

## A glance at the backdrop and the evolving response

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The unprecedented impact on Higher Education as a result of COVID-19

This extended brief looks at how universities globally are having to position themselves strategically to deal with the impacts of the COVID-19 pandemic. We have seen how faculties have rushed to convert curriculum to an online environment, how they have become reliant on using edtech for remote learning during the COVID-19 pandemic. [21], and how whole sectors of educational bodies have had to hurry to put together resources and guidelines from everything from digital resources, to counseling, to advising on student finances and health issues. [3][4][7][14]. And then there is of course the role of higher education in shaping the post'-COVID-19 world [15]

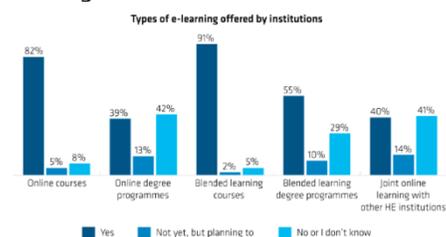
The challenges have prompted adaptations We have seen that

universities have not closed – they have adapted. There has been a rapid move to online learning and teaching [28] In fact, almost 90% of European higher education institutions moved online in April and May [29]. Opportunities in relation to digitally enhanced learning are prompting a readied response: *“The coronavirus crisis has challenged higher education institutions in many new and unexpected ways. As universities have to take radical measures and make major efforts to slow the contagion and to better understand the virus, they are forging new paths in crisis management. This brings both challenges and opportunities to Europe’s universities, in particular in relation to digitalisation and digitally enhanced learning and teaching”* [25]

The wider European strategy response is thought in as part of a two part plan involving a [European Digital Strategy](#) and an [Industrial Strategy for Europe](#) which, seen together, promote the

*“effective and substantial co-operation and partnership between key stakeholders in industry, universities, other educational institutions and civil society organisations, as well as cooperation between EU economies and regulatory bodies”*. [29]

The types of online offerings, offered by universities since 2013, cover a spectrum of online courses, as detailed in the graph below (seen clearly at 200% magnification): *online degree programmes, blended learning courses, blended learning degree programmes, as well as joint online learning with other HE institutions.*



Taken from *Covid-19 and digitally enhanced learning and teaching: New opportunities in challenging times* [22]



*"It's been highly stressful, but at the same time, the clarity of the crisis has brought us together,"* said Clay Shirky, vice provost for educational technologies at NYU in New York. Clay was part of the team helping colleagues at NYU Shanghai launch their courses online. [2]

flexibility for working across time zones as many students are dispersed across the globe

A flexible approach has been needed to accommodate the necessity for working across time zones as many students are dispersed across the globe. Different approaches of delivery complement each other such as webinars, specially-created online resources, one-on-one consultations, drop-in online office hours and many, many emails – NYU Shanghai is an example of a faculty not only located in China. Flight restrictions in and out of China mean have meant staff and students are scattered across the globe. [2]

there were training sessions for faculty to teach on video sharing platforms applicable for synchronous or asynchronous delivery

Chat services to faculty and students were made available. *"Training sessions focused on teaching faculty to teach with two video-sharing platforms, Zoom and VoiceThread"* said Jace Hargis, director of the NYU Shanghai Teaching and Learning Center. [2]

These tools enabled faculty members to teach synchronously or asynchronously as they saw fit.

*"Through webinars, specially-created online resources, one-on-one consultations, drop-in online office hours and many, many emails, an international team worked with NYU Shanghai faculty to move almost 500 classes online."* [2]

**Normally there would be restrictions to online learning at degree level in China, but now even MOOCs are getting in!**

MOOC providers are making their content freely available, Coursera has made its courses freely accessible to Duke Kunshan students, at degree level, which was otherwise restricted in China, due to concerns on regulations.

*"NYU and Duke are not the only universities to take classes in China online. Universities across the country are embarking on similar efforts, many utilizing free content from new national massive open online course providers. Coursera, a U.S. based MOOC provider, has made its courses freely accessible to Duke Kunshan students. Matthew Rascoff, associate vice provost for digital education and innovation at Duke, said the offer has proven very popular with students."* [2]

Online learning at degree level has long been a no go in China- restricted because of regulatory and quality concerns. Presently the Ministry of Education have relaxed their rules to ensure students *"keep learning, even with classes suspended."* [2]

**The Ministry of Education has introduced a "national Internet cloud classroom"**

China's response has been directed from on high— the Ministry of Education, directing all colleges and universities to make use of their *"national Internet cloud classroom"* supported by more than 7,000 servers and designed to cater to 50 million elementary and middle school students at the same time. [11]

the actual courses—developed by the teachers themselves

## Focus on China and International Universities catering to Chinese Students

### In an enormous lockdown

where *"more than half the country's 1.4 billion people are now restricted from leaving their homes in some way"* [11] And *"All schools are closed indefinitely while the public health emergency continues."* [11], universities have been compelled to close their campuses to limit the spread of coronavirus. U.S. universities with Chinese branches have moved *"at lightning speed to take teaching online"*. [2]

The endeavor to transition online has involved a remarkable feat of preparing courses online in 3 weeks. This has resulted in an apparently successful outcome even though the majority of faculty -- 88 percent -- did not have significant experience teaching online previously.

*"The transition from face-to-face to fully online wasn't one leaders at institutions such as Duke Kunshan University and New York University Shanghai had planned for. Preparing to teach a course online for the first time usually takes several months. Faculties at institutions in China have done it in less than three weeks — a remarkable feat."* [2]

It seems that the courses are developed by the teachers themselves, as this would lead us to believe:

*"We've launched all the rich and varied online courses we can think of," said one teacher at Experimental Primary School in Beijing, giving her name only as Gao because she wasn't authorized to speak to reporters. Those courses include classes to try to take care of students' mental and physical health" [11]*

Lessons cover 12 academic subjects, including "moral education" and "epidemic education" as well as Chinese and English lessons, and math and science classes [11]

To complement this, China Education Television is broadcasting online learning programs through satellite to remote areas with weak Internet connections.

