Table 1. Profile of individual ACE Impact Effort in responding to COVID 19

Country	Name of ACE	Host University	Thematic Area	Detailed Intervention	Type of Intervention	Links to interventions
Benin	College of Engineering in Energy, Transport Infrastructure and Environment (CoE- EIE)	Université Abomey Calavi, Benin	STEM	 - Production of Hydro-alcoholic gel (sanitizers). Over 1,800 bottles of sanitizers have been produced to serve individuals in various communities in Benin. - Centre produces about 1000 litres each day - Developed prototypes of solar-powered hand washing equipment. - Use of Moodle for online teaching and learning 	Community Service and Online Teaching and Learning	Not Available impact
Burkina Faso	Centre of Excellence in Training, Research and Expertise in Drug Sciences (CFOREM)	Université de Ouaga I, Burkina Faso	Health	- Production of sanitizers - Provides the pharmaceutical expertise required to ensure the production of quality paracetamol and chloroquine tablets produced by Upharma Unit of the IRSS. This intervention is per the request of the government of Burkina Faso, for the care of patients with covid-19.	Community Service	Click for more info
Gambia	Centre for Science, Technology and Engineering for Entrepreneurship (STEE)	Gambia Technical Training Institute, Gambia	STEM	- Production of hand washing equipment- 40 equipment produced so far	Community Service	Not Available
Ghana	West Africa Centre for Cell Biology of Infectious Pathogens (WACCBIP)	University of Ghana, Ghana	Health	The West African Centre for Cell Biology of Infectious Pathogens in Ghana has successfully sequenced genomes of SARS-CoV-2 which is the COVID-19 virus. This will strengthen surveillance for tracking mutations of the virus and aid in the tracing of the sources of community infections in people with no known contact with confirmed cases. -Mass testing of suspected cases	Innovative Research	Click for more info
Nigeria	Africa Center for Genomics of Infectious Diseases (ACEGID)	Redeemer's University, Nigeria	Health	-First institution in Africa to successfully sequence genomes of SARS-CoV-2 - Development of COVID 19 screening tool to measure individual risk level - Collaborating with Africa CDC to sequence all COVID-19 virus in Africa.	Innovative Research	1.Screening tool 2. Click for more info

				- Intends to develop a rapid and accurate diagnostic tool using the CRISPR technology		
Guinea	Centre for Prevention and Control of Communicable Diseases (ACE- PCMT)	Université Gamal Abdel Nasser de Conakry	Health	-Developing a situation analysis of Covid-19 in Guinea in collaboration with the World Health Organization.	Health and Community Service	Not Available
Togo	Centre of Excellence for Poultry Sciences (CRESA)	Université de Lomé, Togo	Agriculture	Production and distribution of sanitizers and nose masks for the university and environs. CERSA laboratories are used in conducting researches on the pandemic.	Community service and Innovative Research	1.Click for more info 2.Click for more info
Senegal	Centre of Excellence for Maternal and Infant Health (CEA- SAMEF)	Université Cheikh Anta Diop, Senegal	Health	- Organized press conference to sensitize the public on the pandemic Coordination of the clinical team of the observatory committee set up by the Ministry of Higher Education and Research Proposal review and selection of priority COVID research themes - Use of Moodle to engage students in online learning	Community support and Innovative Research	Not Available
Burkina Faso	Centre of Excellence for Biotechnological Innovation for the Elimination of Vector- Borne Diseases (CEA/ITECH- MTV)	Université Nazi Boni, Burkina Faso	Health	Is part of the regional response team in the Bobo Dioulasso region. Two treatments (chloroquine and pivilline) are currently under clinic trial, and the center is also providing support in studying the limitative aspects of transmission of the disease (for example through heat), on testing secretions, and they have mobile testing unit and adequate lab available for in vitro experiments.	Innovative Research	
Senegal	Centre of Excellence for Environment and Health (CEA- AGIR)	Université Cheikh Anta Diop, Senegal	STEM	Collaboration with the Pasteur Institute on detection of new cases of the COVID- 19 infection		
Cote d'Ivoire	CEA- MEM	l'Institut National Polytechnique Félix Houphouet-Boigny	STEM	- Researchers at INP-HB have manufactured alcoholic disinfectants (sanitizers) for distribution to the Ivorian populace Initiate regular screening	Introduction of online platforms to ensure	Click for more info

