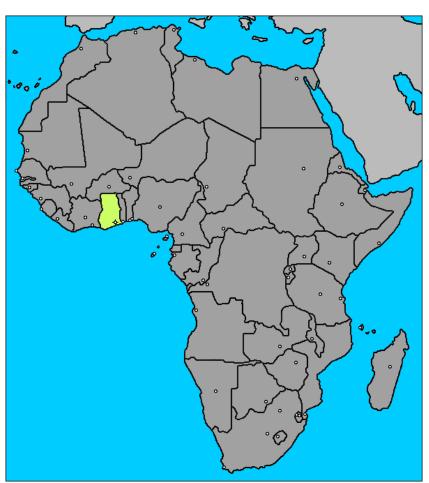




HEALTH OER AT KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, GHANA

Peter Donkor, Provost, College of Health Sciences UNESCO Meeting, Paris, December, 1 2010

Ghana – population 22 million





KNUST – The Green Campus





KNUST

- Located in Kumasi, Ashanti Region
- Established in 1951
- Vision is to advance knowledge in science and technology for sustainable development
- Governed by Council
- Headed by Vice-Chancellor
- 6 Academic Colleges i.e. Health Sciences, Engineering,
 Agriculture, Art and Social Sciences, Architecture & Planning,
 Science each headed by a Provost
- Deans of Faculties assist Provosts
- 28,000 students

College of Health Sciences





- Pharmacy and Pharmaceutical Sciences
- School of Medical Sciences
- Faculty of Allied Health Sciences
- Dental School
- Veterinary School
- Kumasi Center for Collaborative Research (KCCR)

Current Situation in College

- High faculty student ratios
- Inadequate classrooms, laboratories, etc
- High number of students during clinical instruction i.e. bedside
 - theatre, etc
- Inadequate learning resources

Current Situation in Colleges







OER - First steps

- Sensitization of African Leadership, Ghana 2008
- Michigan/OERAfrica sensitize faculty at College of Health Sciences KNUST - 2008
- Plan pilot OER project July 2008
- U. Michigan/OERAfrica workshops in Kumasi on policy, production -2009
- Michigan faculty spends year in Ghana 2008/09



OER at KNUST





OER Production Process @ KNUST

- Voluntary participation by faculty
- Internal and external collaboration
- Content and Design by faculty, ICT, media specialists
- Clearing, Review and Quality Assurance or dScribing by media specialists
- Publication, Interoperability and Access by ICT experts

Some Completed OER at KNUST

Internal Medicine Buruli Ulcer

Interpretation of Automated Blood Counts

Clinical Chemistry: Glucose Tolerance Test

Microbiology Clinical Cases in Microbiology

Laboratory Methods in Microbiology

Introduction to Virology

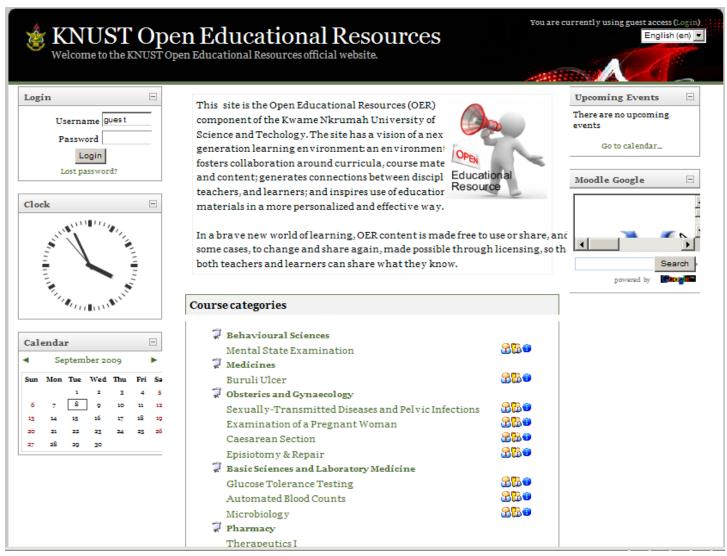
• **OB/GYN** Examination of the Pregnant Patient

