

E-Content Development & Staff Retooling Workshop (11-15 January 2010)

Egerton University, Njoro – Kenya



A WORKSHOP REPORT

By

Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)

Makerere University Campus,

Garden Hill, Plot 151

P.O Box 7062,

Kampala, Uganda

Submitted to

RUFORUM

&

Association for Agriculture Research in East and Central Africa (ASARECA)

Table of Contents

Background	3
Workshop Objectives.....	3
RUFORUM’s vision for e-learning	4
Pre-event planning	4
Workshop Opening Remarks.....	5
Workshop Programme.....	5
Workshop Participants.....	5
Process overview.....	5
Participants Concerns / Expectations.....	6
Evaluation.....	7
Emerging Issues.....	7
Annexes.....	8
List of Participants.....	8
Workshop Programme.....	10
Workshop Evaluation.....	14

Background

Harnessing ICT for effective graduate course delivery is essential. Web 2.0 Technologies such as Moodle Learning Management System (MLMS) are already influencing the way in which people learn, access information and communicate with one another. The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), through its ICT Capacity Initiative has organized a series of workshop to train university lecturers and research professional in Eastern, Central and Southern Africa in the use of Web 2.0 Technologies for research management, e-content development and delivery.

RUFORUM sees ICT being effectively used and integrated into the operations of the RUFORUM universities with a view to improving teaching, learning, research and the linkages with all the stakeholders in the agricultural sector. In this regard one of RUFORUM's ICT Objectives is to empower and encourage RUFORUM member universities to use emerging technologies (such as open educational resources, e-learning, web 2.0) to train a critical mass of Masters and PhD graduates, who are responsive to stakeholder needs and national/regional development goals. AICM is one of the regional postgraduate programmes coordinated by RUFORUM and is supported by the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) through the SCARDA project. The development of AICM was spearheaded by ASRECA after a regional training needed assessment for professionals in use of ICT agricultural knowledge management and communication.

In order to be successfully operationalize the teaching of AICM courses lecturers and students should take advantage of the new ICT technologies. Web 2.0 technologies like MLMS support constructivist approaches to learning and have great potential to socialize online learning to a greater extent and in line with the intended goal of AICM as a computer based postgraduate programme. Since its launch at Egerton University, the delivery of the courses have been dogged by a number of challenges that demand immediate retooling of lecturers including capacity building in e-content development and use of Web 2.0 Technologies to manage research and course delivery. Web 2.0 technologies should be implemented taking into account pedagogical perspectives that were identified as the corner pillars of innovative teaching and student supervision in AICM.

Workshop Objectives

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) and the University of Greenwich (through the Natural Resources Institute - NRI) collaborated to run a five-day training workshop on e-content development and staff re-tooling targeted at Agricultural Information Communication Management (AICM) lecturers/facilitators. Twenty-five participants from Egerton University and the University of Nairobi came together to solidify and learn the following concepts:

- 1) E-learning course design;

- 2) Moodle course management;
- 3) E-tutoring and
- 4) Structural infrastructure & cultural change issues.

Dr Simon Walker (Head of Educational Development, University of Greenwich London), Dr Timothy Chancellor (Natural Resources Institute, University of Greenwich London) and Ms Nodumo Dhlamini (RUFORUM ICT Programme Manager) facilitated during this training workshop.

RUFORUM's vision for e-learning

RUFORUM's vision for e-learning within the RUFORUM network entails the following:

- 1) RUFORUM member universities increase their use of ICT to support effective, decentralized learning and sharing of knowledge;
- 2) All the teaching resources for the RUFORUM supported regional postgraduate programmes to be available in electronic format by 2014;
- 3) All the teaching resources for the RUFORUM supported regional postgraduate programmes to be released as Open Educational Resources under the Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported License.

RUFORUM continues to mobilize resources to support the actual development of e-content and training of staff. An important focus area in 2010 will be supporting staff so that they produce tangible outputs in terms of electronic teaching resources for their subject areas. One of the urgent projects that RUFORUM will be focusing on is supporting the development of electronic teaching resources for the MSc AICM at Egerton University) and the PhD (Aquaculture and Fisheries Science at Bunda College of Agriculture). For the AICM course RUFORUM will begin with the development of the Fundamentals of AICM electronic teaching materials through collaboration with Egerton University and University of Nairobi.

