Interim Report for Hewlett Foundation Grant # 2009-4796 to the University of Michigan "2010 African Health OER Network"

Contact: Ted Hanss, Chief Information Officer, University of Michigan Medical School

Description

The African Health OER Network is designed to strengthen the intellectual and policy infrastructure within and between African institutions. Founding members of the Network are University of Michigan (U-M), OER Africa (OERA), Kwame Nkrumah University of Science and Technology (KNUST), University of Ghana (U-G), University of Cape Town (UCT), and University of the Western Cape (UWC). Our objective is to systematically draw in more African and, eventually, global participants to create, adapt, share, and use OER to the benefit of health education in Africa, while developing models of collaboration and sustainability that can be replicated in other regions of the world.

Activities and Outputs

- 1. Network building
 - a. U-M and OERA are authoring case studies of the health OER initiatives at KNUST, UG, UCT, UWC, and University of Malawi to document their experience with OER, highlighting their strategic priorities, achievements, challenges, production process, future plans, and their advice for others interested in OER. Interviews were completed in 2010, the drafts are in progress, and the case studies will be published in early 2011.
 - b. OERA is developing an OER Request Facility to manage requests and responses for OER on specific health topics. This facility will be launched in January 2011.
 - c. OERA has established a relationship with The Higher Education Alliance for Leadership Through Health (HEALTH Alliance), which consists of seven East African schools of public health. The HEALTH Alliance plans to develop a standardized curriculum for a Masters in Public Health (MPH) across the region. OERA has prepared a proposal with the Alliance to develop the MPH curricula and materials within an OER framework, and expects this work to commence during 2011. This work will be partially funded by this grant.
 - d. Makerere University (Uganda) requested a content and pedagogical review of three public health modules from their distance education program as a first activity in building the program noted above in "c." OERA and U-M completed the review of the first module in November 2010 and will complete the other two by January 2011.
 - e. West Nile University (Uganda) has requested that OERA assist them in sourcing relevant OER for their new Bachelor of Science in Nursing program. This work is underway.
 - f. OERA is negotiating with the Rwanda Ministry of Health to support development of OERbased nursing upgrading programs for the country's nurses.
 - g. U-M and OERA are discussing with the U.S. National Institutes of Health (NIH) creating a partnership with the NIH Medical Education Partnership Initiative (MEPI) coordinating center to reach out to 13 African health science institutions to openly license their curricular materials that are byproducts of the MEPI grants.² NIH has invited U-M and OERA to give an OER workshop at the MEPI grantees inaugural meeting in March 2011.
- 2. Advocacy
 - a. In August 2010, OERA met faculty at the University of Nairobi (UoN) School of Public Health to discuss potential collaborative activities around health OER. OERA and UoN are currently developed a Memorandum of Understanding (MOU).

¹ This document is copyrighted by the University of Michigan, OER Africa, and others. It is shared under a Creative Commons Attribution license, CC-BY. It is available at <u>https://open.umich.edu/wiki/Health_OER_Collaborations</u>. ² http://www.fic.nih.gov/programs/training_grants/mepi/awards.htm

- b. OERA has partnered with EBW Healthcare, IntraHealth, the Association of American Medical Colleges MedEdPORTAL program, and the American Medical Informatics Association Health Informatics Building Blocks (HIBBS) project to contribute and/or promote OER on the Network website.
- 3. Institutional Engagement
 - a. U-M and OERA provided ongoing mentorship on OER production to KNUST, UG, UWC, and UCT through onsite consultation, email, and Skype or teleconference calls. This includes two U-M-moderated calls every other month: one for multimedia and tech support and another for dScribes.
 - b. U-M and OERA have produced multiple guides on OER production to support the institutional activities. These include topics such as how to create open content,^{3,4} how to obtain ethical consent for filming for OER,⁵ and how to submit content to MedEdPORTAL.⁶
 - c. U-M partnered with UG to produce a half-hour documentary that features interviews with faculty, staff, and students involved in OER activities at UG.⁷
 - d. OERA is involved in a project with the University of Malawi's Kamuzu College of Nursing to create an OER module on effective counselling, interviewing, clinical decision-making, and analysing and interpretation of data techniques. OERA has conducted three workshops to support the project.
- 4. dScribe Process Development
 - a. U-M conducted two dScribe training sessions for OERA staff.⁸
 - b. In September 2010, Mr. Adam Rahman (KNUST) began a six-month research fellowship at U-M through the African Presidential Scholars Program (funded by U-M). He is exploring how to incorporate elements of instructional design, interactive design, and the dScribe process into OER production at KNUST.
- 5. dScribe Services
 - a. U-M conducted dScribe analyses of over 20 lectures by the Ghana Emergency Medicine Collaborative.⁹
 - b. U-M experimented with the model of dScribe as a service by conducting an intensive oneweek dScribe training exercise with a research assistant from Mt. Sinai School of Medicine who is assisting a radiology professor with converting a course to OER.
- 6. Search and Discovery
 - a. U-M and OERA are partnering with the U-M Library, Creative Commons, OER Commons, the GLOBE Alliance, and others to distribute OER and to investigate ways to improve search and discovery of health OER.
 - b. In order to address bandwidth limitations and long-term preservation, U-M and OERA have signed a MoU to host duplicate copies of the completed OER on the U-M OER platform.¹⁰

