

The African Universities' Research Approaches (AURA) Programme

Year One Case Studies: April 2015 to March 2016

April, 2016

Funded by:



The African Universities' Research Approaches (AURA) Programme: Case Studies from Participants at the Partner Institutions in Year One – April 2015 to March 2016

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1 The African Universities' Research Approaches (AURA) programme

AURA is an action research programme aimed at strengthening the individual and institutional capacities in up to nine African institutions. The programme aims to improve research and teaching practices and processes, and to build competencies that will enable institutions to be better placed to produce the next generation of African Scholars. The overarching vision of AURA is to reduce poverty through investments in people-centred innovations in universities that will foster economic prosperity and democratic and responsive governance. These continent-wide goals were expressed at the UN Economic Commission for Africa (UNECA) African Economic Conference in 2014.

AURA brings together the collective knowledge of researchers and educators based in the global South and North to co-create a context-specific educational framework that will enable academics with heavy teaching workloads to undertake research and enhance the research capacity of their students. In doing so, the programme will respond to the need for locally generated research knowledge by skilled researchers (and graduates); and support academics to nurture effective research and information capabilities in research-led teaching and learning environments.

AURA is funded by the UK Department for International Development (DFID). The programme started in November 2014 and will run until March 2018. It is a learning partnership led by the Institute of Development Studies (IDS), UK, originally in partnership with the Information Training and Outreach Centre for Africa (ITOCA), South Africa and Loughborough University, UK.



Interactive session with faculty on informal, professional writing skills.

R4 Strathmore University, 2016.

Photo: Emma Greengrass, IDS.

The AURA programme focused on the following deliverables in Year One:

Three research capacity courses:

- **Research 1 (R1)** September to November 2015: adopted a blended learning approach, where a practical/experiential face-to-face intervention is sandwiched between two theoretical online interventions. R1 focused on holistic (citizen-led, participatory) approaches as well as highly analytical approaches to research (researcher-led). R1 also introduced concepts such as wicked and tame research questions and explored the benefits of adopting qualitative as well as quantitative approaches.
- **Research 2 (R2)** February to March 2016: adopted the same blended learning approach as R1. R2 focused on researcher-led and analytical approaches to research and on the practical implementation of these approaches. R2 also supported participants to develop research questions and proposals and explored responding to 'live' research calls (as individuals and as a group).
- The first part of **Research 4 (R4)** February to March 2016: introduced staff and students (graduates, undergraduates and post-graduates) to informal professional writing skills (i.e. blogging) and on building their skills and confidence in writing blogs and publishing them on the *AURA Google Plus site*
 - <https://plus.google.com/u/0/communities/105659513973894994778>

Two teaching and learning courses:

- **Teaching 1 (T1)** March 2016: adopted a face-to-face training approach and focused on building confidence and knowledge in different learning theories, and approaches to assessment for and of learning.
- A pilot unit of **Teaching 3 (T3)** was run at the Global Knowledge Exchange Network (GKEN) Conference at Jimma University in December 2015. This taster session focused on collaborative/cooperative learning principles.
- The full intervention of **Teaching 3 (T3)** was run in March 2016. T3 is a practical course focused on applying learning theories to the design of technology enhanced learning environments.

Open Educational Resources (OERs):

- Developing the **Learning Management System** and setting up AURA'S collection of online learning resources on **IDS Open Docs**:
 - LMS: <https://sites.google.com/site/auraprogrammeinterventions/welcome>
 - IDS Open Docs: <http://opendocs.ids.ac.uk/opendocs/handle/123456789/8992>

- Videos, podcasts, presentations and regular blogs and video blogs along with an e-newsletter including: AURA’s regular blog (and fostering project coordinators skills and confidence in writing regular blog posts) and a dedicated **AURA Channel on YouTube**:
 - **AURA Blogger:** <http://auraprogramme.blogspot.co.uk>
 - **AURA Channel on YouTube**
www.youtube.com/channel/UCtQv5xR9ZqtvXfaHvNPJYNQ

The training courses, OERS and videos that have been produced for Year One will all contribute to the production of AURA’s **Research, Teaching and Assessment (RTA) framework**, which will be the major output of AURA in 2018.

Further details about the AURA programme can be found on the Institute of Development Studies website: <http://www.ids.ac.uk/project/african-universities-research-approaches-aura-capacity-development-programme>.

Year One Learning Partners

AURA’s learning partners in Year One are: **Strathmore University, Kenya; Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania; Kenyatta University, Kenya;** and **Jimma University, Ethiopia.**

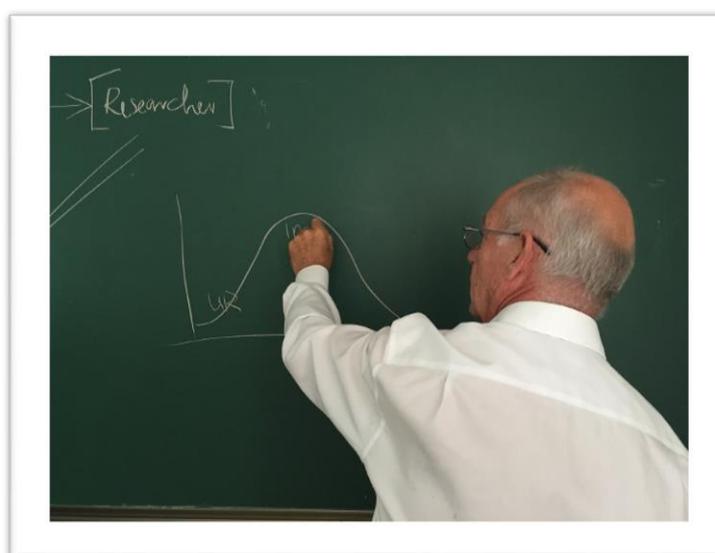
These partners were selected because of their strengths in research or for having a proven track record in applying innovative teaching curricula (or both). Each institution is a Phase 1 Partner on the programme with the exception of Jimma University. Jimma University is currently an Educational Technology Partner and will transition into becoming a full Phase 1 partner in Year Two of the programme. Phase 2 Partners will be brought into AURA in Year Two. A definition of the different roles of the Phase 1 and 2 and Educational Technology Partners is included in the Glossary.

In Year One, the learning partners were given specific aspects of the **Research, Teaching and Assessment (RTA) framework** to focus on. During this year, these partners have worked with AURA to co-design and develop a context-specific capacity development programme (as indicated below) focused in the following areas (or strands of work):

Research courses	Teaching courses	Diagnostic instruments for assessing research and teaching capabilities
Strathmore University – R1, R2, R4	Strathmore University – T1, T3	Kenyatta University
MUHAS – R1, R2, R4	Jimma University – T1, T3	

Glossary of Terms used in the Following Case Studies

Term	Definition
ALIRT team	ALIRT is an acronym for: A cademic department, L ibrary, I CT Services, R esearch unit, and T eaching support. This is the strategic governance/working group in each Partner Institution (PI) that is tasked with integrating AURA concepts and practices into the culture and curricula at each institution. This group will support the curriculum enrichment process and cascade training within the institution.
Educational Technology Partner	A learning partnership focusing on the co-production of e-learning resources and on online learning events. The academics within these partnerships are expected to contribute to the design of the e-learning courses.
Partner Institution (PI)	Up to nine African institutions participating in the AURA Programme comprising Phase 1 Partners, Phase 2 Partners and Educational Technology Partners.
Phase 1 Partner	This option is for institutions who want to play a central role in the design and delivery of the AURA Programme approaches.
Phase 2 Partner	This option applies to institutions who would like to implement the teaching and learning framework with less emphasis on engagement in co-producing the teaching and learning framework.
Project Coordinator (PC)	Project Coordinators coordinate and manage AURA activities within each Partner Institution (PI) and act as the day-to-day coordinators of the programme working with senior management, academic departments and coordinating ALIRT team meetings.
Research, Teaching and Assessment (RTA) framework	This will comprise the courses, OERs and videos and other AURA outputs and will be developed throughout the programme as a major output in 2018.
R1, R2 and R4	Research courses being rolled out as part of the AURA Programme.
T1 and T3	Teaching courses being rolled out as part of the AURA Programme.



Role of the researcher, Dr Mark Hepworth.
 R1 Strathmore University, 2015.
 Photo: Siobhan Duvigneau, IDS.

