



COMMONWEALTH *of* LEARNING

Development of Online B.Ed Arts and Science (B.Ed) Modules, Kenyatta University

Report on C16 - 056

Workshop 1 - ICT Integration and Online Course Development for Lecturers at the School of Education, Kenyatta University

In this contract, the Commonwealth of Learning sought to engage SchoolNet South Africa (SNSA) to facilitate the development of ICT integration capacity, as well as the development of seven online B.Ed Arts and Science modules for Kenyatta University, Kenya.

This report satisfies the first half of the contractual Statement of Work, namely:

- 1.1.1 develop appropriate training materials for the integration of information and communications technologies (ICT) workshop to be held from October 26 to 30, 2015 and develop a draft programme for the training workshop and submit it to COL for comments, inputs and approval; (2 days)
- 1.1.2 Design and administer a baseline survey tool on the current situation of integration of ICT in teaching and learning at KU; (1 day)
- 1.1.3 Design and administer post workshop evaluation instruments that will generate data on the knowledge and skills on integration of ICT in teaching and learning gained as a result of participating in the workshop; (1 day)
- 1.1.4 Facilitate the workshop for 21 academic staff of KU on integration of ICT; (5 days)

And

- 1.1.7. Analyse the data on the baseline survey and post workshop evaluation and submit a detailed report; (1 day)
- 1.1.8 Submit a report on the conduct of the two workshops and a list of participants indicating the number of men and women who took part in the two workshops; this workshops report should include the results of the baseline and the post workshop evaluation; (1 day)

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Background

SchoolNet SA was contracted by the Commonwealth of learning to facilitate two workshops for lecturers at the School of Education at Kenyatta University. The background provided here is for the first workshop. SchoolNet’s responsibilities were to:

- Develop appropriate training materials for the integration of information and communications technologies
- Design and administer a baseline survey on the current situation of integration of ICT in teaching and learning at Kenyatta University
- Facilitate a five-day workshop at Kenyatta university
- Analyse the data of the baseline and post survey responses and submit a detailed report

Overview of the Course

SchoolNet developed the Technology Integration course. The materials are viewable from this link <https://goo.gl/mwLWgr> The overarching goals of this course were for the following key questions to be answered:

- What is the role of the lecturers and the institution in preparing students to succeed in a digital society? How are they currently modelling this role?
- How do lecturers grow professionally with technology’s support and with colleagues locally and globally?
- What lessons can Lecturers’ learn from their own professional development that they can apply to their facilitation of student learning?

- What frameworks will help lecturers better understand and evaluate their efforts with technology integration?

It is important to note that the materials were written without the expectations of the School of Education at Kenyatta University (KU) and no context with regard to current practice at KU.

Based on SchoolNet’s experience in the integration of ICT, we proposed four modules to be covered during the week with the understanding that the facilitator may need to amend the programme if the expectations of the University needed more specific assistance.

Overview of the participants

Three lecturers from each of the seven faculties were granted special dispensation to attend the week-long workshop. The lecturers were:

	Name 1	Name 2	Name 3	Department
1	Dr. Anthony Ireri	Elizabeth Mutwiri	Dr Samuel Mutweleli	Educational Psychology
2	Dr. Catherine Murungi	Dr Hudson Ong’ang’a	Dr Yattani Buna	Early Childhood Studies
3	Mrs Beatrice Isanda	Dr George Mathenge	Dr Mathew Karia	Special Needs Education
4	Dr Hellen Kiende	Dr Ephantus Kaugi	Dr Purity Muthima	Educational Management, Policy & Curriculum Studies
5	Doris Njoka	Dr Hellen Amunga	Dr Moses Kariuki	Educational Communication & Technology
6	Dr Paul Wamae	Dr Caroline Mutwiri	Martin Gichungu	Library & Information Science Department
7	Dr Peter Gathara	Dr Rubai Mandela	Dr Francis Kirimi	Educational Foundations

Three other senior staff Dr Jackline Nyerere, Dr Njihia Mukirae and Dr Rhoda Gitonga joined the training with the Dean, Prof Fatuma Chege, participating when her time allowed. Mr Assah Amkhaya (Technical team) also joined the training.