Pre-event planning

ASARECA, RUFORUM and the Natural Resources Institute of the University of Greenwich met during the GCHERA conference in Nairobi. Discussions were held concerning how best to support teaching and learning activities in the MSc AICM programme at Egerton University. Follow up discussions were made via email, leading to the concretization of plans for the '*e-content development and staff re-tooling workshop*'. RUFORUM then submitted a concept note to ASARECA seeking support for components of the budget. NRI also committed funds to support the participation of Dr Simon Walker and Dr Tim Chancellor. RUFORUM committed to support the participation of its staff that would co-facilitate the workshop.

Workshop Opening Remarks

The workshop was officially opened by the Egerton University Vice Chancellor Professor James K. Tuitoek. He reiterated his full support to the full integration of ICT in teaching, learning, research and collaboration. Egerton University's 2009-2015 Strategic Plan (objective 8) specifies that the university will integrate ICT in teaching, learning, research and management. He alluded to the following fears: plagiarism, low quality content and copyright issues and concluded by saying that e-learning was a necessary 'evil'.

Workshop Programme

The workshop was scheduled for 5 days (see Appendix). The programme had a total of 15 sessions (three per day). The workshop began at 8:30 am daily, finishing at 4:00 pm. There was flexibility to revisit areas that participants did not understand. There was also flexibility to bring in new components that arose during the training. Please see (<http://ed-dev.gre.ac.uk/course/view.php?id=61>) for the daily programmes that were posted on the moodle site.

Workshop Participants

A total of 25 participants were invited to attend the workshop. Twenty-three (92%) came from Egerton University and two (8%) came from the University of Nairobi. Twenty percent were females and eighty per cent were males. In terms of academic qualifications, 92% had PhD's and 8% were MSc students. The participants came from a cross-section of departments within the universities – Computer Science, Distance Education, Library, Education and agricultural departments.

Process overview

Please visit flickr to view some of the workshop pictures on this link:

<http://www.flickr.com/photos/simonwalkerssnaps/sets/72157623090298869/> The workshop materials have also been uploaded on the University of Greenwich Moodle site and you can view them after creating an account. The link for the University of Greenwich moodle is:

<http://ed-dev.gre.ac.uk/course/view.php?id=61> The sitting arrangement during the training was such that it allowed collaboration and group work within the different groups. The informal but focused atmosphere also encouraged the participants to open up to discussions. The moodle platform also facilitated the capturing of discussions, allowed chatting and enabled the participants to retrieve all materials related to the training.

Participants Concerns / Expectations

Concerns	Expectations
The university does not have adequate facilities	You'll participate
Interference from work environment	To be able to convert my lecture notes into an interactive e-learning format
Logistical problems in application of the latest skills	How to effectively use e-learning tools
The course may be too intensive and technical	My teaching will be more effective
The university is not ready to have this learning strategy	The <u>one</u> day the use of papers (source wood) will be a thing of the past in Egerton by about 80%. That when teachers/learners embrace the use of internet and computer in learning research and communication
The technology won't work	To be able to learn how to develop e-content and post it on the Moodle platform
Keeping the group intact throughout the workshop	To become literate in the value and use of e-learning
I feel that I may not be proficient in computing	Broadened capacity and quality of teaching at personal level
Amount of time required to develop good e-content for my courses	Build competency in use and application of Moodle
Not to finish the workshop scheduled programme	We will keep time during the training
Slow take off due to insufficient ICT skills by staff	To be able to develop and use e-learning strategy for the benefit of the current and future students
The learners/students in our university know more than lecturers when it comes to the use of ICT – soon they will demand e-learning instruction when the lecturers are not prepared	Understanding content development in greater detail
Able to publish on the web	That we shall handle the pedagogical issues as well as the technology (skills)
Programme may be too crowded for adequate examples of skills required	Anxious that I can be able to effectively deliver up to date knowledge systems to my students, taking advantage of current technologies in delivery of information
Their various abuses of computers emerges at the same speed as internet use	To be made to understand how to develop e-content
The challenges of technology – IT jargon may be overwhelming	Learn about the e-tools and how I can use them to develop curriculum content
As an institution we are far behind, even for using laptops for teaching. So how do we utilize this knowledge?	Know how to effectively use e-learning as tool in my teaching and research engagement
Security of own works	To use e-learning to improve my service delivery
Need to make effective contributions in research by taking advantage of the state of art and science in my area of specialization	To learn the whole concept of e-learning from the content development and service software perspective
How to absorb the whole concept of e-learning and how it will benefit the rural folk and the computer illiterate persons. Sustainability is another fear	Be able to design e-content for both teaching and learning purposes
Whether in adopting the e-learning strategy I can actually sustain it in my teaching endeavors	Participants will start to identify how technology can enhance their teaching, research and outreach activities

