Kenyatta University and Syracuse University*: Africa-U.S. Higher Education Initiative Partnership

Building Capacity Through Quality Teacher Preparation

Resource packet developed from

Technology Training
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Kenyatta University

Resource Packet 12-02-KUSU

Kenyatta University Vision and Mission

Kenyatta University's *vision* is "to be a dynamic, an inclusive and a competitive centre of excellence in teaching, learning, research and service to humanity." The University's *mission* is "to provide quality education and training, promote scholarship, service, innovation and creativity and inculcate moral values for sustainable individual and societal development."

Kenyatta University-Syracuse University Partnership

The Kenyatta University-Syracuse University Partnership is funded by the United States Agency for International Development (USAID), which through a grant to Higher Education for Development (HED), funded 11 innovative new partnerships in 2011 between 22 universities in Africa and the United States to address issues in the areas of (1) agriculture, environment and natural resources, (2) health, (3) science and technology, (4) engineering, (5) education and teacher training/preparation, and (6) business, management and economics in Africa. These resulted from the Africa-U.S. Higher Education Initiative, a collaborative effort started in 2007 by a number of higher education associations and other organizations and led by the Association of Public and Land-grant Universities (A·P·L·U) to advocate for increased engagement in African higher education capacity development.

The Schools of Education of Kenyatta University (KU) and Syracuse University (SU) have had an institutional linkage since the year 2000 and have collaborated in research projects, mentoring doctoral students, and hosting international conferences. Additionally, a number of students who graduated from Kenyatta University have earned graduate degrees (M.S. or Ph.D.) at Syracuse University in teacher education.

The overall objective of the Kenyatta University and Syracuse University partnership is to build capacity at the secondary school level through quality teacher preparation across the span of teacher education—from preservice teacher preparation, to novice teacher induction, to practicing teacher continual growth— through enhancing the capacity of Kenyatta University in its faculty, educational programs, research, and engagement with stakeholders that will result in improved secondary education in Kenya. Along with this objective, we have a long-term goal of developing and establishing a model for teacher preparation and education that we will share with other universities in Kenya and other East African countries.

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Websites:
+ http://soeweb.syr.edu/centers_institutes/Kenya_partnership_projects/default.aspx

+ http://cuseinkenya.syr.edu/

Background for the Workshop

As part of the KU-SU partnership activities, we conducted a survey of all of the Department of Educational Communication and Technology faculty members to gain baseline data on a variety of teaching and learning issues; included among these issues were class size, supporting all learners, and integrating technology into teaching. Twenty-one faculty members completed the survey. Around 80% of the respondents stated that they see the use of technology as essential in teaching their units, and more than 83% of the respondents would like assistance in integrating technology into their teaching and in preparing teachers to integrate technology.

Additionally, another one of our project activities was to collect data from Kenyatta University graduate teachers, both novice (0-3 years of teaching experience) and experienced (more than 3 years of teaching experience). We collected data from a national sample of 100 teachers, 50 novice and 50 experienced. Sizeable percentages—74% of novice teachers and 94% of experienced teachers—answered "No" to the question "Did the KU TE program prepare you adequately to use ICT in your teaching?"

In January 2012, faculty members in the Department of Educational Communication and Technology had a one-day training session at the National ICT Innovation and Integration Centre, Ministry of Education. Participants expressed great interest in having more technology training, especially training that would include active engagement in developing technology skills and learning strategies for integrating technology into teaching and teacher preparation. To plan effectively for the training, department faculty members completed a Technology Needs Assessment. Twenty-one department members completed the assessment. Due to the response of faculty members and graduate teachers through the needs assessment and the interest of the faculty members, we chose to have two weeks of technology training for our fourth set of workshops sponsored through the Kenyatta University-Syracuse University partnership.

