Deploying Interactive On-line Networking Platform for Improving Quality and Relevance of African University Graduates to Labour Markets

Edulink II Project Contract Number FED/2013/335-687

NETWORKING PLATFORM PROGRAMME (NP)

A Report on an EDULINK Project Workshop

Makerere University College of Computing & Information Sciences, Conference Room, Level 4 Block A

11th – 12th April 2017

1.0 INTRODUCTION

Makerere University is an implementation partner of the EDULINK II project entitled *"Deploying Interactive Online Networking Platform for Improving Quality and Relevance of African University Graduates To Labour Markets".* The EDULINK project member institutions include Jomo Kenyatta University of Agriculture and Technology, Egerton University, Kenya, RUFORUM, and Makerere University. The main objective of the project is to see how technology can be used to track graduate supervision and examination

1.1 Aims of the workshop;

1. To demonstrate the graduate network platform to key stakeholders
2. To receive feedback on the graduate network platform
3. To raise the visibility of the platform among the graduate students, supervisors and administrators at Makerere University.

1.2   Attendance;

The workshop was well attended with over twenty academic and administrative Staff plus a good number of graduate students

A LIST OF PARTISPANTS AT THE EDULINK WORKSHOP

Name	Institution	Designation
STAFF		
Constant Okello- Obura	CoCIS-Mak	Professor / Principal
Engineer Bainomugisha	SCIT- Mak	Assoc. Professor/ Project Coordinator
James O Owuche	Egerton University	Senior Lecturer
Hellen Ssali	DRGT, Mak	Senior Registrar
Agnes Rwashana Semwanga	SCIT- Mak	Deputy Principal
Ernest Mwebaze	SCIT- Mak	Lecturer
Emmanuel Muthui Mutyoka	Futuristic Ltd, Kenya	Software Developer
Nicholas Kimoro	Futuristic Ltd, Kenya	Managing Director
Vincent Abigaba	SCIT- Mak	School Registrar
David Gaamuwa	DICTS, Mak	Network Manager
Linda Wandira	Makerere University	Administrative Assistant
Florence Kivunike	SCIT- Mak	Lecturer
Agnes Nakakawa	SCIT- Mak	Lecturer/ Research Coordinator
Mercy Amiyo Musasizi	SCIT- Mak	Lecturer
Kyanda Swaib Kawaase	SCIT- Mak	Lecturer
Jacqueline Nnam	RUFORUM	Knowledge Management Officer
David Okello Owiny	DRGT	Deputy Director
Alex Mwotil	SCIT- Mak	Assistant Lecturer
Peter Nabende	SCIT- Mak	Lecturer/ Ag. Chair IS
Edith Naluyimba	SCIT- Mak	Administrative Assistant
George Kiyingi	EASLIS- Mak	Dean
Patrick B Feni	CoCIS-Mak	College Registrar
STUDENTS		
Name	**Course**	**Designation**
Katambi Joan	MSc. IS	Student
Nakirijje Justine	PhD. SE	Student
Bogere James	PhD. SE	Student
Masiga Brian	MSc. DCSE	Student
Flavia Ninsiima	MSc. CS	Student

Emmanuel Masabo	PhD. SE	Student
Peter Ochieng	PhD. SE	Student
Omar Sinayobye	PhD. SE	Student
Dennis Kaburu	PhD. SE	Student
Irene Arinaitwe	PhD. IS	Student
Khoba Barbara Loyce	MIT	Student
Paul Bakaki	PhD. SE	Student
Augustus Aturinde	PhD. IS	Student
Kaggwa Lutta	MSc. IS	Student

2.0   OFFICIAL OPENING OF THE WORKSHOP

In his opening remarks, the Principal welcomed members to the College and Makerere University at large. He added that holding the workshop was a clear indication of seriousness and that the meeting would help to stock take the progress of the project. He also promised that the College would give full support to the project and called for advice in case of any inadequacies. He informed members that Associate Prof. Engineer Bainomugisha and Mr. Mwotil Alex were the key project persons at the College and they were to lead the project on behalf of the University

He advised that any issues be brought to the attention of the College in case they arose

He then declared the workshop officially open

3.0   BRIEFING FROM THE PROJECT COORDINATOR AT MAKERERE

The project coordinator, Assoc. Prof. Engineer Bainomugisha welcomed the project team to Makerere and wished them good deliberations. He informed members that EDULINK started in 2014 and the project member institutions included Jomo Kenyatta University of Agriculture and Technology, Egerton University, Kenya, and Makerere University. Other development partners included Futuristic, Kenya, and RUFORUM. He said that the project was timely as it would help to produce graduates who were relevant; it would aid research and examination processes and also help to keep track of graduates.

