

COVID's Lessons for Global Higher Education



Coping with the Present while
Building a More Equitable Future

By Jamil Salmi

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Dear God: Could you please uninstall and install 2020 again? It has a virus. — Anonymous

Things won't change as much as they will accelerate. While other crises reshaped the future, COVID-19 is just making the future happen faster. — Scott Galloway

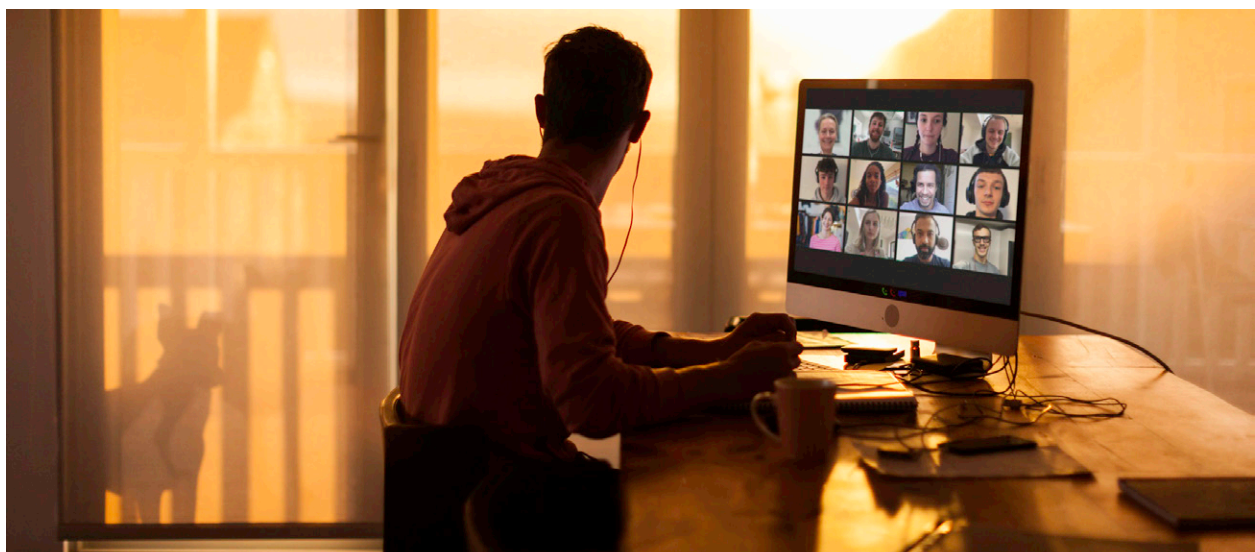
Background

The scale of the ongoing COVID-19 pandemic is unprecedented in the 21st century. As of October 1, 2020, more than 34 million people had been infected and more than a million had died, worldwide. As country after country imposed partial or total lockdowns in February and March, the number of universities and colleges closing down their campus, interrupting face-to-face activities, and switching to e-learning soared on a daily basis, eventually affecting more than 200 million students globally. However, few of these institutions were well prepared for the sudden, disruptive move. A lot of scrambling, improvisation, and continuous adaptation have occurred as administrators, academics, and students struggle to implement online learning.

While the disruptions caused by the COVID-19 pandemic are affecting rich and poor countries alike, disrupting the lives of all groups in society, the impact on students from vulnerable groups may be greater than for the average student population. In low-income countries, students from underrepresented groups have

faced greater challenges due to more severe resource and capacity constraints. Also, in countries with limited internet deployment and low broadband capacity, opportunities for online learning have been drastically constrained, especially in rural areas. In addition to these technological challenges, colleges and universities in low-income nations have struggled to launch quality distance education programs because they lack resources, experienced educators, and strong institutional capacity.

Against this background, this study offers a preliminary assessment of the impact of the COVID-19 pandemic on higher education throughout the world, with a special focus on racial justice and equity. While it is too early to form a clear picture of the multiple effects and consequences of this ongoing health and economic emergency, it is possible to analyze the main challenges it presents and to see the range of responses from nations, institutions, and individuals. The study seeks to evaluate, in particular, the special hardships encountered by students from underrepresented groups and the effectiveness of policies and measures put in place to protect and support them at both the national and institutional level.



