Volume 15 December 2020

Message from the Chairman



As Chairman of the Asian Council on Health and Education (ACHE), I am pleased to present the fifteenth issue of the Newsletter of ACHE to all our colleagues not only in the health and education sectors, but in other relevant industries as well.

This issue highlights the trends, the latest news and interesting reports on health and education in the Asia-Pacific region. I hope that you will find the articles included in this Newsletter of great value, and look forward to your contribution to the Newsletter in the future.

As many of you may know, this Council has been a valuable platform for information exchange and networking for all representatives from the region's health and education industries. Therefore, all CACCI members are encouraged to take advantage of the Council and the Newsletter as channels to voice their opinions and viewpoints.

My Best Wishes

Arash Anissian, MD Chairman Asian Council on Health and Education





Part I Health



4 Questions That Will Help You Understand the Status of Your Mental Health

By Patrick Hyland, Director of Research and Development at Mercer | Sirota



A woman journaling at her desk. Journaling exercises can help you reflect on the past few months from a different perspective. Photo: Pexels

he evidence is clear — we're on the brink of a global mental health crisis. According to a study just released by the Centers for Disease Control and Prevention, 40% of U.S. adults have experienced mental health issues or behavioral health challenges in recent months. Another study by the American Psychological Association found that stress levels are on the rise. A recent poll conducted by the Kaiser Family Foundation shows that the percentage of U.S. adults reporting symptoms of anxiety and depression has tripled during the pandemic. And across Europe and Asia, experts are reporting similar trends.

Amid all this year's suffering — the tragic loss of life, the staggering loss of jobs, the multiple marches and protests — it's easy to feel hopeless. In fact, adopting a moderately pessimistic mindset during a global health and financial crisis may help you stay safe. Following the 2002-2004 SARS outbreak, researchers found that defensive pessimists — people who think about worst-case scenarios and plan accordingly — were more likely to practice preventive health behaviors than their more optimistic peers.

But too much negative thinking can be debilitating. If constant vigilance is causing constant worry, you may be putting your physical and mental health at risk. Persistent pessimism is associated with a number of health problems, including anxiety, depression, high blood pressure, heart disease, and sleep and mood disorders. Considering these consequences, it is critical to understand how COVID-19 is affecting your health and well-being. These four questions can help.

How Have You Been Feeling?

Researchers have found that repeated exposure to trauma can wear us down, leading to cumulative stress and anxiety. Cumulative stress, in turn, can cause a wide range of physical and emotional responses, including increased irritability, decreased motivation, changes in eating or sleeping habits, or unexplained aches and pains. Given the amount of suffering and stress the pandemic has caused, it is important to get a read on your psychological well-being. Self-assessments like this one from the Mayo Clinic can provide quick insights, but the safest thing to do — especially if you

have been experiencing any notable physical, mental or emotional changes — is to talk with your doctor or a mental health care professional. If your organization provides an employee assistance program, that could be an additional source of support.

What Are You Doing to Take Care of Yourself?

A growing body of research shows that we can improve our health and wellness through self-care. Unfortunately, many people do not have a regular self-care practice. In one recent study, we found that over a quarter of survey respondents fell into this camp. It's never too late to start, though, and small changes can lead to big differences. There are many different ways to take care of yourself. In fact, the best self-care plans are based on a holistic review of your health and wellness, considering the various aspects of your life — for example, your home life, social life, work life, spiritual life — your values and character strengths, and the unique assets and personal resources you can draw on to cope with current challenges. Assessments like these on "the six dimensions of wellness" and toolkits like this from the National Institutes of Health can help you get started.

What Is Helping You Cope?

Psychologically speaking, bad is stronger than good. Researchers have found that we tend to pay more attention to what's going wrong rather than what's going right. This tendency can prevent us from noticing those people or practices that have been sustaining us during the pandemic. As a result, we might be overlooking our personal strengths, the power of our social network or other sources of resilience.

Two practices may help you reflect on the past few months from a different perspective. First, take time to count your blessings. Gratitude can have a positive impact on our happiness and well-being (but note that gratitude has a limited impact on serious mental health issues like depression and anxiety). Journaling exercises like these can help you get started.