Concerns	Expectations
Lack of sufficient technical know-how E-learning software may not be locally available and in case it is/may be expensive to acquire/maintain	To have technical expertise To be proficient in producing e-learning materials To be able to teach/train others in the production of e-learning materials
Sending of virus to my class platform Unauthorized use of material posted Lack of practical use of what is learnt in this workshop	To place my course outlines, assignments and reference materials on website Create a class web page with password where I can post notes and send and receive assignments Create a class blog for discussions Open web address for students

Evaluation

The online survey monkey tool was used to administer the workshop evaluation. The link is:

http://www.surveymonkey.com/sr.aspx?sm=R8Z93PfRn7ZNExoSslihE_2bBwCfR7rS1wWUnGt1lu7a0_3d

A total of twelve questions were given. Questions 8-12 required the participants to elaborate further and their responses are shown as an appendix.

Emerging Issues

1. There is an opportunity for Egerton University to develop its e-learning strategy and associated policies. This is an important starting point for the future of the e-learning implementation.
2. Various follow up opportunities to take this initiative have been presented. There is a need to identify resources for the following:
 - a. A retreat for Egerton University, University of Nairobi and Haramaya University to share experiences on the MSc AICM
 - b. A regional training workshop for the moodle learning management technical support persons in the RUFORUM universities
 - c. Funding of the co-development of the AICM Fundamentals course by Egerton University and University of Nairobi
 - d. Capacity building in statistical analysis and data management [requested by Egerton University Staff]
 - e. Funding some people to attend the University of Greenwich E-learning Conference (7th July 2010). Dr Chancellor and Dr Walker offered to structure additional activities and offer RUFORUM to present its findings of the ICT Situation Analysis.

3. RUFORUM and ASARECA must continue to find resources to build the capacity of the lecturers to teach innovatively and understand AICM concepts.

Annexes

List of Participants

Name	Institution	Physical address	Mobile No.
SIMON WALKER	Greenwich university	Head of Educational Development, Univ of Greenwich, Email; s.walker@gre.ac.uk	+44 208 3317683
TIM CHANCELLOR	Greenwich university	Natural resource institute, University of Greenwich Central Avenue, Chatham maritime, Kent ME4 4TB, UK Email; t.c.b chancellor@gre.ac.uk	+44(0) 1634883466
NODUMO DHLAMINI	RUFORUM	RUFORUM Email: n.dhlamini@ruforum.org	+256 773229283
Dr. JASON M. GITHEKO	Egerton University	Dept of Computer Science Email; githeko@gmail.com	+254 722 740237
Dr. JUSTUS M. OMBATI	"	Dept of Education Email; jusmotush@yahoo.com	+254 722 692765
Dr. GILBERT OBWOYERE OBATI	"	P.O Box 536 Egerton Email; onach2002@yahoo.com	+254 725 214510
Dr. BERNARD K. NJEHIA	"	Dept of Economics Email; knjehia7461@yahoo.com	+254 722 488337
Dr. ISAIAH MASINDE TABU	"	Dept of CHSS Email; immtabu@yahoo.com	+254 733 939181
Dr. BOCKLINE OMEDO BEBE	"	Dept of Animal science Email; obebeb@yahoo.com	+254 721 853999
Dr. JOSHUA O. OGENDO	"	COD, Dept of CHSS	+254 722 892504