Participants who Participated in at Least One Training Session

Prof. Henry Ayot, Dr. Hamisi Babusa, Prof. Alan Foley, Ms. Maryanne Gichuhi, Dr. Ndichu Gitau, Mr. Yan Huang, Dr. Wilson Kerich, Dr. Mueni Kiio, Mr. Robert Kimotho, Dr. Violet Kimui, Mr. Silas Maiyo, Prof. Joanna Masingila, Dr. John Maundu, Dr. Marguerite Miheso-O'Connor, Mr. Peter Miheso, Ms. Florence Miima, Mr. Harrison Mulwa, Ms. Beatrice Murila, Dr. Margaret Murugama, Dr. Mary Nasibi, Dr. Sophie Ndethiu, Ms. Sellah Ndiege, Ms. Doris Njoka, Ms. Terry Njoroge, Dr. Moses Ochanji, Dr. Samson Ondigi, Dr. Karen Oyiengo, Ms. Stella Rwanda, Ms. Inviolata Sore, Dr. Nicholas Twoli, Ms. Agnes Wanjau, Dr. Gichuhi Waweru
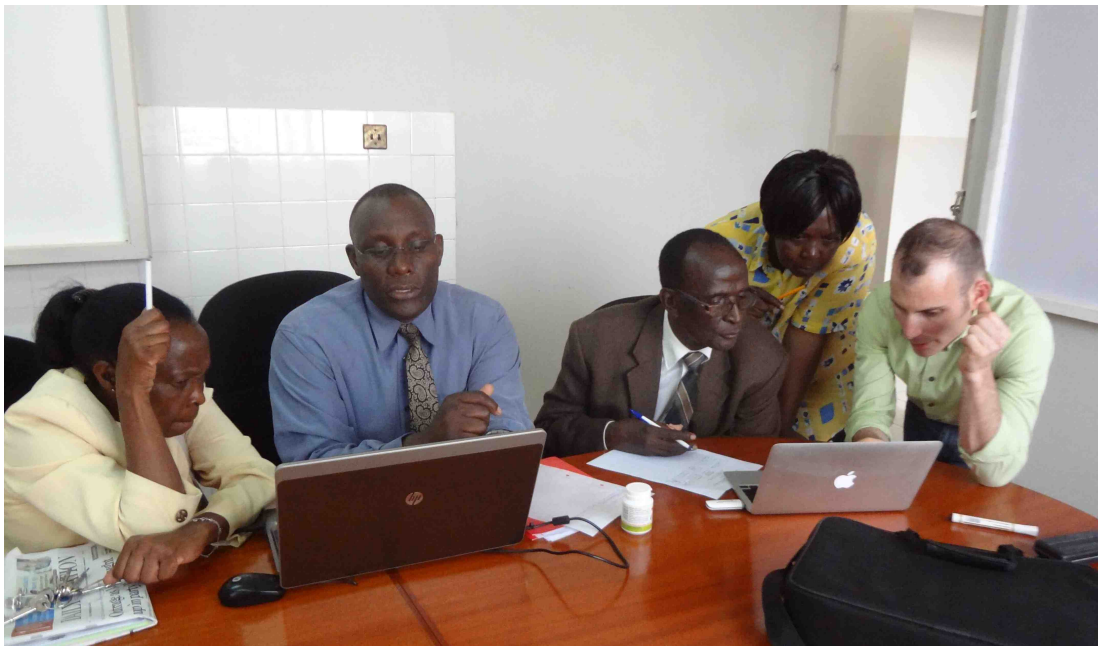
Report of Workshop Activities

As part of the Kenyatta University-Syracuse University Partnership Project, two faculty members and a graduate student from Syracuse University conducted training during the first two weeks of June focused on technology skills, with an emphasis on integration of technology in teaching. Associate Professor Alan Foley led the training; Professor Joanna Masingila and graduate student Yan Huang assisted Prof. Foley. The training sessions were designed to meet the faculty members at their current technology skill and comfort level and support them in developing proficiency in contemporary and emerging educational technologies.