³ <u>http://open.umich.edu/share</u>

⁴ www.oerafrica.org/healthoer/HealthOERHome/HealthResources/tabid/274/mctl/Details/id/38581/Default.aspx

⁵ www.oerafrica.org/healthoer/HealthOERHome/HealthResources/tabid/274/mctl/Details/id/38582/Default.aspx

⁶ www.oerafrica.org/healthoer/HealthOERHome/HealthResources/tabid/274/mctl/Details/id/38583/Default.aspx

⁷ <u>http://www.youtube.com/watch?v=wQyDkzlrNrk</u>

⁸ http://www.slideshare.net/kludewig/dscribe-workshop-international-edition

⁹ http://www.med.umich.edu/em/education/ghana/ghanacollaborative.htm

¹⁰ http://open.umich.edu/education/med/oernetwork/

This is shared under a Creative Commons Attribution 3.0 License (c) BY

- c. OERA has set up YouTube,¹¹ Flickr,¹² and Facebook accounts to promote the health OER created through the Network.
- 7. Evaluation and Impact Analysis
 - a. Drawing on the socio-technical interviews conducted at UWC, UCT, UG, KNUST, OERA, and U-M in 2009, Airong Luo, Dick Ng'ambi, and Ted Hanss published their OER collaboration study as part of the Association for Computing Machinery 2010 GROUP Conference¹³ and as an openly licensed revised report.¹⁴
 - b. Professor Ken Harley of the University of KwaZulu-Natal, the external evaluator, has completed visits to the institutions and is in the process of preparing his 2010 report.

Progress toward intermediate and ultimate outcomes

The African Health OER Network website was launched in April 2010.¹⁵ The website currently features 24 OER and links to over a dozen other health OER repositories. To date, 75 individuals and 15 organizations have signed a Declaration of Support for the Network.¹⁶

Major Changes

Ted Hanss, the U-M PI on this grant, was promoted to the position of Medical School Chief Information Officer in September 2010. He will continue his role with this grant as before. In May 2010, Kathleen Ludewig Omollo, upon graduation from U-M with dual masters degrees from the School of Information and the Ford School of Public Policy, was appointed the U-M Health OER Network Project Manager. In January 2010, Sarah Hoosen became the OERA Health OER Network Project Coordinator.

Lessons Learned

The major lessons learned were documented in the reports by Luo et al. and the pending case studies.

Dissemination

- 1. U-M and OERA have disseminated most of what we have learned through the OERA website¹⁷ and U-M OER wiki.¹⁸
- 2. Several individuals from KNUST and UG published a paper as part of the 2010 Open Ed Conference.
- 3. Several medical faculty members from KNUST and UG submitted a paper on OER at UG and KNUST, which will be published in the December 2010 issue of the Ghana Medical Journal.¹⁹
- 4. Hoosen and Omollo co-authored a short commentary about the Network, which will be published in African Journal of Health Professions Education December 2010 issue.²⁰

Notes on the Interim Financial Report

U-M submitted its interim financial report on November 16. There were some 2010 expenses that had not cleared when the interim financial report was submitted, including, the flight for Mrs. Omollo's June-July

¹¹ http://www.youtube.com/user/oerafrica

¹² http://www.flickr.com/photos/oerafrica/collections/72157624696262534/

 ¹³ http://dx.doi.org/10.1145/1880071.1880117
 ¹⁴ https://open.umich.edu/wiki/Health OER Collaborations (left nav)

¹⁵ http://www.oerafrica.org/health

¹⁶ http://www.oerafrica.org/healthoer/HealthOERHome/ViewSignatures/tabid/1331/Default.aspx

¹⁷ http://www.oerafrica.org/healthoer

¹⁸ https://open.umich.edu/wiki

¹⁹ http://www.ghanamedj.org/

²⁰ http://www.ajhpe.org.za/

This is shared under a Creative Commons Attribution 3.0 License **(cc)** BY

< http://creativecommons.org/licenses/by/3.0/ >

2010 trip to Ghana and the Year One payments for UWC-Dentistry and UCT.²¹ U-M contributed a portion of its management effort (20% effort of Ted Hanss and 5% by Karen Kost). Additionally, Mr. Hanss's Aug. 2010 trip to South Africa was canceled and the expense will be removed from the grant.

²¹ The subcontract and money transfer process is still in progress at these two institutions.