The participants at the start were twenty-four in total with eleven female (45.8%) and thirteen male (54.2%) and by the last day were twenty in total with nine female and eleven male. Four lecturers were in and out of sessions due to their University commitments. The average age of the participants was 41 and ranged from 35 to 60 year olds. The majority of participants



Fig 2: Dr Paul Okemo (Dean-Graduate School) & Prof. Fatuma Chege (Dean-School of Education) at Kenyatta University

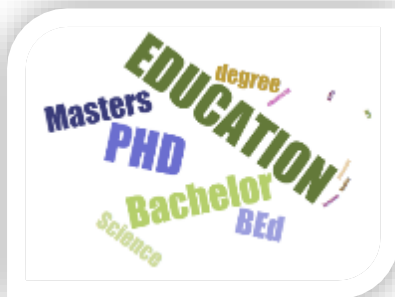


Fig 1: Word cloud depicting Lecturers' qualifications

were lecturers (18), with two senior lecturers, two junior lecturers and two technical staff.

Participants were highly qualified with twenty-one participants having post graduate degrees and an average of 12.8 years of teaching experience. Twenty participants were practising teachers before joining the University.

Facilitation of the course

The workshop was opened by Dr Paul Okemo, Dean of the Graduate School who stood in for the Deputy Vice



Chancellor (Academic), and Professor Fatuma Chege, Dean of the School of Education (SoE). The Dean provided the context for this training which was a joint partnership between Commonwealth of Learning and the School of Education after the Dean and two colleagues had attended a workshop in Singapore. They found that the content was good except that it was not hands-on and they learnt about ICTs but not how it could be used for teaching and learning. Currently 70% of KU's students are using online materials, however even though the School of Education has the largest number of students, only 40% of their students are using online materials. The Dean further discussed the School of Education's enhancements viz improved ICT infrastructure and having ICT policies in place. The Digital school was formed to grow the use of ICTs and was now looking to create more faculty engagement with ICT through this current training initiative. SchoolNet's, Omashani Naidoo set the scene for the week amidst anxious faces who finally understood the daunting task at hand.

The course started with participants completing the online baseline survey which served as an audit of skills and resources currently being used at the University. The survey including participant responses are viewable from this sharable link: [Baseline Survey Responses](#)

The activity on defining the roles that lecturers at the School of Education perform as part of their duties was met with keen interest as participants collaboratively engaged in groups using Google sheets. The groups were then required to explore the use of ICTs to enhance their defined roles.

This activity led to discussions about collaboration and sharing of documents through Drop Box. Social bookmarking and curation of resources were explored and participants were asked to register on Diigo. During this activity the internet failed and participants were asked to complete the activity as homework. The day ended on a high note with participants thoroughly engaged



and enthusiastically discussing how much they had learnt in the first day. The battle was won! This was a crucial element of the training as participants who feel at ease are more likely to learn and implement their learning.

Each day started with an overview of the previous day. The facilitator worked through Diigo as a social bookmarking site and displayed some examples of how resources can typically be curated. The second day's activities continued with an evaluation of education resources. Participants were grouped in colours and given specific resources to evaluate and present an overview of the resources, including uses for teaching and learning and features that were not useful for teaching and learning. This activity was crucial for participants as they engaged with resources that they did not know were available for teaching and learning.



Dr Catherine Gakii
presenting on Moodle



Dr Rhoda Gitonga presenting on she uses Wiki spaces for
teaching and learning

Wiki Spaces was used as a tool for collaboration and it was at this stage that we discovered that one of the participants had published a paper on Wikis in 2012. Dr Rhoda Gitonga was then asked to showcase her wikis and how she uses them for teaching and learning. Sufficient sharing between participants was clearly not happening at KU.

The third day focused on social media and understanding how participants might work smarter using social media for peer support and sharing. The day started with an activity on YouTube and working through the setting up of playlists for teaching, subscribing to channels of interest and culminated with Facebook and Twitter. Each activity created opportunities for participants to register for accounts, explore the interface and connect with others. In her discussions around making life easier for participants, the facilitator mentioned automated marking and this is where we included the use of Google forms, Flubaroo and Google sheets for automated marking. One of the participants mentioned that the Kenyatta Moodle system has this functionality and therefore we agreed that the next day would start with an activity on how Moodle could be utilized to setup automated assessments.

Day four, brought an important change with Dr Catherine Gakii, taking participants through how she uses Moodle in her current modules to setup automated continuous assessment tasks (CAT). The remaining half of the day was used to discuss and work through frameworks for Teacher professional development and in particular focused on the TPACK and SAMR models for ICT integration. Participants were asked to group into their faculties and work through their existing lessons with a view to improving them with tools and resources they had come across during the week. This activity was in preparation for the next day where participants' would present their improved lessons.