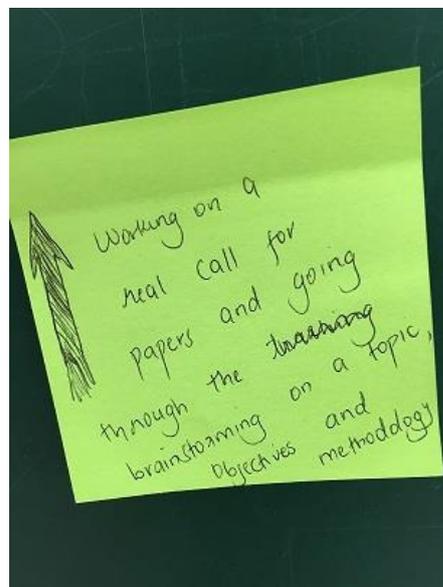
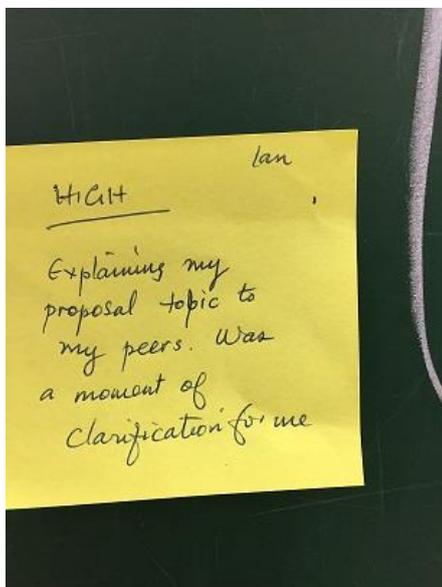
2 Case studies from the AURA learning partners

2.1 Strathmore University, Kenya

Strathmore University is a private institution with a strong focus on business and IT related programmes offering both academic and professional courses. Whilst being a relatively small university, the total figure for enrolment in 2015 was 5,012, it has a good reputation for developing students with strong employment skills. The institution has a clear commitment to continuous staff development and to improving the quality of teaching and learning. The institution is well placed to offer the AURA programme an opportunity to explore a different perspective and approach which could provide useful lessons for state-funded institutions.

Strathmore University's objectives under the AURA programme are to:

- Enrich the MBA Healthcare Management course on research methodology;
- Develop the delivery of both research-led curricula towards scholarly articles being written and published, and postdoctoral training in biomedical research;
- Develop doctoral regulations (in the Business School) for the taught component of a PhD as a way of strengthening internal capacity across the university;
- Develop the open scholarship skills/behaviours of academics;
- Develop critical thinking skills to enable staff/students to identify problems and apply innovative solutions using technology;
- Improve critical writing skills, and concepts, domain and literature mapping skills;
- Create a new research literacy curriculum for all academic and post-doctoral staff.



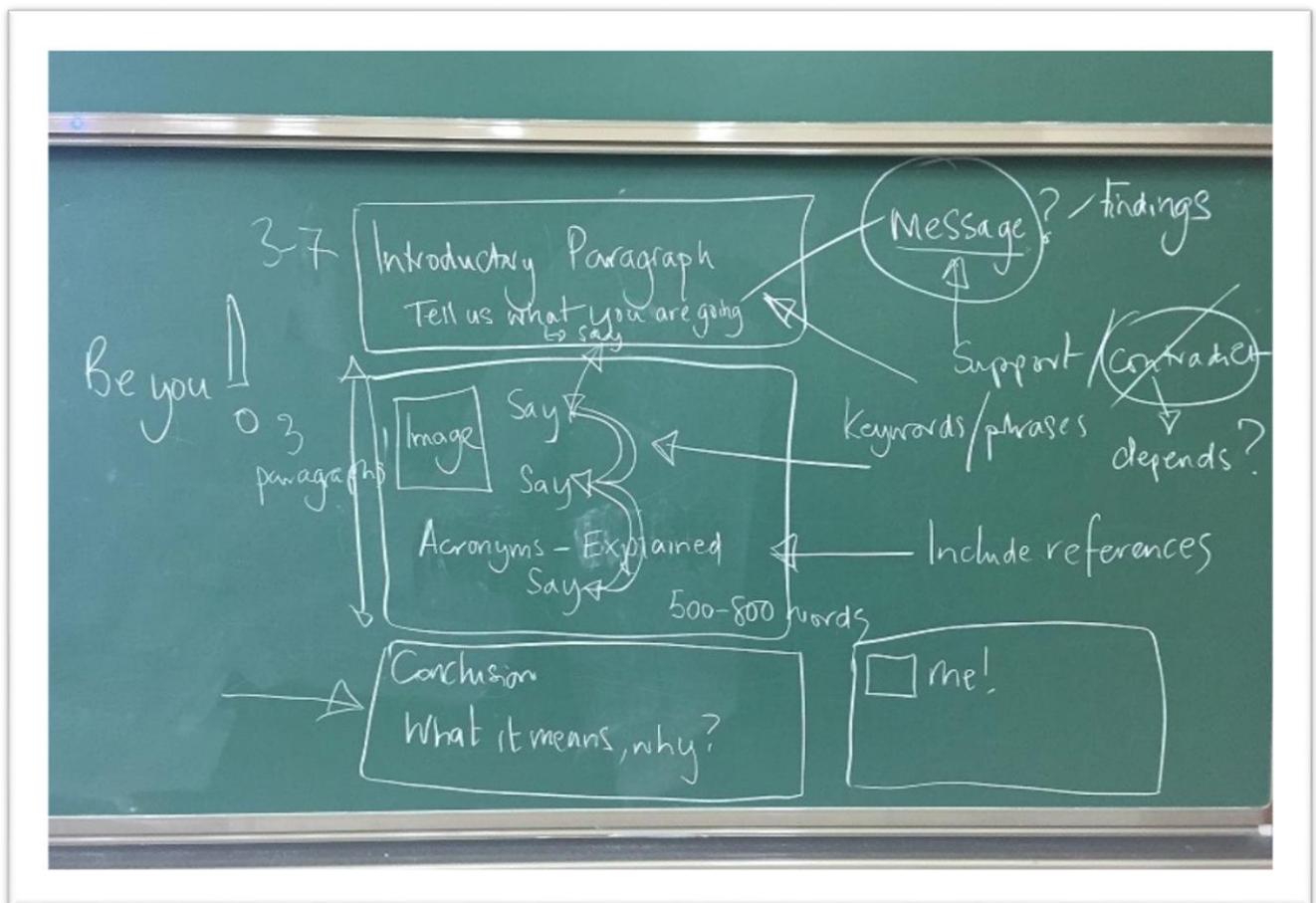
Capturing highpoints.

R2 Strathmore University 2016.
Photo: Siobhan Duvigneau, IDS.

2.1.1 Achievements in year one

The AURA programme at Strathmore University has two project coordinators (PCs) who have been champions for the programme from the start. They are Cavin Opiyo, Research Office Administrator, and Stephen Ng'ang'a, Learning and Teaching. The Strathmore PCs, represent both programme strands (i.e. research and teaching) and are therefore well placed to explore the nexus between these key areas, as well as ways to institutionalise activities that will improve teaching and research.

Strathmore is in the process of reviewing the role of its ALIRT team and ways to re-engage the team around strategic entry points in the AURA programme. Strathmore's Writing Centre is also engaged in supporting students to write blogs about their studies and about wider issues. The Writing Centre is working with a Kenyan based organisation, Siasa Place (<http://siasaplace.com/>), to refine the students' blogs for publication on the Siasa Place blogging platform. Siasa Place provides an inclusive platform which highlights the links between politics and everyday living, and they are promoting the benefits of writing about these experiences in a direct and informal manner. Strathmore have also rolled out the R1, R2, R4, T1 and T3 training in Year One of AURA.



R4 Workshop in Informal, Professional Writing Skills.
 Strathmore University, 2016.
 Photo: Siobhan Duvigneau, IDS.

The Reflective Practitioner

A learning participant at the R1 Training at Strathmore University takes time to reflect on the experiential exercise that the group has just undertaken.

The exercise was to experience an 'object' (the rose) in a sensory way (hence the blindfold to limit the senses to touch). This was a precursor to deeper experiential training which explored the benefits of utilizing alternative approaches to research drawing on holistic (citizen-led, participatory) approaches as well as highly analytical approaches (researcher-led). R1 also introduced concepts such as wicked and tame research questions and explored the benefits of adopting qualitative as well as quantitative approaches and therefore presenting research as a process that is fully experienced by all participants/stakeholders, including the researcher.



Photo: Siobhan Duvigneau, IDS.

To experience the activity, view the following Vine:

<https://vine.co/v/eQihxxnxOzK>

What follow are reflections from Cavin Opiyo and Stephen Ng'ang'a on the year and on the key learning arising from the programme.