Second, search for silver linings. This is what a team of psychologists did with Louisiana residents in the months and years following Hurricanes Katrina and Rita. Through this process, the research team discovered a handful of positive outcomes — like improved social cohesion — that residents observed in the wake of the storms. By searching for your own silver linings from the past six months, you may discover some unexpected sources of support and consolation that you can rely on in upcoming months.

How Can You Grow From This Experience?

As the global death counts resulting from COVID-19 approach a million, there is much reason to mourn. When a crisis of this magnitude occurs, it is easy

to feel overwhelmed by a sense of loss and sorrow. But psychologists have found that following tragic events, some people also experience post-traumatic growth — a positive psychological change that results in a higher level of personal functioning and well-being.

Post-traumatic growth can manifest itself in different ways. Some people may develop an increased sense of their personal strength after trauma. Others may come to realize they have new possibilities in their personal or professional life. Some people may build closer social relationships during times of adversity. Others may develop a new spiritual perspective or a deeper appreciation for life. Based on this research, you may want to consider how you have "grown" over the past few months. Has the pandemic increased your sense of strength and fortitude? Has it clarified any values or prompted any desire for change at home or at work? Have you deepened any friendships or gained any wisdom? Reflecting on these types of questions may help you turn the challenges of the pandemic into sources of personal growth and positive change.

Experts warn that the pandemic will continue to cause outbreaks until a vaccine is developed and disseminated, and that could take months. That means life may not return to any semblance of normalcy until well into 2021. By reflecting on your emotional response to recent events, developing a self-care routine, and identifying sources of support and opportunities for growth, you can prepare yourself for what will likely be a tumultuous six to 12 months.

About the Author:



Patrick Hyland Director of Research and Development at Mercer | Sirota

Patrick Hyland, Ph.D., is the director of research and development at Mercer | Sirota. He has over 15 years of experience in organizational research and consulting. He is currently conducting research on a variety of workforce topics, including employee lifecycle research, onboarding practices, senior leadership team effectiveness, mindfulness at work, and survey actioning best practices.

Brink

Digital innovators have joined the fight against COVID-19

By Martina Merten, Susann Roth



The battle against COVID-19 is being fought on laptops, tablets and phones, as well as in hospitals and clinics. Photo: Pierre Bamin

overnments and private companies are working together to find innovative digital solutions to the problems presented by the COVID-19 crisis.

The COVID-19 pandemic has pressed the fast-forward button on digital health innovations that would otherwise have taken years to produce. It turns out that time pressure is a great incubator of efficient, original thinking.

There are hundreds of digital health solutions for COVID-19 response. They can be broadly divided into four thematic areas: surveillance, treatment, diagnosis and prevention. Let's look at some of the most innovative solutions:

A British company by the name of DrDoctor has developed a surveillance system that sends broadcast messages via SMS to up to 10,000 patients with information about their care. Patients can either be added to the list or automatically enrolled if they meet certain COVID-19 symptom criteria. Broadcast messages can reach thousands of patients quickly and easily.

Meanwhile, a company named BroadReach is helping facilities to manage COVID-19 patients by sending out facility readiness surveys to facility managers via an app. This allows management to decide where to send critical COVID-19 supplies. Time is of the essence when it comes to providing frontline health workers with critical personal protective equipment.

To speed diagnosis, the Armed Forces Medical Command, Republic of Korea, has developed CheckUp – an automated risk assessment app which checks the patient's symptoms and epidemiological factors. CheckUp can be used by anyone. It's a self-reporting tool for public assessment of all risk factors related to

coronavirus infection.

When fear and misinformation reign, a reliable app providing crucial information for confused patients can be extremely valuable. CheckUp is also a triage app which provides information for medical staff, building on Korean guidelines for frontline triage. When decisions have to be made fast and resources are limited, advice on who should receive priority treatment is precious. For clinicians there is also CovED, from the company DetectED-X, to self-learn and recognize COVID-19 by rapidly and accurately diagnosing the early signs of the disease in Computed Tomography scans.Germany's Helmholtz Center for Infection Research teamed with the country's largest public health institute, the Robert Koch Institute, to design an IT system used to help control the Ebola outbreak in 2014. It's called SORMAS (Surveillance, Outbreak, Response Management and Analysis System), and it runs a mobile phone app which forwards information about infected people and their contacts to the health authorities.