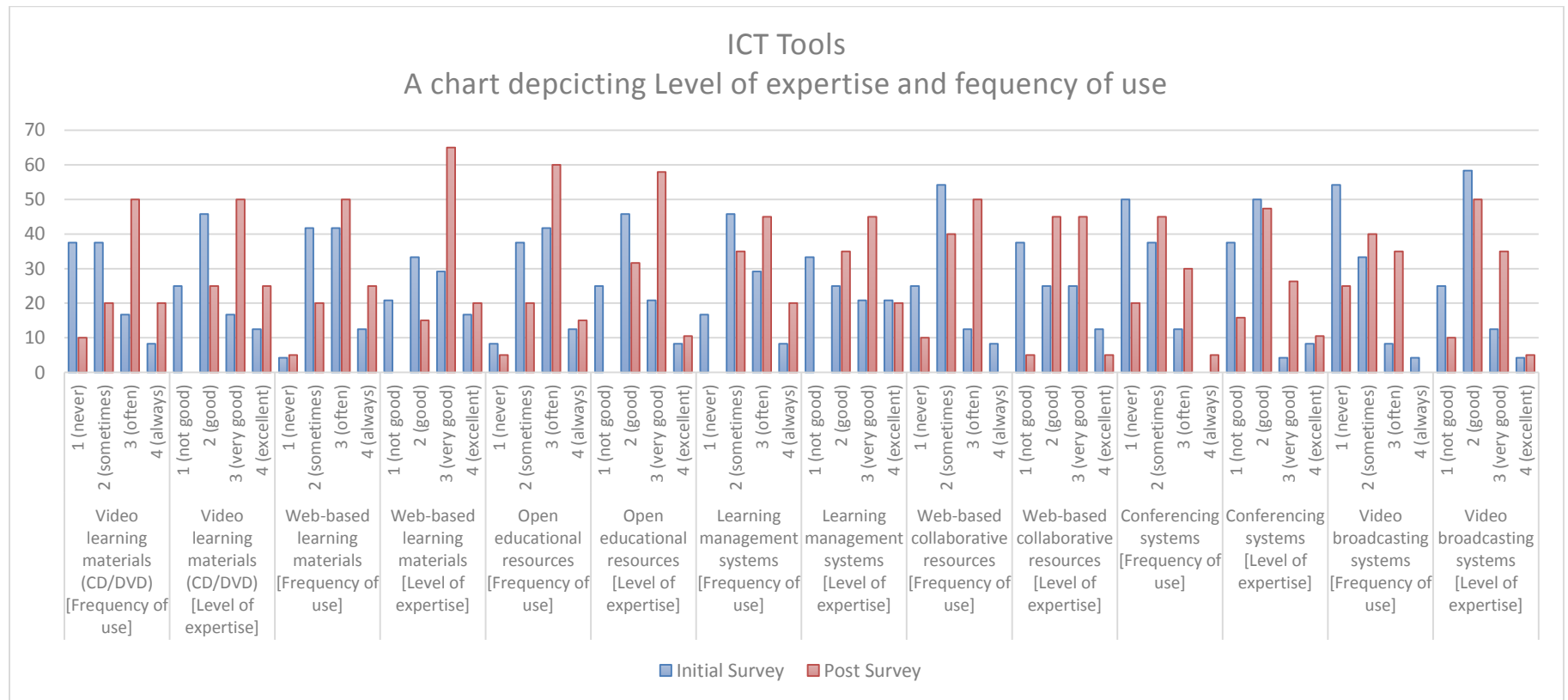
The last day proved most engaging as participants presented their improved lessons that included what they had learnt during the week. Participants included YouTube videos to teach particular concepts, aligned lessons using TPACK and SAMR, used photos for visual representation, added videos of themselves teaching a lesson for playback, included social media contacts for students to engage with them, used videos for best practice modelling and discussion, skype online lesson with a shared screen, used the ASSURE template to ensure multiple elements of learning are included in a lesson, and Google Sheets for collaboration between students!