Impact of COVID-19

Short-Term Effects and Reactions

Closures and Transition to Online Education. Despite repeated warnings from the World Health Organization, few countries were prepared for a possible pandemic in February 2020. When it became clear in early March that COVID-19 was spreading rapidly on a global scale, most governments finally showed alarm and began shutting down businesses, schools, and universities. Within a few weeks, about 20,000 higher education institutions had ceased normal operation, sending home close to 200 million students. Many institutions switched to online classes after only a few days of preparation. In the words of Professor Anant Agarwal, founder and CEO of edX: “The world went from 1 or 2 or 3 percent learning online to 100 percent learning online.”

These campus closures certainly helped prevent the spread of the virus within higher education institutions. At the same time, they forced colleges and universities to operate in unfamiliar ways, spend significant sums to rapidly shift to online instruction, and indefinitely suspend all other activities, including research and lab and field work.

Even though higher education institutions tried very hard to make online education work, the degree of readiness for the rapid transition to an all-online environment was highly unequal across countries and institutions. Very few of the world’s universities and colleges had the foresight and capacity to conduct risk analysis and contingency planning on a regular basis, even though a number of Asian universities had been forced to close down during the 2002-2003 SARS epidemic. Universities and colleges in developing countries faced serious difficulties with IT infrastructure and internet access during the transition to online instruction. In all countries, however, rich or poor, elite institutions tend to be best equipped to face an emergency such as COVID-19.

Impact on Students. The abrupt closure of campuses and the rapid switch to online education have disrupted students’ lives all over the world. It’s no surprise that students from underrepresented groups (low-income students, girls and women, members of minority groups, and students with special needs) have been hit especially hard—economically, emotionally, and in terms of digital deprivation. In poorer countries, students from disadvantaged groups face even greater difficulties.

Assessment and Exams in Transition. Almost immediately after moving to online teaching and learning, higher education institutions had to make decisions about assessment, examinations, and graduation. Many have struggled to decide how to assess student learning remotely, whether to postpone or cancel final exams, and how to select and recruit students for the next academic year, especially in countries that had to scratch the national end-of-high-school exams that determine university access. A big concern for many higher education institutions has been to avoid increased cheating and plagiarism during online examinations.

Universities Rising to the COVID-19 Challenge.

One positive short-term development is that universities worldwide have responded dynamically to the pandemic, generously contributing their scientific knowledge and resources to help fight COVID-19. Within weeks of the virus’ initial onslaught, universities developed a faster and cheaper COVID-19 test and donated surplus equipment to hospitals. Laboratories within universities also have been busy producing medical supplies, sanitizing equipment, and medicines. Universities all over the world have helped with genome sequencing, coronavirus testing, and production of low-cost ventilators. They also have been at the forefront of epidemiological research and communication. The public information role of universities during the pandemic is all the more important as many people across the world have fallen prey to fake news disseminated in the social media, often with dangerous or even fatal consequences.

Likely Long-Term Effects

While it is difficult to predict the pandemic’s ultimate toll, it can be useful to outline some of its likely long-term effects based on current trends and available information.

Reopening in the Fall. The debate about whether colleges and universities can reopen safely at the beginning of academic year 2020-21 has been shaped, in each country, by two factors: the evolution of the pandemic, and political priorities. In nations where the peak of COVID-19 cases was reached after a few months, governmental authorities and leaders of higher education institutions have generally decided that it would be safe to reopen the campuses, although with specific precautionary measures (testing, tracing, and social distance). But in countries where the pandemic is still raging, including the United Kingdom, the United

States and most of Latin America, the outlook is uncertain, and decisions may have been heavily influenced by political and economic considerations. Reactions ranged from outright denial to the implementation of various coping strategies, all dependent on the levels of resources that individual universities and colleges could afford to dedicate to protective health measures. In several countries, including the United States, the threat of economic difficulty may have led many higher education institutions to take chances with students' health.

Diminished Learning and Increased Student Failure.

Despite a lack of statistics documenting the pandemic's impact on student learning, it is safe to assume that many students all over the world will have had an incomplete learning experience in the 2019-20 academic year, either for lack of technology, inadequate internet access, or insufficient training for online education. In addition to degradation of the educational experience during COVID-19, students are also suffering more mental health problems, and there is evidence that female students in developing countries are more likely than males to suffer from the crisis.

In an effort to quantify the educational damage caused by the pandemic, Connie Schrock, a mathematics

professor at Emporia State University in Kansas, has proposed the notion of Years of Potential Intellectual Life Lost (YPILL). The YPILL—modeled on the concept of “years of potential life lost” used in epidemiology—would be a composite index of decline in student learning outcomes based on test scores, years of study lost, and the impact of diminished research.