The system helps detect individual cases of COVID-19 at an early stage, and contact traces outbreak clusters even in remote regions and countries with weak infrastructure. It documents clinical details and laboratory confirmations and offers guidance on therapy at an early stage if patients fall ill. At the same time, it generates data in real time for ongoing risk assessment and targeted interventions at national and international levels.

Lastly, the DHIS2 COVID-19 surveillance tracker, a new digital data package by the Health Information Systems Program, at the University of Oslo, offers an innovative and practical solution. It accelerates case detection, and automates situation reporting, active

surveillance, and response. The digital data packages are optimized for Android data collection with the DHIS2 capture app and can be downloaded on the Google Play store. Four available data packages involve clinical examination/lab testing/outcome, port of entry screening/community follow-up, contact tracing and outbreak line listing.

Platforms have been established to help health experts and laypersons find these innovative solutions. The inventory of digital health solutions for COVID-19 comprises about 150 different solutions, graphically placed in a table. The Global Coronavirus Innovation Map, launched by StartupBlink and the Health Innovation Exchange by UNAIDS, visualizes the global database in fields such as diagnostics, treatment, and lifestyle changes, on a geographical scale.

In a similar vein, the World Health Organization has established the COVID-19 Initiative within the Digital Health Atlas. It helps to coordinate and scale effective digital health implementations and should serve as a hub of information about software planned and deployed in response to the global pandemic.

While COVID-19 has helped to speed health innovation, it has also highlighted the need to consider digital health as a public good. At its center is the health data that is used for digital health systems and generated by and extracted from the systems. These shared assets are important for all stakeholders, be they patients or care providers, to fully benefit from digital health. If they are not in place, the sustainability, quality, reliability, efficiency and effectiveness of digital health and patient safety can be jeopardized.

How data has been used to manage the pandemic has shown that there is a grey area between what is good for the individual and what is good for population health in terms of data ownership, privacy and security. Principles are needed to enable the governance and regulation of digital health public goods.

We have an opportunity to build these shared assets and provide guidance how to build sustainable digital health solutions. The best-case scenario is where decision makers in low- and middle-income countries can create shared assets (infrastructure, governance, standards, policies to clarify data rights) to identify and provide critical information.

Partnerships between academia, governments, industry, international organizations and the non-profit sector are crucial to develop digital health solutions. Ideally, the data is presented in a usable format to patients, health care providers, policymakers and entrepreneurs, and is owned by patients.

Once this crisis is over, these solutions will be used in everyday situations, embedded in solid digital health systems producing and using high quality and reliable data governed by effective privacy and security policies. Hopefully, that day is not too far away.

About the Authors:



Martina Merten Global Health Specialist

Martina's work focusses on analyses of healthcare systems in LMICs, mainly in the Asia-Pacific region. She went on numerous trip to conduct research and consult around global health topics, with a strong emphasis on eradicating infectious diseases and behavior change. She worked with organisations including the Asian Development Bank, the German Corporation for International Cooperation and Rotary International and received numerous grants for global health reporting, including the Bill and Melinda Gates Foundation. She also works as an instructor for global health and comparative healthcare systems at various national and international universities, among other at the Charité Universitätsmedizin Berlin. Based in Germany, Martina holds a Master in political science, constitutional-, social- and economic history and in public international law from Friedrich-Wilhelms University, Bonn.



Susann Roth
Principal Knowledge Sharing and Services Specialist,
Sustainable Development and Climate Change
Department

Susann works on ADB's innovation and knowledge management agenda. In this role she supports the implementation of Strategy 2030, which calls for more applications of technology, innovation, and strengthening knowledge management in ADB operations. Susann also works on corporate foresight to enhance the capacity of ADB and its clients to respond to and plan for emerging trends. Follow her on Twitter: @ADB_SusannR.

Asian Development Blog

CNN lauds Taiwan's healthcare system for defeating coronavirus

Former Taiwan vice president said 250,000 sacrificed 14 days of freedom to ensure safety of Taiwan's 23 million



By Keoni Everington

Fareed Zakaria (left), Chen Chien-jen (right). (CNN screenshot)

NN journalist Fareed Zakaria on Sunday (September 13) praised Taiwan for its extraordinary handling of the Wuhan coronavirus (COVID-19) and suggested that its universal healthcare system played in an important role.