Training sessions covered topics on (1) basic technology (assistance with any email, word processing, navigation questions), (2) pick-a-topic (assistance with any technology topic), (3) technology integration in teacher education (engaging participants in integrating technology into teacher education teaching and supporting teachers in using technology), (4) using tablet

technology in instruction (engaging participants in using iPads in teaching teachers and supporting their teaching of students), (5) developing a web presence in online teaching and learning (establishing profiles in Google Scholar and Academia.edu to create an online identity and connect with researchers and teacher educators across the world in areas of interest), (6) Universal Design (engaging participants in using the Universal Design framework to make learning as accessible as possible for all students), (7) online learning (strategies and techniques for creating a social presence in online learning), and (8) creating accessible media for use in teaching (engaging participants in creating materials that will support all learners in their classes). The workshop sessions consisted of a balance of presentation and hands-on learning.

Training participants included Department of Educational Communication and Technology faculty members, as well as staff members from the Library, the Department of Special Education and the National ICT Innovation and Integration Centre. Project members also conducted an initial assessment of several spaces in the department for planning for design for a digital classroom and flexible learning space.

The Syracuse University team also worked with four KU students with visual impairments using iPods and keyboards to teach the students how to use these devices as assistive technologies to help them in both their academic work and also other various areas in their lives (e.g., color detection, print recognition, creating documents, using applications, recording videos to listen to, taking photos of documents and creating optical character recognition documents). Staff members from the Office of Disability Services, the Library, the Department of Special Education, and a teacher from Kibos School for the Blind in Kisumu participated and supported the students.

Dr. Mueni Kiio, Dr. Samson Ondigi, Prof. Henry Ayot, Dr. Mary Nasibi and Prof. Alan Foley work on setting up Academia.edu and Google Scholar profiles

Dr. Gichuhi Waweru and Ms. Doris Njoka explore features of the iPad

Mr. Silas Maiyo, from the National ICT Innovation and Integration Centre, writes on an iPad that is set up to be a document camera

Sammy Luvonga, an Education student, works to coordinate the iPod and keyboard

Lucy Waringa, an Education student, works with her iPod and keyboard

Products Developed Through the Technology Training Sessions

The following items were developed through the training sessions and are available and can be checked out through Ms. Inviolata Sore, the Project Administrator, in Room 6 (Projects Office) for use by department faculty members.

1. Folders with hard copies of documents with step-by-step instructions for the following technology tasks. There are three (3) copies of the folder available for check out and digital copies are available in the technology course on Moodle.

   - Adding Data to an iPad and a Modem
   - Charging an iPad
   - Connecting Two Bluetooth Devices
   - Creating Academic Profiles
   - Creating Polls
   - Downloading YouTube Videos
   - Excel Tutorial
   - Learn More about Keynote (an application on the iPads)
   - Learn More about Pages (an application on the iPads)
   - Logging in to Moodle and Adding Our Course
   - Making and Using a Document Camera
   - PowerPoint Tutorial
   - Sending a Document on an iPad via Email
   - Uploading and Captioning a Video on YouTube
   - Word Tutorial

2. DVDs with the following four video presentations by Prof. Alan Foley from the workshops during early June. There are two (2) copies of the DVD available for check out, plus four (4) CDs each having one of the presentations.

   - Integrating ICTs into Teaching
   - Introduction to the iPad
   - Online Learning and Social Presence
   - Universal Design

3. CDs with the following captioned videos of eight (8) Kenyan secondary classroom lessons that could be used in subject methods classes. There are nine (9) copies of the CD available for check out.

   - Biology lesson on respiration
   - Biology lesson on transport in plants
   - Chemistry lesson on electrolytes and non-electrolytes
   - Chemistry lesson on titration
   - English lesson on listening and speaking
   - Mathematics lesson on histograms
   - Mathematics lesson on the law of sines
   - Physics lesson on linear motion

4. iPads with a zippered plastic bag with the power cord and outlet adapter. There are three (3) iPads available for check out.