



AFRICALICS

**THE AFRICAN NETWORK FOR ECONOMICS OF LEARNING, INNOVATION,
AND COMPETENCE BUILDING SYSTEMS**

Teaching innovation and development:
A training workshop for university
lecturers in Africa

WORKSHOP REPORT

Held at Desmond Tutu Conference Centre, Nairobi, Kenya

29th November – 2nd December 2016

Summary

The African Network for the Economics of Learning, Innovation, and Competence Building Systems (AfricaLics) held a workshop entitled 'Teaching innovation and development: A workshop for university lecturers in Africa' at Desmond Tutu conference centre from 29th November 2016 to 2nd December 2016 (see Appendix 1).

The workshop was attended by 19 participants (10 female & 18 male) from 17 countries (5 of them being low income countries) in Africa. There were 6 facilitators and 3 AfricaLics secretariat who helped in logistics.

The workshop programme was very full with a mix of lectures and in-class activities as well as group work. In preparation for the workshop, all participants received reading documents before the event in order to prepare for the workshop activities. All participants attended the workshop fully and no incidents were reported during the entire training.

The workshop facilitators were Dr. Margrethe Andersen, Dr. Rebecca Hanlin, Dr. Ann Kingiri, Prof Mammo Muchie, Dr. Maurice Bolo, Dr, Oluseye Jegede, Prof. Abdelkader Djeflat and Abdi Yuya.

The workshop evaluation results show that participants' expectations were met. The facilitators noted that all participants were active and interacted well in all the sessions.

At the end of the workshop, each participant had prepared their own individual action plans outlining short, medium and longer term efforts that they would make to encourage the uptake of innovation and development training and teaching at their home institutions.



Figure 1: Workshop participants and facilitators

Rationale and objectives for the workshop

“The continent is currently witnessing two dichotomous situations. On the one hand, there are constant calls for businesses and economic sectors to innovate; innovation is seen as a catalyst of economic growth. On the other hand, knowledge of what innovation is and why it is important for economic, and social, development is lacking.”

A recent survey found that Africa has a dearth of university courses or programmes that include content from the field of innovation studies focusing specifically on the introduction of new products, processes and business models into firms with a view to enhancing productivity and growth. There is also a crucial lack of expertise in innovation and development studies (that teaches and researches how to maximise these innovations’ potential benefits for economic and social development). The work of the AfricaLics network is to change this so that education systems in Africa build the next generation of researchers and practitioners who can ensure innovation activities are taken seriously in the productive sectors. The AfricaLics network does this by promoting the introduction of new or improved curricula into African universities.

This is particularly necessary because the relationship between innovation and economic and social development is now well recognised. The Sustainable Development Goals include innovation as a key component of Goal 9, while, countries in Africa are increasingly thinking not just about science and technology but also innovation when they write action plans and policy documents this area.

Following the development of a series of model teaching materials, the AfricaLics Secretariat designed and planned a workshop to support those who are currently integrating or expecting to implement an innovation and development course into their curricula offering.

The four day workshop was relevant for those who:

- Are interested in integrating a Masters level introductory course on innovation and development into their curricula
- Have already started using the AfricaLics materials but have been facing problems with their implementation

The course was designed with the following objectives:

- i. Provide an introduction to innovation and development issues to those currently working in more disciplinary based subjects
- ii. Be a practical training on interactive based learning techniques – experiencing the course as a student would
- iii. Enable experience sharing amongst lecturers from different universities across a number of African countries to enhance their skills as teachers and educators.

The training programme

Participants were selected based on an initial open call for interest through the AfricaLics' social media platforms and other affiliated networks. Interested individuals were asked to contact the AfricaLics Secretariat with details of why they would be interested in attending a teaching workshop and to state if they had tried to use any of the course materials already. In addition, representatives of the original partner universities that were involved in the development of the course materials were also invited.

The recruitment and selection process aimed for as balanced a mix as possible between those who had experience of teaching and researching innovation and others who were in the process of introducing the innovation subject in their institutions but had very little knowledge of the subject.

The programme was designed to utilize the materials from the AfricaLics model module on Innovation and Development, developed for introduction into existing Masters training programmes at African universities. Participants were sent readings from these course materials in advance in order to prepare for the workshop activities.

The programme had the following elements:

- i. Introduction to the course and its pedagogy
- ii. Learning sessions on:
 - a. The history and definition of innovation and development studies
 - b. Research methods for studying innovation and development studies
 - c. The relationship between innovation and development research and policy debates
- iii. Practical sessions where participants:
 - a. Conducted project work to experience interactive learning techniques as students would
 - b. Interacted with other researchers to understand how to get your research into policy and how to ensure teaching is policy relevant
- iv. Experience sharing and evaluation sessions on the course materials and the learning experience.

The full programme is provided in Appendix 1. The list of additional reading materials is available in Appendix 2. The list of participants including facilitators is available in Appendix 3.

