



**Dr. Daniel Sherrard**  
**EARTH University, Costa Rica**

### The COVID-19 crisis and the future of education

What will be the impact of COVID-19 crisis on the future of education? At three months into the pandemic there are obviously no definitive answers, but clearly the impact will be profound and will also vary greatly between countries, regions, institutions and groups of learners. The disruption that the crisis has caused has been, to use a terribly overused word these days, unprecedented. Since the virus was first reported in late 2019, and the World Health Organization declared its spread a pandemic in March of this year, schools and universities have been shuttered and classes for over a billion students have been canceled as a public health measure to slow the spread of the COVID-19, the disease caused by the Novel Coronavirus.

While RUFORUM is primarily concerned with tertiary education, it is difficult to discuss the effects of the crisis on that sector without also considering primary and secondary education. Students entering university over the next few years will be those who are currently unable to attend their primary and secondary schools, in many cases unable to take school leaving exams (such as the WASSCE in West Africa), and shut out of internships and other educational enrichment programs. It is likely that one particularly nefarious effect of the crisis on primary and secondary students will be an increase in the drop-out rate, particularly among girls (Darso, 2020). For many vulnerable students, schools are particularly important in providing nutritional support. Even in industrialized countries<sup>1</sup>, school nutrition programs are essential in guaranteeing that children receive the nutrition required for growth and development. Failure to receive adequate nutrition negatively impacts children's cognitive development, resulting in educational challenges throughout their lives.

As the pandemic lingers, with no end yet in sight, children are falling behind in the essential skills critical to their success in the university and in their careers – reading, numeracy, critical thinking, study habits and a whole raft of social skills. According to Audrey Azoulay, Director General of UNESCO, "While temporary school closures as a result of health and other crises are

---

<sup>1</sup> In the USA for example, the National School Lunch Program provides over 5 billion school lunches per year. [https://en.wikipedia.org/wiki/School\\_meal\\_programs\\_in\\_the\\_United\\_States](https://en.wikipedia.org/wiki/School_meal_programs_in_the_United_States)

**The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), [www.ruforum.org](http://www.ruforum.org)**

Contact us: E-mail: [secretariat@ruforum.org](mailto:secretariat@ruforum.org) | Website: [www.ruforum.org](http://www.ruforum.org) | Join conversations on #AGMGhana2019

not new unfortunately, the global scale and speed of the current educational disruption is unparalleled and, if prolonged, could threaten the right to education” (Relocate Magazine, 2020).

While certainly not a definitive analysis, the following are surely among the significant impacts of the crisis on education:

### **Inequality**

It seems clear that the current crisis will exacerbate the existing inequality in access to educational opportunities, on both a global and local scale. While students from more affluent circumstances, better resourced schools and those living in urban centers (although certainly not all) enjoy access to the internet and the possibility of studying virtually, lower income students from less well-resourced schools and rural areas often lack both the hardware and the bandwidth (and oftentimes the electricity) required to access the internet. When relying on virtual education, learning outcomes are dependent in large measure on the extent of digital access. Where those students with access to modern hardware and high bandwidth are interacting in real time with teachers and fellow students, other students depend on lessons and assignments sent by WhatsApp and email while still others lack access altogether. Despite the incredible growth in access to the internet and mobile technologies, only around 60% of the world’s population is online. Already burdened by under-resourced schools, poorly prepared teachers and lack of access to other educational resources, those students on the losing side of the digital divide will tend to fall further behind in the wake of the crisis caused by COVID-19 (Kemp, 2020).

This inequity in access to the internet is also evident on a global scale. In sub-Saharan Africa, 89% of students lack access to household computers and 82% lack internet access. While many without computers do have access through mobile telephones, more than 26 million learners in SSA live in locations not served by mobile networks (UNESCO, 2020). It is also relevant that within these numbers an additional gap is found: in 2019 it was estimated that worldwide, women’s access to the internet is 10% lower than men’s, while in Africa the gap is 33% (ITU, 2019). While specific data is not available, it seems reasonable to assume that there is also an access gap between male and female students.

### **Economic Impact on Education**

As Patrick Okori noted in an earlier thought piece on the impact of COVID-19, the global economy is expected to shrink by 3.2% and Africa and the continent will most likely experience its first recession in over 25 years. Middle and high income countries are likely to experience an even larger reduction.