Students were requested complete the post workshop survey questions. Their responses can be viewed here [post survey responses](#)

A further post survey was conducted by the School of Education and the results correlate the COL surveys. The results can be viewed here [School of Education Survey Responses](#)

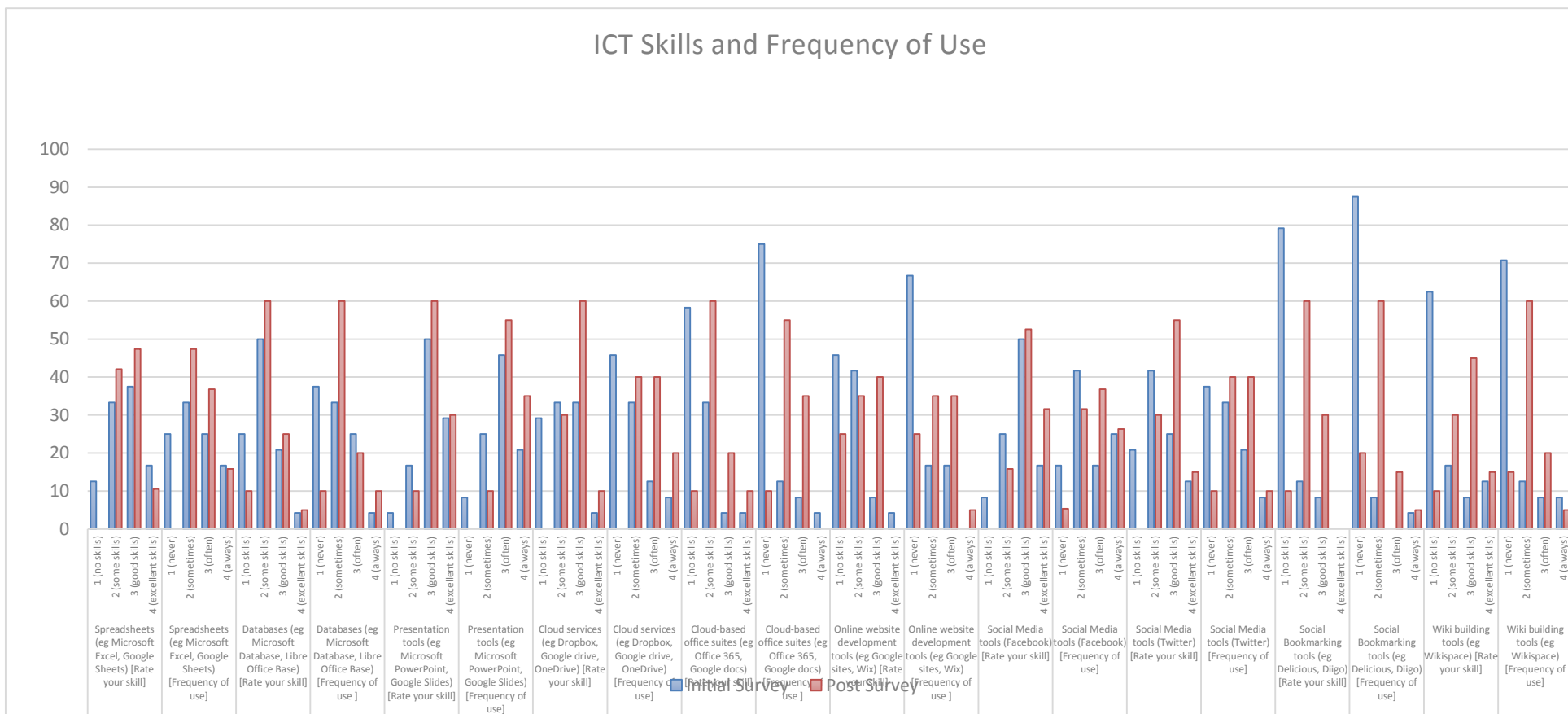
Analysis of the baseline and post workshop surveys

The baseline and post workshop survey has elicited much data about the current expertise and frequency of use of ICT Tools and resources. The surveys will be shared with the Commonwealth of Learning. Below is a snapshot of the analysis.



In the majority of tools, we see a marked increase in level of expertise and frequency of use. An average of 15.6% improvement was noted in participants' increase in expertise and frequency of use.

Data on the participants ICT skills and frequency of use also showed an increase in the use of ICT tools such as Spreadsheets, databases, presentation software, cloud services, online website development, social media, bookmarking, curating tools, and wiki building.



Click here to access details of both the [baseline survey results](#) and [post survey results](#).