The workshop itself

On Monday 28th November the workshop began with a group dinner for all 16 participants and various facilitators who had arrived at Fogo Gaucho; a nearby Brazilian restaurant. The dinner gave participants an informal opportunity to know each other and the institutions they are affiliated to. The dinner started at 7pm and ended at 10 pm.

On Tuesday 29th November 2016, the workshop formally began at 8am. The proceedings started with an ice breaker where Dr. Kingiri requested participants to pair up and introduce each other including details of participants' affiliation and reason for their interest in participating in the four days of training.

After the introduction Dr. Rebecca Hanlin gave an overview of the course aims and objectives as well as providing clarity on the programme and workshop logistics. Dr. Margrethe Holm Andersen followed this with an introduction to the interactive learning methods utilised by the course materials; focusing predominately on the problem-based learning (PBL) method.

A discussion was then held to enable participants to comment on issues of concern or interest to them. The following issues were raised:

- Students freeriding during project work and how best to overcome this/ reduce opportunities for this
- The difficulty for lecturers to keep momentum during more interactive teaching approaches; especially in light of the freeriding issue.
- The criticality of, but current lack often of, a linkage between industries, communities and universities
- Little appreciation and understanding of PBL in African universities and rigidity of university systems both of which reduced the potential to re-structure current teaching systems

After a tea break, participants who had used parts of the Africalics model Masters module entitled 'Innovation and Development' in their teaching or other similar materials were given a chance to share their experiences of doing so with all present. The main points raised by each of these speakers are captured in the box below.

NAME	MAIN POINTS
Blasius bavo Nyichomba University of Dar es Salaam	<ul style="list-style-type: none">- Key issue is commercialisation of education i.e. increasing class sizes and correspondingly large lecture halls vs. the small project breakout rooms and seminar rooms at a PBL based university such as Aalborg- Lack of competitive graduates – in East Africa (50-60%) who not employable on completion- Big classes are unmanageable in doing group work.- A request has been submitted to run full course on I&D which currently being reviewed by National Commission that would be available (compulsory?) for all to take at university

Manir Kamba Bayero University Kano	<ul style="list-style-type: none"> - In a review of 500 undergraduate (UG) theses found most did not include any component of innovation so agreement at university that a course was needed - Nigerian Regulatory Commission has announced that all UG students at all universities have to take a compulsory course on entrepreneurship. As this was being reviewed at his university decided to inject element of innovation and creativity into it. - The additional new element on innovation includes a visit to a local industry - At post graduate level all must have innovation element in their thesis and a lot of project work encouraged. - Also runs an indigenous knowledge course which focuses strongly on innovation issues.
Jemima Yakah university of Ghana	<ul style="list-style-type: none"> - They already have a course and the aim of the course is to expose students to the theoretical understanding of the concept of innovation in Agricultural extension. E.g paper box innovation (creates file folder from it) - They have future plans to; incorporate the PBL approach into current course material, create new masters course focusing on innovation (Msc & MPhil.) and hold special workshops on innovation for development workers.
Kassahun Yimer Addis Ababa University	<ul style="list-style-type: none"> - Currently dealing with discussions at university level as to where to host a course on innovation – in engineering or in business school. The course is on ‘technology and innovation management’ - Question of projects or problem based learning. Get students to understand both and work with both - Specifically introduced this after hearing the teaching track sessions at the AfricaLics conference in 2015 in Kigali - Has conducted a workshop internally on I&D and also conducts workshop with industry on how to promote innovation (especially after firm level survey showed no company had introduced any innovation in past 3 years - When thought it was only referring to that which is ‘new to the world’. After the workshop and learning that innovation is a much broader concept then they found thousands of innovations had been conducted in the industries surveyed) - Get students to work with industry and have new project where companies embedded in project activities.

These discussions led into an introduction to the workshop activity that focused around the development of individual action plans. The action plan template was reviewed.

After this more general introduction, the workshop changed gear a little. The next session saw the start of the theory lectures. Margrethe gave a lecture introducing innovation and development theory and history. Following the lecture, participants worked in 4 groups to discuss how their attitudes to the meaning of innovation and development had changed since they had completed a pre-workshop survey. In their groups, they were then asked to discuss the three most important take away points from the lecture/ readings and present these back in plenary. The aim of this group exercise was to provide participants with an example of how students can be asked to negotiate and broker ideas during group work.

After the lunch break, Rebecca gave the second theory lecture which introduced different innovation models in more depth. The lecture emphasized the importance of recognizing no single model works. The lecture built on Tidd (2006) which participants had received in advance to read. Following the lecture, a further interactive session was held whereby participants were asked to engage in a 'rap battle' whereby two teams battled it out to debate for and against positions of the proposition: the linear model is here to stay. The participants were shown a short video showcasing different forms of 'rap battle' to give them inspiration for the activity ahead of them. This session was extremely well received by participants who became highly vocal and participatory. The aim of the exercise was to highlight to the participants alternative methods to assist students in developing ideas into short statement; an exercise that would be useful for them during the project work exercise which involved distilling ideas into a short presentation including policy recommendations.