Name	Institution	Physical address	Mobile No.
		Email; ogenderjoshua@yahoo.co.uk	
Dr. JOASH K. KIBETT	"	Dean of Students Email; kibettjoash@yahoo.com	+254 727 097186
Dr. ABDI GULIYE	"	Dept of Animal science Email; guliye@gmail.com	+254 723 800 242
Prof. MWANGI NDIRANGU	"	Assoc Professor Email; ndirangu2002ke@yahoo.com	+254 722 592283
Dr. GEORGE M. GATERO	University of Nairobi	Senior librarian U o N P.o box 30197, 00100. Nairobi Email; ggatero@yahoo.co.uk	+254 722 902263
Prof. JOHNSON CHANGEIYWO	Egerton University	Director CoDL Email; jchangeiywo@yahoo.com	+254 722 858563
Dr. MARGARET WANJIRU NGIGI	Egerton university	Senior lecturer Dept of Agric Economics Email; ngigim@yahoo.com	+254 721 798784
Dr. ELIAS K. MARANGA	"	Dept of Natural Resources Email; ekmaranga@yahoo.com	+254 722 694378
Dr. DAVID .M. AMUDAVID	"	Dept of Agricultural education Email; damudavi@africaonline.co.ke	+254 717 627098
MARY C. LOPOKOIYIT	"	Deputy director planning/ Lecturer Email; mclopokoiyit@yahoo.com	+254 724 313771
Dr. RAYMOND ONGUS	"	Assistant librarian Email; raymondongus@yahoo.co.uk	+254 722 377467
Dr. RICHARD M. S. MULWA	"	Director CMRT / Senior lecturer Email; risamuk@gmail.co.uk	+254 722 557037
Dr. ERIC CHERUIYOT	"	Senior lecturer Email; cheruiyotke@yahoo.com	+254 722 359310

Name	Institution	Physical address	Mobile No.
Dr. MBITHI R. MULWA	University of Nairobi	Lecturer Dept of Agric Econ, Univ. of Nairobi Email; richard.mulwa@yahoo.com	+254 710 561626
Mr. Chrys Misaro	Egerton University	ICT Manager Email: cmisaro@egerton.ac.ke	+254 722 363145
Dr. AGNES OYWAYA NKURUMWA	Egerton University	Dept of AGED & EXT Email; aonkurumwa@yahoo.com	+254 721 220363
Prof. FRED KERARO	"	College of open & Distance learning Egerton university Email; fred.keraro@yahoo.com	+254 721 375678
Dr. ING. WILFRED G. GIKARU	"	Dept of Comp. Science Email; wgikaru@yahoo.com	+254 723 620899
ALEX MUGAMBI	"	ICT Department Email: mugambi@egerton.ac.ke	+254 722 981781
KAPSOOT CHEBET	"	MSc. Horticulture Student CHS Dept Email; ecckapsoot@yahoo.com	+254 722 797160
MAUREEN SITUMA	"	MSc. Horticulture Student CHS Dept Email; msituma@gmail.com	+254 714 671840

Workshop Programme



Regional Universities Forum



Association for Strengthening



Natural



Egerton

for capacity Building in
Agriculture

Agricultural Research in Eastern
and Central Africa

Resources
Institute (NRI) –
University of
Greenwich

University

WORKSHOP PROGRAMME

E-CONTENT DEVELOPMENT AND STAFF RETOOLING WORKSHOP (11-15 JANUARY 2010)

EGERTON UNIVERSITY, NJORO - KENYA

AGRICULTURAL INFORMATION AND COMMUNICATION MANAGEMENT (AICM) PROGRAMME

Expected Outputs

Aims

- Devise strategic approaches to support curriculum redesign and development
- Develop approaches and skills to enhance learning using technology

