



CURRENT RESEARCH ON E-LEARNING & PROPOSED RESEARCH AGENDA FOR MAKERERE UNIVERSITY

By

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Makerere University

E-learning Research Group

PHEA ETS Formulation Consultative Workshop

6th – 10th October 2008



Presentation Outline

- Background
- Aim
- Objectives
- Ongoing and Recently Completed Research
- Modus Operandi
- Projects in the Pipeline
- Benefits
- Research Agenda
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Background

- The group is housed in the FCIT
- Membership is made up of persons from a variety of backgrounds such as academicians, researchers, educationists, staff developers, Internet librarians, software developers and Web designers drawn from all over the University
- The need to stimulate e-learning research under a coordinated environment and the need to share research findings in e-learning led to the birth of the group



Aim

- The group aims at enhancing e-learning research output and practice at Makerere University increases



Objectives

- Undertake e-learning research locally and internationally through institutional/organizational collaborations
- Develop capacity for mobile and online learning amongst university dons in developing countries such as Uganda
- Establish new techniques and models for online and mobile learning that can be implemented within developing countries such as Uganda
- Streamline the pedagogical integration of Information Communication Technology in developing countries education
- Provide high-quality consultancy and education support on the use of eLearning and mobile learning within developing countries



Objectives...

- Organize training workshops, seminars, symposiums, debates, research and publications related to e-Learning
- Provide an evaluation of the implementation of eLearning within Makerere University and Uganda
- Re-design the eLearning framework for both Makerere University and Uganda educational system
- Advice, strengthen and broaden people's understanding on the use of e-Learning and mobile learning for developmental purposes
- Strive for the improvement of the quality of eLearning instruction



Ongoing Research

- Pedagogical model for the efficient deployment and utilization of mobile learning objects in developing countries – PhD Research Project
- Gender Symbolism, Gender Differentials in ICT Uptake in Ugandan Universities: A Users' Standpoint – PhD Research Project.
- A Software Agent-Based Model for Personalized Real-Time Feedback Generation in E-learning – PhD Research Project
- ICT Liberalization and Changing Gender Relations in Contemporary Uganda – PhD Research Project.
- A framework for implementation of blended learning in constrained low bandwidth environment – PhD Research Project.



Ongoing Research...

- Making e-learning resources such as learning management systems and associated content accessible to the majority of potential users including people with disabilities – PhD Research Project
- A constructivist framework for the development of personalized online learning systems – PhD Research Project
- Enhancing the capacity of East African universities to utilize ICT for sustainable regional development – EU funded at the East African University Council
- Scaffolding Conventional Distance Learners in Uganda for Constructivistic Online Learning



Recently Completed

- An Evaluation of the Mobile Research Supervision Initiative at Makerere University
- Gender Study of ICT Access in Makerere University
- E-learning in teaching, learning and research in the universities of Makerere, Dar-Es-Salaam and Nairobi
- The effectiveness of mobile short messaging service (SMS) technologies in the support of selected distance education students of Makerere University, Uganda
- Web-based mobile application for supporting group discussions amongst distance learners at Makerere University, Uganda



Modus Operandi

- Undertaking research in cutting edge e-learning topics
- Seminars – these are held on a weekly basis (Every Wednesday)
- Training Workshops
- Facilitating online based crosscutting courses, e.g. Computer Literacy Course
- E-Learning Consultancy



Projects in the Pipeline

- Creation of Digital Content for Secondary School Education (starting soon)
- Formulating educational technology strategies for Makerere University – stage being set



Benefits

- Research skills
- Publications (some examples)
 - Baguma, R., Lubega, J. (2008). Web design requirements for making Web based learning accessible to the blind. A Springer publication available at <http://www.springerlink.com/content/l2r04287766l308q/>
 - Muyinda B. P., Lubega, J., Mugisa, E. (2008). Unleashing Mobile Phones for Research Supervision Support at Makerere University - Uganda: Lessons to Learn. *Fourth coming in International Journal of Innovation and Learning*
 - Muyinda, B. P. (2007). MLearning: pedagogical, technical and organisational hypes and realities. *Campus-Wide Information Systems*, 24(2), 97-104.



Benefits ...

- Publications (some examples) ...
 - Muyinda B. P., Lynch, K., Mugisa, E. (2007). Mlearning: The education use of mobile communications devices. In Kizza, J. M., Muhirwe, J., Aisbett, J., Getao, K., Mbarika, V.W., Patel, D., Rodrigues, A.J. (Ed.), *Strengthening the Role of ICT in Development*. Kampala: Fountain Publishers. ISBN: 978-9970-02-730-9
 - Muyinda B. P., Lubega, J., Lynch, K. (2008). An Evaluation of the Mobile Research Supervision Initiative (MRSI) at Makerere University. *A paper presented at eLearning Africa 2008 Conference, Accra, Ghana, May 28-30, 2008*
- Collaborations
 - SAIDE and CET (brewing up)
 - AVOIR
 - Nettel@Africa
- Has Propelled our Academic and Professional Agendas



Research Agenda

- As communicated in expression of interest by the VC
 - Factors that influence uptake of ETS in African Universities
 - Investigations into social and pedagogical ICT mediated possibilities in diverse and difficult contexts
 - The roles and possibilities of mobile technologies;
 - The strategies used by enterprising staff and students in challenging circumstance; and
 - The alignment between emergent ICT mediated pedagogical practices and assessment practices.
 - Influence of gender relations in the uptake and implementation of e-learning



Research Agenda...

- As set out by the research group
 - Gender and ICT
 - Knowledge Sharing and Acquisition
 - Online Tracking
 - Online Feedback Generation
 - Adaptive eLearning
 - Content Instruction, Storage and Sharing
 - Personalization
 - User profiling



Research Agenda ...

- As set out by the research group ...
 - Multi-media in eLearning
 - Interoperability of learning resources, systems
 - eLearning standards
 - meta data
 - digital rights management
 - Collaborative eLearning
 - Software Agents for eLearning



Research Agenda ...

- As set out by the research group ...
 - Online Assessment
 - Formative
 - Summative
 - E-learning tools
 - Learning Management Systems
 - Content Management Systems
 - Learning Content Management Systems
 - Personalized Learning Content Management Systems
 - Mobile Learning
 - Pedagogical Integration of ICTs in Education for Developing Countries



Research Agenda...

- As set out in PHEA Workshop



Mega Plans

- Establishing a 2 Yearly E-Learning Conference – name yet to be decided
- Establishing an E-Learning Journal – name yet to be decided



Some Members

1. Jude T. Lubega **Chairperson**
2. Paul B. Muyinda **Secretary**
3. Miss Ruth Nsibirano
4. Rehema Baguma
5. Consolata Kabonesa
6. Atib Habibu
7. Emily Bagarukayo
8. Godfrey Onyait
9. Philip Ayoo
10. Muhammad Nazir Suhail
11. Evelyn Kahiigi
12. Aramanzan Madanda
13. John Ngubiri



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