Discussions arising from these sessions were focused around the following issues or questions:

- The lecture focused heavily on the importance of policy as a driver of innovation. However, this is not the only issue. To paraphrase Michael Joseph, a former CEO of Safaricom what are 'the peculiarities of Kenya' that explain MPesa's success?
- How does the technological specificities of a product impact adoption? For example, a mobile phone might be much easier than another technology for a disabled person to adopt.
- When is innovation 'social' in nature and should all innovation be seen as social innovation i.e. focused on inclusion?
- How do you determine what model is 'best'?

The final session of the day was an introduction to the project work exercise to be completed in groups. The session involved the selection of groups and the agreement on an overarching problem issue that the group project work would address. The AfricaLics model Masters module on Innovation and Development places a strong emphasis – in the tradition of PBL – on project work activities. The workshop organisers therefore wanted to ensure workshop participants experienced the challenges and opportunities of conducting project based work in teams.

On 30th November 2016, Ann Kingiri started the day by asking participants to reflect on their learning from the day before in the areas of course content and course pedagogy. This activity was designed to ensure participants didn't just interact in the workshop as 'students' but also considered what they were learning from being a workshop 'student' and what this meant for how they designed their own courses at home in terms of what they taught and how they taught.

The day then progressed to the next topic area of the Innovation and Development course materials: methods for studying innovation and development. Rebecca gave a lecture on methodologies and methods for studying innovation and development session pointing out use of mixed methods in innovation and development work.

Thereafter, Ann facilitated a session which consisted of presentations by those who researched in the area of innovation and development. The session asked these researchers to reflect to the group on what methodologies and methods they had used, why they had chosen these and how they had implemented these. The presenters were researchers who had all received funding from AfricaLics small project 'seedfunding' scheme between 2014 and 2015 and included: Prof Mammo Muchie, Prof.

Abdelkader Djeflat (by emailed presentation), Dr. Oluseye Jegede and Abdi Yuya. Details of their project titles are outlined below:

Mammo Muchie	Engineering design capacity building and economic development in Africa, Project.
Oluseye Jegede	The Work organization, competence building and innovation in formal and informal micro-enterprises in Africa, Project, giving experience from Nigeria.
Abdi Yuya	Does Natural resource endowment characterize the innovation behavior of African firms? Implications to overcome the resource curse, project
Abdelkader Djeflat	Engineering design capacity building and economic development in Africa, Project.

In the afternoon all participants worked in their groups to continue their project work discussions. In the evening, it was time for a poster session whereby each team presented a poster outlining their project work progress to date. This activity utilized another interactive learning technique. This time, the form of 'ritual dissent' was utilized, asking participants to frankly provide critique (positive assent or negative dissent). The method asks the presenters to turn their backs on the audience to receive the comments; forcing them to listen in a more focused way to the comments received. Again, this activity was chosen to provide participants with another alternative method of conducting interactive learning activities.



Figure 2: Photos of group discussions going on

On 1st December 2016, the day started with further reflections on course content and pedagogy that had arisen from the proceedings of the previous day. This morning participants were asked to discuss in pairs about the key points they had noted in each of the two areas and which they would take home with them and reflect on further. The points that emerged can be summarized as follows:

- Lecturers should learn to have lively teachings and not just literature; incorporate innovative methods and exciting practicals to make learning interesting.
- Ways in which one could put PBL into practice and engage students by making PBL fun. However the ability to do this was often limited due to practical difficulties with undertaking PBL in home institutions and/or lack of knowledge of latest theories.
- A discussion as to whether innovation was only about 'making money' i.e. what value matters?

- It was acknowledged that engineering classes were all about group work but that PBL type approaches had rarely been applied.
- Teaching is not linear and so many have developed other ways of teaching; just don't always refer to it as interactive teaching or PBL.
- Need more thought about how to establish impacts of innovations on development and how to highlight these to students.
- The importance of taking advantage of opportunities for new learning and finding ways of giving these back to the student.

The day then moved into the third part of the workshop; focusing on the industry, innovation and policy nexus. Ann presented a lecture to introduce the topic area on the innovation, industry and policy nexus pointing out the differences between macro, meso and micro environments of the nexus. She also gave an introduction as to how innovation and development policy is often developed and why it is important to consider policy discussions.

The participants then heard from Dr. Maurice Bolo representing the Science, Innovation and enterprise (Scinnovent) Centre. Maurice highlighted the relevance of research to policy and practice. Maurice started by creating a common understanding of key definitions with the participants while emphasizing that knowledge is the new motor in economic development. He pointed out the reasons why research policy gaps exist being not limited to: lack of understanding of the policy processes in research community, weak demand for research and; poor supply of policy-relevant research. He concluded with a discussion of the need to foster greater private sector-academia partnerships in order to accelerate innovation.