#### training sessions by iTutorGroup

This article indicates that some training in online teaching is undertaken by ITutorGroup—seen training teachers from around China, visible on large screens, from their office in Shanghai. [11]

**the numbers of students on the national cloud platform** Up to 50 million students on the national cloud learning platform at any given time. 169 lessons were introduced for the first week, covering 12 subjects for junior and senior high school based on the national curriculum. Key teachers are to be brought in from other cities as needed

**Issues included the internet being overwhelmed and noise from many students jumping in apartment buildings at the same time**

Due to so many being online simultaneously — children sang the

national anthem in front of screens. So many that " *In some parts of the country, so many kids were watching at the same time that Internet speeds ground to a halt.*" [11], The Washington Post reports.

Another unusual outcome from this has been the occurrence of children jumping inside their apartments as they participated in live P.E. sessions. These sessions involved live-streamed videos of teachers climbing and doing push-ups. Students were then expected to send short videos every half an hour for an attendance check. An example is also given of university students also having to do "eye exercises - even more, they have to record and submit ( on DingTalk)[13].

Although very popular - By Feb. 27, the P.E. exercises had amassed 170 million views and 24,000 discussions on Weibo, there were many complaints over disturbances from these online P.E. class.[13]

**China has set about ensuring easy transfer of students between universities**

Other interventions set in force in China include enabling easy transfer to other university campuses for students and funds available for students high speed internet and working laptops, tablets or smartphones.

**Technologies China is taking in use include Alibaba Group's DingTalk to conduct live-streaming courses**

Alibaba, the parent company of the South China Morning Post, have started coaching teachers on how to use DingTalk to conduct live-streaming courses.

They are one of several tech companies including Baidu, Alibaba and Huawei to back up the e-learning platform with

7,000 servers and go terabytes of bandwidth. [12]

Three major telecommunications operators — China Mobile, China Unicom and China Telecom have also been roped in by The Ministry of Industry and Information Technology [12]

*"This is to ensure that it can run smoothly with up to 50 million students using it at the same time, CCTV reported" [12]*

**Comparing China to US- China has transitioned to online, at lightning speed**



In China, over 8m Chinese students are expected to graduate by the end of year. Expectations for the upcoming months are even higher. And whilst the vast majority of faculty didn't have any significant online teaching experience before the outbreak, this reference from [Inside Higher Ed](#) shows the extent to which U.S. universities with Chinese branches have moved "at lightning speed to take teaching online" [2]

Robert Hsiung added: "If this drives widespread change, this will place China's education system at the forefront of the world and ahead of other countries less affected by the outbreak." [9]

## Issues in USA

### Universities, colleges and students are under financial strain after the onset of covid

The change to online learning has been challenging on many fronts, especially for those campuses that emphasise an intimate college experience—they are losing the opportunity to engage with students through their on-campus experiences.

#### On-campus colleges seeing their retention rate and tuition revenue decline as they lose students to online programmes

*"Campuses will see their retention rates and tuition revenues decline" said Brian Jones, Director of Admissions at [Minnesota State University, Mankato](#). As he points out, faculty and staff are transitioning all learning to "online and virtual in a very short period of time and this will undoubtedly impact the success and retention of students" [5]*

He also saw the possibility of the "on campus" colleges losing students to all online programmes elsewhere: *"Students might enroll in online programs such as Western Governors University or Southern New Hampshire—schools with good track records online, as opposed to residential colleges without as much experience with this method," said Pryor. [5]*

**the surprising resilience of the urban commuter colleges, that, that do not depend on finances intertwined with payments for accommodation**

Whilst schools such as Harvard and Yale will continue to attract and retain a select and interested demographic of students, willing to pay, other colleges that are "a few notches below in selectivity will see a substantial impact to their applicant pool" according to Colleen Ganjian, a former undergraduate admissions officer and the owner of a college admissions consulting practice—the effects on college applications and admissions—students may migrate to closer, local colleges or they may decide to take a gap year. [5]

Of colleges closer by:

*"The colleges best positioned to survive the financial challenge may be the urban commuter schools. Living at home while attending schools with limited-sized classes may become a much more palatable option for parents afraid to send their children to live in densely populated campus dorms," said Gil Gibori, CEO and founder of [The House Tutoring Lounge](#). [5]*

#### Pay cuts and furloughs at colleges like the University of Arizona

The financial ramifications to college and universities are many—colleges are having to enact severe cost-cutting measures or dipping into their funds



Both colleges and students are facing financial hardships.

*"As a case in point, staff and employees at some colleges like the University of*

*Arizona are already facing confirmed temporary pay cuts and furloughs. While universities and the government are announcing and rolling out relief package measures to support affected students facing financial hardship due to this global pandemic, such measures are not yet widespread or standard." said Dr. Khamitov. Dr. Mansur Khamitov of the Nanyang Business School at Nanyang Technological University. [5]*

#### Many students and their parents may no longer be in the position to afford tuition fees because of being laid off, furloughed, unable to pay off loans

Dr. Mansur Khamitov continued, about the financial situation: *"New domestic applications are likely to go down as many students and their parents may no longer be in the position to afford tuition fees because of being laid off, furloughed, unable to pay off loans, needing to dip into their savings, etc.," [5]*

#### Smaller institutions are being pushed over the edge or having to merge with larger colleges

The financial losses sustained during the spring semester may be enough to push smaller institutions over the edge. Or cause them to have to merge with larger institutions: *"Colleges and universities will first need to determine if they can recover from the financial losses they sustained during the spring semester and anticipate for the summer. There are predictions that some small institutions may need to close or merge, and larger institutions may need to reduce significant numbers of faculty and staff—or at least reduce their pay and benefits," said Allison Vaillancourt, vice president of organizational effectiveness at [Segal](#), and previously at the University of Arizona as vice president of business*

affairs and human resources and a professor of practice in the School of Government & Public Policy and Honors College. [5]