Reduced Resources, Shifting Demand, Closures, and Restructuring. The higher education sector has been hit by both the health emergency and the economic recession, as universities, students, and most households have suffered substantial income loss. The rapid transition from face-to-face to online education has caused unplanned expenditures during the spring semester, and additional spending on health prevention measures was required to prepare for the fall term. Altogether, the outlook for the 2020-21 academic year and beyond is highly worrisome, forcing difficult questions about long-term viability and the need for substantial changes.

Generally speaking, the crisis has revealed structural weaknesses in the financing models of many higher education systems and institutions. In OECD countries with substantial cost-sharing, universities and colleges will have fewer resources. For private higher education institutions that depend fully on tuition and/or on



international students, financial survival will be seriously tested during the deep recession that many economists predict. Many students with limited resources could drop out of higher education altogether, or at least shift to more affordable public institutions. It's realistic to expect a wave of mergers in the public and private sectors, and many private institutions may close their doors for good. In many developing nations, where public funding for higher education has often been insufficient—usually less than 0.5 percent of GDP—the consequences could be dire. Reduced public budgets, combined with the diminished likelihood of increased private funding, could mean that many students opt out of higher education, undermining institutions' ability to sustain the quality of teaching and research.

What is certain is that students graduating this year are facing difficult prospects in the medium and long terms. Many will have trouble finding jobs, and those who do will likely have starting salaries far below those earned by graduates of previous years. In developing countries, where unemployment was already chronically high because the economy cannot absorb the growing number of university graduates, the situation will only worsen.

Impact on Research and Internationalization. As universities continue to operate online, research activities will lag in many countries. Because of lab closures and travel restrictions, researchers in many disciplines can't conduct their experiments or field investigations, except when remote lab work and collaborations are possible. Virtually all research universities—public and private—face the likelihood of reduced funding in coming years, except for programs and projects directly aligned with national priorities or related to COVID-19. This will likely affect research capacity and output in universities in the poorest countries, which have been heavily dependent on funding from donor agencies.

Data on research production show that women academics seem to be affected more seriously than men. This reflects the skewed division of labor within households that serves to protect men's professional duties more than those of women.

The medium-term outlook for internationalization is dim. Continuing restrictions on travel and the issuance of visas have halted short-term mobility in most of the world. Academics and students who had planned longer-term relocation have been forced to suspend or cancel their projects. Colleges and universities everywhere are less likely to form new partnerships and collaborations.

Mitigation and Transformation Measures

National Policies

Financial Support. A number of industrial countries—including Denmark, France, Finland, Germany, Singapore, Taiwan, the United Kingdom, and the United States—have rapidly approved economic rescue packages that include funds to help colleges, universities, and/or students weather the crisis. Many governments also are providing targeted research funding to help universities develop a vaccine and identify effective medicines to treat COVID-19.

However, with a few exceptions (Colombia and Indonesia, for instance), few governments in developing nations have been able to provide a sizable stimulus package to support higher education during the pandemic.

Student aid is at risk in many countries, especially when it takes the form of loans rather than grants and scholarships, because of the high unemployment rate for graduates during the ongoing economic crisis. Moving to income-contingent loan repayment is a structural change that countries should consider as they seek more sustainable funding approaches.

An important policy aspect worth revisiting in the wake of the COVID-19 pandemic is the traditional competitive approach to research funding and research production—an approach that privileges publications in prestigious scientific journals over research impact and social relevance. The move toward an Open Science mode, which allows for more collaborative forms of research, can only occur on a large scale if research funders agree to modify their allocation methods and encourage grant applications that reflect partnerships across institutions and countries. Another equally important change would be the transition to open-access publishing of scholarly articles and books.

Capacity Building for Connectivity and Online Education. The second type of intervention that countries have implemented aims to increase connectivity for higher education institutions and their students, while helping colleges and universities to build their capacity to effectively deliver online education. Governments in Sub-Saharan Africa, in particular, have tried to strengthen broadband capacity through the National Education Research Networks (NRENs) and reinforce campus network infrastructure. These interventions can

have significant positive effects, but only if governments refrain from taking advantage of the health crisis to enforce internet shutdowns and censorship—a growing practice in many non-democratic countries to muzzle political dissent. Even industrial countries with a good broadband network have felt the need to enhance their digital infrastructure.

Flexibility in Quality Assurance and Assessment.