Engineer also noted that universities had unique needs and policies and it was important to leave each institution decide what is in line with their policy. He however added that the functionality that the system presented was key to decision making and that other existing systems had implications on the design of the system.

He also informed members that the system was open to all graduate students in the University but it would first be used at CoCIS then other Colleges would adopt it later

 He thanked members for coming and wished them fruitful discussions

4.0 REMARKS BY THE DEPUTY DIRECTOR, DIRECTORATE OF RESEARCH AND GRADUATE TRAINING

The Deputy Director, Directorate of Research and Graduate Training, Assoc. Professor David Owiny thanked the College for inviting him to the workshop. He welcomed colleagues from Egerton and Jomo Kenyatta University of Science and Technology.

He further informed members that graduate training in Makerere had advanced a lot and that graduate research had positioned the University well in University rankings. Admissions were at 3000 students per year but half of these students graduated in time. He called upon the workshop to reflect on issues that had a bearing on graduation rates, including supervision and examination of graduate students

He highlighted that graduate training mainly took place in Colleges and the DRGT oversaw Supervision and examination processes. He appreciated the idea of the EDULINK project that it would help fast track students' progress. He also informed members that Makerere had developed the Grad-track system and there was need to see how the two systems would work together. He encouraged the workshop to bear in mind that there were other existing systems and encouraged them to be complementary instead of having programmes that were conflicting

5.0 REMARKS BY THE TEAM FROM KENYA

Dr. James Owuche a Senior Lecturer from Egerton University thanked members for coming to the workshop. He informed members that the project which was funded by European Union was born out of an outcry from students. The quality of graduate students, publications and the quality of theses had gone down. The three partner Universities came together to develop an interactive platform that was to be open to all Faculties and Colleges. The tool would have a source code which would be accessed by all partner institutions.

He further added that one of the objectives of Edulink was to enhance completion rates, help with writing skills and eliminate plagiarism. He said that the developed platform was to be compared with existing systems and see how well to integrate them. He highlighted that the system was developed on assumption that some institutions did not have automated registration systems

He also said that the platform would enable sending of alerts to students about timelines and also enable exchange of theses electronically. That it would also allow inter university interactions, peer to peer level and industry connections. He added that the System would help to ensure timely problem resolution and transparency. It would also be easier to handle large volumes of work and hence lead to efficiency in supervision, examination and allocation of Supervisors.

He further highlighted that the use of ICT would lead to improvement in a number of processes by the following mechanisms;

- Auto reminders
- Set timelines for different activities and give alerts
- Timely response
- A student self service portal for interaction
- Graduate school modules
- Alumni Management
- Help with the vetting processes
- Student submission
- Supervisor can make queries to graduate school
- Graduate school can establish a board of examiners
- Can view final grade assigned
- Monitor all theses collections
- Accessibility from anywhere
- Interaction of students within various universities if the system is hosted globally
- Student and supervisor interactions

- Supervisor allocation
- Panel allocation
- Checking on the progress of a student
- Inform graduate school if student has seen a supervisor
- Monitor supervision load
- Provide industry linkages
- Back and forth interaction between supervisor and student
- Map students' research area to suitable supervisor

He thanked members for coming to the workshop and requested for honest feedback on what suited Makerere

6.0   PRESENATION OF THE PLATFORM

The EDULINK platform was presented by Nicholas Kimoro the Managing Director, Futuristic, Kenya and Emmanuel Muthui a software developer at the same institution

Informed;
- That the platform could be hosted within the environment of the institution, on a country network or cloud service in globally recognized centers
- That graduate school would able to see everything while supervisors and examiners would only see their modules

7.0   DISCUSSIONS: QUESTION AND ANSWER SESSION

The following questions were raised and answered respectively;

1. What is the difference between the Edulink platform and Moodle?
   Ans: Moodle is more of course delivery than research. The Edulink platform takes the student through the beginning of the research with the hope of fine tuning the thesis which Moodle doesn't. The two systems can work together but not replace each other

2. Where do we access the system, where is it hosted?
   The System open source code can be hosted on the cloud or it can be released for Makerere. However, if Makerere decides to host its own platform, it loses interaction with other universities. (Followup comment: The system should be designed to allow syncrhonisation of data even if it is hosted on different servers at partner institutions.