Outcomes

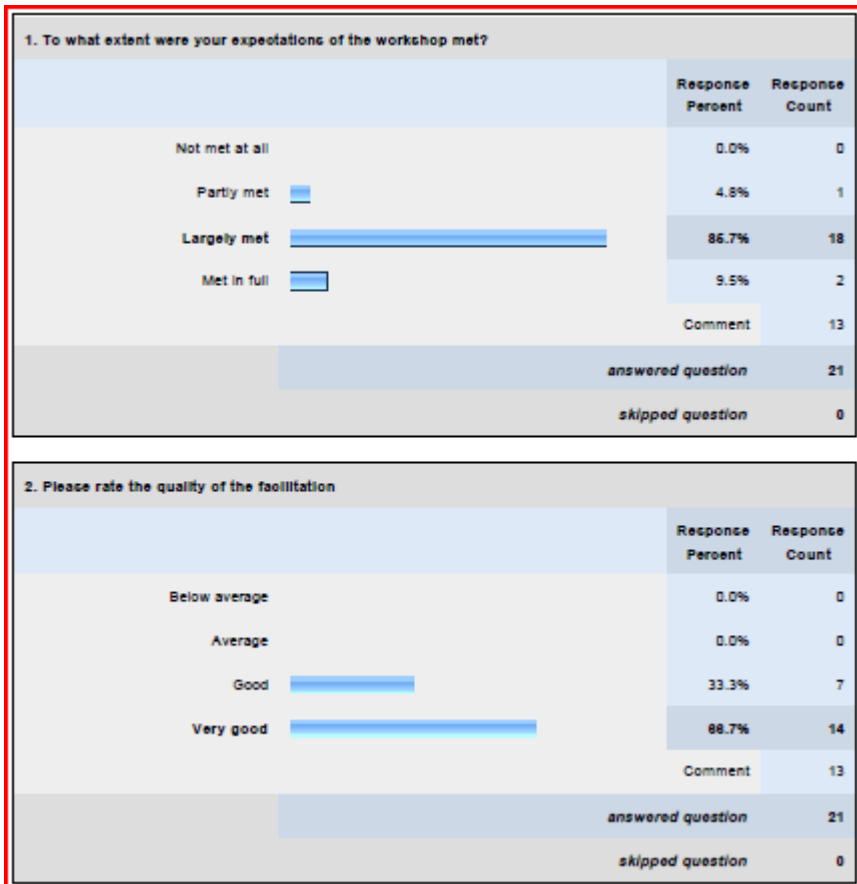
At the end of the training sessions, participants will be able to:

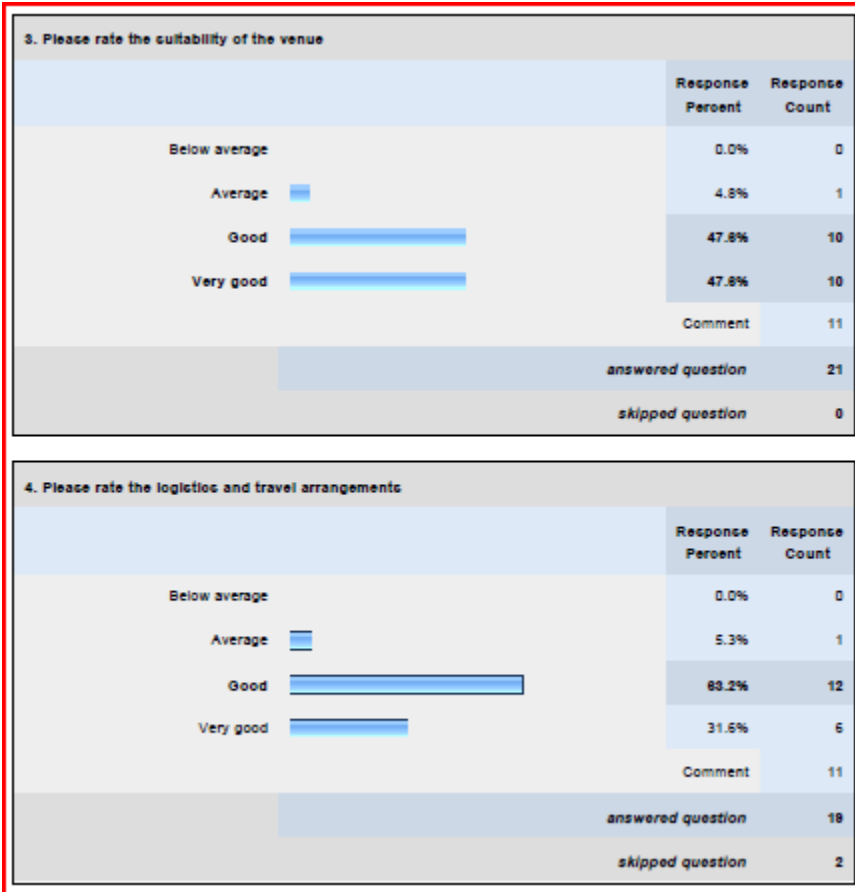
- identify appropriate models of learning, feedback and assessment that integrate digital tools and technologies
- Populate specific Moodle courses with appropriate content and activities for teaching and research under the AICM programme
- Share and review content, and consider stakeholder action plan for further development