### Critical revenue from International students may be lost

The political decisions determining how international travel and visa appointments are handled, will have a heavy impact on already financially strained colleges



There may be tuition revenue lost from international students for colleges and universities. In fact the US may lose those students altogether—It may be that U.S. embassies and consulates are unable to reopen relatively soon, creating difficulties for the influx and processing of international students. If they are nevertheless, able to access remotely, but come from a country with a “more austere government”, there will be “technological access issues as well as freedom of speech and thought concerns” said Stacy L. Peazant, academic and research administrator at the University of Florida, and continued: “higher ed institutions will incur less diverse student populations and deeper financial strain.” [5]

Nicole Pilar, college counselor with Collegewise: “While some schools might choose to offer a delayed start to those students—second semester or

*quarter, for example—the students’ ability to return will depend on whether the State Department starts accepting routine visa appointments. And even if they do start accepting appointments, there is no guarantee those students will still choose to come to the U.S.” [5]*

### Colleges are being forced online, to teach but also to give advice to students on finances

The \$600 billion-plus higher education industry must suddenly turn to an approach where many have long resisted online education. How are they doing it? Here we see examples. America has 1.5 million faculty members, and, like Packham, 70% have never taught a virtual course before—

*“Analisa Packham, an economist who studies health and education, would seem ideally suited for teaching in the age of Covid-19. Yet last weekend the 30-year-old assistant professor at Vanderbilt University in Nashville realized she had a lot to learn—about technology. Packham taught herself two popular software programs for videoconferencing, Zoom and Kaltura. She plans to hold office hours via Skype and produce TikTok videos to explain the importance of food stamps in the current economic crisis. She’s already recorded a video lecture for her 41 students, but is far from satisfied with it.” [6]*

### Life happens issues

Problems experienced are more than how to deliver online education. Circumstance requires it to also be about helping students to navigate the current economic crisis.

An earlier mass emergency produced The Sloan Consortium, an association of colleges supporting online

education, which offered free virtual classes originating from more than 100 schools, and showed that students could face “life happens” issues as they scrambled to find a safe place to live or found they couldn’t concentrate on their work. [6]

Now, issues students face could be lack of access to online networks, due to spotty internet, if they are in remote areas for example or issues faced could be more economic in nature.

### Students loan repayments will kick in earlier

*“One thing students need to remember is that student loans are only deferred for six months from the time a student graduates or stops attending class,” said Robert Farrington, founder of The College Investor. “If their courses were cancelled early, loan deferment will come sooner than it would have had classes ended on their normal schedule.” [5]*

### There have been losses in endowment and operating funds for colleges and universities, which may cause them to reduce scholarships normally awarded to students on a “merit” and “need based” model

Another financial effect for colleges—whilst the larger donors might not dwindle, the smaller endowments, e.g. \$25 and \$100 donations from alumni and parents, that cumulatively build up to millions, look like they will peter out.

Also, whatever has been endowed may be eroded through demands for compensation for the loss in tuition. [5]

### there will be fewer opportunities for students to receive scholarships

This means there will be fewer opportunities for students as there will be fewer scholarships offered. Mike Proctor of [BrokerScholar](#) added: “A big sector of college and university scholarships is commercial companies that offer scholarships. Due to the impact of COVID-19, commercial companies are cutting their budgets and data shows that private scholarships from commercial organizations are down.” [5]

### What online systems are US universities depending on?

Many universities already use learning management systems such as Blackboard or Instructure where students can log on to access course materials, hand in assignments, see grades, converse with one another. However, for schools wanting more tailor made offerings, such systems can require millions of dollars in investments: “Such offerings can require millions of dollars in investments” said Trace Urdan, who is managing director of Tyton Partners, an education-focused investment banking and consulting firm. [6]

But for those institutions that can afford it, tailor made solutions are available: “[Pearson](#), [John Wiley & Sons](#), and other publishers craft more tailored online programs for universities, helping develop curriculum and recruit students. So does [2U Inc.](#), which works with well-known schools such as Georgetown, Northwestern, the University of North Carolina at Chapel Hill, and the University of Southern California.” [6]

### Edtech companies benefit largely from online college classes

Some background on the history of distance learning— learning dates to 19th century snail-mail

correspondence courses. In US, the industry has had a dubious reputation with many for profit companies unscrupulously hard-selling expensive degrees of questionable value and leaving students with crushing debt. Now, in US, traditional nonprofit and state colleges have stepped in to the online space. However, those utilizing edtech companies are not too happy since many edtech companies take 50% or more of revenue from classes. These tailor made setups allow students to learn at their own pace, where they can log on at will and chat online. In others implementations, professors hold classes in real time, where students can speak via video feeds and virtually raise their hands. [6]

### Concerns about the efficacy of online learning

There are challenges to be faced for those schools who now are suddenly turning to online learning without previous experience. Challenges such as securely offering tests to avoid cheating and even knowing how to hold students’ attention. Not making the mistake for example of offering long videos for students to have to watch.

Other voiced concerns associated with turning to online delivery, include low completion rates, especially among underprivileged and less prepared students. [6]

**Some universities are already positioned ahead of the curve, as they have been enrolling online students. Last fall, Arizona State University enrolled 45,000 online students, mostly undergraduates— this number is more than the total number who attend the University of**

### California at Berkeley in person

*“A relative handful of institutions, including major public universities and private nonprofits such as Southern New Hampshire University, enroll a disproportionate number of U.S. online students, making them ideally positioned for this environment. Last fall, Arizona State University enrolled 45,000 online students, mostly undergraduates—more than the total number who attend the University of California at Berkeley in person. One-fifth work for Starbucks Corp., which pays their tuition. Phil Regier, the ASU dean overseeing these initiatives, says schools that suddenly adopt virtual learning will encounter new challenges, such as securely offering tests to avoid cheating and holding students’ attention. “Here’s the first lesson,” [6]*