The switch to online education has made it much more difficult to assess students' learning progress. The pandemic also has prevented quality-assurance experts from making regular evaluation and accreditation visits. For these reasons, efforts have been made in some countries to bring greater flexibility in applying quality-assurance criteria and assessment methods. Many quality-assurance entities have suspended deadlines for accreditation and program registration processes, postponed accreditation visits or switched them to “virtual visits,” and relaxed assessment criteria to support the rapid transition to online education. The general trend has been to delegate responsibility for establishing quality online programs to the higher education institutions themselves and to issue blanket approvals of alternative assessment approaches.

One positive outcome of the COVID-19 crisis has been a more favorable view of online education, which in many countries had been considered as a second-rate kind of education, often subject to substantial constraints and strict regulations.

Institutional Policies

Innovative Educational Approaches. The first step to ease the transition to online education has been to offer crash courses—for instructors and students alike—in the use of digital platforms and application of effective techniques for online teaching and learning. Institutions with fully functional teaching and learning services have been better prepared to support their entire academic community in this transition, as have those with a strong digital capacity or a well-thought transition plan. Many colleges and universities also have seen higher levels of cooperation and experience-sharing among instructors across academic departments, schools, and faculties that would typically operate independently.

The first six months of the COVID-19 crisis revealed four sets of good practices that can aid the transition to online education. At the core of a successful online education experience is the adaptation of the curriculum, pedagogy, and assessment in the most suitable way to fulfill the mission of the institution and respond to the characteristics and needs of students.

Second comes the recognition that teaching online does not mean simply recording a traditional lecture and posting it to the web or using a videoconference platform to deliver the same lecture online as the instructor would give on campus. Effective online education requires teaching and learning methods that engage students dynamically in an enjoyable and stimulating education experience.



The pandemic has presented a great opportunity to scale up innovations that enable many active, interactive, and experiential modes of education delivery. Among these student-focused approaches are problem-based learning, self-learning, peer learning, team learning, the flipped classroom, and the use of simulations and games, all of which can be used separately or in combination.

The third important consideration is the need to fully align learning-assessment procedures and criteria with online curricular and pedagogical practices. Higher education institutions all over the world have explored various forms of alternative assessment: the pass/fail approach, open-internet/open-book exams, self-certification of online exams based on trust, collaborative forms, portfolios, next-generation assessments, etc.

Finally, many institutions have found it indispensable to establish, increase, or strengthen their academic and psychological support systems for students who have been personally affected by the health and economic crisis and have struggled to adjust to new teaching and learning approaches.

Research Continuity and the Enhanced Scientific Role of Universities. In many countries that face funding cuts, the prospects for recruiting young doctors and doctoral students are grim in the medium term. This is likely to reduce the number of new graduates in years to come and cut the research output of many universities.

While research funding has been reduced substantially for many programs and projects during the pandemic, many governments have commissioned universities to participate in medical and clinical research on treatments and vaccines. Some also have financed research on the social implications of the crisis and needed changes in public health planning. However, for research universities to make a strong contribution to recovery efforts, governments must recognize and respect their key scientific role. In the middle of the 2020 pandemic, it is sadly ironic that two nations leading the world in the number of COVID-19 deaths —the United States (No. 1) and the United Kingdom (No. 4)—are the ones with the most winners of the Nobel Prize for medicine in the past century and supposedly have the best universities in the world.





Governance beyond the Pandemic. The crisis has tested the leadership skills of college and university presidents in an unprecedented way, forcing them to make quick and vital decisions to protect the health of the academic community and maintain business continuity under taxing and uncertain conditions. This crisis has taught them the importance of good communication—of explaining frequently, honestly, and transparently the challenges COVID-19 presents. By contrast, the muddled approach taken by many countries and institutions in the wake of the fall 2020 semester has left many students and their families in limbo, creating additional stress and anxiety, and even putting the lives of students in danger.

One thing that has aided leaders' communication efforts is their reliance on early feedback from students and staff about the rapid transition to online education. Thinking about the post-pandemic times, higher education leaders would be well served to rely more frequently and systematically on such feedback mechanisms.

As higher education institutions scrambled to move rapidly from face-to-face to online education and remote work, many leaders saw value in increasing efforts to decentralize decision-making. By trusting and empowering administrators and instructors, allowing them to find

practical and innovative solutions to challenges, progress often came more quickly.

For higher education institutions in low-income countries, the COVID-19 crisis may be an opportune moment to form a few deep partnerships with universities in other countries that are willing to share their resources and experience in this time of emergency. This is especially true of South-South partnerships, in which countries of the Southern Hemisphere collaborate in the areas of digital education and online research.