One of the key aspects of the research strategy at Strathmore University is to inculcate a research culture among the faculty and students. The AURA programme has provided an opportunity to realise the concrete steps to achieve capacity development of faculty and students. For example:

- The institutional diagnostic and the capacity development plan produced at the beginning of the AURA programme in April 2015 usefully presented documented gaps in research capacity building.
- The individualised diagnostics assisted the AURA facilitators to design a responsive intervention. This process has been useful in refocusing the AURA intervention to address specific individual needs without ignoring the institutional focus in research development.
- The engagement of young scholars through the activities of R1, AURA's regional online conference ("Researchers of the Future", November 2015) and the 5th Global Knowledge Exchange Network (GKEN) Conference in Addis Ababa in December 2015, proved that young scholars are interested in developing their research capabilities and can work around their difficult schedules to make progress in research activities. Incentivisation and flexibility are key components of this progress. The AURA programme gave Strathmore University an opportunity to demonstrate that research capacity building, especially among young scholars, can produce the intended outcomes. Sarah Muigai and

Cecil Agutu, two young scholars participating in the AURA programme, showcased the benefits of the R1 intervention by presenting posters at the 5th GKEN Conference in Addis Ababa in 2015. Their participation at the conference was a learning experience for them as individuals as well as for their colleagues – participation in events like this helps to shore up good will from management as well as to motivate prospective participants for future opportunities.

Engagement of Strathmore University's young scholars at the 5th Global Knowledge Exchange Network (GKEN) Conference, Addis Ababa, December 2015.



Photos: Valentina Cattane, IDS.

Left: Cecil Otieno Agutu, Lecturer, Strathmore University discussing his poster presentation on engaging young people, in particular around employability, from Nairobi's informal settlements.

Right: Sarah Muigai, Assistant Lecturer, Strathmore University, highlighting her poster presentation on corporate governance and its' influence in strategic planning and strategic choices of organisations.

2.1.2 Lessons learnt

The engagement of young scholars. Some of the key lessons in successfully engaging young scholars include the need for flexibility in the programme to accommodate their heavy teaching loads and the need to address their immediate career progression objective which is to finalise their master's or PhD studies. This aspect usually demands appropriate research skills and that gap was addressed by the AURA intervention.

The role of project coordinators in balancing the needs of the participants and institutional priorities. PCs have to play an active diplomatic role in balancing the needs of the participants and institutional priorities. Short-term results (for example, attendance of conferences by young scholars participating in the programme) have a huge impact in shoring up good will from management and motivating prospective and active participants. The involvement of senior management to interact with participants and facilitators during implementation, especially face to face, is also key.

The role of project coordinators in mobilising faculty. It is clear that the engagement of senior researchers requires a completely different approach and strategy from what was implemented in in the first year of the programme. The motivation and fruitful engagement of senior scholars must be conceptualised to address their key personal/career development plans, which differ significantly from those of young scholars.

The roles of the ALIRT team. At the onset, the ALIRT team was enthusiastic about participating in the AURA intervention. However, as the implementation of the programme was rolled out, their roles appeared to diminish and members of the team developed “cold feet”, especially since their continued engagement did not appear to be fruitful. More time should have been spent (at both programme level and partner institution) to internalise and reposition the roles of the ALIRT team and to ensure that they would be meaningfully engaged in the programme.

2.1.3 Key challenges

One key challenge has been inconsistency in attendance to the programme commitments by participants in the online and face-to-face activities. The solution for online commitments has been to establish joint forums where participants engage under facilitation by the PCs. For the face-to-face activities, an attempt to increase the motivation of participants to attend has involved the sharing of success stories in joint forums and establishing a scoring system as well as engaging the deans in the schools.

A significant proportion of participants faced technology-related difficulties in taking advantage of the online resources and activities. Participants were overwhelmed by the amount of information and some had difficulties in navigating through the multiple sources. An attempt has been made to streamline the flow of information by the PCs to ensure that participants receive only the necessary information for action. Furthermore, the PCs have established facilitated forums to increase responsiveness to online activities from participants.

2.1.4 Key impacts

Strathmore University has experienced early results from its engagement in the AURA programme including:

- The execution of AURA in 2015 opened up an opportunity for Strathmore University to design a faculty-focused research capacity development programme. The team at Strathmore is working at customising the AURA R1 to R4 lesson plans with a view to mounting an executive education course on research literacy. Components of this programme will include information literacy, critical thinking and critical writing. Aspects of the programme will be tested before the end of 2016. It is intended that the entire curriculum will be ready for implementation before the end of the AURA programme.
- To help institutionalise AURA's core concepts, Strathmore have set up a number of working groups to take forward specific strands of work. These include a publications working group, and a writing group.
- The mode of delivery of AURA using digital technologies demonstrated significant gaps among faculty on necessary skills for digital learning. Strathmore University is exploring the possibility of implementing a digital literacy programme that prepares staff for the online environment. It is anticipated that the programme could be driven by the Teaching and Learning Services.

- The quick wins in the implementation of the programme (such as conference presentations, upcoming publications and the real progress emerging in Master's and PhD academic programmes by staff) are all strong points for continuing implementation of AURA.



Individualised support on developing research proposals.

R2 Strathmore University, 2016.

Photo: Siobhan Duvigneau, IDS.

2.1.5 Advice to new partners

Institutional level:

- There needs to be a strong buy-in by university management into the AURA programme. The best approach is to explore points in the institutional strategy to which AURA can add value.
- The PCs should be strategically placed within the university administrative structure to drive the AURA programme. For example, if the mandate of AURA touches on different offices, for instance academic and research, it would be prudent to make a team from these separate offices to ensure that the programme is smoothly implemented.

Participants' level:

- The programme must address participant needs. It is a matter of critical importance to manage the different demands competing for the time of participants to flexibly involve them in the programme and to provide additional incentives. The best incentives for young scholars is to assist them to progress in their immediate academic research work and provide opportunities for conference presentations.
- It is critical to manage communication among participants and clear actionable communication is essential. Emails should be backed up by face to face sessions and briefings as appropriate.

- The notion of co-constructed partnerships can be misunderstood, particularly at management level. AURA has adopted a co-constructed approach - hence aspects of programme design are left open to be developed in collaboration with participating partners. This more open approach in the programme design was a challenge to sell to university management, and potential beneficiaries, who were not so familiar with a co-creative approach and tended to perceive this openness as a 'lack of clarity' in the programme design.

Personal stories of impact from Strathmore University (1): Caroline Shisubili Maingi, Graduate Assistant, School of Humanities and Social Sciences, Strathmore University

Research is my area of interest but up to the first meeting with AURA, the traditional methods had not interested me. When the time came to write my proposal for defence I was not equipped. But after going through R1, I discovered that the topic of my research was doable, it was relatively new in Kenya and it was current. I received a response to my amateur proposal, with suggestions of ways forward. I have since defended my proposal and am set to research and write.

The new concepts that were introduced were wide and diverse. Some examples are tame and wicked problems, the new approaches to research – research-led and citizen-led, experiencing of phenomena, and other new paradigms. The fact that we are even writing testimonials is an impact. The fact that people have attended some events in the region, and a few more are coming up, is another impact, since it's coordinated through the university. The fact that sensitization through meetings, presentations, and communication on AURA matters is done through the university is another example of institutional impact. All this because the research office recognises the programme and has taken it up. Another aspect is the reaching out to students pursuing their master's and doctoral programmes; encouraging them to research and write – but using newer methods and approaches. This re-energisation has given a wake-up call to the interested students, granting them an opportunity to finish their studies.

For Phase 2 of AURA, there needs to be sensitisation of the programme in the institution. Since lecturers and students are already doing other things, the approach needs to be in such a way that they see the value of the programme for themselves first, and then for the institution. This will lead to the discovery that it is a commitment that, once involved, would be good to take to completion. That means checking to see that all variables make it possible to take up the commitment. These includes the allocation of time for AURA matters – to do the assignments, respond to the surveys, attend the meetings – while at the same time keep working on one's dissertation or thesis.

The organisers will need to encourage the current and new master's and PhD students to see what the AURA programme offers. Just one meeting makes you realise that 'you can do it'!

Another thing will be to work with the university calendar and the academic semester schedule so that activities don't coincide with other important events in the institution.

Another area that needs to be sorted out is the logistics for online events. And it is very important to inform the participants that they need to be able to work to achieve excellent results and there needs to be a concerted effort to block time for this.

On a personal level, I would like to finish my dissertation through the new approaches to research and writing, I would like to understand navigation of literature review and the discourse therein and I would like to learn more about online searching, citation, synthesis, among other underpinnings of research. I would also like to explore the new methods of data collection and analysis.

Personal stories of impact from Strathmore University (2): Sarah Muigai, Assistant Lecturer, Strathmore University

I am an Assistant Lecturer in the area of Strategic Management. I teach ACCA and CPA professional courses, and also undergraduate students. I am interested in corporate governance and strategic management. My PhD topic is on corporate governance and its influence in strategic planning and strategic choices of organisations.

When AURA came to Strathmore University, I had just a simple idea of what I could study for my PhD. I was not enthusiastic about doing a PhD that would just accumulate dust on the shelves and probably not have any impact. When R1 presented citizen-led research, I got excited about doing my PhD. I started thinking of stakeholders who would be interested in the research courtesy of concepts such as stakeholder mapping learnt in R1.