Program Chart

CATEGORY	INDICATORS	BASELINES	TARGETS AND TARGET DATES	PROGRESS		
Activities/ Outputs						
♦ Advocacy	 Policy review workshops held Policy review reports shared Policy review strategies in place 	 Policy reviews held by core institutions in 2009 	 Policy review workshops (typically with 5-10 participants) and reports with at least 4 new institutions by Dec. 2011 Strategies to establish OER policies with 2 institutions by Dec. 2011. 	 KNUST passed OER policy in Aug. 2010 UG OER policy is at the academic board 		
◆ Network building	 Number of registered participants Signatures on the Statement of Commitment Number of tagged and uploaded OERs User profile facility Peer feedback facility Global repository links 2nd annual meeting Metrics of web use Published toolkit Publications Faculty recruitment mechanisms 	 Core institutions and guests at first annual meeting OER pilot materials created during design phase Oerafrica.org/h ealthproject and Open.umich.edu sites First annual meeting 	 Preliminary business case for potential donors by Jan. 2010 One case study by Dec. 2010 and two by Dec. 2011. 300 participants by Dec. 2011 150 individual and 10 faculties signed up to Statement of Commitment by Dec. 2011 50 tagged OERs on OERA site by Dec. 2010; 100 by Dec. 2011. Apr. 2010: User profile registry Jul. 2010: Peer feedback facility Dec. 2011: Global repository integration Sept 2010: 2nd annual meeting Dec. 2010: Jointly submitted publications 	launched in April 2010. ♦ Briefing for potential donors and participants held at Global Health		
 Institutional Nurturing 	 Dedicated institutional staff (academic or support) in place Number of OERs created per institution Use of OERs within institutions New/revised OER policies 	 Early adopter staff (and national service workers in Ghana) OER created during design phase Initial policy workshops and analysis 	 Staff named by April 2010 At least 15 OERs published per institution each year OER in use by Dec. 2010 New/revised policies in place at four core institutions by Dec. 2011 	 All staff in place 3 OER workshops at UNIMA, 1 at UWC, 1 at KNUST 3 OER from UWC and 3 from U-M published 4 OER from UG and 3 from KNUST under review 		
 dScribe Process Development 	 Updated dScribe processes Number of people trained Installation of OERca outside U-M 	 ♦ Current dScribe 	 Localized and updated dScribe processes by July 2011 1+ dScribe trained per institution by Dec. 2011 1+ African-based installation of OERca by Dec. 2011 	 Bimonthly global dScribe calls UCT, KNUST, OER have trained dScribes 		

 ◆ dScribe Services 	 African sites offering dScribe services Sites subscribing to dScribe services Subscribing sites transitioned to self- sufficiency Fee-based services 	 Current dScribe process 	 1+ African institution offering external dScribe services by July 2010 3+ Network participants using dScribe service by Dec, 2010 3+ Network participants transitioned to self- sufficiency by Dec. 2011 Business model for fee- based dScribe services by Dec. 2011 	 Experimented with the service model of dScribe
 Search and discovery 	 Tagged OERs Health OER DiscoverEd instance Inbound searches 	♦ None	 All OERs with metadata when published on OERA site Health OER DiscoverEd instance by Dec. 2010 Growth in search traffic measured 	 Completed OER up on OERA and U-M websites
 Evaluation and Impact analysis 	 OERA selects evaluator from Africa Evaluator meets with grant participants to understand the long-term goals Metrics (qualitative and quantitative) are agreed upon that will measure the goals Studies of faculty, students, and patient care Addressing socio- technical issues related to intra- and inter- institutional collaboration 	 Formative program evaluation done in 2009 Framework for research evaluation done in 2009 Pilot socio- technical collaboration analysis done in 2009 	 Program evaluations done mid—project (by Dec.2010) and at completion (by Dec. 2011) Case studies from 2009 Design Phase published by Dec. 2010. Research-based evaluation of OER deployment studied in 2010 and submitted for publication by July 2011 Pilot socio-technical analysis published by July 2010 Broader sociotechnical analysis field work completed by July 2011 and submitted for publication by Dec. 2011 	 Formative evaluation for 2010 in progress Updated 2009 socio-technical analysis Metrics discussion scheduled for Jan. 2011
Intermediate O	outcomes			
 Highly used community of practice web site that augments and highlights institutional and global repositories 	 Best practices materials covering institutional policies, outcomes-based learning using OER, etc. Case studies from multiple health science domains Research publications on the effective use of OER- based learning materials Search capability across growing collections of health OER learning materials 	 Oerafrica.org/ healthproject site 	 ◆ 3-4 years 	 African Health OER Network website launched in April. In early 2011, we plan to enhance the website with more dynamic and interactive features, including mailing lists.

 Enhanced student learning 	 Research results on improved learning outcomes correlated to OER access 	♦ None	 ◆ 3-4 years 	 Evaluation underway for Ghana Emergency Medicine Collaborative OER 			
Ultimate Outcomes							
 Increased numbers of health care provider graduates and improved quality of training and performance 	 Graduation levels for physicians, dentists, nurses, public health workers, etc. Scores on standardized board tests 	 Currently there is more student demand than the system can support 	 ◆ 10-15 years 	 Discussions underway regarding follow-on efforts, including determining whether students can engage more in self-directed learning with OER 			
 Improved outcomes for patient populations 	 Health care statistics 	 Sub-optimal patient/provid er ratios 	 ◆ 10-15 years 	 Work underway to distribute and use learning materials 			