Status Update of the African Health Open Educational Resources Network: <sup>1</sup> 2008 – Present Principal Investigator: Ted Hanss, Chief Information Officer, University of Michigan Medical School Report Prepared by Kathleen Ludewig Omollo, International Program Manager, University of Michigan Medical School Office of Enabling Technologies

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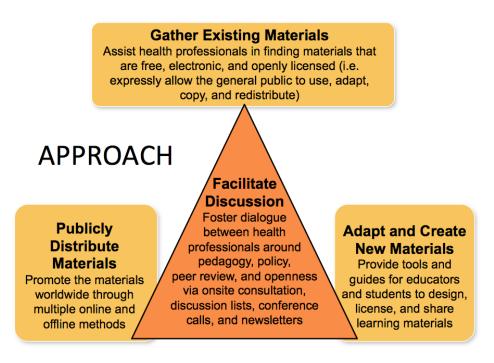
## **Background**

The mission of the African Health Open Educational Resources (OER) Network ("the Network") is to advance health education in Africa by creating and promoting free, openly licensed teaching materials created by Africans to share knowledge, address curriculum gaps, and support health education communities. Established in 2008, the Network aims to strengthen the intellectual and policy infrastructures within and between African health training programs through gathering existing openly licensed materials, adapting and creating new materials, distributing those materials worldwide, and facilitating dialogue around health education.

Founding members of the African Health OER Network include the University of Michigan (U-M), the South African Institute for Distance Education (Saide), Kwame Nkrumah University of Science and Technology (KNUST), University of Ghana (UG), University of Cape Town (UCT), and University of the Western Cape (UWC). Largely funded by the William and Flora Hewlett Foundation, the Network evolved over three distinct phases:

- Phase 1: Pilot (2008) U-M received a six-month pilot grant, which funded materials and process development at U-M as well as travel to bring together participants from U-M and health science institutions from across Africa to discuss opportunities to advance health education using African-produced openly licensed health educational materials. This workshop, which included 27 participants from eight African universities and institutes, three foundations, and the University of Michigan (U-M), resulted in the partnership between the six founding organizations. The Open Society Foundations provided supplementary funding for the 2008 workshop. From 2008-10, U-M, KNUST, and UG received some supplemental funding for staff, software, and hardware for health OER production from the Ghana-Michigan Charter grant from the Bill and Melinda Gates Foundation.
- Phase 2: Design (2009) The six founding members received a joint one-year grant to
  initiate health OER initiatives within the four African universities and to encourage
  collaborative authoring of materials between institutions. This grant also included funds for
  a second workshop to bring over 40 faculty and staff representing 11 health science African
  institutions to Cape Town to discuss expanding the health OER activities across the
  continent.
- Phase 3: Network (2010-12) The founding members renewed the grant with the objective
  of scaling the health OER initiatives within each university and to systematically draw in
  more African and, eventually, global participants.

<sup>&</sup>lt;sup>1</sup> http://www.oerafrica.org/healthoer, http://openmi.ch/healthoernetwork



## Accomplishments

- 1. Fostered institutional and inter-university capacity and community around health OER.
  - a. 160 individuals trained in materials development and open licenses
  - b. 115 individuals from 12 institutions created openly licensed materials
  - c. 620 newsletter subscribers worldwide
  - d. Two African institutions include students to develop materials, freeing up instructor time for other activities
  - e. Three periodic community audio conferences and complementary email lists to encourage cross-institutional communication: a health OER partners forum to engage senior leadership,<sup>2</sup> a dScribe forum to discuss copyright clearance and student engagement,<sup>3</sup> and a health OER tech form to connect individuals involved in technology and multimedia support for OER.<sup>4</sup>
- 2. Assisted African health educators in using simple, low-cost technology to create multimedia-rich learning materials that were lower-cost and more contextually relevant than previously available educational resources.
  - a. 339 original materials created by Africans and shared as part of 135 learning modules. Most of the resources are in English, but there are currently three multilingual modules: a gynecology surgery guide in Portuguese and English,<sup>5</sup> an occupational therapy module in English and Spanish,<sup>6</sup> and a diploma in occupational health module in English, Afrikaans, and Xhosa.<sup>7</sup>
  - b. Subjects represented include behavioral sciences, ethics, health services administration, informatics, medicine (emergency medicine, family medicine,