I am still trying to find out ways to get data from boards of directors because it isn't easy for them to be very open to giving me data that is relevant to their corporations. But thanks to AURA, I came to Ethiopia for the GKEN conference, and I've had a lot of feedback from the participants about the way I could go about collecting data, for example, from other stakeholders to be able to get that information that I need through qualitative methods. Without AURA I probably would not have had this chance and I would not have collected all this feedback to refine my methodology. I hope in R2 I will refine the methodology further.

One of the benefits to my students is that R1 was delivered in a learner-centred way. We've had learner-centred methodology in the past at Strathmore, but R1 gave a lot of tips about ensuring that the class is lively, that my teaching is not boring and that, at the same time, the students can internalise what I am saying. It also got me wondering about the way we supervise research for undergraduate students, because it is very positivistic. In Strathmore we follow a formula. I look forward to future changes in the way we guide our students. Instead of just telling them that they have to define the problem, they can discover the problem with the participants and refine and come up with quality research.

I think the benefits to the institution will be enormous. I think most of us get intimidated by PhDs. When you share your ideas with your professors, you still don't feel safe to open up completely. But AURA has given me an opportunity to share my idea in a safe environment with the AURA team and with my peers. And I would say that is a plus, not only for me but also for the other participants: when your idea is brought to the table

and discussed you are able to see areas that you can improve on; you are able to shape the idea and I think that is what we are looking for. Giving confidence to the young researchers to go to the next stage.

There are some of the things that I hope will be better in R2. When you are coming for R2, we should be told earlier so that we can organise ourselves better. I am sure the facilitators noticed that most of us had to rush out during the programme to organise our classes – the notice was too short. It would be helpful to have at least three weeks' notice before the next dates so that we can organise ourselves.

I like the online interventions a lot. The challenge we have had at Strathmore is that the internet is sometimes down. I don't know if there is anything AURA can do about that. But I think it's also for us to get better organised. When you know you are having an intervention by Skype call on Friday, can you make sure that by that Friday things are working...

Personal stories of impact from Strathmore University (3): Cecil Otieno Agutu, Lecturer, Strathmore University

I lecture in Development Studies at Strathmore. At any one time I have about 85 students in my class and in a semester I teach around three classes.

My work involves teaching and research. Since I have a big teaching load, my research work has suffered. However after joining the AURA programme my passion for research has been rekindled and the techniques I have discovered from AURA have helped me to get back into the research work.

I also believe in transferring, or sharing, the knowledge I have with my students so whatever I gained from the AURA sessions I look at what I can share with my students. For example, I have encouraged my students to write and to share their ideas and to break this myth that is only professors who can share knowledge. So a number of my students have taken up writing, for example, in the national newspapers, writing articles on development, which has been a great encouragement to them. Two of them are also writing blogs. They have been encouraged to do this through my interaction with the AURA programme.

We have many young scholars and some of them are participating in the AURA programme which has helped them to focus on research. This will give a long-term benefit to my institution because we are cultivating young scholars' right from the start to get them into the research mood and to do high-quality research that will have impact on Kenya and the lives of poor people.

I have been doing some work with the youth in the informal settlements of Nairobi especially around employability and, after joining the AURA programme, I was really encouraged to share the experiences I got from this project with others so that they could pick up one or two ideas. And by participating in the [GKEN] Ethiopia conference facilitated by AURA, I was able to get a platform to share my ideas, and also to hear other people's experiences around youth employment and youth development. So this is very encouraging and very enriching for me as a young scholar.

AURA has given me a life line to start writing again and to do high-quality research. I see myself in the future being a more capable researcher and also nurturing young researchers in my university, and beyond, because we need high-quality research to be able to move our country forward in terms of its development. So I think this programme is very valuable in helping us to nurture young scholars and to do high-quality research.

2.2 Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania

Muhimbili University of Health and Applied Sciences (MUHAS) is a medical university based in Tanzania. MUHAS is the first Public University for Health Sciences in Tanzania and offers a variety of programmes in Medicine, Dentistry, Pharmacy, Nursing, Public Health, Laboratory and Allied Sciences, at diploma, undergraduate and postgraduate levels. A medium-sized institution (approximately 5,500 students), MUHAS offers the AURA programme an opportunity for curriculum enrichment that will benefit staff and students, as well as supporting an existing agenda to improve the quality of teaching and learning.

MUHAS's priorities under AURA are to:

- Strengthen research capacity and research-led teaching;
- Enhance the provision of e-learning courseware and other approaches to address the high demand on staff teaching time; and
- Incentivise academic (professional) staff to participate in the research/teaching and learning interventions.



Interactive Netmapping Exercise with learning participants

R1 MUHAS, 2015.

Photos: Siobhan Duvigneau, IDS

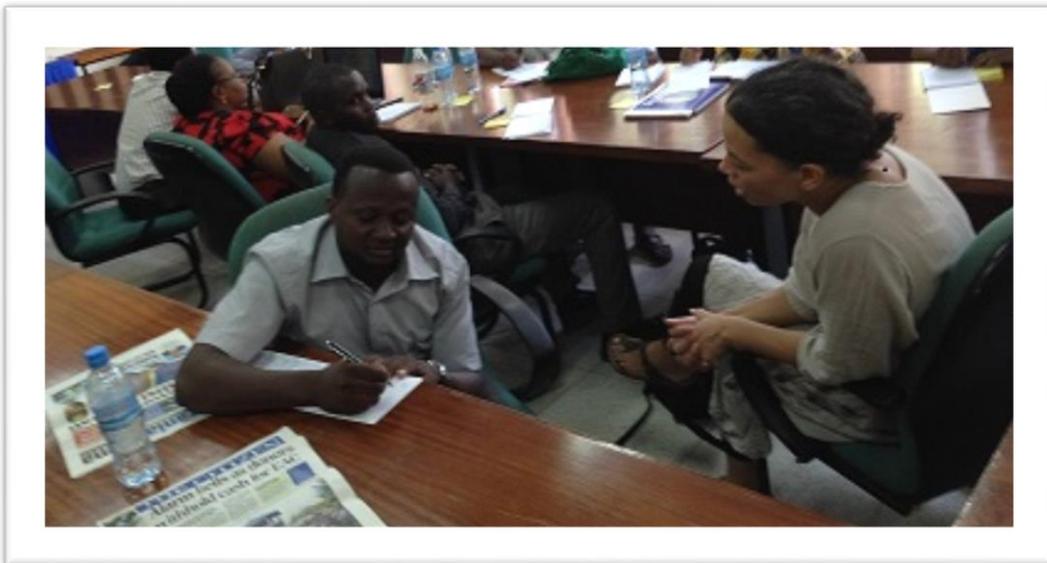
2.2.1 Achievements in year one

The AURA Programme at MUHAS is coordinated by Dr Tandi Lwoga, Director, Directorate of Library Services and Senior Librarian and Dr Doreen Mloka, the Deputy Director, Directorate of Continuing Education and Professional Development and MUHAS Curriculum Chair Lecturer.

What follow are reflections from Dr Tandi Lwoga and Dr Doreen Mloka on the year and on key learning arising from the programme:

Main achievements at MUHAS in Year One include:

- Contribution to R1, R2 and R4 courses. MUHAS rolled out R1 from September to October 2015, and R2 in February 2016. A half-day R4 workshop focused on blogging – a new area for staff and students.



Learning participants reflect on individual research proposals

R2 Training, MUHAS, 2016.
Photo: Emma Greengrass, IDS.

- Identification of a cross-cutting curriculum for enrichment (E600) and embedding AURA approaches within the institution.
- Training around conducting mixed methods research, especially around qualitative research and citizen-led approaches, has helped to bridge a skills gap at MUHAS.
- Establishment of orientation sessions to improve competency to use technical platforms and build confidence with online learning and accessing online resources
- Encouraging the introduction of blended learning approaches at MUHAS - this a first for the institution and this has changed how the university thinks about teaching and learning.

- Encouraging more multi-disciplinary ways of working has increased internal collaboration and helped to address tendencies to work in silos.
- MUHAS's own e-learning platform (Moodle) provides an opportunity to interact with students on teaching and learning activities. The MUHAS PCs are planning to link to the Moodle as well as make better use of other free online AURA services (e.g. Google Plus, Google Site and YouTube). MUHAS's 2,700 undergraduate students (and some post-graduates) are currently registered on the Moodle-learning platform – although not all are using it, PCs hope to encourage greater utilization in the future.
- MUHAS PCs are planning to support a core group of trainers, both in research as well as in teaching, so that in time they will be able to repeat the AURA R1 and R2 training themselves. This would support the continuation of AURA's teaching and learning approaches and activities beyond the scope of the programme. If the skills and knowledge acquired through the AURA training are cascaded through the university, and to individuals through faculty development, and a similar training can be launched to other colleagues, the skills and knowledge that will be gained will change the way research training is viewed in the health professions in Tanzania.