As they look ahead to the post-pandemic era, leaders of higher education institutions should seek to answer three key questions. The first one is about the new vision for the future of their institutions. The second concerns the evolution of their own leadership style and governance structure during the pandemic. The last question is about identifying and seizing the new opportunities that this transformational experience offers to build more resilient institutions.

Inventing a New Economic Model. Though effects vary with the health and economic situation and the funding patterns of each country, it's clear that the pandemic has increased expenses and cut revenues.

Many higher education institutions are likely to suffer significant financial losses, some may have to close down, and most could use this opportunity to revisit their business and funding model. Among the structural features that make colleges and universities vulnerable are over-reliance on tuition fees, especially those from international students, lack of funding diversification, and lack of endowment. Generally speaking, public higher education institutions must try to balance public and private funding sources, while private colleges and universities ought to avoid depending only on tuition.

New opportunities may arise in the post-pandemic period. Higher education institutions could become serious about embracing adult learners as a legitimate segment of their target student population. Though national policies exist to expand lifelong education, few colleges and universities around the world have made significant efforts to offer programs designed for adult workers. Adopting a true focus on lifelong learning goes beyond offering short training courses with exclusively professional content. Rather, it means stressing the primacy of the learner and recognizing competencies acquired on the job. It also requires higher education institutions to organize themselves to accommodate the learning and training needs of a more diverse clientele: working students, mature students, stay-at-home students, traveling students, part-time students, day students, night students, weekend students, etc.

Finally, colleges and universities across the world could consider how to build on their networks to collaborate more systematically with partner institutions and pool their resources, instead of competing as they have in the past. Higher education institutions can explore new alliances that allow them to offer joint degrees, teach courses collectively, and conduct research collaboratively, combining their talent and financial resources more effectively.

Equity-Focused Responses. A priority task for many higher education institutions immediately after suspending on-campus activities has been to address the hardships experienced by students from low-income families and other vulnerable groups. This support has come in four types, often provided in combination: emergency financial assistance, support for access to online education, help with academic issues related to the switch to online education, and emotional support to relieve stress and anxiety.

Financial help has come in the form of additional grants,

interest-free loans, and access to food banks and food parcels, all paid for by the colleges or universities themselves or through emergency fund-raising.

To reduce the digital divide between rich and poor students, many institutions have donated or loaned out devices and offered students internet bundles to provide access to online resources.

Other institutions have strengthened their mechanisms to identify at-risk students and offer adequate academic support to prevent the switch to online education from undermining their academic success.

Finally, many colleges and universities have tried to boost their online health services to attend to the emotional needs of students and staff.

Angels and Vultures: Contributions of Other Actors

As the pandemic forced the closure of campuses all over the world, two opposing trends have changed the division of labor inside and outside higher education institutions. On the one hand, many colleges and universities have stepped in to provide direct assistance in areas where external players typically have intervened, including financial assistance, physical and emotional health care, support with food and access to housing, and support with technology and the internet. On the other hand, the pandemic has helped “unbundle” many activities traditionally handled within institutions, such as curriculum design, production of digital resources, organization of virtual classrooms, and the proctoring of examinations.

For this reason, the abrupt shift to broad-based online education has been a boon for education technology companies. While a few appear to have shamelessly taken advantage of the crisis by boosting prices or dumping flawed products on the market, many firms—inside and outside the education sector—have been generous in supporting the thousands of higher education institutions and millions of students left stranded by the pandemic. Telecom companies have offered free or highly subsidized internet packages and have exempted educational institutions from data charges for their websites. Firms and philanthropists in many countries have donated money, laptops, and tablets to help students adjust to online learning. Academics and students all over the world now have access to free courses and digital content in many languages.

Conclusion

The year 2020 it is not the first time industrial and developing countries faced major crises. But never before have the strength of colleges and universities, in both rich and poor countries, been tested as severely as during the current pandemic. Furthermore, the health crisis has shown that, in higher education, digital and economic inequality aren't theoretical notions. Rather, they are huge and uncomfortable realities that directly affect the ability of colleges and universities to cope with the COVID-19 crisis and offer a high-quality education experience to all students.

While the world's top universities are unlikely to suffer adverse long-term consequences, many higher education institutions will face real financial peril during the deep recession that many economists predict. Many will close their doors for good. Millions of students with limited resources could drop out of higher education, or at least be forced to attend more affordable institutions. The higher education systems and institutions that emerge from the pandemic financially crippled won't sustain the progress of past decades, eroding opportunity for underrepresented students and increasing the already-high levels of educational inequality.