3. Can the process of inputting all credentials be eliminated since there is an auto registration system in place? Some people are not computer literate. Is there a way of minimizing user input?
   The designer took into consideration of institutions which do not have any auto systems in place. However if any systems already exist, they can be integrated automatically so that data from existing systems is incorporated. The system can be integrated for what the current one does not have

4. Is it possible for someone to register by e-mails so that alerts are sent to the e-mail?
   Yes, the student receives an alert through the e-mail she/ he provides during registration

5. Is there a chat module to share with someone working on a similar project?
   No but it is being worked on

6. If a student is assigned two supervisors, can both of them track each other's comments?
   Yes, they are able to see each other's comments in the Supervisor module and also the student can see if necessary, but students cannot see each other's comments

7. Can a recent copy of the thesis replace an older one?
    No, they are both there but the recent one is final

8. Can a Supervisor provide online comments inside the document?
    Yes

9. Can a list of potential Supervisors be provided for the student to choose from after submitting an abstract?
    Yes, there is a module of supervisor tracking which also provides the status of the supervisor regarding pending work. There should be a limit for the Supervisor. In Makerere one should not supervise more than 3 PhD students and not more that 5 Masters students

10. Can the System show timelines?
    Yes each activity will have expected time alert when you exceed the required time. The roadmap is set by graduate school depending on the programme

11. Can the System be customized to suit Makerere?
    Yes

12. Is there somewhere you capture a student portal to avoid Masqueraders?
    Everything is customizable. You own the source code and you can put whatever details you deem necessary

13. Can the system have information on a student who has graduated at Masters and is now at PhD level?
    Currently, once the student finishes, he/she is an alumni and once he comes back, he applies afresh but previous interactions remain in the system.

14. In case the student left a balance to pay during the previous course, can the system track that, since they retain the same student number on return for another programme?
    No, but it will be taken into account

15. Can the system trace the person who alters a student's marks?
    Yes, the system keeps a record of who uploads students' results and whoever alters them

16. Can you know if the student has paid fees before graduation?
    Before examination, graduate school uploads clearance for you. However, there is still need to link the system to the student's account

17. Does the system only cater for the research year and not Course Work?
    Yes, it does not look at the coursework. Universities already have existing systems for coursework. Output in Course Work can be used to clear RTC (Road Map to Completion)

18. How does one handle password loss?
    Students can reset their passwords

19. Can the system assist in identifying External Examiners?
    Yes. There is a repository of external examiners and internal examiners in the system. The system takes supervisors as potential examiners. The difference is that the supervisor does not award marks but the examiner does. However, there is need for another menu log for examiners so that there is a distinction between supervisors and examiners

20. Do examiners in one university get access to records of other universities?
    It depends on the institutional policy framework. You could just see the profiles of supervisors but you cannot edit; it has to be by the approval of graduate School. You could also run the system as stand alone without other institutions

21. Can the supervisor submit comments?
    Yes, Supervisor can make comments on the document and upload them or make one by one in the system and the student can print them

22. How does the system track active and inactive studentship?
    The system sends alerts for non-registration within a specified period

23. Is there an inbuilt plagiarism detection module?
    No but it can be integrated for every document to pass a standard score using the plagiarism software

24. What is the benefit of rolling out the system to many universities?
    It encourages sharing information and resources: Mentorship and supervision, there is also a possibility of uploading approved theses in the system to avoid plagiarism

25. Does the system block inactive students from logging in?
    Yes, the Registrar activates and deactivates students

26. What is the plan for continued support especially for non-ICT Faculties?
    The source code is available to you. Members of DICTS (Makerere Doctorate of ICTs) can be able to take it. The system documentation should be made available as well.

27. Can the system allocate panelists?
    Yes, there is a semi automation process; there is a report which shows all examiners in a period

28. Can the system show withdrawals and extension cases?
    No but it is being worked on

8.0   RECOMMENDATIONS

The following recommendations were made;

- That Mr. Mwotil Alex feeds into the system; the University calendar including all Colleges and Departments and be in charge of monitoring the platform.
- That some pictures of Makerere Staff be included in the website.
- That institutional regulations be taken into account.
- That the browser be magnified so that everything is visible.
- That the system sends alerts for non-registration within a specified period and also blocks withdrawal cases. Overpayment may mean non-registration.
- That timing alerts be made default e.g. Masters= 2 years, PhD= 3 Years. The Road Map to Completion should be defined.
- That the system be linked to the library. It is important to create a group called Lib and allow them to see only final copies of theses.
- That the system considers automating resource allocation e.g. panelists.
- That the system blocks inactive students from logging in automatically.
- That the system captures cases of re-submission and re- examination.
- An examination module should be developed to cater for the examination processes.

9.0   CLOSING REMARKS

In the closing remarks, Dr. Ernest Mwebaze a Senior Lecturer appreciated the System for what it would be doing. He also thanked the team from Kenya for making a trip to Uganda for such an informative workshop. He further thanked them for partnering with Makerere. He said that he looked forward to having the system work and wished everybody a safe journey back home.

He then declared the workshop officially closed.

10. PHOTOS TAKEN AT THE WORKSHOP