In a program titled "On GPS: Learning from Taiwan's Covid-19 response," Zakaria pointed out that Taiwan is almost always at the top of any list of countries that have handled the pandemic extremely well, with less than 500 cases and only seven deaths. Zakaria observed that the U.S., in contrast, has had 2,000 times the number of deaths and 1,000 times the number of infections as Taiwan per capita.

Zakaria said that some of the credit goes to former Taiwanese Vice President Chen Chien-jen who is a Johns Hopkins-trained epidemiologist and was at the helm when the outbreak started. Chien said that the problems in the U.S. stem from a lack of recognition early on of the infectiousness of the disease and a failure to take the necessary steps to prevent its spread, such as personal hygiene, social distancing, and avoidance of large gatherings.

He said that the lockdown of cities seen in some parts of the U.S. was not the optimal method to control the spread of the virus. Instead, Chen advocated contact tracing and a "very stringent quarantine of close contacts" as the most optimal

methods to control the proliferation of the contagion.

Zakaria then asked if Taiwan's single-payer, unified healthcare system, health insurance card, and electronic information that is pooled centrally were "all key to being able to detect cases and trace back to potential infections?" Chien agreed, and he emphasized that Taiwan avoided mass lockdowns of cities and instead implemented "very stringent close contact tracing and tracking."

Instead of mass screenings, Chien said that Taiwan carried out "very careful testing" of all those suspected of having the symptoms and signs. He remarked that this was more efficient and effective and it was combined with the mandatory 14-day home quarantine for those who came in close contact with confirmed cases.

Chien said that out of the 250,000 people in Taiwan who have been told to undergo 14 days of quarantine or isolation, 99.5 percent followed government guidelines. He said only 0.4 percent were penalized for venturing out of their restricted area during their quarantines.

Zakaria then recalled the experience of a friend who underwent the quarantine process in Taiwan and said that those quarantined are given a cell phone and placed in a hotel. He said that people

"get checked on" and if they do not answer the phone and wander out, they will "get apprehended." Agreeing with Zakaria's assertion that strict quarantines meant no major lockdown was required and businesses were able to stay open, Chien said that although 250,000 people had to sacrifice 14 days of their time, it assured that 23 million could "work normally and live normally," thus reducing the economic decline in Taiwan.

When asking Chien about his criticism of Taiwan's exclusion from the World Health Organisation (WHO), making Taiwanese "orphans in the health care system," Zakaria recognized that much of the blame for leaving Taiwan out is China. Zakaria then asked Chien if China had deceived the world in terms of the COVID-19 outbreak.

Chien pointed out that Taiwan disease experts were already aware of a "huge group" of pneumonia

cases in Wuhan in December "and they (China) did not report it to the WHO." "If the WHO had received the information and helped China to contain COVID-19 in December in Wuhan I think the disease could be contained there quite well. There would have been no way for it to spread out to the whole world," said Chien.

He added that Chinese authorities only treated severe cases in the hospital, while ignoring minor cases, allowing them to return home to spread the virus in the community. He said that allowing less serious patients to leave the hospitals caused the large scale outbreak in Wuhan.

When asked if the virus is "exhausting itself," Chien warned that the first wave of the pandemic has yet to end and he called for continued vigilance.

Taiwan News

Japanese firm launches world's first UV lamp that safely kills coronavirus

KYODO



Ushio Inc.'s Care 222 ultraviolet lamp is set up at the company's head office to disinfect the air and surfaces below. | KYODO

ajor light-maker Ushio Inc. has recently launched an ultraviolet lamp that can kill the coronavirus without harming human health — the first of its kind in the world.

The Care 222 UV lamp, which Ushio developed together with Columbia University, is expected to be used for disinfection in spaces where people keep going in and out and the risk of contracting the deadly virus is high, such as on buses, trains and elevators and in offices, the company said.

UV lamps have been widely used as an effective means of sterilization, notably in the medical and food-processing industries. But conventional UV rays cannot be used in spaces where there are people, as they cause skin cancer and eye problems.

Ushio's new lamp, however, emits UV rays with a wavelength of 222 nanometers, as opposed to the

conventional 254-nanometer wavelength, making them lethal to germs but benign to humans.



Ushio Inc.'s Care 222 ultraviolet lamp glows in a dark space. | KYODO



Ushio Inc.'s Care 222 ultraviolet lamp emits specific UV rays whose 222-nanometer wavelength kills the new coronavirus but is safe to humans, as opposed to conventional UV rays which cause cancer and other health problems.

| KYODO

At this particular wavelength, the firm said, UV rays cannot breach the surface of the skin nor the eyes to bring about cancer-causing genetic defects and other damage.