Maurice's presentation led to the following discussion points:

- In universities, research is not translated into innovation, how do we change it to focus to innovation & development in context to Africa?
- We may not find students or researchers interested in commercialization and those with interests may not be having the knowledge, how do we help them? Are there organizations/institutions that can actively master& influence this?
- Intermediaries on technology transfer: what is the difference between research, technology transfer, innovators & knowledge brokerage? What is expected of us out there?
- There is a policy deficit in how we train & linking with the industry. How should we work on this? How do we come in if we want to change policy?
- Structure of states is different but as academia do we have a clear way or procedure on the processes on influencing to get to the right people?

After lunch the workshop continued with presentations from the representatives of the AfricaLics seed funding projects on their experiences of getting research into policy and practice debates.

Participants then went back to their group work activities to finalize their project work activities ready for presentations the following day.

The day was completed by a group dinner at Sovereign Suites along Limuru Road. The participants and facilitators were subjected to a long bus journey with much hilarity before partaking in a very pleasant three course meal in luxurious surroundings. The evening was enjoyed by all and enabled everyone to relax a little after the hard work of the previous few days.

On 2nd December the workshop entered its final day. Sessions were only tabled for the morning and consisted of three sessions focusing on learning and feedback from the workshop. This was followed by the four groups presenting their group work.

In the first evaluation session, all participants were given a blank end-of-workshop survey to fill in asking them to reflect on the workshop content and logistics.

The second evaluation session asked participants to return to their action plans and consider what they would be able to realistically be able to do on return to their home institutions in the short, medium and longer term. Their final actions plans were then stuck to the workshop room walls and participants were free to visit each plan and discuss the content with its owner.

The final evaluation session considered what participants would like support on in the future from AfricaLics and what support AfricaLics would be able to provide. A summary of the results of these discussions is outlined below:

	What participants would like AfricaLics to do	What we can (try) to do at AfricaLics
Materials	More teaching materials including PowerPoint templates Access to key literature (content and PBL)	-Contact International Network for the Availability of Scientific Publications (INASP) and others to enhance access (no promises) -Enhance the material on the website re: where to find open access material -Update course outline and translate into French -PBL research agenda at Aalborg University
Training	More of the same Training specifically on research methods	No funding at the moment but can plan to have a side event in the conferences or academies in the future.
Networking	Facilitating networking and team building between participants Further opportunities to meet and share experiences with others	-Set up forum for you to interact (face book, LinkedIn, dedicated?) -Phase II resource site on YouTube that you can contribute to as well teaching track at conference
Advocacy	Lobbying African governments to enable access to materials Lobby for more funding of universities More efforts to promote teaching of innovation at grassroots	-Conference track where policy makers invited -More focus in Phase II on working with regional policymakers
Direct support	Providing training at my institution on how to teach I&D Financial support for course development and lectures	More difficult but work with opportunities that present themselves

	Help finding experts Technical backstopping Specifically lobby university management for PBL	
Scholarships	For students For lecturers	-PhD Visiting Fellowships -PhD Academies

The final session of the day, was the project work presentations. Amongst the four groups formed, only 3 groups made a presentation of their findings. One group was unsuccessful in completing their work which helped in reflecting real life in a class given some work in groups. The three projects that were presented were:

NO	TITTLE	MEMBERS
GROUP 1	Malaria Free 2030 Saving lives, Our Priority	Dr. Manir Kamba Eng. A Weisheit Dr. T. O. Olaposi Dr. S. P. Marivita Dr. N. Sawadogo Dr. A. I. Shittu
GROUP 2	SOLARLICS: Solar Energy for Small scale Productive Purposes	Anne Achieng Aseey, Jemima Yakah Amoah, Joseph Onjala, Charles Nzila
GROUP 3	AFRICA Solar Industries: AFRISI Academic Consulting TEAM	Nepeti Nicanor Abdi Yuya Gregory Mvogo Kassahun Yimer Dessalegn Molla

The workshop concluded just before lunch. Prof. Mammo gave some concluding remarks in form of a poem urging participants to give back to the society by utilizing the knowledge from the workshop. Dr. Cosmas Ochieng, the Executive Director of ACTS, gave the closing remarks and had the honor to award the participants with a certificate of participation on completing the workshop.

Delivery Evaluation Results

A total of 17 out of 19 participants took part in the delivery evaluation on the last day of the workshop. A copy of the survey evaluation form is available in Appendix 4.

Over 95% of those who completed the form identified themselves as university lecturers. 2 participants left before this session to catch-up with their flights back home. The majority (n= 10) of the participants were PhD holders while six others were in the process of completing PhDs. Slightly over 80% (n=14) of the participants were from low income countries as per the World Bank classification.