### Surprisingly, institutions often charge about the same for an online degree as an in-person degree.

*“With a few notable exceptions, such as Georgia Tech’s roughly \$7,000 online computer science master’s degrees, institutions often charge about the same for an online degree as an in-person one, undercutting the promise of lower costs via technology.” [6]*

## Background - US colleges which are traditionally resistant to online learning, are being forced online



The coronavirus is forcing colleges to embrace distance learning for the rest of the school year. Students and families aren't thrilled at the prospect [6]

Talking about the voices that want to make online learning a permanent state of affairs, namely, in this case some specific voices "Eric Mazur (a Harvard physics professor), Bob Kerrey (formerly a US Senator and president of the New School) and Ben Nelson (founder and CEO of the for-profit Minerva Project, which purports to offer online instruction superior to an Ivy League education)", Jonathan Rose, who is a William R. Kenan Professor of History at Drew University responds: "Evidently these three gentlemen are under the impression that college teachers and administrators never thought to focus on learning. They urge us to "shift to student-centered instruction," when in fact they recommend tech-centered instruction. And they say that we must "refocus on student outcomes, on the universal skills that will enable graduates to respond to the next

crisis, to create resilience and adapt to unfamiliar territory, and to help lead society forward." Reading these vacuous platitudes, one has to wonder whether the Minerva Project teaches its students how to express themselves meaningfully on paper – or on a screen for that matter." [23]

Jonathan Rose continues to criticise the rush to online everything and parallels technological advancements now happening in society with "E. M. Forster's dystopian novel, "The Machine Stops" in which Rose sees resemblances to "the locked-down tech world we live in today" and where there is "no real human interaction or intellectual exchange, the whole system eventually collapses." [23]

There is then, a long held belief in US that online learning is inferior to in-person courses. In particular the elite colleges, defend their in-person offerings:

"Many elite colleges, including small liberal arts schools, have resisted online classes. They've always justified their cost, which can top \$70,000 a year, by trumpeting their small classes, mentoring from professors, and extracurricular activities." [6]

### The coronavirus is forcing colleges to embrace distant learning for the rest of the school year

And students and families aren't thrilled at the prospect. It has disrupted their lives:

"even after some schools—including Harvard, Princeton, and Middlebury—offered room-and-board refunds. Amelia Pollard, a 21-year-old junior at Middlebury, has already been told by her history of American conservatism professor that the seminar's scheduled time may not work anymore because her own young child's school was shut because of the virus."

"There's a lot of moving parts that were not anticipated," Pollard said. [6]

### Many students rely on office hours and study halls to complete the homework

Nora Heaphy, a 20-year-old junior at Yale, expresses concern about her physics course. "That's going to be a hard one, mostly because I and many other students heavily rely on office hours and study halls to complete the homework," [6]

### In contrast - opinions in the general public about online education are changing, according to a study on consumer behaviour

A recent survey on U.S. consumer behavior and attitude toward online learning as a result of the pandemic,, shows that more than 70 percent of respondents have an increased interest in further education. In addition, 82 percent are interested in some form of online education, and 40 percent are drawn to pursuing further education.[8]

#### ACTUAL STATISTICS

13.9%

The statistics for the number of students in "entirely online" courses in 2018, in US:

15%

In 2019: According to Eduventures, Some 2.4 million undergraduates, or 15% of the total undergrad student body nationwide in US, studied entirely online in the fall of 2019. An additional 3.6 million enrolled in one or more online courses while otherwise studying on campuses

#### FOR MORE INFORMATION

**BOTTOM LINE** - Just 15% of undergraduates in the U.S. did their coursework totally online in September 2019- a small increase compared to the year before. That number is about to explode [6]

## Will the Coronavirus Cause an EdTech Boom—in light of the pressure to transition online?



Some maintain that the effects of the virus is set to impact global economies well into 2021 and that EdTech companies will benefit from the mass adoption of online learning [9]



The challenge- driving education at scale will be met by edtech ready organisations, propelling their business models

Robert Hsiung, MBA grad and China CEO of the online educational company EMERITUS said: "The massive move to online is forcing the education system to figure out how to drive engagement at scale in their courses. This has created a

*special window for us to leverage our experience in supporting these schools."*

He added: "I believe that this black swan event will serve to propel our business faster than we had previously projected" [9]

### Perceived benefits with online delivery

This article lists the obvious benefits - of not having to commute, the flexibility in being able to study at one's own pace, the advantages of having a quieter working environment (although this seems a dubious one, considering home environments can have small children in the vicinity). Furthermore, gains in IT adaptability skills are mentioned. [9]

### Anticipating future impacts and reacting with appropriate edtech measures for the road ahead...

The road ahead—this call ( now expired) for tech-focused ideas as a response to COVID-19 in low- and middle-income countries speaks to the anticipated prolonged effects of the outbreak and the need for edtech solutions in education—the call is entitled "Call for ideas for EdTech responses to coronavirus (COVID-19) " and is backed by The **EdTech Hub**, **Education Alliance**, and **Global Innovation Exchange**. [10]

The intention with the call has been to meet the need to "Longer-term consequences of this disruption" which have been listed as:

*"Continued disruption of student enrolment and retention in school Negative impacts on the cognitive, academic and socio-emotional development of students*

*Stalled or even reversed learning gains in affected regions reduced educational attainment of marginalised children, such as girls, children with disabilities, and those in refugee and internally displaced communities" [10]*

In particular there is mention of the

impacts being "especially felt and more difficult to recover from in lower-income environments across Africa, Asia and the Middle East" [10]

The particular types of innovation ideas wanted can be seen here:

*"We are looking to support a range of technology-enabled initiatives with a focus on:*

*Innovative methods for distance learning and education content for students out-of-school and in non-formal settings, particularly focused on foundation literacy and numeracy*

*Support for teachers and school education leaders*

*Within these focus areas, we are seeking interventions that support:*

*Formal assessment and examination systems*

*Parents, caregivers and/or other community champions*

*The psychosocial and socio-emotional impacts of COVID-19 on learners including through the use of play and games*

*Marginalised learners including girls, those with disabilities and those in internally-displaced and refugee communities,*

*'Learning-adjacent' needs such as a feeding programmes and a safe place, and, Strengthen education systems, such as data management systems for local or national governments and analysis of system readiness for use of technology"*

[10]

## A Broad look at 20 countries

### A research paper documenting the types of responses by higher education providers to COVID-19, across 20 countries

This article takes most of its responses from this research paper: "COVID-19: 20 countries' higher education intra-period digital pedagogy" [16]

Responses from universities, range from having no noticeable response through to social isolation strategies on campus and rapid curriculum redevelopment for fully online offerings.