**The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), [www.ruforum.org](http://www.ruforum.org)**

Contact us: E-mail: [secretariat@ruforum.org](mailto:secretariat@ruforum.org) | Website: [www.ruforum.org](http://www.ruforum.org) | Join conversations on #AGMGhana2019

In Africa, significant progress has been achieved in increasing funding for education over the past two or three decades, including for higher education. Yet in many low and lower middle income countries in particular, progress is likely to be challenged as a result of the COVID-19 crisis. Governments, households and development partners are the main funders of education. With unemployment and underemployment reaching levels not seen since the great recession, it seems clear that household contributions in the form of tuition will fall. Compounding the problem of increased unemployment on the continent, remittances from abroad, in many countries an important component of household income, are decreasing as unemployment also increases in wealthier countries.

While government revenues around the world are expected to decline, there is also an expectation that in the short term government spending will increase in response to the pandemic. According to World Bank estimates, government spending in 2020 in Sub-Saharan Africa is expected to increase by 13% in real terms with respect to 2019 (Al-Samarrai, 2020). Nevertheless, it seems likely that health and social protection programs will take priority and that the share going to education is destined to fall. Deterioration of fiscal balances caused by reduced revenues and increased spending will likely result in an overall retreat from spending levels when the recovery from the pandemic is finally underway.

It remains to be seen what priorities development partners will set in efforts to support education. It does seem likely however, that the overall volume of aid provided by these partners will be negatively affected by the sharp drop in economic growth in donor countries.

One thing seems certain – the impact of the pandemic will fall most heavily on the poorest and most vulnerable students. This is particularly true in the case of primary and secondary education (and girls in particular), but applies to tertiary education as well. Unless bursaries and other educational opportunities are maintained and hopefully increased, fewer economically disadvantaged students will have the chance to access higher education.

### **Educational Quality**

According to UNICEF, more than 90% of the world's learners have been shut out of classes since the pandemic began (Psacharopoulos, 2020). While some countries are beginning to open schools and universities, and others are in the planning stages, the extended closures have had a negative impact on learners at all levels. In the case of tertiary education, student's advancement towards graduation has been halted with serious financial and other repercussions. Lockdowns and stay at home orders have thwarted student's plans for internships and other enrichment activities. In many cases student and faculty research projects have been shut down or delayed.

**The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), [www.ruforum.org](http://www.ruforum.org)**

Contact us: E-mail: [secretariat@ruforum.org](mailto:secretariat@ruforum.org) | Website: [www.ruforum.org](http://www.ruforum.org) | Join conversations on #AGMGhana2019

The response on the part of many centers of learning to public health closures has been a transition to e-learning. “E-learning” is essentially the acquisition of knowledge through the use of electronic technologies and digital media. As noted earlier, the transition to e-learning is often undermined by the lack of hardware and access to electricity and internet bandwidth. Of equal concern is the quality of the e-learning offered. Prior to the advent of the pandemic, an increasing number of university lecturers and others have been encouraging a move away from lecture based instruction to a more active, participatory and experiential approach to learning. Among the negative effects of the pandemic has been to bring many of these discussions to an end, at least temporarily. The challenges of mounting an effective e-learning program are many, beginning with the reality that often subject matter experts have little or no training in e-learning tools and methodologies. In the case of students who are accustomed to a classroom environment, lack of motivation to engage with e-learning is frequently an issue. Unfortunately, much of what is billed as e-learning is nothing more than Powerpoint presentations and a static lecturer delivering the same lecture as usual in front of a camera. Many online courses are simply videotaped lectures, and the experience of taking such a course as compared to an in-person lecture course, has been described by a pioneer of the massive online open courses, or MOOCs, Sebastian Thrun as: “You get the worst part without getting the best part” (Carr, 2012). Furthermore, in the case of programs such as agriculture, in which practical experience is essential, virtual education is a poor substitute for hands-on activities in the laboratory and the field.