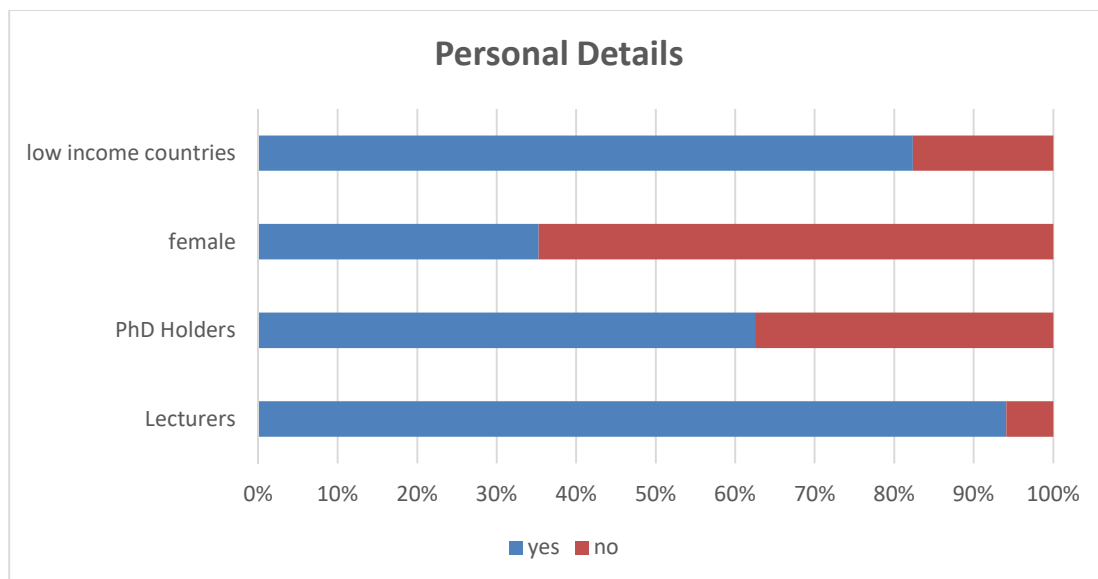


Figure 3: table showing participants personal details

96% (n=16) of the participants said that the workshop was very good. Only one participant said that it could be improved. On the overall structure, over 50% (n=12) of the participants said it was good while five said it could be improved. The major complaint was the tight programme that ran all day long with short breaks in between due to the degree of material that needed to be covered.

A total of 13 participants out of the 17 who engaged in the delivery evaluation liked the size of the workshop saying that the small number was really manageable. They particularly appreciated the group discussion sessions which weren't over crowded but also didn't require too many groups in total. 10 survey respondents also liked the mix of participants.

