# RUFORUM THOUGHT PIECE ON COVID-19



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## Repositioning Higher Education for a post-COVID-19 world

The impact of COVID 19 and the need to re-engineer university operations and delivery in the 'near normal' landscape

**Pandemics can cause major societal disruptions**

The Corona Virus Disease 2019 may not kill as many people as the Bubonic plague in 14th Century, the Spanish flu in 1918 and others across time. So it may not be as disruptive. But COVID-19 has already clearly highlighted the inequality in the world, and it has also shown the vulnerability of all, including the rich, to be affected. The Spanish flu triggered efforts to introduce universal health care and improved housing for the poor in Europe. The cholera epidemic in 19th Century brought improved sewerage and access to water. Will COVID-19 bring changes that make the world more inclusive and better positioned to tackle climate change and a secure future? Or will it increase inequality, food and health insecurity and global warming?

"**The safe prediction that the world will change leaves open the form and direction this change will take. But it cannot and should not be left unguided or subject to those seeking to re-establish old systems of power. We contend that higher education must play a major role in helping to shape the post-COVID-19 world and do so by reshaping higher education itself**" (Harkavy Ira *et al.*, 2020).

The need for social distancing during the pandemic has created enormous hardships and dislocation. Digital technology and the merging of cyber-physical-biological solutions that are a part of the 4th Industrial Revolution (4IR) have helped to keep some parts of the global economic, social and education systems operating. These disruptive technologies provide many opportunities for leapfrogging the old in Africa along with the significant challenge of positioning Africa to be able to take advantage of the advances. Success is entrenched on how African economies adapt to the 4IR. To stay relevant African universities need to become not only adopters, but leaders, in finding ways for this technology to be accessible across Africa.

## Universities must change to survive and thrive in the new world

The RUFORUM network is dedicated to promoting the transformation of African universities for improved relevance, quality, reach and much stronger societal engagement. This pandemic has made the transformation more urgent than ever. Our universities need to help society to 'reimagine' the future. To do this they need to 'reengineer' themselves. Universities are, or should be, the sources of new ideas; centres of creativity and of local,

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national and regional economic growth.  They need to become the leaders of systems that are more inclusive and more sustainable, environmentally and over time.  To do this they must be adaptable.  Change has always been inevitable; today it is more rapid than ever. Any system or individual that cannot adapt will become irrelevant, or even extinct.

To take leadership in social systems, universities must be open to change.  They need to embrace the new opportunities inherent in the immense challenges of providing education, research and outreach services to students and communities that may not always be able to operate face-to-face.  Unless, or until there is a vaccine for Covid-19, outbreaks are likely to recur.  This may mean ongoing intervention to normal life.  The new technology is going to open up options for students and reinforce the potential for life-long learning. This means that universities need to internalise adaptive management strategies and that they must produce students that are able to meet changed realities.  Universities must take advantage of the opportunities or be left behind as their students and faculty "migrate" to global offerings.

 "Education, even if specifically targeted, needs to emphasize cognitive agility…( and)…thus far the changes in HE have been slow and inadequate, though some are trying to adapt" (Gleason, 2019).

There needs to be much greater focus on skills – content will be changing at an ever-increasing pace. No lecturer can hope to transfer content information that will be relevant to the future.  They can only facilitate the ability of students to find, adapt and use information they need to address a challenge. The focus is on the 'how' and not the 'what'.  Müller when considering the challenges through an environmental lens discusses three urgent challenges: the need to move from disciplinary approaches to holistic ones; adapting to disruptive technological advancements; and identifying what is truly important for survival of our civilization (in Gleason, 2019).  Joseph Aoun (2017) pointed out that the focus must be on content combined with "cognitive capacities that revolve around systems thinking, entrepreneurship, and cultural agility".  We need to train students to invent, create and discover.

Bo Xing *et al*. (in Gleason, 2019) make the case for an Adopt Fast and Adapt Quick strategy for universities. They use case studies and detail an adaptive solution to new demands in the HE arena, which address issues of accessibility, digital literacy, acceleration, pan-regionalization, transformation, inclusiveness, vision, and engagement of students, end-users and communities.  They show that under this new normal, students need professional mentors and coaches who join them to explore new front-lines, solve problems, and obtain concrete skills. To enable this, institutions must provide professional development support to their faculty.

How can Universities continue to provide service during and after the Covid-19 Pandemic- an outline summary of practical steps
1 Modern Technology can be used to assist in the transformation – the global lockdowns have seen all education, but particularly higher education closed down.

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In South Africa universities are not expected to reopen in 2020 and technical colleges only towards the end of the year. This has resulted in the need to be innovative in reaching out; to continuing to provide services and still generate fees; to find ways to overcome the inequalities of access to electronic communication.

Despite years of awareness of the importance of e-learning most African universities were not prepared. A few are and most are willing to share their lessons and materials. The use of ICTs in educational delivery and in any other field of endeavor cannot be over emphasized in this era of science and technology:

Need for a massive investment in accessible connectivity across Africa

Need to immediately restructure curricula and course modules

Need to accept outside course modules, and to ensure rapid changes to curricula to include them

Need to find ways to enable university administrative systems to respond quickly to changes to meet immediate and future needs

Need to provide skills and training to staff and to students in e-learning

For the immediate situation during Covid-19, universities need to find ways to reach those with no access to internet or computers. There are a wide range of innovative ideas implemented across Africa by educators from pre-primary to post-graduate using mobile phones, contact leaders able to print from whatsapp or sms, radio, tv and hard-copy couriers.

