



Trainings and Recommendations on Technology Implementation and Integration for Faculty Members at University Level

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

Building Capacity Through Quality Teacher Preparation

Policy Brief 14-04-KUSU



As part of the KU-SU partnership activities, we conducted a survey in April 2011 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 a series of technology workshops sponsored through the Kenyatta University-Syracuse University partnership.

In June 2012, Prof. Alan Foley, from Syracuse University, led training sessions focused 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).

In January 2013, following up on two previous sets of technology integration workshops, and the continued interest expressed by participants, Prof. Alan Foley led three days of workshops focused on technology, and in particular on making effective presentations.

In July 2013, Prof. Alan Foley and Prof. Joanna Masingila led two additional days of workshops on technology integration that focused on using SurveyMonkey™, Excel™ and an interactive whiteboard such as a SMART Board. All workshop sessions consisted of a balance of presentation and hands-on learning.

To facilitate faculty members' use of technology in their work, and to facilitate their teaching with technology, project funds were used to purchase a laptop and Internet modem for each full-time faculty member in the Department of Educational Communication and Technology.

Additionally, the department was given booklets of technology instructions from the workshops; DVDs with workshop presentations so faculty members could review the presentations; two iPads with cases, power cords, and installed apps Pages, Keynote; one VGA adapter to connect an iPad to a LCD projector; one connector to connect a camera to an iPad; two stylus to use when writing on an iPad; six iPad minis with cases, power cords, and installed apps Pages, Keynote; three VGA adapters to connect iPad mini to a LCD projector; one connector to connect a camera to an iPad mini; and three document camera stands to use with an iPad or iPad mini.

From Implementation to Integration

The distinction between technology implementation and technology integration is often unclear for educators; however, the distinction is important. Technology implementation refers to digital competency and skills in using technology resources, whereas technology integration refers to using technology as a tool or medium to acquire new skills, knowledge, and understanding of a concept or phenomenon. Moving from implementation of technology to meaningful integration is predicated on the availability of technology for teachers to use, support in using it, and curricular connection. Without adequate professional development and training, faculty members may lack the skills needed to make this distinction and effectively integrate technology. Based on the professional development conducted through this project, we make the following recommendations:

- ***Recommendation #1:*** Technology tools must be available for faculty members to use in teaching. This means that LCD projectors, printers, digital cameras, along with subject-specific software must be available and used by faculty members.
- ***Recommendation #2:*** Training and support must be available for faculty members by trainers who have expertise in subject-specific technology tools in order to allow faculty members to integrate technology in teaching and learning, and to prepare pre-service teachers to do the same.
- ***Recommendation #3:*** Faculty members must connect technology to the curriculum they are teaching and see technology as a vehicle for engaging students in understanding these curricular ideas in a deeper way. This is especially important as the need for preparing pre-service teachers to integrate technology in teaching is high.

*This partnership is made possible by the generous support of the American people through the United States Agency for International Development (USAID) and the Higher Education for Development (HED) office, as well as the Schools of Education at Kenyatta University and Syracuse University. The contents are the responsibility of the project team members from Kenyatta University and Syracuse University and do not necessarily reflect the views of HED, USAID or the United States Government.