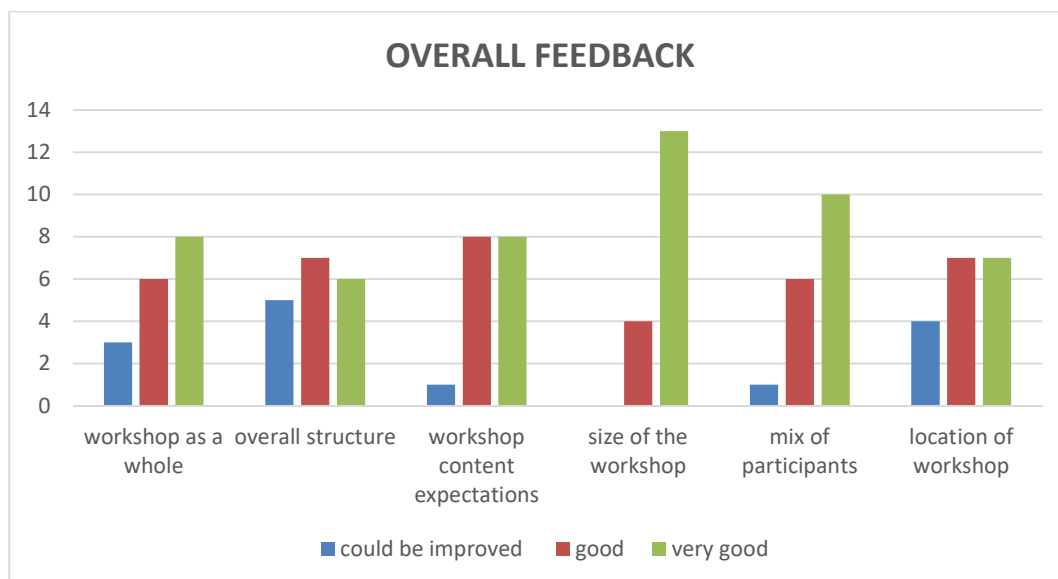


Figure 4: overall feedback

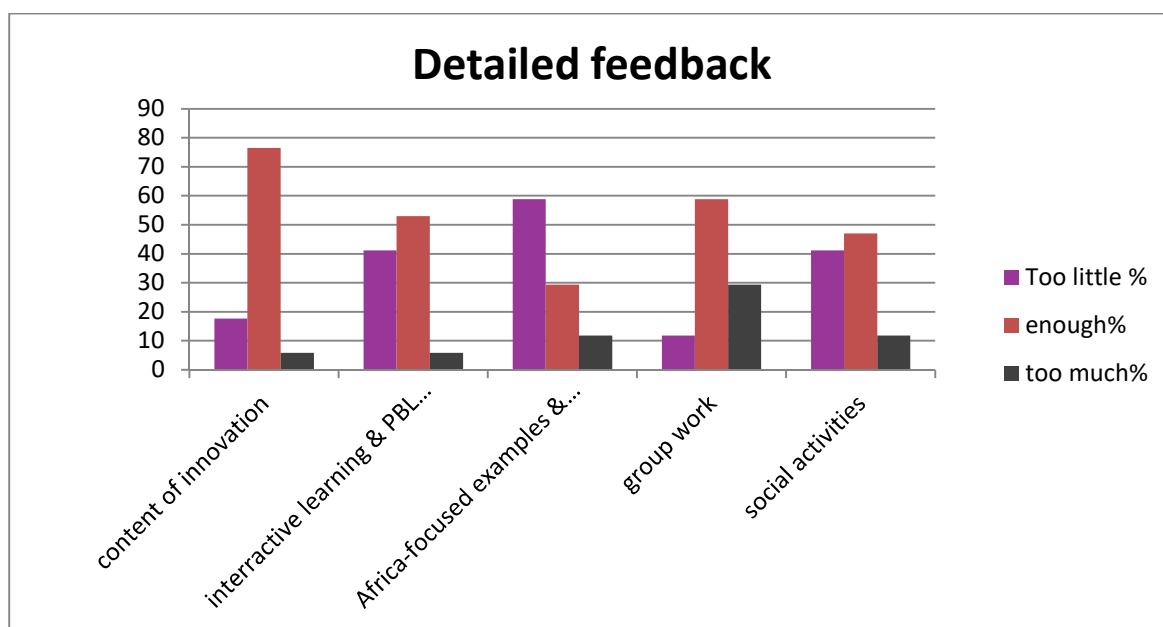


Figure 5: participants detailed feedback

Figure 5 above shows that about 75% (n=13) of participants agreed that the content of innovation and development course materials in the workshop were enough and only a few (n=4) thought it was too much. A bigger number of participants (n=10) also felt that the Africa-focused examples and references were little, however two of them felt that it was too much.

The most favorite session (n=11) in the workshop was the innovation, industry and policy nexus session. Qualitative responses highlighted that it was well researched, interactive with the depth of discussions being 'mind blowing' and that it provided updates and real ideas. However, the methodologies for studying innovation and development together with the theory and history were the least favorite sessions. Reasons given for this related to the lack of time allocated to the session relative to the amount of material being taught. This meant several participants felt that some

concepts and ideas were not well elaborated and suggested that the course designers should have chosen fewer methods to focus on in the workshop.

Suggestions for improvement brought up in the survey responses included:

- Programme
Many participants thought that such trainings should not have a tight schedule as this one, the introduction and definition of terms should be given more time for them to understand and be able to incorporate in the entire workshop activities hence the need for more time in mastering the subject matter.
- Presentations
In an innovation focused meeting, presentations should be made interesting and put in graphics, illustrations & schemes to keep the participants awake and eager for more information.
- Workshop Activities
Some participants proposed to increase practical problem based cases (Africa focused) including examples of successful and unsuccessful innovations.
- Type of participants
Inviting influential people in institutions to push things forward or now plan to do another similar workshop with the influential participants.

Appendix 1: Full Workshop Programme

TIME	ACTIVITY	Facilitator/ Speaker
Monday 28th November 2016		
Afternoon	Arrival of participants before 14.00 hrs (2pm) at Jomo Kenyatta International Airport, Nairobi. Transfer to the Desmond Tutu Conference Centre.	All
18.30	Bus leaves conference centre for dinner venue	All
19.00 – 20.30	Welcome dinner at a nearby restaurant	All
20.30	Bus leaves back to conference centre	All
Tuesday 29th November 2016		
07.00 – 08.00	Breakfast	All
08:00 – 08:30	Welcoming remarks & introduction	Ann Kingiri
08:30 – 09:15	Introduction to course Overview of the course aims and objectives together with logistics	Rebecca Hanlin
09:15 – 10.00	The course pedagogy An introduction to interactive learning methods utilised by the course materials	Margrethe Holm Andersen
10:00 - 10:30	Tea Break	All
10:30 – 11:30	Reflections on utilising the course materials Experiences of those who have already used the materials in the classroom or similar materials Introduction to course action plans	-Rebecca Hanlin -Manir Kamba -Kassahun Yimer -Jemima Yakah -Blasius Bavo Nyichomba
11:30 -12:30	Section 1a: Theory and history An introduction to innovation and development theory	Margrethe Holm Andersen
12.30 – 12.35	Short break	
12.35 – 13.30	Interactive session: class discussions on definitions and understandings of innovation and development	Margrethe Holm Andersen
13.30-14.30	Lunch	All
14.30 – 15.30	Section 1b: Theory and history Models of innovation	Rebecca Hanlin
15.30 – 15.35	Short break	
15.35 – 16.30	Interactive session: ‘rap battle’	Rebecca Hanlin
16:30 – 17:00	Tea Break	All
17:00 – 19:00	PERSONAL TIME (Please use this time to respond to work emails etc.)	All
19:00 – 20:00	Dinner	All