Findings indicate that the responses by higher education providers have been diverse - from having no response through to social isolation strategies on campus and rapid curriculum redevelopment for fully online offerings.

The global higher education sector have been impacted, not the least from losing international students- responses were first directed at helping international Chinese students who were unable to travel internationally study online. Responses also needed to navigate differing self-isolation guidance from national governments

Countries other than China were impacted by the 180 million Chinese students in primary, secondary and tertiary markets. Many education providers relied on the income from this international cohort (Perrotta, 2020.) [16] For international students, delivery of

online training, has become a priority and faculties have rushed to convert curriculum to an online environment, mindful of technology and websites that could be accessed from China. [16]

Universities are dependent upon the successful and timely processing of international student visa requests

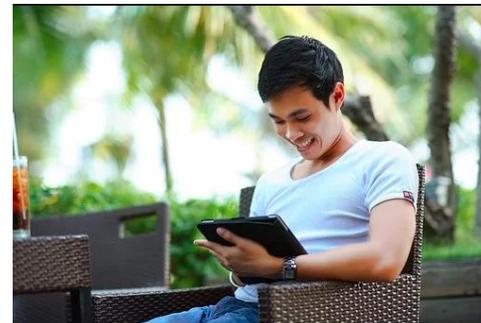
*"Given the large number of international students who attend U.S. institutions of higher learning, there are many unknowns as we plan for the fall semester. In the event U.S. embassies and consulates are unable to reopen relatively soon, this will negatively impact the processing of newly admitted international students' I-20 and visa requests," said Stacy L. Peazant, academic and research administrator at the University of Florida. "Even if international students are able to participate in fall classes remotely, there will be technological access issues as well as freedom of speech and thought concerns for those citizens of more austere governments."* [5]

When the highest paying cohort of students cannot come to campus due to visa restrictions, although schools try to delay semester start, there is a possibility of them never coming back

*"If international students, a population that tends to pay more than domestic students, are unable to come to campus due to visa restrictions, their absence most certainly means lost tuition revenue," said Pilar. "While some schools might choose to offer a delayed start to those students — second semester or quarter, for example — the students' ability to return will depend on whether the State Department starts accepting routine visa appointments. And even if they do start accepting appointments, there is no guarantee those students will still choose to come to the U.S."* [5]

<https://www.forbes.com/sites/andrewdepietro/2020/04/30/impact-coronavirus-covid-19-colleges-universities/>

The pandemic then spread to South Korea, Iran and Italy. This resulted in the higher education sector in these countries changing to focusing on their own operations (UNESCO, 2020). [16]



The initial focus was on transitioning content to an online environment, and not necessarily worrying about the online pedagogy

Thinking about pedagogy has certainly taken a back seat, in a situation where transitioning to online delivery in itself poses its challenges. The likelihood of achieving less on the quality assurance scale is high, whilst activities while focus on revenue mitigation and on actual technological constraints: "it was also a demonstration of the impact of poorly resourced institutions and socially disadvantaged learners where limited access to technology and the internet impacted on organisational response or students' ability to engage in an online environment (Zhong, 2020)." [16]

Designing for the long haul with continuous monitoring needs to be thought into the response "Universities undergoing a rapid change period need to be conscious of their ability to continuously monitor the quality of the learning design" [16]

## A Broad look at 20 countries, continued...

According to UNESCO (2020), there is no country-wide policy on school closures for Brazil, Canada, Greenland, Russian Federation, and the United States of America.

Most developing countries took the nationwide approaches of closing campuses and moving to online instruction, except for the United States of America.

The majority of universities in developing countries have closed their institutions. However, Brazil and Singapore continue had at the time of this report, localised closures and not a country-wide policy.

Moving of the semester break (extending or starting early) by universities in China, Hong Kong, India, the Republic of Korea (South Korea), and South Africa.

China, Hong Kong, and, to some extent, the Republic of Korea (South Korea) and South Africa responded further by implementing an online instruction strategy to support students to continue with their studies.

**An online strategy in most cases for countries surrounding China, except, Malaysia who backtracked**

*"Except for Malaysia, Republic of Korea (South Korea) and Indonesia, the analysis also shows that countries closer to China or with a larger number of COVID-19 cases per one million of their population have a digital strategy for higher education across the nation. Interestingly, Malaysia's response was to move online but higher education providers have now been instructed not to provide online tuition to restrict movement (Asia Pacific University of Technology & Innovation, 2020)" [16]*

### Overviewing the university

responses and looking ahead at transitioning society into "stay at home periods"

Overviewing the responses - *"On one side of the extreme, one group of universities did very little to respond and opted to meet their government's minimum standards (e.g. 1.5-meter distance or reduced social gatherings). On the other side, universities rapidly closed their face-to-face operations and moved to digitalised education. Some universities, like the University of Tasmania, were already partially prepared for this endeavor given the University had some blended or fully online offerings. Other universities had a lot more ground to cover."* [16]

Looking ahead - universities have a *"role in the transition to support a society that needs to stay at home for periods of time, and higher education may be a valuable addition to their productive home environments in the short and potentially medium-term."* [16]

**The variables that matter to bring offerings online and the challenges**

The challenges to implementing digital strategy have a certain alignment with how far the university has come with online offerings. The parameters that matter in this context are named - data connectivity, home office infrastructure including sufficient recording and internet bandwidth, student infrastructure. What has to be thought into this are *"How can students access online and virtual content from remote locations? What about accessing content from jurisdictions where Internet access is monitored and restricted by the Government?"* [16]

*"Data connectivity is positioned as an important addition as individuals choose,*

*or are required, to work and study from home (Morris, 2020; Perez, 2020)"*

Additionally "general skillsets" are *"needed to professionally design and offer online/ virtual education"*.