2.2.2 Lessons learnt

ALIRT team engagement. Involving the ALIRT team early on in the process lets them own, and champion, the project. The programme structure at the beginning did not engage the ALIRT team as required. It was not clear what their roles or responsibilities should be, or how much they would need to be involved. ALIRT team engagement at MUHAS has been refocused, and consequently ALIRT team members now know how much they need to be involved and what their roles are in the project. The AURA Project Coordinators had an opportunity to share experiences of AURA across institutions when they came together for the GKEN Conference in Addis Ababa and Jimma, Ethiopia, in December 2015. This forum helped the MUHAS PCs to address issues such as: how to involve the ALIRT team; and how to respond to the challenge of supporting participants to access online materials.

Motivating participants to go online. It will take time to make a cultural change towards online learning and it is necessary to offer technical orientation programmes for participants, and short training sessions, with limited online activities at the beginning to get them comfortable in accessing the platform and ready to undertake bigger online activities. Low rates of participation were observed for the pre-online R1 training at MUHAS. Therefore, for the pre-online R2 training, Project Coordinators held a technical orientation session with 16 participants where they watched the pre-online videos ('Introduction to the R2 Workshop' and 'Introduction to the Pre-online Session') collectively using headsets purchased with programme funds to support this strategy. The PCs also demonstrated how to navigate around the AURA Learning Management System (LMS) and how to access the online materials for R2 in order to build confidence in this area. The hope is that building skills collectively in this way will enable individuals to undertake future online activities individually and from their offices.

MUHAS'S own e-learning platform (Moodle) has been under-utilised because of a lack of skills, and confidence in this area. The PCs, recognising that Moodle provides an opportunity to interact with students in teaching and learning activities, are planning to link to this as well as make better use of other free online AURA services (e.g. Google Plus, Google Site and YouTube). Although not everyone is using it, MUHAS's 2,700 undergraduate students

(and some post-graduates) are registered on the Moodle-learning platform. The Project Coordinators at MUHAS hope to implement AURA's blended learning approach and teaching methodologies by enriching what is already established and Moodle provides an existing platform at MUHAS for taking their online learning, and AURA learning, forward.



Interactive session with faculty and students on informal, professional writing skills.

R4 MUHAS, 2016.

Photo: Emma Greengrass, IDS.

2.2.3 Key impacts

AURA has helped to bridge a skills gap in conducting mixed methods research, especially around qualitative research. Staff have learnt new ways to approach teaching and learning by participating in a blended approach. Their research skills, in terms of doing qualitative and quantitative research, have also been enhanced. And in the R2 course in February 2016, it is expected that there will be more to learn on how to conduct mixed methods research, and how to embed qualitative research into teaching as well as future research activities.

Introduction of a blended learning approach. The AURA programme has encouraged the introduction of blended learning, scarcely used at MUHAS prior to AURA, to reach a wider audience and at the same time ensure that the learning outcomes have been achieved. Faculty and students have been encouraged to adopt this approach in their day-to-day activities including finding information about research or teaching and learning activities. This has changed how the university thinks about teaching and learning, and implementing the blended learning approach and teaching methodologies enriches what is already in place.

Introduction of a multi-disciplinary approach. The AURA programme has recruited academic staff from different disciplines, as well as from the different schools and institutes at MUHAS, to work and network together to learn from each other. Peer-to-peer collaboration has been greatly enhanced. AURA has made it possible for people from different disciplines to think about research questions together and share their strengths and weaknesses among peers on how best to solve and do research. This has helped to strengthen internal collaboration as well as to mitigate tendencies to work in silos.

Staff research skills and teaching methodologies have been enhanced. Citizen-led approaches to research, and the paradigms associated with these types of research approaches, were unfamiliar to many staff. They have had an opportunity with R1 to focus their minds on citizen-led approaches, which has opened up a new area for staff. The teaching methodology, in addition to being blended, involves a lot of interaction and peer learning. Participatory research is a methodology that promotes critical thinking and reflection and these are methodologies that could be adopted in day-to-day teaching of other disciplines at MUHAS.

2.2.4 Long-term sustainability and contribution to institutional and national goal

The sustainability of any programme relies on change agents and champions to spearhead it and cascade it down to others. Therefore, MUHAS is hoping to support a core group of trainers, both in research as well as in teaching, so that in time they will be enabled to repeat the AURA R1 and R2 training themselves. This would support the continuation of AURA's teaching and learning approaches and activities, beyond the scope of the programme. If champions of this teaching and learning approach are involved in this way, it should disseminate quite quickly because there is institutional support. The main issue will be to make sure that it is easy, flexible and adaptable to MUHAS requirements, and promoted so that people can see its value.

If the skills and knowledge acquired through the AURA training are cascaded through the university, and to individuals through faculty development, and a similar training can be launched to other colleagues, the skills and knowledge that will be gained will change the way research training is viewed in the health professions in Tanzania.

MUHAS has a reputation of being an innovator and setting the standard. If these positive effects can be documented in publications and scientific outputs that show the quality of research, best practices in terms of teaching and learning can be shared with colleagues in other institutions. If MUHAS can show that the AURA programme has enhanced teaching and learning and practice of research at MUHAS, then it is likely that other institutions will want to learn from MUHAS and adopt these innovative changes.

2.2.5 Advice to new partners

- Clarify from the onset the specific roles of the PCs and the time required for their input.
- Clarify the role of the ALIRT team early on and actively engage them from the beginning. Consider having regular meetings with ALIRT teams so that they feel part of the wider group and ongoing project.

- Ideally, PCs across institutions should have a similar level of qualifications. Different levels of qualifications and experience can lead to quite different ways of thinking about how to proceed. If the PCs have similar qualifications they will be able to manage the project more effectively. It will also be helpful to have senior people involved in the running of the project (at PC and ALIRT team levels) who are able to make decisions.
- Hold an awareness session for the institution early on to clearly state what is expected and what the intervention intends to do so people are made aware of what is expected of them, the time and the commitment, and can schedule the activities and plans to avoid timetable clashes.
- As AURA is a collaborative project, new partners will need to be open-minded in terms of how they are going to learn, and how they are going to enrich their curricular as well as their research activities. They should identify what kind of curricula they want to enrich.
- Their ALIRT team will benefit from being multidisciplinary as this will help to promote ownership of the project. A multidisciplinary team is well placed to support the practices that will be taught, and eventually embedded, into the whole partner institution.
- For some institutions it will be necessary to familiarise participants with online technology prior to the programme sessions so that they will be comfortable with using the online platform.

Personal stories of impact from MUHAS (1): Dr Doreen Mloka, Medical Education Fellow and Director of Continuing Education and Professional Development, MUHAS

I am the Director of Continuing Education and Professional Development. This is basically the arm of teaching and learning and curricula for the University. So I oversee MUHAS's curricula and I oversee professional development of staff in all areas including their professional development as clinicians, as researchers, and as teachers or lecturers.

I am one of the co-ordinators for AURA so my job is to oversee AURA activities, to interact with our partners in AURA, to see that the concept note, or the ideas of enriching teaching, learning and research (which is the main objective of AURA) are implemented at MUHAS in such a way that the MUHAS staff gain and benefit from this intervention. We anticipate that they will enhance their skills in terms of conducting research but also in their ability to teach research to their colleagues and students. And I am also one of the participants at the same time.

As an academic and a lecturer I have now gained the confidence and the skills to adapt some of my teaching and learning and assessment activities to feature the blended mode approach. Through AURA, I have also gained the experience to be able to cascade these skills down into my day-to-day activities and this has shown that I can actually free up some time from my busy schedule. For some of the elements to be on an e-learning platform would give me more time to do research or other administrative activities. So it's a system that I may adopt in my day-to-day practice here at MUHAS.

AURA has made me look at blended learning and peer-to-peer approaches as an alternative and feasible pathway. I am a little hesitant at the moment because I'm still waiting to see the effects over time. It looks feasible but I need more time to actually

assess if it's implementable in my own practice. At my directorate level I would need to have more activities where I expose people to how to run an e-learning programme.

Reflective practice is quite a new concept at MUHAS so we haven't really engaged in reflective practices, although we do the methodology that is used in the health profession quite a lot. On a personal scale, I think it cements what you have gone through; you look back on the opportunities and challenges, and on how you have overcome those challenges and what measures you have done to mitigate them and you are actually able then to see the successes that were possible. This is a good way to have a reference for the future either to avoid errors or to improve your performance that you usually don't have time to think about. It's a good exercise to review how you do things and improve gradually over time rather than wait until the end to make corrections. I would like to develop reflective practice in the daily activities of teaching and learning among students and staff, and consider how we can do continuous quality monitoring and evaluation and improvement in our daily practice and not only in research.

As the coordinator, and as the director, I am always a champion of new innovations that will foster capacities or competencies in research. Research development is the core for sustainable development, so as well as being a PC I am definitely a champion for the AURA programme because it enhances our research capacity and our teaching and learning capacity at MUHAS. The ALIRT team is now engaged but I am not counting on the ALIRT team to be the only champions. I am counting on the participants in the AURA programme who will take on what they have learnt and apply those lessons because here at MUHAS we have different groups of champions. We have champions for teaching and learning and now we could establish new champions for research. They don't necessarily have to come from the ALIRT team but they have to come from the enthusiastic participants of the AURA training.