When attached to a ceiling, within six to seven minutes the Care 222 inactivates 99 percent of viruses and bacteria in the air and on up to a 3-square-meter area on the surface of objects some 2.5 meters away from the lamp.

A recent third-party study by Hiroshima University confirmed the 222-nanometer UV rays are effective in killing the new coronavirus, Ushio said.

The 1.2-kilogram Care 222 is about the size of a hardcover book and has a price tag of ¥300,000.

The company said it only accepts orders from medical institutions for the moment but will serve other customers once production catches up with demand.

Ushio has also teamed up with Toshiba Lighting and Technology Corp., a subsidiary of Toshiba Corp., to develop general-purpose lamps with Care 222 emitters installed to cater to a broad range of situations. The companies aim to release such products in January 2021.

Japan Times

How South Korea turned an urban planning system into a virus tracking database

By Hyonhee Shin, Hyunjoo Jin, Josh Smith



FILE PHOTO: People in personal protective equipment walk up a flight of stairs as South Korean job seekers (background) attend an exam conducted outdoors amid social distancing measures to avoid the spread of the coronavirus disease (COVID-19), in Seoul, South Korea, April 25, 2020. REUTERS/Kim Hong-Ji/File Photo

hen a man in Seoul tested positive for the new coronavirus in May 2020, South Korean authorities were able to confirm his wide-ranging movements in and outside the city in minutes, including five bars and clubs he visited on a

ecent night out.

The fast response - well ahead of many other countries facing outbreaks - was the result of merging South Korea's already advanced methods of collecting information and tracking the virus into a new data

sharing system that patches together cellphone location data and credit card records.

The Epidemic Investigation Support System (EISS), introduced in late March, effectively removed technological barriers to sharing that information between authorities, by building on the country's 'Smart City' data system.



South Korea's Gyeonggi Province Governor Lee Jae-myung speaks during an interview with Reuters in Seuwon, South Korea, May 15, 2020. REUTERS/Daewoung Kim

That platform was originally designed to let local authorities share urban planning information, from population to traffic and pollution, by uploading data in Excel spreadsheets and other formats. Now it forms the foundation for a data clearing house that has turbocharged South Korea's response to the virus.

While personal location and credit card data has been available for use by South Korean health investigators for years, previous systems required physical paperwork to request the data before it was uploaded to analytical software. That took investigators about two to three days to gather a patient's personal data to trace their contacts.

The new system digitizes the entire process, including the requests, and can reduce that time to less than an hour, officials say. Investigators can use it to analyse transmission routes and detect likely infection hotspots.

The system has had some teething problems, and has attracted criticism on privacy grounds, but it has been a major factor in the East Asian nation of 52 million keeping virus infections at a relatively low 11,122, as of May 21, 2020, with just 264 deaths.

It got its first test with an outbreak in May, traced to the Itaewon district of Seoul known for its nightlife, which ended up infecting at least 206 people.

"Faster epidemiological survey means faster discovery of potential patients, which helps contain the spread of the virus even when there's a massive cluster of infections or people who are asymptomatic, as we've seen in the nightclub outbreak," said Yoon Duk-hee, director for infectious disease management in Gyeonggi Province, a densely populated region near Seoul.

Yoon said she and other authorities used the EISS to trace the movements of the first person detected in the

Seoul nightclub outbreak, as he visited a number of places including two nightclubs and three bars.

The system is still reliant on humans operating it to approve and upload data, which can lead to delays. And in some cases, concerns over privacy and security have led to access being so restricted that some local officials said they had to rely on old-fashioned methods.

When another infected person - a 25-year-old man known as Incheon Patient 102 - told health authorities that he did not have a job, city officials said they went to the police because the information they wanted to check was not available in a timely manner on the EISS.

The phone's location data showed he was a teacher at a private academy, where subsequent contact tracing and testing revealed at least 30 other people had been infected, including some of his students and their parents.

"There were limitations to the system," said an official at the Korea Centers for Disease Control and Prevention (KCDC), on condition of anonymity because he was not authorised to speak to the media. "We are now trying to address them after the Itaewon outbreak."