		(INP-HB), Cote d'Ivoire			continuous teaching and learning	
Senegal	Centre of Excellence in Mathematics, Computer Science and ICT (CEA- MITIC)	University of Gaston Berger, Senegal	STEM	-Use of digital educational platform (Moodle) to ensure continuous teaching and learning - Printing of Personal Protection Equipment (PPE) for the Saint-Louis regional hospital Designed ventilators in collaboration with EPT in Thies - Conducting a study on the development of an epidemiological model of COVID-19 - Software for the electronic management of COVID-19 patients' files developed	Use of online teaching platforms and innovate research	1.Click for more info 2.Click for more info 3. Software for management of patients' files
Nigeria	Centre for Technology Enhanced Learning (ACETEL)	National Open University of Nigeria (NOUN)	STEM	 Use of Mooddle for online engagement of students The university has subscribed to MOOCS 	Online Teaching and Learning	
Cote d'Ivoire	Centre for Statistics and Applied Economics	ENSA. Cote d'Ivoire	STEM	Use of Microsoft teams	Online Teaching and Learning	
Cote d'Ivoire	Centre of Excellence for Valorization of Waste Products with High Value Added (ValoPro)	l'Institut National Polytechnique Félix Houphouët-Boigny (INP-HB), Cote d'Ivoire	STEM	Use of internally developed software for virtual teaching and learning	Online teaching and Learning	
Djibouti	Emerging Centre for Transport and Logistics	University of Djibouti	STEM	Use of Adobe connect, Innova, Edmodo and WhatsApp to engage students in virtual learning	Online teaching and Learning	
Burkina Faso	Centre for Training and Research in Science and Technology, Water, Energy and Environmental Technologies (2iE)	2iE,	STEM	Use of Moodle to engage students	Online teaching and Learning	

Ghana	KNUST College of Engineering (KEEP)	Kwame Nkrumah University of Science and Technology, Ghana	STEM	Students are engaged virtually via email	Online Teaching and Learning	
Nigeria	Centre for Mycotoxin and Food Safety (ACEMFS)	Federal University of Technology, Minna, Nigeria	Health	Use of video conferencing to engage students	Online Teaching and Learning	
Guinea	Emerging Centre for Mines and Societies (CEMS)	Institut Supérieur des Mines et Géologie de Boké (ISMGB), Guinea	STEM	Students are engaged virtually via COGNIBOX	Online Teaching and Learning	
Nigeria	Centre of Excellence for Population Health and Policy (ACEPHAP)	Bayero University,	Health	Institution intends to adopt Moodle for virtual teaching and learning	Online Teaching and Learning	
Ghana	West African Centre for Crop Improvement (WACCI)	University of Ghana	Agriculture	Adoption of Sakai for virtual teaching and learning	Online Teaching and Learning	
Benin	Centre for Water and Sanitation	University of Abomey Calavi,	STEM	Use of MOOC and Moodle for virtual learning	Online Teaching and Learning	
Nigeria	Centre for Food Technology and Research (CEFTER)	Benue State University,	Agriculture	Use of Moodle for online teaching and learning	Online Teaching and Learning	
Nigeria	Centre of Excellence for ICT- Driven Knowledge Park (OAK- Park)	Obafemi Awolowo University,	STEM	-Use of Moodle and Blackboard	Online Teaching and Learning	
Nigeria	Centre for Public Health and Toxicological Research (ACE- PUTOR)	University of Port Harcourt	Health	Adopted online teaching and learning via Learning Management Systems (LMS)	Online Teaching and Learning	

Ghana	Regional Centre for Energy and Environmental Sustainability, (RCESS)	University of Energy and Natural Resources,	STEM	Supervision of student's research Use of google classroom to virtually engage students	Online Teaching and Learning
Nigeria	Centre of Excellence for Future Energies and Electrochemical Systems (ACE- FUELS)	Federal University of Technology, Owerri, Nigeria	STEM	Use of Oylex	Online Teaching and Learning
Nigeria	Africa Centre of Excellence for Neglected Tropical Disease and Forensic Biotechnology (ACENTDFB)	Ahmadu Bello University,	Health	- Supervision of students' research - Students have access to course materials from MIT	Online Teaching and Learning
Ghana	Centre for Coastal Resilience (ACECoR)	University of Cape Coast,	STEM	Students are engaged through WhatsApp, Skype, Webex and Moodle	Online Teaching and Learning
Ghana	Regional Water and Environmental Sanitation (RWESCK)	Kwame Nkrumah University of Science and Technology, Ghana	STEM	- Use of virtual classrooms such as Moodle - Interact with students via Virtual Classroom (Moodle), Zoom, skype	Online Teaching and Learning
Nigeria	Centre for Innovation and Transformations in STEM Education (ACEITSE)	Lagos State University,	STEM	- Use of Moodle, GoToMeeting, Skype and Zoom for online classes.	Online Teaching and Learning