For me as an individual researcher/practitioner it's been a learning exercise. I learnt how to develop and do a blog post, which is a new skill that I've acquired that I can use for other activities apart from research. But it is also of benefit to me to develop platforms to communicate with my students and discuss issues without being face to face.

As a researcher I was mainly a quantitative person, but through the AURA intervention I've looked at the citizen-approach led research and it seems that there is a whole area of qualitative research that is applicable to my discipline that I never explored before. Now I am looking at research questions in a more holistic way, the quantitative and the qualitative elements in my research questions, and I think I've gained more confidence to tackle qualitative questions.

Personal stories of impact from MUHAS (2): Tandi Lwoga, Director of Library Services, MUHAS

I am the Director of Library Services at MUHAS but I am also the core Project Coordinator for the AURA Programme at MUHAS.

The AURA Programme has really helped me in terms of project management and coordination. I've learnt a lot about how to manage the programme and how to communicate the findings of the project through the blog posts that we have been writing and the critical reflections that we have been doing for the project. Myself, I also learnt a lot through the R1 workshop on citizen-led intervention that I was not much aware of before.

This programme has been different from the other initiatives that I am coordinating. Currently I coordinate about four projects and in most projects I have collaborated but we are following so much of what I wrote in the proposal, for example, if I wrote about working skills or supervising students, I've really been doing it all myself. But with the AURA programme, it has been different because we have been going along with the partners at every step in the programme. So we have had meetings that have got us to scale up on the issues that we discussed; even the way we run the publicity, the way we develop tools and the way we contact people for the R2 training. We were able to participate from the development of the programme; we've really been involved in everything. So it's very collaborative. We also have a lot of assistance in the project. We have other people who are helping us in developing the tools and the proposal, so it's really been different.

I think the AURA programme has enriched my research practices. For instance, the way we have been doing the diagnostics (the pre- and post-) has really enriched what I have been doing myself. I've been able to learn practically how to conduct action events of the research. Also I've been able to build my skills as a practitioner on how to carry that out. And in practical terms in the project coordination itself, because initially I thought I was just going to be the project lead and not be part of the participation, but I think by being a project leader who is also a participant, you learn and benefit a lot. By being a participant, I've been able to see how the participants can benefit through the project.

I've also benefited from the AURA programme from the multidisciplinary nature of the ALIRT team because in most of the other projects I've been working with other MUHAS schools but not to a large extent. With the AURA project, I'm working with every other school at MUHAS, so it has also increased internal collaboration at MUHAS. I've been able to work with people from pharmacy, from medicine, from nursing, and all focusing on the same goal, so it's really helping us to strengthen our internal collaboration.

The Ethiopia meetings really helped us in coordinating the project because we found that there were similar issues, such as involving the ALIRT team, accessing online materials and motivating participants, where we could share experiences.

I think that we are going to be like champions for the project. Because we are also participants and have to learn and to submit, this will help us to go on with it even after the project has ended. So we also need to fully participate as much as we are also championing the project so that other people can also learn.

For the facilitated part, I would also like to have a core group of trainers both in research as well as in teaching, and perhaps see if we can conduct the workshop on our own, perhaps repeating R1 and R2 training, and be able to attain the objective through the core group. So that even after the project, we are able to continue doing the activities.

It's been a learning experience for me and I expect to learn a lot more through the three years of this project, especially on the social sciences and the qualitative research and all that we are going to learn in the teaching methodology, so I think it's been a good experience for me and for my colleagues.

Personal stories of impact from MUHAS (3): Felix Sukums, Ag. Director, Directorate of Information & Communication Technology, Ass. Lecturer and Consultant, MUHAS

Two impacts coming out of the AURA programme at MUHAS are:

- Knowledge: building awareness and understanding of new approaches to research and how they can be applied in ongoing projects or future project plans; and
- Use of ICT platforms for learning research approaches and conducting or coordinating research related activities using various ICTs, especially web or online technologies.

Some challenges arose in employing the new approaches, including reluctance to change from established territory, for example, in the use of quantitative or qualitative methods. And there was some difficulty in applying some methods because of the nature of the study, for instance, applying a citizen-led approach in laboratory based research.

At the individual level, people had to move towards the use of mixed methods, which advocates involvement of communities through various participation approaches including focus group discussion in identification of research problems, questions and design.

In order to ensure diverse research approaches are employed, MUHAS has established, and plans to establish whenever needed, various Health Professions Educators Groups (HPEGs).

A number of lecturers who attended the AURA trainings have promised to integrate the approaches in their teaching and research activities and will also prepare proposals for integration of the research approaches into curricula. There are also proposals for preparation of courses to be included in curriculum review so that new research approaches are integrated during the review.

In order to improve advocacy of the use of mixed methods or new approaches to research and learning, mentorship and a training of trainers programme would build capacity to teach and conduct research using research-led and citizen-led approaches.

New partners should make sure all key stakeholders are involved from the very beginning and are aware of the project plan and expected outcome. There is also a need to implement a reward system for both staff and students to participate in the programme and later employ the research approaches. This could be done through recognition of the best performers in the programme but also by providing funding opportunities, especially

for students and junior staff, for research that will be conducted using the new approaches.

The ALIRT team should be a strong team of persons who have adequate time and capacity to follow up and coordinate the programme. The team can also establish different clusters.

Personal stories of impact from MUHAS (4): Raphael Z. Sangeda, Lecturer and HOD, Department of Pharmaceutical Microbiology, School of Pharmacy, MUHAS

When I heard that the AURA programme's objective was to integrate research capacity into the university's research and teaching programmes, I knew we were heading for the betterment of teaching of our students. I strongly believed that embedding research into the teaching would give an opportunity to train students in problem solving and being analytical in designing their own research. So I was very motivated to join the proposal writing team that was led by Professor Tandi Lwoga.

First, we suggested dividing the task between members of the proposal writing team. Each member wrote up a section before presenting to the team. We finally came up with the completely filled application template that the team discussed before the final submission. We collected biographies of key participants from the schools, in my case from members of two departments in the School of Pharmacy. During the process two departments from my school were nominated as pioneer departments to start implementation of the AURA programme at MUHAS. However, during later meetings we agreed that implementation would begin in departments teaching a cross-cutting course (such as ER200 and ER600) taught in all schools at MUHAS. Moreover these courses contained aspects of research methodology and epidemiology and thus would make a perfect model to cascade in other departments during later phases of implementation.

We soon realised that we needed to nominate our ALIRT team and I was glad to be nominated as an ALIRT-Teaching and Learning member. We conducted several meetings in order to discuss how to implement the programme at MUHAS.

In September 2015 I was involved in giving a short presentation on 'African Universities' Research Approaches (AURA) Capacity Development Programme' as part of AURA orientation at MUHAS, which was attended by university management and other academic staff. In that presentation we highlighted AURA's goal to 'Integrate research capacity building and improved pedagogy into teaching to give a positive impact on the education of many thousands of students contributing to strengthened human capital – a key driver of economic growth'.

I was later privileged to participate in both the pre-online R1 intervention and the face-to-face workshop. The differentiation around researcher-led versus citizen-led research was quite fascinating to discuss and the trainers of this workshop, Dr Mark Hepworth, Loughborough University, and Siobhan Duvigneau, Institute of Development Studies (IDS) were very keen to bring knowledge to us with highly participative approach that would make you want to learn more.

Sometimes I could not fully participate in the training at MUHAS due to other university commitments as the head of department. But thanks to the AURA Programme's Community on Google Plus, I have managed to follow up on the blog posts of colleagues who give their reflections on the course as was evident in the case of R2 interventions.

In our latest ALIRT meetings we discussed the current institutional challenges in AURA implementation, the cascading plan at MUHAS, how to enrich the research curriculum and how to participate in the upcoming T1 intervention.

Generally the programme will culminate in a framework of competency-based research curriculum that can be shared with other universities in Africa.

I encourage more colleagues at MUHAS to join the programme as they can benefit by learning appropriate research approaches that will help them to give better training to students and write high-quality research publications for the betterment of all Tanzanian citizens.

2.3 Kenyatta University, Kenya

Kenyatta University (KU) is the second largest public university in Kenya with a student population of over 70,000 in 15 schools that teach a diverse range of disciplines. It has a long history in teaching and for many years it was the only institution of higher learning that was producing graduate teachers in Kenya. KU, therefore, has the longest and most diverse experience of teaching in post-independent Kenya. The launch of the AURA programme at KU in 2015 coincided with their celebration of 30 years in teaching and research. KU is a large institution which offers the AURA programme opportunities for high-degree impact through institutionalisation of approaches.

- Kenyatta University's objectives under the AURA Programme are to:
- Build the capacity of faculty in pedagogy and research methods; and
- Develop faculty competency in writing winning proposals, and researching and writing scientific papers.