South Korea's Gyeonggi Province officials demonstrate the Epidemic Investigation Support System (EISS) during an interview with Reuters in Seuwon, South Korea, May 15, 2020, in this still image taken from video. Video taken May 15, 2020. REUTERS/via Reuters TV

INVASIVE APPROACH

The EISS was jointly developed by the KCDC and the Ministry of Land, Infrastructure and Transport, with the help of the Korea Electronics Technology Institute (KETI). Many details of how the system works and some limitations of the programme have not previously been reported. A scientific paper on the system was published in a public health journal only on May 20, 2020.

Authorities' power to get information was established by a 2015 law called the Infectious Disease Prevention and Control Act, introduced after the country was hit by Middle East Respiratory Syndrome (MERS). The law allows South Korean health officials to access a wide range of personal data, including cellphone location information and credit card transactions, without a court order.

While many countries are scrambling to develop smartphone apps that can trace the contacts of patients

without revealing detailed personal information, South Korea has forged ahead with a more invasive approach. The EISS allows an authorised investigator to log in to a secure web portal and send information requests about specific confirmed cases. Police agencies must approve requests for location data from three telecommunications

requests for location data from three telecommunications operators, while the Credit Finance Association handles approval for information from 22 credit card companies.

When a request is approved, designated officials at the companies receive alerts on their phones and computers. They then upload individuals' data in an Excel spreadsheet.



South Korea's Gyeonggi Province Governor Lee Jae-myung speaks during an interview with Reuters in Seuwon, South Korea, May 15, 2020. REUTERS/Daewoung Kim

The investigator then has temporary access to the information to conduct analysis. There are usually more than 10,000 location data points for each person in a typical 14-day period being analysed, according to the KCDC.

An EISS web portal seen by Reuters showed an interactive map displaying patient movements, with each location data point indicating whether it was collected via credit card or cellphone.

The government says access is restricted and authorized investigators must log in through a virtual private network (VPN) and use two-factor authentication to prevent security breaches.

Officials told Reuters that developers of the system had considered using surveillance footage and even facial recognition as part of the data the system could access, but decided against it because of privacy concerns. While CCTV is not accessed or uploaded to the EISS portal, health investigators still widely use such footage to track cases.

"We spent more time agonising over privacy than on developing the system," said Park Young-joon, a director at the KCDC. Still, the system has raised concerns over its use of private data.

"It represents a rare non-judicial, non-consensual acquisition of location data, with no judicial oversight for the data collected," said Deborah Brown, a digital rights researcher with the U.S.-based Human Rights Watch. "There's a concern that the door is open to abuse."

SWAMPED WITH CALLS

South Korean officials told Reuters that data on almost every person confirmed to have the virus is entered into the system to allow cross-referencing and analysis of likely hotspots. The KCDC declined to say how many people's data has been collected in all.

People do not have any choice whether their data is collected and accessed, but officials told Reuters that authorities notify anyone whose information is gathered and that all the data will be deleted when the virus is contained.

"Such information should only be used for crises like infectious diseases," said Gyeonggi Province Governor Lee Jae-myung. "But thankfully our people understand that it is inevitable in battling the pandemic."

At a national or global level, lives are more important than personal privacy, said a 64-year-old South Korean woman who asked only to be identified by her surname Jang. "Personal privacy is important, but preventing an infectious disease is even more so."

Some local health investigators said that access to the EISS has been too restricted or too slow, so they have gone back to traditional ways of requesting data.

One Incheon health official told Reuters the city did not initially use EISS on Incheon Patient 102 because it took too long to get the person registered.

Those concerns have since been addressed by changes that will allow local agencies to register patients themselves rather than waiting for the KCDC, said Kim Jae-ho, a director at KETI.

Travel information and medical records may be added to the system, two people working on the project told Reuters. South Korean health ministry official Yoon Tae-ho said at a briefing that they are also looking at the use of Bluetooth and QR codes to log places people visit - such as nightclubs.

There was "an inertia in administrative process," the first KCDC official told Reuters. "But now I am swamped with calls from the local governments about how to use the system."