Analysis of the course impact

The impact of the course was observed from the first day, where participants were in awe of the amount of resources at their disposal for teaching and learning. The Dean also exclaimed that “never before had she seen her staff more engaged”. Participants willingly ignored tea and lunch times in lieu of completing tasks and indeed showed that “learning had taken precedence over food”.

Participants had the following to say about the usefulness of the course.

“The content was perfect; although it was somehow too much, given the training period”

“The content is quite useful and rich. However, more training time would be necessary since a few key tools and techniques were highlighted yet there was no time to discuss them in-depth.”

“Very appropriate for our online classes as well as regular.”

“The content were adequate and learning progressed at the right pace. Well done!”

“All was very useful, though more practice was needed in few areas.”

“The content is suitable in this era where ICT integration in our learning is unavoidable for this young generation.”

“Very relevant, what the present day teachers require to integrate it in teaching and learning”

“It was very essential for our teaching!”

“Good work on content assembly. Include more tools on large classroom management and learner evaluation.”



The following word cloud depicts the thoughts about the facilitator on delivery of the course



When asked whether the Commonwealth of Learning influenced their learning, the participants had this to say:

"It was good although we didn't learn all tools due to time but for sure, my skills have improved and I am a better teacher"

"I have learned how to incorporate different multimedia/ interactive networks in my lesson"

"There were practical sessions on the skills and in some situations, presentation made on the same"

"The workshop had great impact. I acquired various skills video conferencing, use of various platforms and applications to enrich teaching among others."

"1. Yes it has. Initially I was not even aware of all these knowledge and resources 2. I have built my personal capacity as Special Needs Lecturer 3. My students will benefit"

"The hands-on training was excellent."

"I was able to practice the skills and apply a number of them in my trial lesson."

"It was very useful. Have gotten good skills"

"It was fantastic because in most areas of learning it has moved me way up many levels and I will build more on it."

"Yes. Exposure to new ICT tools. Knowledge of how to use interactive web-based platforms for learner involvement."

"It has exposed to a variety of tools"

"Yes, the training has grown my skills in the above tools. Am now able to easily find resources, collaborate, make my teaching more interactive and discover new ways of doing my work by use of ICT."

"The training positively changed my attitude"

"Hands on in all activities"

"It has exposed me to more tools that I was not aware of before and how I can improve on those I knew"

"Helped me to deal with negative attitudes with regard to use of ICT in teaching and learning process ... exposure to various ways and tools of sharing knowledge and skills... creative use of ICT in teaching and learning process ..."

“Has had a great positive influence”

“I have explored how to further use wiki spaces, Skype, you tube, how to use Google sheets and much more, I have topped up a lot and I believe I will learn more in the next week. Thank you to Omashani I can now use the available tool easily and comfortably for dissemination of information”

Recommendations and Conclusion

During our discussions and activities it became apparent that KU needs to:

- Create an OER or copyright license for the School of Education and its published works. This needs to be explained and understood by all lecturers and the recourse for infringement and accountability in this regard must be understood and clearly mentioned in all published work.
- Create a space where lecturers can share their learning and new tips for improved ICT integration. This may need to be a physical gathering where all lecturers are provided with opportunity to share on a rotation basis.
- Ensure that lecturers’ published papers are highlighted in a forum, perhaps a School of Education newsletter or a post on the KU Facebook page - because currently peers seem not to be aware of papers published by colleagues.
- Explore options for a Multimedia studio where lecturers can create their own Videos and teaching resources.
- Investigate the full potential of their Google Apps account. The administrators need to look at allowing permission for sharing outside of the KU as this affects whether part time lecturers have access to KU modules. Furthermore students don’t have KU addresses and hence lecturers are currently not able to share documents via Google drive.
- Create a KU school of Education presentation template so that all presentations build the KU brand when placed in public forums and the Moodle LMS.
- Training needs to be hosted at a venue outside of Kenyatta as lecturers unavoidably get called into faculty meetings and are therefore unable to fully participate in the course.



The training went exceedingly well where participants went from anxious to enthusiastic in no time at all. It is important to ensure that this momentum is not lost and opportunities are provided for lecturers to peer review each other's work as well as visit other Universities to learn more about ICT integration in practice.

Thank you to the Commonwealth of Learning for providing this fantastic facilitation experience. The lecturers at Kenyatta University were an exuberant and engaging group.

Ms Omashani Naidoo

www.schoolnet.org.za

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