2.3.1 Achievements in year one

The AURA programme at Kenyatta University has adopted a different approach, which has been to focus on the diagnostics exercise – an area that KU felt was an important entry point for the programme and one that has allowed AURA to develop a diagnostics framework that can be rolled out across the programme. The AURA programme at KU is championed by Dr Titus Kahiga, a Lecturer at the School of Medicine, who specialises in clinical pharmacy. His views are reflected below.

Main achievements at Kenyatta University (KU) in Year One include:

- **Undertaking a pre-diagnostic meeting:** This was a key opportunity for reflection which provided KU with valuable insights for the diagnostic process.
- **Undertaking a baseline survey at KU:** The main focus in AURA is to enrich the existing capacity in teaching and learning, and research. To be able to achieve this objective at KU, a baseline survey (referred to as the diagnostics exercise) was undertaken.

- **Interactive workshop took place in February 2016 at KU:** The diagnostics exercise was undertaken jointly with teams from IDS and an independent consultant through an interactive workshop.
- **KU is strengthening capacity in teaching and learning.** KU has developed several administrative and policy strategies to improve capacity in teaching. There is a robust directorate that is specifically designed to advise and ensure effective teaching and learning. It is hoped that KU's involvement in the AURA programme will help to further strengthen capacity in these areas.

2.3.2 Lessons

At the time of publication, lessons from the Kenyatta University experience were still emerging and will be articulated in subsequent publications.

2.3.3 Key challenges

While the diagnostic process is under way, a pre-diagnostic meeting has provided moments of reflection providing KU with valuable insights. However, there are many challenges ahead for KU. The assessment tools that the university has been using has not been reviewed over time although there is also a growing sense of this as becoming urgent. It is hoped that some useful recommendations for policy directions will arise from the preliminary findings from the pilot diagnostic which can further help strengthen KU's institutional teaching and learning policies and processes.

There are also many challenges on the research side for KU. Although the need for new knowledge is critical, not much research is going on yet. A lot of work has been published on possible solutions, however, serious interventions that are locally driven remain lacking in Kenya. One key gap is a lack of adequate numbers of faculty who can dedicate more to research and a significant obstacle are the limitations in resources available for cutting-edge knowledge creation and dissemination.

What is needed is a new team - an inspiring, multidisciplinary, passionate team - that can drive the teaching and research agenda forward so it is anticipated that the AURA programme will support KU to develop a non-traditional approach as an intervention for research capacity building. It is hoped that the diagnostic process will help KU to review possible locally driven challenges and develop some innovative interventions.

2.3.4 Key impacts

Undertaking a baseline survey at KU: The main focus in AURA is to enrich the existing capacity in teaching /learning and research. To be able to achieve this objective at KU, a baseline survey was undertaken (referred to as the diagnostics exercise). The diagnostics exercise is a key tool which is helping to analyse the teaching and learning environment at KU.

Interactive workshop took place in February 2016 at KU: The diagnostics exercise was undertaken jointly with teams from IDS and an independent consultant through an interactive workshop. A number of areas were agreed on as needing further interrogation.

These included:

- A possible audit of capacity in creativity;
- Problem-solving attitudes;
- Commitment to research; and
- Cognitive abilities (among other attributes).

The process was undertaken through a highly interactive workshop involving the clustering of ideas and themes in order to get a convergence of priority themes. This was exciting and also helped to confirm institutional buy-in – another significant step for KU – as the interactive workshop was attended by the Deputy Vice Chancellor in charge of academic affairs and the Deputy Vice Chancellor in charge of research innovation and outreach. Both deputy VCs affirmed the desire of KU to deepen its excellence in teaching and research.

KU is an institution with a long experience in training teachers and has developed several administrative and policy strategies to improve capacity in teaching. There is a robust directorate that is specifically designed to advise and ensure effective teaching and learning. How effective these have been has not been investigated but it is hoped that KU's involvement in the AURA programme will help to strengthen these areas.

Pre-diagnostic work: a pre-diagnostic meeting has also provided KU with valuable insights. It is anticipated that the AURA programme will support KU to develop a non-traditional approach as an intervention for research capacity building. It is hoped that the diagnostic process will help KU to review possible locally driven challenges and develop some innovative interventions.

Personal impact statements from Kenyatta University: learning participants reflective feedback from the Interactive Workshop on Diagnostics

"New methods of teaching and involving participants. Use of the sticky wall was indeed new to me and was effective."

"The diagnostic tools were quite efficient in terms of time and coverage."

"It was very interactive and everybody had an opportunity to participate. It was possible to get the areas of concern from the participants. It was a new experience in conducting a workshop."

"The workshop brought strongly a very quick way of getting ideas from a group of people on an issue of interest."

"The idea of engaging every person made the participants feel part of the workshop which is very healthy."

"The workshop focus on research and teaching is credible because it is one area that will ensure issues affecting people currently are addressed and peoples' capacity to address these issues is enhanced."

“It was a new learning experience on preparation of a diagnostic tool.”

“[The] brainstorming session [was a positive experience] especially when allowing people to justify the sorting exercise. [The] session provided opportunities for consensus building and consolidation of understanding of the task.”

2.4 Jimma University, Ethiopia

Jimma University (JU) is a public higher educational institution established in December 1999 through the amalgamation of Jimma College of Agriculture (founded in 1952), and Jimma Institute of Health Sciences (established in 1983). JU is Ethiopia's first Innovative Community Oriented Education Institution of higher learning and trains higher calibre professionals at undergraduate and post-graduate levels through its innovative Community Based Education (CBE) – JU currently educates more than 43,000 students.

Higher education is expanding in Ethiopia at an exponential rate in response to increasing demands for access to education and new universities appearing in different parts of the country. Within this context, the role of Jimma University (JU) has greater prominence - as one of the first-generation universities in the country, it is well placed to build the capacity of younger universities. JU's vision is to become “the premier [university] in Ethiopia, renowned in Africa and recognised in the world” for excellence in teaching, research and service delivery. This requires, among other things, engagement in collaboration with peers and other partner institutions to exchange skills, knowledge and expertise in the areas of teaching and research. Undertaking multidisciplinary research, expanding and using ICT as a tool for teaching and research are strategic vehicles for JU to advance in the process of becoming a world-class university. To this end JU has been partnering with many institutions, joining the AURA Programme as Educational Technology partner in 2015. JU will transition to become a Phase 1 partner in 2016.

JU objectives under the AURA programme are to:

- Strengthen the production and communication of research by emphasising strong research skills, information and evidence literacy, and effective research practices; and
- Increase faculty's confidence in engaging and informing policy audiences and decision-makers.

2.4.1 Achievements in year one

The AURA Programme at Jimma University has focused on the online learning aspects of the AURA programme. Elias Ali Yesuf, Department of Health Economics, Management, and Policy, and Kora Tushune, Associate Professor, Vice President for Business and Development, are the project coordinators for AURA.

Their views are reflected below.

Main achievements at Jimma University in Year One include:

- Jimma University has rolled out the T1 and T3 courses which focused on pedagogical theory and teaching practice. This will complement the work on utilising JU's Moodle platform and fostering online skills
- ALIRT team is helping to strengthen multidisciplinary practice at JU
- Started to mentor champion trainers on learning technology and to foster skills in the utilisation of the Moodle platform for course design, delivery, learning assessment and course evaluation.
- Increased profile internally of the work that departments are engaged in at Jimma University due to engagement on AURA's multidisciplinary approaches and the cross-organisational work of JU's ALIRT team
- Assignment of a course coordinator to facilitate course administration (in time this will become be part of the routine services of the Public Health Faculty)
- Stimulated interest in e-learning and teaching technology as well as enriching existing e-learning units within each college in ways that mean they will receive new skills in e-course design and administration
- Started the process of converting an existing module into online format and diffusing to other blended modules.

2.4.2 Lessons learnt

At the time of publication, lessons from the Jimma University experience were still emerging and will be articulated in subsequent publications.

2.4.3 Key challenges

Jimma University has been trying to implement e-learning for nearly ten years and recognizes the importance of technology in improving educational quality and access. Jimma University faces a number of challenges in taking the e-learning forward.

Although staff training on e-learning took place four years ago, the e-learning Moodle infrastructure at JU remains underutilized with insignificant numbers of interested staff members using e-learning in the university. The majority of those who took the e-learning training offered some years back have, unfortunately, since left the university. AURA has enabled Jimma to respond to this situation by: offering training to academic staff members; and to start development of the e-learning Moodle and of institutional arrangements for the introduction and implementation of e-learning. Nonetheless, Jimma University faces a number of challenges.

The re-organization of contents and change on the mode of delivery of courses during the modularization process at Jimma University, seems one of the major factors that have made the university management decide against pushing colleges to move forward with e-learning.

