




Building E-Learning Capacity in Cameroonian Universities: Opportunities and Benefits

BACKGROUND

The global spread of the novel coronavirus (COVID-19) in 2020 escalated into a global lockdown, keeping billions at home and bringing institutions and businesses to a standstill. In response to this pandemic, several countries announced the closure of all educational institutions. To ensure that students complete their curriculum on time, universities moved rapidly to transition various courses and programs from on-site to online delivery models. In Cameroon, the Ministry of Higher Education (MHE), declared, “The physical closure of campuses does not mean the cessation of teaching activities.” Fortunately, since 2017, the government has promoted E-learning, by developing E-learning systems, establishing Information Technology Centers (ICT) in state universities and providing laptops to Cameroonian students.

Online learning is not a new method of teaching in Cameroon; indeed, several faculty have been trained to use it; however, some faculty’s skills were inadequate for the transition to E-learning platforms, so they had challenges adapting. These rapid transformations raised questions about faculty’s capability to match the pace in terms of adapting their classroom materials to online delivery, as there was slow uptake of the adaptation strategy proposed by the MHE. Thus, Cameroon universities were confronted with a need to find additional strategies to speed up uptake and foster resilience to COVID-19. With COVID-19 financial support from USAID, AFROHUN Cameroon supported government efforts through strengthening the capacity of E-learning in 17 public and private universities. The objective was to strengthen the capacities of the university teachers to access and interact with E-learning technologies. To achieve our goal, we first assessed the E-Learning infrastructural capabilities in the selected university. Secondly, we provided new pedagogical tools and platforms that allow innovative, participatory remote learning. Third, we set up two teleconferencing units at AFROHUN member universities (Université des Montagnes in Bangangté and Université de Buéa). The final step was to scale up E-learning training in these selected institutions, which was the focus of this highlighted activity.



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APPROACH

To achieve our objective, we first assessed the E-Learning infrastructural capabilities in the selected universities. A national consultant in educational technology and E-learning was recruited to carry out a rapid assessment of the prevailing e-learning systems, existing infrastructure and their functionality in the different universities/institutions, and also to investigate the extent of use of the available infrastructure, as well as the degree of the availability of the Internet. This assessment allowed us to identify the gaps and the need.

- STEP 1** Administrative letter was sent by the Minister of Higher Education to the Rectors and Presidents of the 17 public and private universities selected, to propose their E-Learning champions.
- STEP 2** Criteria to select E-Learning champions set depending on each university’s local needs and circumstances. For example, at Université des Montagnes, E-Learning champions were selected by each department.
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STEP 4

A Distance-Learning expert, a Curriculum Development expert, and an IT expert were engaged to develop training modules for university faculty on instructional design and teaching delivery using online platforms. Then online sessions with national and international facilitators were organized to prepare the training.

A training of trainers (ToT) approach was used to train participants using a hybrid approach.

Five (5) Zoom-based webinar sessions for different modules were conducted namely: 1) Introduction to distance learning, 2) Active pedagogy in distance learning, 3) Structuring a distance course; 4) Pedagogical scripting in distance learning and videoconferencing systems; 5) Learning management systems and videoconferencing.

Face-to-Face sessions took place in three (3) locations with fourteen (14) universities involved:

- 1) **Ngaoundéré:** where the ToT participants from five (5) universities were brought together (Université Catholique d'Afrique Centrale, Université de Yaoundé I, Université de Maroua, Université de Ngaoundéré, Université Evangélique de Bandjoun).



Trainees in group discussions during the face-to-face training session in Ngaoundere.

- 2) **Yaoundé :** the four (4) universities involved were: Université des Montagnes, Université de Bamenda, Université Protestant d'Afrique Centrale, Université de Dschang participated.



The face-to-face training session in Yaounde brought together faculty from four universities.

- 3) **Douala:** the five (5) universities involved were: Université de Douala, Université de Buéa, University of Biaka, Cosendai adventist University, Institut Universitaire du Golfe de Guinée to review modules in order to improve the skills acquired and to finalize the user manual.

