Find out more about UCT's approach to COVID-19 on the UCT website

1 July 2020

Africa must bridge digital divide to adapt to e-learning technology, UCT study

Research by University of Cape Town (UCT) PhD student Matthias Krönke reveals that 34 African countries – surveyed for his paper titled "Africa's digital divide and the promise of e-learning" – are on strikingly different levels when it comes to this fast-emerging global phenomenon.

Krönke, a student at UCT's Department of Political Studies, said his research into the digital divide in Africa and the continent's readiness to embrace online remote teaching and learning is imperative. This after universities around the world put on hold physical teaching and learning amid the COVID-19 pandemic and students had to adapt to the new digital learning methodology.

"From my research it is clear the countries surveyed have very different levels of remote online learning readiness. Hopefully these findings will help us to think differently about who we could turn to when incorporating new technologies," he said. "While it's helpful to learn and adapt to new technologies from the Global North, there is a lot that African countries can learn from each other in this regard."

The research revealed that only 20% of adults on the continent have access to both a smartphone and a computer, while 43% indicated that they only have access to a basic cellphone.

He said only 20% of adults are "well prepared" to participate or assist members of their family with the online learning transition, and a whopping 55% reported to be "ill prepared" for remote learning. Further, 25% of respondents noted that they are able to participate in digital learning if smartphones or laptop computers are provided.

Interestingly, he said that Africans' readiness to engage in remote learning is primarily shaped by their level of formal education and access to electricity, rather than by their overall wealth and geographic location. "This was surprising to me. I expected that smartphones or laptop computers would have a much bigger effect on citizens' readiness to participate in, or assist with, remote learning," he noted.

These findings, he said, highlight the importance of basic infrastructure, such as electricity supply, as well as access to quality education, which are lacking in many countries on the continent.

A sizeable digital divide exists among countries on the continent because access to digital devices remain limited.

The research found Mauritius to be the only country where over half of the adult population (51%) own a smartphone and a computer. Tailing closely behind is Morocco at 40%, Cape Verde at 39%, Gabon at 37% and South Africa at 36%.

But in countries like Madagascar, Malawi and Niger, only one in five citizens are "moderately" ready to participate in or assist with remote online learning.

He said for most Africans, buying a smartphone or a computer is considered a significant investment, which explains why access to tech devices are limited among households in poorer communities. "Poorer households run the risk of being severely disadvantaged in this new learning environment where having easy access to such devices is essential," he said. "Given these differences, African countries should be encouraged to share their lessons; they have so much to learn from each other."

Bridging the gap will take hard work. He argued that Africans need access to smartphones and education on digital literacy to make e-learning work. "A preliminary analysis suggests that in the short term, government provision of smartphones and/or computers could redraw the contours of the digital divide. Albeit effective, this could be a costly intervention."

He said African countries should focus on providing access to electricity and make quality education a priority in order to close the digital divide.

"It would be great if the COVID-19 pandemic and the forced move to e-learning would also signify the starting point for more inter-university collaboration of both staff and students to develop different models of blended learning. With more open-source tools, opportunities for digital African collaboration increase rapidly."

ENDS

Issued by: UCT Communication and Marketing Department

Ridovhona Mbulaheni
Media Liaison Assistant
Communication and Marketing Department
University of Cape Town
Rondebosch
Tel: (021) 650 2333
Cell: (064) 905 3807
Email: ridovhona.mbulaheni@uct.ac.za
Website: www.uct.ac.za