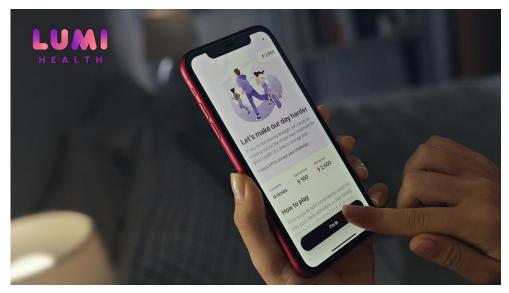
Reporting by Hyonhee Shin, Hyunjoo Jin and Josh Smith in Seoul; Editing by Jonathan Weber and Bill Rigby

Reuters



Singapore and Apple partner on national health initiative using Apple Watch

LumiHealth app encourages healthy lifestyle changes through technology



Singapore, in partnership with Apple, presents LumiHealth, a first-of-its-kind program that encourages healthy activity and behaviors using Apple Watch.

he government of Singapore and Apple announced on September 15, 2020 their partnership on the health initiative LumiHealth, a personalized program to encourage healthy activity and behaviors using Apple Watch. The first-of-its-kind program was designed by Singapore's Health Promotion Board in conjunction with Apple as part of the country's Smart Nation initiative, a national effort to leverage technology to deliver benefits to its citizens and businesses. Created in collaboration with a team of physicians and public health experts, LumiHealth uses and behavioral insights to encourage technology Singaporeans to keep healthy and complete wellness challenges through their Apple Watch and iPhone. The LumiHealth app, designed with user privacy and security at its core, is available in the App Store for pre-order now, and the two-year program will be offered from late October 2020.

"Even as all of us around the world are dealing with the challenges of COVID-19, we must keep investing in our future. And there is no better investment than in our own personal health," said Heng Swee Keat, Singapore's Deputy Prime Minister. "This partnership between Singapore and Apple will enable Singaporeans to lead healthier lives, but equally important, it will contribute valuable insights to improving the health of people all over the world."

"Singapore has one of the world's leading healthcare systems, and we are thrilled to be partnering with them to incorporate Apple Watch and LumiHealth into their holistic approach to well-being," said Jeff Williams, Apple's chief operating officer. "Apple Watch has already helped millions of our customers manage their activity levels to improve their health, and we look forward to applying our expertise here in the same privacy-friendly way that distinguishes all Apple products and services."

LumiHealth harnesses the power of Apple Watch



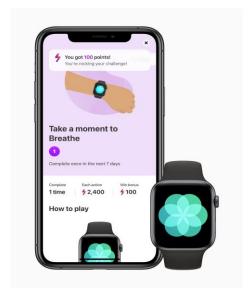
The LumiHealth app features challenges designed to help users sleep better, move more, eat well, and live more mindfully.

to encourage and empower Singaporeans and residents to adopt healthy habits through personalized reminders, programs, activity coaching, and incentives. Within the app, users travel through worlds with a friendly intergalactic explorer who guides them through tasks that are personalized based on their age, gender, and weight. They include weekly activity goals that can be met through not just walking, but also swimming, yoga, and other activities. LumiHealth also reminds users to go for health screenings and immunizations, and participate in wellness challenges that aim to improve sleep habits and mindfulness as well as encourage better food choices. By completing these goals and challenges, users help the intergalactic explorer get back home, all while being able to earn rewards worth up to \$\$380 over the two-year duration of the program. An Apple Watch is necessary to participate, as is downloading the LumiHealth app from the App Store.

LumiHealth was created with customer privacy and data security built into its design. The program is voluntary: Users must opt in and provide consent to share information with LumiHealth when they join, and may opt out at any time. The collection of any personal identifiable information will be limited to information that will enable the app to provide an experience that is personalized and relevant to the user's needs. All user data will be encrypted to protect privacy. Data will be stored in a highly secure system that is fully compliant with Singapore's data privacy and security laws. No data from LumiHealth will ever be sold or shared for marketing purposes.

LumiHealth is the culmination of a two-year process that began with Singapore soliciting proposals from international healthcare and technology companies on ways to enrich the lives and health of its population.

Apple Watch is the number one watch in the world, allowing users to access and personalize hundreds of



Using Apple Watch, LumiHealth offers a holistic approach to well-being.

tools and apps from their wrist. Activity rings, fall detection, and electrocardiogram features have changed the way that people manage their health and well-being. And groundbreaking research studies, including the Apple Heart Study, have provided scientists and medical professionals with critical data that users have shared to help power healthcare breakthroughs for the future.