Three (3) months into this process the government decided to re-open the universities, ending the exclusivity of E-Learning. This, in a way, affected the interest of faculty to continue using E-Learning platforms. We had to think very fast to ensure that this investment doesn't go to waste. Luckily, funding and technical support through the ARPA funding mechanism came in at the very right moment. We changed tact and focused on building capacity for blended learning.

In this phase of the process, sixty-nine (69) trainers; twenty-three (23) female and forty-six (46) male have been trained from six (6) public and (8) private universities.

Step 5: The last step was the scaling up. To achieve this, online training sessions were organized by the 3 E-Learning champions in their respective institutions to scale up capacities of teaching staff.

OUTCOMES

1) Strengthened teleconferencing capacity

We set up two teleconferencing units at AFROHUN member institutions (Université des Montagnes in Bangangté and Université de Buéa). These are being used for thesis defense, and also for distance learning/teaching.



Trainees in group discussions during the face-to-face training session in Ngaoundere.

2) Creation of a community of practice in digital educational innovation.

We provided new pedagogical tools (structuring a distance course, pedagogical scripting in distance learning, Learning management systems and videoconferencing) and platforms (Moodle) that allow innovative, participatory remote learning. Objectives were to promote, exchange and collaborate in order to improve and harmonize pedagogical practices through the integration of the bimodal pedagogical model (hybrid training). Trained faculty took up the positive effects of the E-Learning approach for strengthening their professional capacities. The COVID-19 situation created a new classroom situation with the need for new pedagogical tools and student support needs. Trained faculty decided to create a community of practice in digital educational innovation to continue to support each other and improve techniques.

3) The influence of AFROHUN in Cameroonian universities

In two years, AFROHUN has carved out a good reputation for itself through E-Learning. It is perceived as a center of educational and scientific innovation, more in demand than in the past. By strengthening the E-Learning capabilities in Cameroon, AFROHUN has touched on a key challenge in the education sector in Cameroon.

CHALLENGES

Like it is with the introduction of new ways of doing things and adaptation, ours was not a challenge-free endeavor. The main challenges were:

- i) the difficulties related to technological access, such as poor internet connectivity, electricity supply, no intranet accessible to students, cost of implementation. We had requests from faculty and students alike to support their internet data costs.
- ii) diversity of platforms available for use- despite the government institutional platform (Moodle), some faculty preferred to train using Zoom, Google Classroom, WhatsApp. This created challenges in terms of harmonization.

LESSONS LEARNED

- Ensuring continued availability of participants for virtual engagements is challenging. We found it rewarding that the selected candidates were committed by their institutions and always available to follow the course before starting the training which minimized dropout rates and absences.
- As one gradually eases into online education, face-to-face sessions are essential for building learners' capacity in more concrete ways as they share and learn from and with each other and obtaining their opinions to improve the quality of the course.

ABOUT AFROHUN

Africa One Health University Network (AFROHUN) is an international network, currently in 28 higher education institutions of public health, veterinary medicine, pathobiology, environmental sciences, medicine and global health, in 10 countries in Africa. The countries are *Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Kenya, Liberia, Rwanda, Senegal, Tanzania and Uganda*.

AFROHUN is working to transform the training environment and approaches in universities and allied institutions in Africa, to develop a One Health workforce: a workforce with no disciplinary boundaries. AFROHUN is building a workforce with competency to predict, detect and respond to the kind of complex health challenges we are witnessing today. To achieve this transformation, we are reviewing curricula, designing new and exciting experiential learning multidisciplinary training programs, re-tooling teachers and trainers, educating communities on existence and transmission of zoonotic and infectious diseases, while engaging national and sub-national governments to integrate One Health into national policy and strategic planning.

For More Information about AFROHUN

Plot 20B Kawalya Kaggwa Close, Kololo-Uganda

P.O Box 100953 Kampala

☎ +256 392 001 642 ✉ secretariat@afrohun.org 🌐 www.afrohun.org 🐦 @AFROHUN_



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