For the long term universities must find a way to establish life-time learning options, shared courses across universities, shared course and information resources and strengthened links to practical experience. There needs to be a much greater emphasis on inter-disciplinary teams and a focus on analytical and creative skills.

2   **Collaboration** –Globally COVID-19 has sparked progress in problem-solving by using teams that are multi-disciplinary and multi-sectoral – as well as global, continental and regional partnerships. This also resonates well with the approach that the RUFORUM network has been using and reinforces the approaches.

African universities need to work together:

To put pressure on telecom providers to zero rate their websites

To government, hardware and software companies to provide access

To share modules and courses

To share scarce human resources

To host joint MOOCs or other e-learning platforms

Universities need to find ways of connecting with farmers and end-users and to consider how they will carry out participatory research supporting ethics and the social of students

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Universities need to find ways to host platforms working with other researchers and stakeholders to ensure that the agricultural value chains are maintained and strengthen the entrepreneurial skills of students

Universities need to host platforms that allow all these stakeholders to work and research together, advocate for changes and provide evidence for policy.

Universities need to support governments, sub-regional and regional bodies and the African Union to advocate internationally with governments and multi-laterals to adapt to the health, education and financial hazards made worse by COVID-19. We need to fight for access to new technology, to resources to support changes in higher education if we are to achieve Agenda 2063 and the SDGs.

## 3 Employment in a post-COVID 19 world

Goldman Sachs predicts the jobless rate in the United States will hit 15% in the second quarter of this year. Other economists predict a jobless rate closer to 25%. (In 1933, during the Great Depression in the United States, the jobless rate was 24.9%.)

Given how interconnected the world is, even if Africa does not reach the pandemic levels of infection seen in Europe and the Americas, university graduates will face an even tougher world. This reinforces the importance of developing personal and inter-personal skills, strengthening entrepreneurship and creativity and linking students into platforms of action and to potential employers or customers through their university experience.

"The top ten skills that will be needed in order of priority by employers by 2020 are: complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision making, service orientation, negotiation, and cognitive flexibility." (WEF 2016)

Students need to be fully prepared to interact in a digitalised world and to think beyond their own communities and be able to create value at national, regional and international scale. They need to the ambitious and to reach out. The 4IR will bring about new economic systems and new technologies. They are faced with challenges, but they also have opportunities that were unimaginable just a decade ago. They need, above all, to be adaptable and prepared to apply their skills in unexpected ways, take on new challenges. They need to be life-long learners and to have entrepreneurial and innovative mind sets.

## 4. Practical engagement and service to society

Universities need to ensure that their systems integrate their post-graduate research into broader teams, across institutions and countries.

Universities need to use new technologies to provide more meaningful outreach and to work in partnerships to scale out their innovations.

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Universities and their students need to work together with government to support the marginalised with extension and other services, e.g. in response to COVID-19 disruptions, China announced the recruitment of 105,000 college graduates to teach in impoverished rural schools as part of a national programme to revitalise rural areas. Perhaps universities in Africa could use students that are unable to gather at universities during Covid-19 lockdowns, to work in their local societies and assist on the agriculture, health or education value chain.  After the pandemic, much more effort could be made for students to use their vacations or an internship programme.

**How can the RUFORUM network assist members to adapt to the post-COVID 19 world?**
A few ideas:

1   Host an annotated platform of links to various free resources that assist universities to: train their staff at various levels of e-learning; access learning materials and course modules; remind all of the existing free reference libraries and other resources and lobby for more and wider access and invite universities across the world to support. (This will both help to raise the profile of RUFORUM and also provide a useful service to members – but you will need to get it funded as your current staff time is so very thinly stretched).  There is a good example of how the South African universities are collaborating with shared e-learning modules, courses and staff training.

2   Carry out a desk study of a representative sample of member university websites to assess how universities have responded to closures and what facilities are being offered to their students and staff and identify opportunities and challenges. This will supplement the information from surveys of vice-chancellors, faculty and students.

3   Add a section to the Weekly Briefing that provides links to support resources for faculty and students on e-learning

4   Establish Community Action Research Platforms at universities across Africa to lead the way and share lessons on how universities can be integrated into communities, value chains, the NARES, regional and international research and outreach systems

5   Strengthen the advocacy with governments, multinationals, regional and international bodies for a massive investment in connectivity, training of faculty and access to hardware and software for online learning and to facilitate research and outreach.

"All the opportunities that the digital revolution represents are premised on super-fast, reliable and affordable connectivity. African economies cannot shoulder this investment by themselves. It requires the financial heft of the multilateral investment community in collaboration with the leading global tech innovators to find viable solutions to connect the bottom three billion, many of whom are in Africa, by 2025… African governments, the international community and the tech community must come together to harness the power

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of the 4IR. If this does not happen now, a new tech inequality will further entrench the gap between the developed and developing world."(Akileswaran, 2019)

This is uncharted territory and all ideas are welcome. Please share them with RUFORUM.

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*This is our Fourth issue in a series of articles we are releasing as part of our RUFORUM Thought Pieces on the Corona Pandemic. You can get more information about RUFORUM at www.ruforum.org. You many also share your thought piece about the Pandemic with us by writing to e.adipala@ruforum.org and copying m.agena@ruforum.org*

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## About the Author

Prof. Kay Muir-Leresche is a member of the RUFORUM International Advisory Panel. She held the Natural Resource Economics Chair at the University of Zimbabwe where she was based for 22 years. Since retirement she has worked across the world with international development and bilateral agencies in monitoring and evaluation and as a tertiary education and agricultural development consultant. She has also worked in the private sector in marketing, tourism and as a journalist.