Poor follow up and support from the university's leadership (department, college and corporate level), an absence of incentive mechanisms for academic staff members who are

champions of e-learning, an absence of awareness raising and capacity building trainings and the malfunctioning of e-learning offices are also major limitations with regard to the sustained implementation of e-learning in Jimma University.

Interruption of electricity and internet connections, an unworkable student-computer ratio, deficiencies in e-learning knowledge and skills on the part of teachers and students, centralization of ICT related privileges and a confusing structure of e-learning at the university level are all identified as major challenges to the sustained implementation of e-learning in Jimma University.

Based on these findings, the university has been developing an e-learning strategy for the next three years. There is a strong belief that the university will benefit from the AURA partnership. Jimma University has an expectation that the AURA partner institutions will share their learning and experiences around how they are enhancing technology teaching and learning. This will help to strengthen blended distance learning programmes like Jimma University's Health Economics master's programme.

2.4.4 Key impacts

- AURA is transferring knowledge on the attributes required of the 21st-century researcher, such as working with a holistic team and harnessing social and digital media for learning and teaching. For example, AURA is helping to strengthen multidisciplinary teams through the ALIRT team comprising of individuals from the Library, ICT, Pedagogy, Health and other disciplines. The team is led by the Vice President for Business and Development of Jimma University - this helps to foster ownership of the programme within the institution.
- It is hoped that participants will get new skills from AURA with mentoring of champion trainers on learning technology. The mentoring involves fostering skills in the utilisation of the university Moodle platform for course design, delivery, learning assessment and course evaluation. Institutional processes are being transformed through the partnership of AURA and Jimma University - AURA is helping enhance collaboration within departments and across departments, as well as communication between faculty, ICT, Library and AURA coordinators. This has increased the profile of the work that departments are engaged in. For example, faculty from the Department of Health Economics, Management and Policy now see an opportunity to use the ICT Moodle facilities for a blended distance course on health economics. AURA is also helping JU to move two blended modules in the health economics master's programme into fully online formats. ICT and the library are now in a better position to advertise services (such as an institutional repository) to faculty across disciplines including health, education, social sciences and natural science. This enhanced communication helps Jimma University to maximise the utilisation of its infrastructure for teaching and research.
- Sustainability will be achieved through assigning a course coordinator. The course coordinator will receive a small incentive in the first year. After the first year, the task of course administration will become a part of the routine services of the Public Health Faculty.
- There is currently a mismatch between the number of faculty and number of students and this large student to staff ratio is a challenge for JU. The hope is that the use of

digital technology will motivate staff to adopt new approaches using online teaching and student assessment and this should reduce the burden on faculty.

- It can be a challenge at JU to get all staff in person to a meeting place. JU are hoping to emulate the AURA experience where meetings take place online (between AURA-JU and the IDS team). The experience of meeting online (rather than face to face) can hopefully be extended to other academic units and offices at JU to help to strengthen internal collaboration and communication.

2.4.5 Advice for new partners

The recommendations for new partners coming to AURA areas include:

- form multidisciplinary teams;
- hold online meetings; and
- move towards changing some of the existing modules in blended distance learning programmes into online modules.

Personal statements impact from Jimma University – learning participants reflective feedback from the T1 course at Jimma University

“Makes me to think of changing the tradition lecture method into technology”

“It was nice to make us use our own course guideline”

“Experiencing the richness of online resource and e-learning [was positive]”

“Designing an innovative online activity that I can – and will! – use in my class!”

“Alignment of the objective with learning activity, teaching method and assessment [was a high point]”

“Creating high level (higher-order) objectives [was useful]”

“Never thought that skills can be learned through social constructivist approach. You really did that...!”

“Experiential learning of the Moodle capacities [was a high point]”

“Designing a module in Moodle [was a positive]”

“Practical, theoretical and interactive”

“I will start designing the courses I offer for online platforms”

“I will definitely design my courses accordingly and use it as much as possible as the connections allowed me!”

“I will use the platform to enrich learning”

“I will consider the whole chapter of the course to best fit with online learning... to engage other staff at my department to think over this and start the training to prepare their material for online course.”

3 Conclusions

3.1 Key findings

- Thinking strategically about needs from the outset, using processes such as the ideas board and the capacity development plans to document gaps and plan interventions in a structured and systematic way are crucial for success. A key approach is to explore points in the institutional strategy to which AURA can add value.
- Participants need to see the value of capacity development if they are to invest their limited time on improving their skills. Therefore, the design of the programme has been carefully considered not only to show the value added but also to link tasks to research activities (such as the development of a research grant proposal in R2, or the successful transference of lecture-based activities into an online learning environment in T3).
- Short-term results (for example, attendance of conferences by young scholars participating in the programme) have a huge impact in shoring up good will from management and motivating prospective and active participants.
- Sharing learning across institutions has helped to overcome a lack of clarity about the role of the ALIRT team through exchanging ideas and sharing alternative strategies for engagement.
- As a learning partnership, AURA promotes a collaborative approach and learning from the programme is a two-way process. On one hand, partners are better informed about their contexts than the AURA consortia, and are therefore most likely to enrich the programme by contributing context or domain-specific solutions. On the other hand, this two-way process can lead to partners being required to work in new ways, which may require a shift in their working practices, or to form new ways of working that need time to develop to become fully functional. What has been observed is that this transformation is facilitated by internal discussions between the learning partners. When learning partners have the opportunity to exchange their knowledge of what has worked, and why, the group has adopted the solutions that the partner has offered, and this process has helped other Phase 1 partners to learn. As a consequence, AURA prioritises this type of communication in order for partners to share their experiences and learning on a monthly basis. This also helps speed up the time it takes to achieve clarity on areas of the programme, for example (and in particular) in reaching clarity about how to work strategically with the ALIRT teams. New partners may need to respond to questions within their institutions that focus on the participatory and co-constructive nature of the project. PCs are advised to work with the AURA team to fully comprehend the consultative and open nature of the programme so they can defend these approaches as they unfold within each institution.
- Digital literacy needs to be strengthened through orientations to the programme materials, and this support should continue at a group or individual level throughout the programme delivery (as needed).
- AURA will assist with transformation and change towards blended learning modalities by demonstrating how these approaches can be integrated into course curricula.

- AURA can help strengthen the case (and trend) for working in trans-disciplinary teams, and the advantages of adopting a holistic approach to research problems.
- It is possible to teach critical thinking through setting critical tasks and activities that promote deep thinking and problem-solving skills.
- Cascading the skills and knowledge acquired through the AURA training through the universities participating in the programme, and sharing best practices in teaching and learning with colleagues in other institutions, supported by documentation and outputs that show the quality of research, should encourage other institutions to adopt these innovative changes.

3.2 Recommendations for future partners

- The PCs should be strategically placed within the university administrative structure to drive the AURA programme. Ideally position the PCs in the research and teaching areas so they can represent both programme strands (i.e. research and teaching) and to explore the nexus between these key areas.
- Clarify the specific roles of the PCs and the time required for their input early on in the process. Ideally, PCs across institutions should have a similar level of qualifications. Having senior people involved in the running of the project (at PC and ALIRT team levels) who are able to make decisions is beneficial to the programme.
- Clarify the role of the ALIRT team early on and actively engage them from the beginning. Work with the ALIRT team to think strategically about how to institutionalise the learning coming out of AURA and involve them in this decision making process right from the beginning. Consider having regular meetings with ALIRT teams so that they feel part of the wider group and ongoing project. The ALIRT team should be multidisciplinary – a multidisciplinary team is well placed to support the practices that will be taught and eventually embedded into the whole partner institution.
- There needs to be a strong buy-in by university management into the AURA programme. The best approach is to explore points in the institutional strategy to which AURA can add value.
- The programme must address participant needs. It is a matter of critical importance to manage the different demands competing for the time of participants to flexibly involve them in the programme and to provide additional incentives. The best incentives for young scholars are to: assist them to progress in their immediate academic research work; and provide opportunities for conference presentations.
- Hold an awareness session to clearly state what is expected in AURA and what the intervention intends to do so people are made aware of expectations, time commitments, and can schedule activities and plan to avoid timetable clashes.
- As AURA is a collaborative project, new partners will need to be open-minded in terms of how they are going to learn and how they are going to enrich their curricular as well as their research activities. They should identify what kind of curricula they want to enrich and whether it is suitable for technological integration.

- For some institutions it will be necessary to familiarise participants with online technology prior to the programme sessions so that they will be comfortable with using the online platform. Digital literacy will need to be strengthened so it is important to ensure the institution has adequate resources to orientate partners from the beginning.
- Regular online meetings can help to bring people together, even within the same institution.
- PCs need to produce monthly blog posts to capture learning from the programme. It is recommended that they also involve ALIRT team members in blog writing to capture the ALIRT team perspectives. Blog posts are ways to capture and record learning as well as evidence impact through the production of regular communications for the programme.

The blog posts are currently being published on the AURA blogger site:

<http://auraprogramme.blogspot.co.uk>

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