and as such may not have the pedagogical background needed to contribute new content effectively. It was suggested that a database of academics who could also function as translators be created for the OER community to assist non-academic translators. The creation of a multilingual platform that supports knowledge sharing between different parts of the world was also identified as a necessary step if OER is to be a democratic and inclusive movement.

Although support was expressed for Dr. Sabry's model of collaborative OER environments that enable multiple users to edit material, a participant highlighted the potential problems that this might cause for translators. If material is constantly changing and a stable version is not available, how can a translator firstly keep track of the changes, and secondly decide at what point a new translation becomes necessary? Gerry Hanley stated that version control has also been a challenge for MERLOT, in the context of their peer reviews and metadata, but that the organisation relies on its community (users, authors and members of the peer review boards) to keep MERLOT informed of changes. While he acknowledged that this approach is not

perfect, Dr. Hanley suggested that a similar model could be used in relation to translation, with volunteer translators tracking changes or responding to user requests. Reading lists (an element of most MIT OCW, mainly constituted of English-language journals) were also identified as causing particular problems for OER adaptation and re-use.

It was suggested that translation software could reduce the time and effort required to make resources more accessible, and that this should be an area of greater focus for the OER community. However, a participant noted that his organisation abandoned the use of translation software after users raised concerns over the quality of the resulting OER product. It was suggested that further research into this area is required.

Many of the OER translation initiatives described by participants appear to rely heavily on local volunteers, who in turn guide the direction and scope of the projects, and the degree of adaptation of the material. For example, the self-selecting volunteers of the Opensource Opencourseware Prototype System (OOPS), which translates MIT OCW into Chinese, are encouraged to add a "translator note" and complete the courses with whatever they feel to be missing. And their involvement does not end with the completion of the translation: they are also expected to be on hand to reply to any user queries once the course has been posted on the OOPS website. The recruitment of motivated volunteers (or "civilization bridges", as one participant named them) was felt to be critical for broad participation in OER initiatives, and for moving beyond the current minority community of OER evangelists and converts.

Original content production

Developing countries have three non-exclusive options for OER production:

- the translation and localisation of "imported" OER (which is currently produced predominately in English);
- the development of "local" OER based on "imported" academic resources;
- the development of "local" OER using locally generated academic resources.

It was acknowledged that, "The scale in the world of OER is currently weighted down to the side of materials produced in the English speaking countries (translated or not)", i.e. the former of these options. "Imported" OER material is seen as a highly valuable resource as content, but also as a model for local initiatives. For example, Universia member institutions saw the MIT project as a catalyst for their own OCW and a lever of MIT "know-how". However, several participants emphasised the importance of faculty and institutions creating original OER in their own languages and incorporating their own cultural approaches to teaching and learning. One participant suggested that the translation of existing materials could not lead to "cultural pluralism", only "cultural understanding"; the OER vision should be as much about a cultural exchange as an educational exchange. Without more local OER, the movement will be dominated by, and identified with, a handful of international "brands", such as MIT OCW. The development of original OER based on local knowledge and scholarship was identified as the ideal approach if the research potential of academic institutions in developing countries is to be realised and the complexity of local cultures and languages preserved. There was a caution, however, against the false polarization of global (i.e. English) and local (everything else) materials: resources should be of interest and benefit to the entire international community.

Several participants identified constraints to original content production, in addition to the

technological issues highlighted earlier. CORE has found OER to represent a new and challenging way of thinking for many of the professors, departments and universities that they have worked with. Echoing the discussion in the previous session on faculty involvement, OER production was not recognised as a valuable way for faculty to spend their time, and was therefore not rewarded. In Africa the percentage of online academic publishing and open content produced is severely limited because of systematic under funding and a research culture that rewards publication of material in international (i.e. "Northern") journals. Therefore, the promotion of open access publishing initiatives in Africa could facilitate the process of moving from a reliance on external content to the generation of original content utilizing and showcasing African scholarship.

Quality assurance and assessment

Once again, several participants expressed concerns about maintaining the quality of resources if the processes of content creation, adaptation and translation are open to participation from a wide range of individuals with varying levels of knowledge and expertise.

Quality assurance and assessment were particularly relevant issues to the discussion on Learning Object Repositories, since LOR may catalogue and store materials from a very wide range of sources. For example, anyone can contribute materials to MERLOT (there are now almost 13,000 online teaching and learning materials listed in the repository) – and it is the users themselves that are responsible for cataloguing them. Gerry Hanley described how MERLOT uses a number of quality assurance processes, perhaps the most critical being peer reviews carried out by editorial boards. He indicated that a second layer of quality assurance is provided by the users themselves, who may contribute individual evaluations and comments, and advise MERLOT of any corrections needed.

Costs and funding

Dr. Sabry suggested that although the role of volunteers limits the amount of capital needed for OER initiatives in developing countries, funding for hardware, software and training is still required. One participant suggested that international bodies could play a role in fostering OER development in low-income countries by providing nominal fees to teaching staff that develop content or assist in the distribution of materials. Other possible financing solutions could include government sponsorship and public/private collaboration.

The Universia funding model attracted the interest of some participants as an alternative to state or donor funding and a possible model for sustainable OER development. Universia is a Public-Private Partnership between the Santander Group and shareholding universities. MERLOT's business model also sparked discussion. While MERLOT provides free access to its index of resources, institutions, professional societies and corporations can choose to become partners in the project, for which they are charged a fee. The incentive for partners is that, "It is cheaper to join the MERLOT cooperative, contribute their 'in-kind' services, and pay MERLOT to build the technology services, to build alliances with professional societies, and to develop creative programs to serve their institutional needs in a timely way than it is to do it themselves".

The potential of OER for Small States

One participant suggested that South-to-South cooperation, between developing or underresourced nations, could offer positive opportunities for exchange and growth, with the
resulting OER being translated for "Northern" repositories. The forum was advised by John
Daniel, President and CEO of the Commonwealth of Learning, of an initiative that will foster
OER development among 22 Small States of the Commonwealth ("Small States" being
defined as those with less than 4 million inhabitants). The Virtual University for Small States
of the Commonwealth (VUSSC) is designed to build a network for collective action that will
allow states with limited resources and technology to develop a capacity for online and
distance learning. OER will be developed in areas of shared need, including life skills,
business and management, and professional development in education. One participant
suggested that small states could benefit from the shared technical expertise of the OER
community taking part in the forum, and that efforts should be made to involve organisations
like the VUSSC in collaborative OER development projects.

Looking forward

Participants identified the formation of a global OER research community as one important potential outcome of the forum. This community would investigate best practices, identify research gaps and propose guidelines for further OER development. This idea will be carried forward into the final week of the forum, when participants will identify areas for further collaboration and discussion.