20:00 – 21:00	Introducing project work	Margrethe Holm Andersen/ Rebecca Hanlin
Wednesday 30th November 2016		
07.00 – 08.00	Breakfast	All
08.00 – 09.00	Available for group project work	
09.00 – 09.30	Learning from yesterday: reflections on content and pedagogy	Ann Kingiri
9:30 – 10:30	Session 2a: Methodologies for studying innovation and development Use of mixed methodology and mixed methods in innovation and development work	Rebecca Hanlin
10:30 - 11:00	Tea Break	ALL
11:00-12:00	Session 2b: Methodologies for studying innovation and development Practical examples of innovation and development research methods	-Ann Kingiri -Mammo Muchie -Abdelkader Djeflat -Oluseye Jegede -Abdi Yuya
12.00 – 13.00	Lunch break	
13:00 – 15:00	Group project work	All
15:00 – 15:30	Tea Break	
15.30 – 17.00	Group project work	All
17:00- 19:00	Personal Time (Please use this time to respond to work emails etc.)	All
19:00 – 20:00	Dinner	
20:00 – 21:00	Project work: Poster session to present initial ideas with feedback from all facilitators present	All
Thursday 1st December 2016		
07.00 – 08.00	Breakfast	All
08.00 – 09.00	Available for group project work	
09.00 – 09.30	Learning from yesterday: reflections on content and pedagogy	Rebecca Hanlin
9:30 – 10:30	Session 3a: The innovation, industry and policy nexus Macro, meso and micro environments of the nexus	Ann Kingiri
10:30 - 11:00	Tea break	
11.30 – 12.30	Session 3b: The innovation, industry and policy nexus The relevance of research to policy	Maurice Bolo, Scinnovent Centre
12.30 – 13.30	Lunch Break	
13.30 – 14.30	Session 3b: The innovation, industry and policy nexus Experiences of getting research into policy and practice debates	-Rebecca Hanlin -Mammo Muchie -Abdelkader Djeflat -Oluseye Jegede -Abdi Yuya

14.30 – 16.00	Finalise group work and presentations	All
16.00 – 16.30	Tea break	
16.30 – 17.30	Action plans for taking learning forward	Margrethe Holm Andersen
17.30 – 19.00	Personal Time (Please use this time to respond to work emails etc.)	All
19.00	Bus leaves conference centre for dinner venue	All
19.30 – 21.30	Workshop dinner at nearby restaurant	All
21.30	Bus leaves back to conference centre	All
Friday 2nd December 2016		
07.00 – 08.00	Breakfast	All
08.30 – 09.00	End of course survey	All
09.00 – 10.00	Learning from the course: reflections on content and pedagogy	Rebecca Hanlin
10.00 – 10.30	Tea break	
10.30 – 12.30	Group presentations 20 min presentations by each group of project work plus Q&A.	Ann Kingiri
12.30 – 13.00	Closing session	-Ann Kingiri -Cosmas Ochieng
13.00 – 14.00	Lunch	All
14.15	Bus to airport leaves	

Appendix 2: READING DOCUMENTS

The following documents were circulated to all participants either before the workshop or during the workshop. These acted as focusing devices for learning and interaction and/or the provision of template lectures, class activities or group work that participants could modify to their own circumstances and contexts and use in their own teaching.