<sup>&</sup>lt;sup>2</sup> http://lists.nbaserver.co.za/cgi-bin/mailman/listinfo/healthpartnersforum

<sup>&</sup>lt;sup>3</sup> http://groups.google.com/group/oer-dScribe/

<sup>4</sup> http://groups.google.com/group/oer-tech/

<sup>&</sup>lt;sup>5</sup> http://open.umich.edu/education/med/oernetwork/med/ob-gyn/vvf/2011

 $<sup>^6\</sup> http://blogs.uct.ac.za/blog/oer-uct/2010/11/12/from-uct-open content-to-a-journal-article$ 

<sup>&</sup>lt;sup>7</sup> http://open.umich.edu/education/med/oernetwork/med/family/clinical-skills-exam/2011

internal medicine, microbiology, obstetrics and gynecology, otolaryngology, pediatrics, surgery, travel medicine), pharmacology, public and community health, and research design.

- c. 906 minutes of instruction in a collection of 144 videos on YouTube<sup>8</sup>
- 3. Monitored use and adaptation of health OER within the Network.
  - a. We have already seen cases of use and adaptation of learning materials in at least 10 countries. For example, medical videos from KNUST and UG have received over 12,000 views in Egypt, over 35,000 in Saudi Arabia, and over 41,000 in India. Several Nigerian medical residents used gynecology surgery videos from UG. The Ministry of Health of Ethiopia distributed a Caesarean section learning module by the University of Ghana. An occupational therapy module from UCT was translated from English into Spanish for the Journal of Occupational Therapy of Galicia.<sup>9</sup>
  - b. The YouTube videos have 909,365 total views, 855 favorites, 183 comments, and have been accessed by over 190 countries.
  - c. 804 individuals have rated the YouTube videos, with average rating of over 4 stars out of 5.
  - d. U-M and Saide drafted a comprehensive impact research plan, which outlined anticipated outcomes and associated indicators and timelines.<sup>10</sup> An external evaluation expert is currently implementing the research plan.
- 4. Shared lessons learned through publication of journal articles, reports, and blog entries.
  - a. A dozen reports and peer-reviewed publications are available on our website. http://open.umich.edu/education/med/oernetwork/reports. An additional 4 papers and 1 report are currently in progress.

## **Sustainability**

Since 2010, U-M and at least three of the African universities have enacted practices and polices to try to incorporate OER into the activities of the respective universities: Within U-M, there have been numerous workshops and projects with the library and technology support staff in the health sciences. At UG, all of the OER media specialists are general media specialists who assist with other ICT activities, not just OER. Two of the UG media specialists are roughly half grant-funded, with the other one media specialist doing a one-year volunteer internship. KNUST is able to keep by salary costs low by pairing OER authors and media specialists with student volunteers and National Service students in the Department of Communication Design who provide multimedia support as part of class projects. Last year, UCT launched an OpenUCT initiative, which aims to bridge various open activities on campus, including health OER, general OER, open scholarship, and other activities.

Both KNUST and UG plan to include an open license/OER clause in future health education grants that include materials development. KNUST has already implemented this approach with a new emergency medicine education partnership funded by the U.S. National Institutes of Health. UG has taken a similar approach with a HIV/AIDS education project with Brown University. U-M has done likewise for numerous internal and external materials development projects.

<sup>8</sup> http://www.youtube.com/results?search\_query=healthoernetwork&search=tag

<sup>9</sup> http://blogs.uct.ac.za/blog/oer-uct/2010/11/12/from-uct-opencontent-to-a-journal-article

<sup>10</sup> http://open.umich.edu/wiki/Media:2011.05.09\_Health\_OER\_Network\_ImpactResearchPlan\_v5.doc