**The Variability within nations was noticeable and not all countries have a digital strategy for higher education**

The resources available to the universities and to the cohort of students attending them, has differed across countries. Developing economies for example have had access to high tech solutions (such as Blackboard, Zoom, Panopto) whereas countries, have had to resort to less expensive solutions. Jordan is an example: *"Jordan reported several low technology solutions to support online instruction, including narrated PowerPoint presentations and freeware, such as Skype, Google Classroom, Moodle, and Facebook."* [16]

### Australia

Australia's responses to COVID-19 have had varied effectiveness. First off, Australia responded to *"international student load concerns due to flight restrictions"*. [16] Then their attention turned to domestic cases of the virus and the requirement for social isolation.

The response phases: Some universities started with cleaning of their campuses after students tested positive with COVID-19. The University of Sydney for example, responded with a speedy building cleaning after their first case. The majority of universities are now progressing to other forms of learning -

Some have temporarily postponed learning so as to design online learning (such is the case with Macquarie University, 2020; Monash University,

2020; Victoria University, 2020).

Others, are intending to continue face-to-face learning with social distancing protocols and with supplementary online recordings/offerings. Such is the case with University of Queensland, University of Technology Sydney.

Others have not suspended offerings and "have made rapid progressions towards online learning" [16] e.g. Australian National University, University of Tasmania.

Then there are those which, are continuing to offer face-to-face classes "with alternative delivery structures for large lectures and seminars (University of Adelaide, 2020; University of Melbourne, 2020) including Flinders University and Deakin University (Ross, 2020)." [16]

The article also states that "Some universities have not created significant responses for domestic students not requiring self-isolation (e.g. University of Western Australia, 2020)" [16]



In Australia, the extent to which successful

outcomes in online delivery are experienced likely rests upon the prepared and quick transition to online. The especially hard hitting restrictions on public gathering with bans on all public gatherings "exceeding two non-family/households announced on 24 March... is likely to significantly affect those universities that did not move online immediately"

### The United States

The United States of America initially responded to addressing the needs of students unable to travel and to address the impact of reduced enrolments.

First, the response was to support staff and student safety. Many organisations published resources on self-protection and prevention.

The online education response was not fast: "the higher education sector did not begin a significant online education response until March, with several eminent institutions making an announcement early in March, and many others joining by mid-March" [16]

The ivy league universities led the way

"Harvard University (Herpich, 2020) announced on 10 March, it would move to full online delivery by 23 March (as did Massachusetts Institute of Technology: MIT). Yale, Princeton, Stanford, and the University of California, whereas Southern Oregon University (2020) announced on 19 March, it would also deliver all instruction remotely by the same date." [16]

Many universities moved Spring Break by one week to allow them to transition to online.

The majority of universities will return with online instruction."

The, majority will return with online instruction, although some institutions as of the 22nd March had yet to decide.

"Whilst some websites (Clark, 2020) by mid-March were reporting only 5 percent (260 out of 5,300) higher education institutions had decided to move to online instruction with minimal on-campus presence, anecdotal evidence suggests most higher education institutions have made the transition." [16]

### United Arab Emirates

A country wide closure of all schools and universities

The United Arab Emirates employed measures including the closure of all schools and universities, cancelling public events, suspending entry into the country, precautionary measures taken by food outlets, limiting flights, country-wide disinfection, and adopting working from home for employees.

Online delivery is new to many universities. Here is what they are intending to do: Zayed University has intentions of adopting Adobe Connect, the University of Sharjah and United Arab Emirates University have adopted Blackboard. Heriot-Watt University Dubai will be using a virtual learning tool, called Vision.

one particular university is advising and helping others

"Hamdan Bin Mohammed Smart University was the first e-University in the UAE (inaugurated in February 2009) and has extensive experience in delivering content online (HBMSU, 2020a). Therefore, HBMSU is assisting other higher education institutions in implementing online classes. Educators and professors in UAE universities have been attending training on effective online delivery in higher education" [16]



Many universities initially focused on transitioning content to an online environment, and not necessarily on online pedagogy [16]

### The United Kingdom.

Measures across the sector have included *"shifting to online delivery of teaching as far as possible, encouraging working from home, postponing graduation ceremonies, cancelling open days, and changing examination arrangements »*

The University of Hull and the University of Exeter had already suspended face-to-face teaching by 29 March.

Disruptions in admissions will impact entry to the next academic period for students at home and abroad

The response in UK: *"Bothwell (2020), reports that universities should focus on introducing more flexible admission processes, delay start dates and relax some entry requirements" [16]*

### Latin America

Universities in Latin America reacted in vastly different ways to the pandemic. They either continued teaching, keeping their premises functional and open, or deciding to completely close down and transition to e-learning.