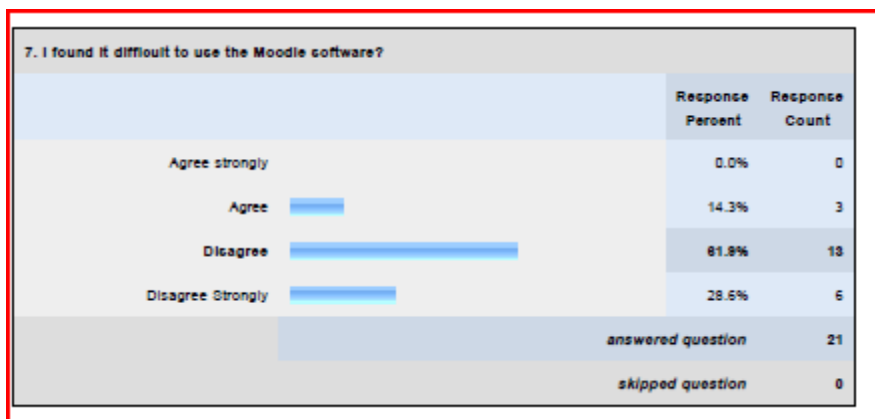
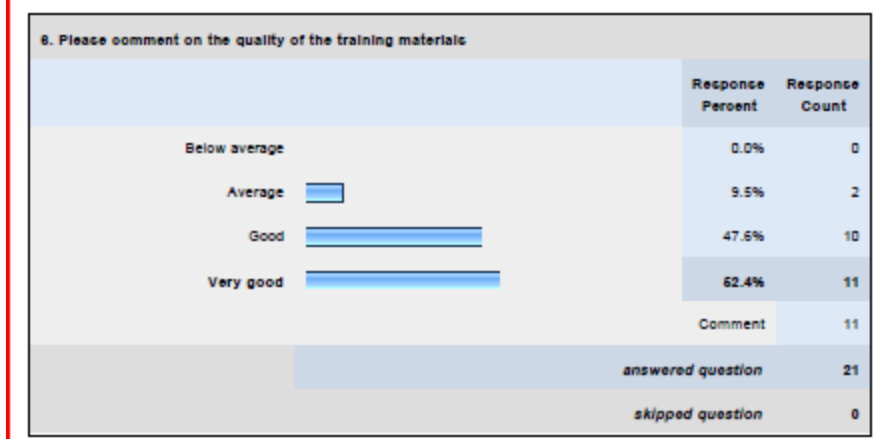
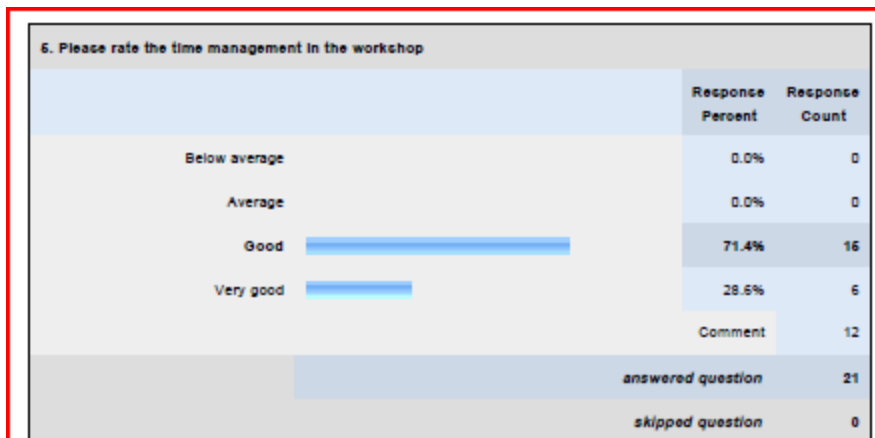
Day	8:30	10:30	11:00	1:00	2:00	3:45	4:00
1	<p>Welcome and Introduction</p> <p>Opening Remarks</p> <ul style="list-style-type: none"> Organizing Committee RUFORUM ASARECA University of Greenwich <p>Participant Introduction and Expectations</p> <p>Workshop Expectations</p> <p>Aims/Objectives and Outcomes</p> <p>Official Opening – VC, Egerton University</p>	HEALTH BREAK	<ul style="list-style-type: none"> Overview of sessions E-learning rationale, general objectives of e-learning, 	LUNCH BREAK	<ul style="list-style-type: none"> The teacher as active learner (participant workshop) Pedagogical models 	HEALTH BREAK	<ul style="list-style-type: none"> Policy implications <p>Paper</p> <p>University strategic plans / learning and teaching policies, models of learning ,</p> <ul style="list-style-type: none"> Measures of success, JISC publications <p>Practical</p> <p>Computer suite/ laptops running Moodle with internet connectivity</p> <p>Moodle server (Greenwich)</p>
2	<p>E-learning course design</p> <ul style="list-style-type: none"> Review of day 1 Developing goals and objectives, assessment 	HEALTH BREAK	<ul style="list-style-type: none"> Instructional design principles for e-learning <p>Paper</p> <p>models of learning , JISC publications</p>	LUNCH BREAK	<ul style="list-style-type: none"> Instructional methods for e-learning 	HEALTH BREAK	<ul style="list-style-type: none"> Moodle course creation and design (part 1)