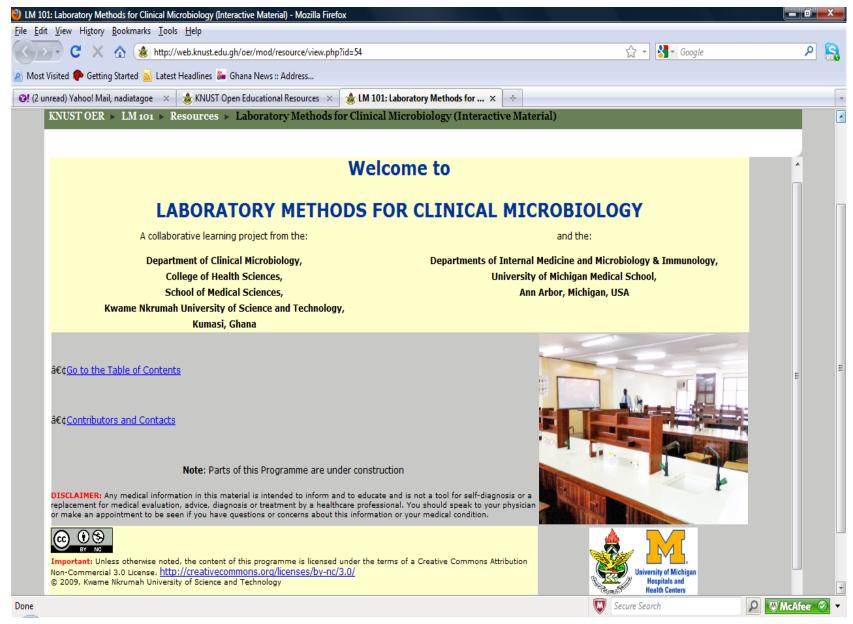
• **Behavioural Science** The Mental State Examination

Results

- OER productions completed and uploaded to dedicated KNUST website: http://web.knust.edu.gh/oer/
- Many more at different stages of completion
- Previously password protected
- Policy approved in August 2010
- Now free open access

KNUST OER Repository





Students' assessment of OER

- Based on Survey & Interview of medical students
 - Complements the teacher-learner interaction instead of replacing it
 - Makes the learning of complex scientific processes much easier when audio and visual interfaces are used
 - Makes laboratory and clinical demonstrations easier to understand
 - Facilitates in-class sessions as students are already familiar with the material

Summary of Milestones

- Hewlett Foundation funding for pilot project
- OER Coordinator appointed Feb 2009
- Interdisciplinary collaboration faculty from College of Health Sciences, Communication Design, Network Operating Center, Library, Distance Learning
- 16 OER productions outlined for completion
- Draft OER Policy committee Feb 2009
- Training of Media Specialists and Copyright Reviewers (dScribes)
- Policy Approved August, 2010
- Facilitation of OER workshop for Deans/Provosts of West African medical schools – Nov 2010

Current Challenges

- Topic-based instead course- or curriculum-focussed OER
- "Hobby" for faculty than serious activity
- Lack of incentives for production promotion, free time, monetary etc
- Limited funding sources
- ICT-related Student access to computer; infrastructure;
 Internet Bandwidth
- Current efforts limited to health OER

Financial Implications of OER

- Faculty time approx 30 hours/production
- Hiring of media specialists
- Hiring of part-time administrator
- Establishment of secretariat and coordinating centre
- Equipment PCs, video camera
- Software
- Institutional and national sensitization workshops

Way forward

- Policy implementation and structured development of OER
- Wider stakeholder involvement, MOE, MOH
- Sustainable funding and investment
- Partnering with students to reduce costs
- Faculty motivation to be addressed
- Develop metrics for evaluation of OER use
 - Administration, faculty, students
 - ? Cost-efficient; easier learning; easier teaching

PARTNERS





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 William and Flora Hewlett Foundation; Bill and Melinda Gates Foundation; Soros Foundation; OER Africa; University of Michigan; University of Ghana; University of Western Cape; University of Cape Town.

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