

Evaluating the role of MOOCs in the Higher Education sector of Africa

In 2018, the Centre for Global Health (CoGH) at the Institut Pasteur initiated a pilot study to evaluate the role of Massive Open Online Courses (MOOCs) as a pedagogical tool in the Higher Education sector of Africa. CoGH designed a short pilot study, selecting four Higher Education Institutes (HEIs) across Francophone and Anglophone Africa as partners. Here we present their findings, including the barriers and lessons learnt, to better understand the use of MOOCs adopted across different HEI settings.

Barriers

- Although most students and trainers have access to computers and mobile phones, **weak and expensive internet connections** constituted a major barrier
- There is a clear lack of **awareness** about MOOCs - the majority of students and only around half of the trainers were unaware of the **availability** of MOOCs on the internet, with even fewer respondents stating that they had used MOOCs in the past
- Those respondents that had previously used MOOCs had encountered problems with **internet access**, a lack of **technical support**, and for students, a lack of **guidance** on selecting the most appropriate MOOCs for their learning needs
- As the majority of MOOCs are in **English, language** poses another barrier in the **Francophone HEIs**
- There is a **reluctance** from trainers to utilise eLearning tools generally, including a fear of **plagiarism**, fear of **discrediting traditional** pedagogical methods, a lack of **adequate equipment**, and the prevailing perception that training in the health domain is **too difficult** to be adapted to the MOOC format
- Amongst respondents who had followed an entire MOOC, less than half had obtained a **certificate** at the end, mainly due to what was perceived as **excessive fees**
- The local production of MOOCs is hampered by the lack of **technical platforms**, but the main barrier identified was the lack of the **relevant skills and experience**

Lessons Learnt

- Only a **minority** had **completed** an entire MOOC, with the majority only selecting **specific sections**
- There is a general consensus that MOOCs have a **real potential** to be used for teaching across global and public health, biostatistics, and similar subject areas
- There appeared to be a **great interest** and will to integrate MOOCs as a **complementary** pedagogical tool into existing education programmes, in particular, for health professionals who constantly need to upgrade their medical and clinical training to maintain their respective accreditation
- The potential discrepancy of the **content** of available MOOCs (on the whole produced outside the African continent) and the **local context** was considered an important problem but not one that would pose a major barrier
- All of the partner HEIs had a **strategy** to increase the use of eLearning tools, including MOOCs, in the varying stages of their education programme development
- MOOCs were seen as a **cost-effective** way to offer Higher Education to students who would otherwise not be able to access it

DELTAS: Learning Research Programme

The Learning Research Programme (LRP), led by the Centre for Capacity Research, works alongside the DELTAS Africa consortia to produce research-based learning about how to train and develop world-class researchers, foster their careers and collaborations, and promote research uptake. For more information about the LRP research activities and to access the LRP resources (annual reports, in-depth newsletters and all our publications), please visit our DELTAS research page at: www.lstmed.ac.uk/projects/deltas---learning-research-programme

For more information about the LRP please contact justin.pulford@lstmed.ac.uk



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Some of the LRP team at the DELTAS Africa AGM 2019

Equitable Career Pathways - This theme is framed within the context of a PhD project, led by Millicent Liani, titled: “Examining barriers and enablers to gender equitable scientific career pathways in African research institutions”. Millicent has employed a qualitative case study design, focusing on three DELTAS consortia, including: **IDeAL** (Initiative to Develop African Research Leaders); **MARCAD** (Malaria Research Capacity Development in West and Central Africa); and **SANTHE** (Sub-Saharan African Network for TB/HIV Research Excellence).

Research Training - Currently led by Abiola Aiyenigba, this theme explores the range and quality of professional development opportunities available to African-based researchers as well as the individual and institutional benefits – in terms of professional development – associated with DELTAS Africa membership. Research activities have included a mapping of health-related postgraduate training courses available in sub-Saharan Africa, an online survey of African researchers’ professional development needs, opportunities and barriers, and a qualitative case study exploring the extent, and process by which, researcher training in sub-Saharan Africa may be enhanced through consortia membership. Participating DELTAS Africa consortia include: **CARTA+** (Consortium for Advanced Research Training in Africa+); **MARCAD**; and **Afrique One-ASPIRE** (African Science Partnership for Intervention Research Excellence).

Knowledge Translation - Also framed within the context of a PhD project, led by Violet Murunga and titled: “Exploring the research uptake strategies being used by African researchers to promote evidence-informed decision making”. Phase one of Violet’s research is a qualitative case study of selected DELTAS Africa consortia: **AMARI** (African Mental Health Research Initiative); **THRIVE-2** (Training Health Researchers into Vocational Excellence in East Africa-2); and **WACCBIP** (West African Centre for Cell Biology of Infectious Pathogens).

Consortia Management - Framed within the context of a PhD project, led by Nadia Tagoe and titled: “Examining the process of establishing and managing health research capacity strengthening consortia”. Nadia is based at KEMRI-Wellcome Trust, Kilifi, Kenya, under the **IDeAL** programme and has employed a mixed methods research design. To date, Nadia has completed key informant interviews with almost all DELTAS Africa consortia Directors and Programme Managers as well as a focused case study in three selected DELTAS Africa consortia including: **CARTA+**; **THRIVE-2**; and **DELGEME** (Developing Excellence in Leadership and Genetic Training for Malaria Elimination in Sub-Saharan Africa).



Millicent Liani



Abiola Aiyenigba



Violet Murunga



Nadia Tagoe