Day	8:30	10:30	11:00	1:00	2:00	3:45	4:00
3	Moodle course management <ul style="list-style-type: none"> Review of day 2 Moodle course creation and design (part 2) 	HEALTH BREAK	<ul style="list-style-type: none"> Moodle course creation and design (part 2) CONT Communication tools 	LUNCH BREAK	<ul style="list-style-type: none"> Feedback and Assessment E-Tutoring <ul style="list-style-type: none"> Student enrolment Interacting with learners - forums 	HEALTH BREAK	<ul style="list-style-type: none"> chats, email, wikis, groups Course import, export, SCORM, backup Gradebook management
4	Structural infrastructure and cultural change <ul style="list-style-type: none"> Review of day 3 Staff and learner skills 	HEALTH BREAK	<ul style="list-style-type: none"> Standards for e-learning 	LUNCH BREAK	<ul style="list-style-type: none"> Staff incentivisation - certification 	HEALTH BREAK	HMSO standard for e-learning Skills audit <ul style="list-style-type: none"> QA and validation e-Learning policy Measures of success
5	Ruforum planning <ul style="list-style-type: none"> Review of Day 4 RUFORUM ICT Policy Implications for E-Content Intellectual property rights - who owns what? 	HEALTH BREAK	<ul style="list-style-type: none"> AICM Course: Lessons and Wayforward (RUFORUM-EGERTON-ASARECA) 	LUNCH BREAK	Quality assurance - Goals, objectives, methods and measurement Peer Review	HEALTH BREAK	The Wayforward and Next Steps Workshop Evaluation