The main priority, therefore, is not to cope with the short-term effects of the pandemic, but to think carefully how to reshape higher education for long-term resilience. This unprecedented crisis portends drastic structural changes in the educational and business models of colleges and universities. The main question is whether most institutions are satisfied with a return to "normal," or whether they will embrace and widely implement some of the disruptive practices that they have implemented during the pandemic.

At this transitional time, with long-standing inequalities laid bare as never before, it is essential that nations, systems, and institutions focus on achieving fair and just outcomes for students who have long been denied them: students from low-income families, female students, and those representing racial and ethnic minorities. The next 12 months will be a critical test of the capacity of the international community, national and local governments, and higher education institutions to act swiftly and effectively in order to reverse the growing gaps between rich and poor countries, between well-endowed and resource-limited institutions, and among learners.

Main Messages and Policy Lessons

Main Messages

- With the pandemic interrupting face-to-face education on campuses all over the world—a possibility very few colleges and universities were prepared for—higher education institutions and students have experienced unprecedented disruption and face significant new challenges.
- Many institutions managed to switch to online education very rapidly and have done their best to provide continuity in teaching.
- It is a myth that COVID-19 has been a great equalizer. The digital gap and the lack of preparation for online instruction have actually increased educational disparities and created social distress, especially among vulnerable students.
- In the medium to long term, COVID-19 is likely to negatively affect the learning outcomes, graduation rates, employability, and job prospects of traditionally underrepresented students. It also is expected to worsen the already-precarious economic health of many colleges and universities.
- The move to online education poses significant opportunities for transforming the learning experience, whether remote or in person. Curricular and pedagogical practices could be reshaped to promote active, interactive, and experiential education, supported by aligned innovations in assessment and more flexible pathways and qualifications.
- Substantial changes are needed in the economic models of higher education systems and institutions to increase their resilience. Systems with higher proportions of public funding are less vulnerable to health and economic crises. Strong IT infrastructure and solid student aid programs (grants and income-contingent loans) are indispensable to foster inclusion.
- Higher education institutions need to integrate risk analysis and contingency planning more systematically. Comprehensive support (financial, academic, and psychological) for vulnerable students and faculty is necessary to foster inclusion and reduce inequalities.
- COVID-19 has helped colleges and universities demonstrate their "public good" contributions through relevant training, dissemination of scientific evidence, and direct help to government and local communities in combating the pandemic.

Policy Lessons at the National Level

- COVID-19 economic relief packages should protect employment in the higher education sector and provide emergency financial aid to all students in need.
- Public funding for higher education should prioritize short-term training programs with flexible pathways and scaffolding of credentials. Such programs, often offered by community colleges and technical institutes, provide opportunities to many low-income and minority students, and can play an important role in boosting economic recovery through relevant training, often in partnership with employers.
- Countries whose colleges and universities have a high level of financial dependence on fee-paying students, especially international students, should work to reduce this vulnerability.
- Student aid systems that include conventional student loans should consider switching to income-contingent loans.
- Entities that fund research should encourage Open Science and collaborative projects across institutions and countries. Such projects can pool talent and resources to foster multidisciplinary cooperation in addressing societal challenges.
- In developing countries where internet access is unequal and expensive, governments should strengthen broadband infrastructure and eliminate the digital gap among higher education institutions and students.
- Ministries in charge of higher education should support capacity building for online teaching, learning, and assessment.
- Assessment methods and quality-assurance approaches should adjust flexibly to the difficult conditions faced by higher education institutions and their students.



Policy Lessons at the Institutional Level

- Having a well-developed and experienced Teaching and Learning Services department can help facilitate the transition to online education and introduce innovative curricular and pedagogical practices.
- Professional networks within and beyond higher education institutions are important platforms that can support instructors who struggle to adapt to online education.
- Effective governance during the pandemic requires compassion from leaders, flexibility in management, and delegation of decision-making to empower all academic and administrative actors.
- Implementing a transparent communication strategy raises the level of awareness and ownership among the entire academic community during times of crisis.
- The crisis reinforces the need for more systematic risk analysis and implementation of preventive measures as part of strategic planning.
- To prepare for the post-pandemic era, leaders of colleges and universities should define a bold vision that accelerates the introduction of innovative approaches in the educational and economic models of their institutions.
- Effective support for vulnerable students requires comprehensive sets of measures that encompass their financial, technological, educational, and health needs.
- In the post-pandemic era, colleges and universities should embrace adult learners as an essential component of their target student population and offer appropriate programs to meet their learning needs.



About the author

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