The University of São Paulo (USP) in Brazil announced on 11 March that it

had created a committee to monitor COVID-19 at the university. São Paulo became one of Brazil's worst hit regions by the pandemic [30] and all non-essential businesses including schools were ordered to be shut down on March 17<sup>th</sup> [31]. On that date USP temporarily postponed all academic activities on campus and announced: *"Contingency plans for distance and remote learning are being partially adopted. Furthermore, domestic trips must be avoided. The use of videoconferencing is recommended for meetings."* [32]

The Pontificia Universidad Católica de Chile (UC) took a different approach—classroom teaching was replaced by E-learning. Academics prepared for courses by using a coordinated academic schedule. They used the Canvas platform:

*"They announced the progressive move toward online coordination for teams from all areas of the University (Pontificia Universidad Católica de Chile, 2020). Great effort was put in place to reach all the students, therefore several messages of updates were shared on the university's social media channels (e.g. the official Facebook page of UC). By 16 March, the University aimed to have only 25 percent of staff working on campus, with a further reduction to no more than 10 percent of officials by 20 March" [16]*

## MORE RESOURCES AND PERSPECTIVES ON THE RESPONSES TO COVID

-An unintended positive consequence is that *“high education will become significantly more accessible as universities think about how to move all of their programming online, including counseling, student life, career development, etc.”* according to Gaidi Faraj, Dean of African Leadership University. [ 5]

- This brief on how countries are using edtech has been put together by the World Bank. It catalogues emerging approaches by country in a database and countries are listed alphabetically. Underneath are some selected country entries [21]

-This resource advises on four steps to take quickly, to bring about quick transition to online delivery online. It prudently advises to “plan for the long haul”. [20]

-This resource gives example of how universities are adapting their admissions in response to Covid-19 – with extended deadlines, waived application fees & greater flexibility, adjusted entry requirements, flexible study options [19]

-Here is a resource of Higher Education Responses to Coronavirus by the National Conference of State Legislatures, listing details of closures and re-openings, guidelines for reopening, resources for students who might lack access to an internet connection, pointers to with tips and resources to help other schools manage and improve online instruction. Of particular interest is Southern New Hampshire University, an online university, which has published a guide with tips and resources to help other schools manage and improve online instruction. (NCSL represents the legislatures in the states, territories and commonwealths of the U.S) [18]

- Here is an example of how one university is coping with the pandemic, and how it keeps its staff and students updates - The University of Richmond has extensive documentation on its site, with “brief update logs”, “Campus-Wide Updates” delineating their plans for the autumn and detailing interim policies and operational changes in response to the COVID-19 outbreak. They also strive to give practical advice on technologies, on how get online with freeWiFi hotspots across the country (e.g. Xfinity WiFi hotspots) and offer advice to low income students on where to get affordable internet services [17]

- These resources include a brief from ACHA's Task Force at American College Health Association (ACHA) are many. To name a few:clarifications on testing; Guidelines on Reopening Campuses; Recorded Webinars- here are some titles- “Preparedness and Preparedness and Response on U.S. College Campuses, Public Health and College Health Working Together. There are also extensive “situation updates” from WHO and CDC. [24]

- This resource from EUA (European University Association) is a central hub for European responses and resources. A smattering of resources referenced: [Covid-19 impacts and mitigation strategies. The European context](#) (SlideShare presentation); [EUA response to the new EU Industrial and Digital Strategies](#)( policy input) ; [IUA/EDTL Webinar: Planning for effective remote teaching during Covid-19, 24 June](#) (Webinar)[25]

-Also from EUA, this page is dedicated to Resources for digital learning and teaching during the coronavirus pandemic [26]

## REFERENCES

1. Tracy Qu, (February 2020), *China's traditional schools embrace online learning as coronavirus forces students to stay at home*, South China Morning Post  
<https://www.scmp.com/tech/enterprises/article/3048891/chinas-traditional-schools-embrace-online-learning-coronavirus>
2. Lindsay McKenzie, (February 2020), *Coronavirus Forces Universities Online*, Inside Higher Ed  
<https://www.insidehighered.com/news/2020/02/25/coronavirus-forces-us-universities-online-china>
3. NASPA, (June, 2020) COVID-19 Resources, NASPA  
<https://www.naspa.org/project/covid-19-resources>
4. U.S. Department of Education, (July, 2020), *COVID-19 ("Coronavirus") Information and Resources for Schools and School Personnel*, U.S. Department of Education  
<https://www.ed.gov/coronavirus>
5. Andrew DePietro, (April, 2020) *Here's A Look At The Impact Of Coronavirus (COVID-19) On Colleges And Universities In The U.S.*  
<https://www.forbes.com/sites/andrewdepietro/2020/04/30/impact-coronavirus-covid-19-colleges-universities/>
6. John Hechinger and Janet Lorin (March 2020) *Coronavirus Forces \$600 Billion Higher Education Industry Online*, Bloomberg Businessweek  
<https://www.bloomberg.com/news/articles/2020-03-19/colleges-are-going-online-because-of-the-coronavirus>
7. The Education Trust, (June, 2020), *COVID-19: Impact on Education Equity, Resources and Responses*, The Education Trust  
<https://edtrust.org/covid-19-impact-on-education-equity-resources-responding/>
8. Emeritus (April, 2020) *Emeritus Survey Finds People In The United States Are More Interested In Online Education As A Result Of The Global Coronavirus Crisis*, Cision PR Newswire  
<https://www.prnewswire.com/news-releases/emeritus-survey-finds-people-in-the-united-states-are-more-interested-in-online-education-as-a-result-of-the-global-coronavirus-crisis-301038909.html>
9. Top MBA (March, 2020), *Why Coronavirus Will Cause an EdTech Boom*, Top MBA  
<https://www.topmba.com/jobs/career-trends/why-coronavirus-will-cause-edtech-boom>
10. The Edtech Hub, *Call for ideas for EdTech responses to coronavirus (COVID-19)*, The Edtech Hub  
<https://edtechhub.org/coronavirus/call-for-ideas/>
11. Anna Fifield (February 2020), *In China, 200 million kids have gone back to school*. Online, The Washington Post  
[https://www.washingtonpost.com/world/asia\\_pacific/in-china-200-million-kids-have-gone-back-to-school-online/2020/02/17/e5cc6f10-5131-11ea-80ce-37a8d4266c09\\_story.html](https://www.washingtonpost.com/world/asia_pacific/in-china-200-million-kids-have-gone-back-to-school-online/2020/02/17/e5cc6f10-5131-11ea-80ce-37a8d4266c09_story.html)
12. Sarah Daida (February 2020) *With schools remaining closed during coronavirus outbreak, China launches national remote learning platforms*, South China Morning Post  
<https://www.scmp.com/tech/policy/article/3050940/schools-remaining-closed-during-coronavirus-outbreak-china-launches>
13. Siya Zhang (March 2020), *How Do You Teach Art, Music and PE Online? In China, They're Figuring It Out.*, Edsurge  
<https://www.edsurge.com/news/2020-03-10-how-do-you-teach-art-music-and-pe-online-in-china-they-re-figuring-it-out>
14. International Association of Universities, (April, 2020), *The impact of COVID-19 on higher education worldwide Resources for Higher Education Institutions*, International Association of Universities  
[https://www.iau-aiu.net/IMG/pdf/covid-19\\_and\\_he\\_resources.pdf](https://www.iau-aiu.net/IMG/pdf/covid-19_and_he_resources.pdf)