In spite of the challenges, the pandemic does present opportunities for incorporating e-learning into existing programs. E-learning is particularly well suited for acquiring information and learning well-established procedures that can readily be codified in software (many aspects of computer science or remedial courses in mathematics for example). Where the barriers to connectivity can be overcome, e-learning can be a low-cost means of delivering segments of an overall program. The emergence of increasing number of such blended programs, combining e-learning and in-person classes, seems certain to be one result of the COVID-19 crisis.

### Conclusion

The global pandemic is proving to be a significant disruptive force in education. With over a billion students and their teachers unable to attend classes, there’s no question that student advancement through their programs of study will be delayed (particularly those with limited or no access to internet). With reduced government revenues, the necessity of funding health and social programs to aid recovery from the pandemic, high levels of unemployment among student’s families and a probable reduction in development assistance from donor countries, investments in education will likely fall in many countries. The pandemic has occurred in a moment of increasing questioning of higher education. Whether it’s the out-of-control costs of

**The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), [www.ruforum.org](http://www.ruforum.org)**

Contact us: E-mail: [secretariat@ruforum.org](mailto:secretariat@ruforum.org) | Website: [www.ruforum.org](http://www.ruforum.org) | Join conversations on #AGMGhana2019

undergraduate education in the U.S. (NCES, 2019) or concerns about the levels of unemployment of university graduates in many African countries (McCowen, 2014), the COVID-19 crisis will only exacerbate the questioning and the challenges facing institutions of higher learning.

### **Bibliography**

Carr, N. 2012. The Crisis in Higher Education. MIT Technology Review, September 27, 2012, <https://www.technologyreview.com/2012/09/27/182834/the-crisis-in-higher-education/>

Darso, Sabdio, 2020. What is the effect of COVID-19 on girls' education? <https://www.mercycorps.org/blog/COVID-19-effect-girls-education>

Kemp, S. 2020. Global Digital Overview. <https://thenextweb.com/growth-quarters/2020/01/30/digital-trends-2020-every-single-stat-you-need-to-know-about-the-internet/>

International Telecommunications Union. 2019. Measuring digital development Facts and figures 2019. Geneva, Switzerland.

McCowen, Tristen. 2014. Can Higher Education Solve Africa's Job Crisis? The British Council, U.K.

Psacharopoulos, G., Patrinos, H., Collis, V. and Vegas, E. 2020. The COVID-19 Cost of School Closures. The Brookings Institution, Washington USA. <https://www.brookings.edu/blog/education-plus-development/2020/04/29/the-covid-19-cost-of-school-closures/>

Relocate Magazine. Coronavirus and education: what is the global impact on students, families and communities? <https://www.relocatemagazine.com/news/education-schools-the-impact-of-coronavirus-on-education-as-schools-close-causing-worldwide-disruption-0320-reeditor>

UNESCO. 2020. Startling digital divides in distance learning emerge. Paris, France. <https://en.unesco.org/news/startling-digital-divides-distance-learning-emerge>

U.S. Department of Education, National Center for Education Statistics. 2019. Digest of Education Statistics, 2017 (NCES 2018-070), Table 330.10.

*This is our eighth 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](http://www.ruforum.org). You may also share your thought piece about the Pandemic with us by writing to [e.adipala@ruforum.org](mailto:e.adipala@ruforum.org) and copying [m.arena@ruforum.org](mailto:m.arena@ruforum.org)*

**The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), [www.ruforum.org](http://www.ruforum.org)**

Contact us: E-mail: [secretariat@ruforum.org](mailto:secretariat@ruforum.org) | Website: [www.ruforum.org](http://www.ruforum.org) | Join conversations on #AGMGhana2019

### About the Author

Dr. Daniel Sherrard has been with EARTH University in Costa Rica since its founding in 1990. He has been a Professor, Dean and Provost at the University. He is currently leading EARTH's Education for Leadership initiative. He has collaborated closely with RUFORUM for many years and is a member of RUFORUM's International Advisory Panel. He received his doctorate in Agricultural Education from Iowa State University in the USA.

**The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), [www.ruforum.org](http://www.ruforum.org)**

Contact us: E-mail: [secretariat@ruforum.org](mailto:secretariat@ruforum.org) | Website: [www.ruforum.org](http://www.ruforum.org) | Join conversations on [#AGMGhana2019](https://twitter.com/AGMGhana2019)