Workshop Evaluation







Aspect	Participant Comments
8. Which topics or activities in the workshop were most useful to you? Please indicate why?	<ul style="list-style-type: none"> Using the programme to upload my course outline. Saves one the cost and inconvenience of making and availing physical copies to students, if students can access them on-line. Moodle allows wider coverage within shorter time and also gives more room for interaction with students. Hands-on practice on moodle, learning how to develop and upload documents into the moodle

Aspect	Participant Comments
	<ul style="list-style-type: none"> • World Cafe- It brought out new insights, meanings and expectations of e-learning. • The whole idea that I can link topics to quizzes, able to grade, control enrolment and content access to my intended targets
9. Which parts of the workshop were least useful? Please indicate why?	<ul style="list-style-type: none"> • The content on the battles by medieval kings. Local examples would have been more appropriate. • Introductory part was not that important. We should have just concentrated on the software since it requires a lot of practice and use. • None • Morning session of the First Day. Introduction lacked relevance of the needs of the majority of clients • Developing goals and objectives- Not clearly explained. • Pedagogical models- Explanations were not very clear. • None. Most of the time, I was interested in getting to know the new skill • I consider all the parts of the workshop very useful • During the first day we spent a lot of time discussing the vision and vision of the university. Whereas this may be good, the purpose of the workshop was building capacity for e-learning, not review of our strategic plan.
10. What suggestions do you have to improve future workshops?	<ul style="list-style-type: none"> • Should be moved to a venue outside the university. Once in a while one had to leave and attend other university matters, what would not happen if the workshop was outside the university. • I suggest more notes and/or slides on step by step activities since attendants are likely to forget most of the activities and there is no reference for the same. • We need another to gain experience and involve also the students so that we can begin using moodle • More time for hands-on on the various aspects of moodle • Introductory should be geared to main themes and main objective or the outcomes of the workshop. • Produce manuals on skills required, Participants should be asked to bring their course materials so as to develop course materials at the end of the workshop. • Get the workshop at a time when the targeted audience is less engaged. We had this workshop when the semester is beginning- teaching staff handing-in grades for last semester and preparing for the current. Should be done during long vacation.
11. What kind of support would you like RUFORUM to provide in the future?	<ul style="list-style-type: none"> • Another workshop is necessary where participants can come out with teaching resources in their areas. • Continuous refresher courses can be organised online in future. Continuous support of use of the site (Greenwich University) will assist in future interaction in case a participant needs to consult. • Facilitate Improvement of infrastructure for e-learning in public universities • Provision of manuals on e-learning, support of e-learning

Aspect	Participant Comments
	<p>preparation retreat so that staff can concentrate on preparing e-teaching course materials faster</p> <ul style="list-style-type: none"> • Funding to enable lecturers to develop materials and to network and share. • Support Universities to come up with E-learning Policies and Strategies to ensure that it becomes part of the University culture. • This exercise requires support for follow-up. We should be enabled to hold a two-day back-stopping workshops every semester
<p>12. Which areas do you think are most important for your university to consider in developing policies and a strategy for e-learning?</p>	<ul style="list-style-type: none"> • Programmes that have big numbers of students in order to improve the quality of teaching in those courses for example, education, science and business courses. • Developing content, access to e-learning content, use of the content and security of the site. • Develop logistical support for e-learning • Retooling lecturers in ICT • Quality assurance and security • Moodle development and skills on uploading and managing learning materials online platforms • Infrastructure, increasing the ratio of students: computers, increasing bandwidth and staff retooling. • Ensure that all academic staff develop e-learning for their courses and provide incentive for those who respond. • Needs assessment (Staff and student training) Environmental scanning. Incentives. • Improve access to computers and internet. The level of computer illiteracy among our colleagues is appalling. • Assist lecturers acquire laptops • Computer literacy for academic staff and certainly students • Students and staff access to computers - can they all be assisted to acquire their own computers? • Internet connectivity on campus