15. Ira Harkavy, Sjur Bergan, Tony Gallagher and Hilligje van't Land (April, 2020) *Universities must help shape the post-COVID-19 world*, University World News  
<https://www.universityworldnews.com/post.php?story=20200413152542750>
16. Crawford, Butler-Henderson, Rudolph, Malkawi, Glowatz, Burton, Magni & Lam, 2020 ( March, 2020) *COVID-19: 20 countries' higher education intra-period digital pedagogy*, Journal of Applied Learning & Teaching Vol.3 No.1 (2020)  
[https://www.researchgate.net/profile/Bashar\\_H\\_Malkawi/publication/340341491\\_COVID-19\\_20\\_countries%27\\_higher\\_education\\_intra-period\\_digital\\_pedagogy\\_responses/links/5eb39b67299bf152d6a1d3bc/COVID-19-20-countries-higher-education-intra-period-digital-pedagogy-responses.pdf?origin=publication\\_detail](https://www.researchgate.net/profile/Bashar_H_Malkawi/publication/340341491_COVID-19_20_countries%27_higher_education_intra-period_digital_pedagogy_responses/links/5eb39b67299bf152d6a1d3bc/COVID-19-20-countries-higher-education-intra-period-digital-pedagogy-responses.pdf?origin=publication_detail)
17. (July 2020), *SPCS-Specific Responses to the COVID-19 Pandemic*, The School of Professional & Continuing Studies, University of Richmond  
<https://spcs.richmond.edu/coronavirus/index.html>
18. Andrew Smalley (July 2020) *Higher Education Responses to Coronavirus (COVID-19)*, NCSL  
<https://www.ncsl.org/research/education/higher-education-responses-to-coronavirus-covid-19.aspx>
19. Times Higher Education (2020), *How universities are adapting their admissions in response to Covid-19*, Times Higher Education  
<https://www.timeshighereducation.com/hub/keystone-academic-solutions/p/how-universities-are-adapting-their-admissions-response-covid-19>
20. Paul LeBlanc (March 2020), *COVID-19 has thrust universities into online learning—how should they adapt?*, Brookings  
<https://www.brookings.edu/blog/education-plus-development/2020/03/30/covid-19-has-thrust-universities-into-online-learning%E2%81%A0-how-should-they-adapt/>
21. The World Bank, *How countries are using edtech (including online learning, radio, television, texting) to support access to remote learning during the COVID-19 pandemic*, The World Bank  
<https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-support-remote-learning-during-the-covid-19-pandemic>
22. Michael Gaebel, (May, 2020), *Covid-19 and digitally enhanced learning and teaching: New opportunities in challenging times*, European University Association  
<https://www.eua.eu/resources/expert-voices/178:covid-19-and-digitally-enhanced-learning-and-teaching-new-opportunities-in-challenging-times.html>
23. Jonathan Rose (May, 2020) *Stop the Machine: Why We Should Resist Online Learning*, History News Network  
<https://historynewsnetwork.org/article/175718>
24. ACHA, (June, 2020) *COVID-19 RESOURCES*, ACHA  
<https://www.acha.org/COVID-19>
25. European University Association, (June, 2020), *Covid-19 and universities*, European University Association  
<https://www.eua.eu/issues/27:covid-19-and-universities-in-europe.html>
26. European University Association (April, 2020) *Resources for digital learning and teaching during the coronavirus pandemic*, European University Association  
<https://eua.eu/news/494:resources-for-digital-learning-and-teaching-during-the-coronavirus-pandemic.html>
27. European University Association , (June 2020), *EUA response to the new EU Industrial and Digital Strategies*, European University Association  
<https://www.eua.eu/resources/publications/930:eua-response-to-the-new-eu-industrial-and-digital-strategies.html>

28. European University Association, (June, 2020) *Covid-19 impacts and mitigation strategies*. The European context, European University Association  
<https://www.slideshare.net/EurUniversityAssociation/covid19-impacts-and-mitigation-strategies-the-european-context>
29. European University Association, (June, 2020), *EUA response to the new EU Industrial and Digital Strategies*, European University Association  
<https://www.eua.eu/downloads/publications/strategies%20policy%20input.pdf>
30. Kat Watson, ( May, 2020), *Coronavirus: Hospitals in Brazil's São Paulo 'near collapse'*, BBC  
<https://www.bbc.com/news/world-latin-america-52701524>
31. Marcia Reverdosa, Rodrigo Pedroso and Shasta Darlington ( June, 2020) *Brazil's big cities start to reopen, fueling fears of another deadly coronavirus wave*, CNN  
<https://edition.cnn.com/2020/06/10/americas/bolsonaro-sao-paolo-coronavirus-reopens-intl/index.html>
32. International Cooperation Office, University of São Paulo – Brazil, (March, 2020), *Orientations about Coronavirus-How does the pandemic affect activities at the University of São Paulo and USP International Cooperation Office?*, International Cooperation Office, University of São Paulo – Brazil  
<http://www.usp.br/internationaloffice/en/index.php/admissions/orientations-about-coronavirus>