Material from the model masters module:

- The AfricaLics Model Masters Module course outline
- Readings from the course:
 - Fagerberg, J. (2013) 'Innovation – a new guide', TIK Working Paper Series on Innovation Studies, No. 20131119, <http://ideas.repec.org/s/tik/inowpp.html> (accessed 31/01/14)
 - Tidd, J. (2006) "A review of innovation models" London: Imperial Business School. Available at: http://www.emotools.com/media/upload/files/innovation_models.pdf
 - Lundvall, B. 2007, "National Innovation Systems-Analytical Concept and Development Tool", *Industry and Innovation*, vol. 14, no. 1, pp. 95-119
 - Lorentzen, J. (2011) Food on the table and disease at the door: insights from low-income countries and regions for measuring innovation *Innovation and Development* Vol. 1(1)
 - Chiminede, C. (2009) "Designing innovation policies for development" Chapter 13 of Lundvall et al. *Handbook of Innovation Systems and Developing Countries: Building domestic capabilities in a global setting*, Cheltenham: Edward Elgar

Additional material

- Copies of all presentations given
- Group work instruction sheet
- Guilbert, K. (2016) "From gene editing to death traps, Seattle scientists innovate in race to end malaria" Reuters Health News, Mon Oct 31, 2016. Available at: <http://www.reuters.com/article/us-health-malaria-idUSKBN12W2TM> (accessed 15th November 2016)
- Gakenke (2016) "Africa unplugged: Small scale solar power is surging ahead" -The Economist, 29th October 2016, print edition.
- Small, M.L. (2011) How to conduct a mixed methods study: recent trends in a rapidly growing literature Annual Review of Sociology. Vol. 37, pp. 57–86
- Mills, J.E. and D. Trugest (2003) Engineering Education, Is Problem-Based or Project-Based Learning the Answer Australasian Journal of Engineering Education, January 2003

Appendix 3: List of participants and facilitators

NO	NAME	Institution	Country
1.	Abdi Yuya	Adama Science and Technology University	Ethiopia
2.	Anne Aseey	University of Nairobi	Kenya
3.	Blasius bavo Nyichomba	University of Dar es Salaam	Tanzania
4.	Derrick Eric Bugenimana	University of Kibungo	Rwanda
5.	Dessalegn Molla	Bahir Dar University	Ethiopia
6.	Grégory Paulin Mvogo	University of Douala	Cameroon
7.	Jemima Yakah	university of Ghana	Ghana
8.	Dr. Joseph Onjala	IDS Nairobi	Kenya
9.	Kassahun Yimer	Addis Ababa University	Ethiopia
10.	Manir Kamba	Bayero University Kano	Nigeria
11.	Natwinde Sawadogo	University of Ouaga II	Burkina Faso
12.	Oluwayemisi Adebola Oyekunle	Tshwane University of Technology	South Africa
13.	Pamela Adhiambo Mreji	Gordon Institute of Business Science	Kenya
14.	Shittu Ayodele Ibrahim	University of Lagos	Nigeria
15.	Titilayo Olaposi	Obafemi Awolowo University	Nigeria
16.	Sizet Paul Marivate	Tshwane University of Technology	South Africa
17.	Anke Weisheit	Mbarara University of Science and Technology,	Uganda
18.	Mrs. Nepeti Nicanor	Ashesi University,	Ghana
19.	Prof. Mike Korir	Moi University	Kenya
20.	Dr. Charles Nzila	Moi University	Kenya
21.	Dominic Somoita	Moi University	Kenya
22.	Faith Odongo	Moi University	Kenya

23.	Oluseye Jegede	AISPI , Nigeria	Nigeria
24.	Margrethe Andersen	Aalborg University	Denmark
25.	Ann Kingiri	AfricaLics Secretariat	Kenya
26.	Rebecca Hanlin	AfricaLics Secretariat	Kenya
27.	Moses Owidhi	AfricaLics Secretariat	Kenya
28.	Aschalew Tigabu	AfricaLics Secretariat	Kenya
29.	Mourine Chepkemai	AfricaLics Secretariat	Kenya

Appendix 4: Evaluation Sheet



Teaching innovation and development: A workshop for university lecturers in Africa

AN AFRICALICS TRAINING WORKSHOP
DESMOND TUTU CONFERENCE CENTRE, NAIROBI, KENYA
29TH NOVEMBER TO 2ND DECEMBER 2016

END OF COURSE SURVEY

A LITTLE ABOUT YOURSELF

	YES	NO
Are you a lecturer?		
Do you have a PhD?		
Are you female?		
Do you work in a low income country?		

OVERALL FEEDBACK

How would you rate:	Could be improved	Good	Very good
The workshop as a whole			
The overall structure of the workshop programme			
The workshop content meeting your expectations			
Size of the workshop			
Mix of participants			
Location of the workshop (accommodation, food, facilities)			

Detailed feedback

Please assess the amount of coverage given to each of the following topics	Too little	Enough	Too much
The content of the innovation and development course materials			
Interactive learning and PBL type pedagogy approaches			
Africa-focused examples and references			
Group work			
Social activities			

Please rank your three <i>most favourite</i> sessions during the workshop? (1 being most favourite)	Why?
1	

2	
3	

Please rank your three <i>least favourite</i> sessions during the workshop? (1 being least favourite)	Why?
1	
2	
3	

Please provide details of any content that you think should have been included in the workshop.

Please describe one or more aspects of the workshop that could be improved

Please provide any <u>further</u> comments or suggestions for improvement that you may have