Apple Press Release

Taiwan doctor's easy-to-make aid for health workers welcomed in Japan

creative solution to protect health care providers at high risk of contracting the novel coronavirus amid a global shortage of personal protective equipment is attracting interest throughout the world, including in Japan.

The Aerosol Box, created and shared online by Lai Hsien-yung, an anesthesiologist from Taiwan, is a transparent box shielding a provider's face from aerosol particles contaminated by the virus while intubating an infected patient, many of whom develop respiratory failure.

"I felt that I was protected," said Takahiro Kusume, 32, a doctor on the frontlines of an anti-coronavirus team at a university hospital in Tokyo.

In April 2020, he requested his brother, who owns a design studio in Kobe in the western prefecture of Hyogo to make the product based on the design shared online by Lai.

"I feel safe even when my face has to come close to a patient during my work," said a male doctor in his 50s at a medical facility in Osaka who is developing measures to prevent infections among staff and patients at the institution.



Supplied photo shows medical workers using an Aerosol Box to intubate a patient.

[Courtesy of Dr. Lai Hsien-yung]

"We bought two of them to prepare for an increase in the number of patients," he added.

The Aerosol Box is a transparent box-like structure that can be cheaply made using acrylic or transparent polycarbonate sheet, according to the website, which gives design specifications.

It covers the head of the patient lying on the bed, with the healthcare provider sticking his or her arms in two holes on one side of the box.

The box "effectively shields a provider's face from a patient's airway, while allowing the provider to move his/her arms freely to perform all necessary tasks during endotracheal intubation," the website explains, adding that the box can be cleaned thoroughly with a solution of 70 percent alcohol or bleach to be reused for the next patient.

Lai, 52, who works at the Mennonite Christian Hospital in Hualien, eastern Taiwan, told Kyodo News that he was inspired by baby incubator apparatus.

As hospitals, overwhelmed by the rising numbers of coronavirus patients, are running out of N95 masks and other protective equipment, Lai didn't submit a patent application, preferring to put it online at the end of March so as to deploy it rapidly across the globe.

"I made this box to protect the doctors who are fighting on the frontline," Lai explained. He said he hoped "people (all) over the world can build and modify (them) by themselves."

Medical teams from countries that have been hit hard by the virus, including the United States and Spain, have tested and reported their experiences with the simple contraption as they adapt it in the field.

One adaptation is an Aerosol Box that can be folded and shipped easily to be reassembled in a minute at its destination.



Tetsuo Taniguchi, background, president of acrylic product maker Act, watches on as an employee cleans a completed Aerosol Box on April 22, 2020 in Osaka.

A Japanese acrylic company in Osaka, Act, has received orders for the Aerosol Box since mid-March, producing around 40 per day.

The company says it takes around 30 minutes to produce one, with a wholesale price of less than 10,000 yen (\$93).

"We can make the product on the day we receive the order," said Tetsuo Taniguchi, the 70-year-old president of the company, whose around 10 employees also make countertop shields to protect against infectious droplets in face-to-face meetings.

Kyodo News

Australian and New Zealand scientists use AI to predict heart disease risk

The system has been developed to examine the retina of a person's eye.

By Aimee Chanthadavong

Scientists from the University of Melbourne and University of Otago have jointly developed and trained an artificial intelligence (AI) system to predict a person's risk of cardiovascular disease (CVD) by looking at the retinas of their eyes.

The research flagged that examining retinal blood vessels to predict a patient's risk of CVD is not anything new, but the current software used to carry out the procedure is semi-automated and still requires human intervention.

In developing the system, the scientists trained the AI using more than 70,000 digital retinal photographs from 15 diverse multi-ethnic and multi-country datasets.



"Deep learning has the potential to transform clinical care in medical imaging fields ... here we developed and validated a deep-learning CNN (SIVA-DLS) that specifically measured retinal-vessel calibre from retinal photographs," the research said.

According to the research, the results of the findings showed the AI system performed the same or better than experts in predicting a patient's risk of CVD by measuring common signs such as blood pressure, body-mass index, total cholesterol, and glycated-haemoglobin levels.

The results also revealed how the people who were flagged to be at risk ended up suffering a cardiovascular incident, such as a stroke or death.

"Retinal-vessel calibre is a specific clinical feature of CVD risk that many physicians may appreciate and accept. We showed that such retinal calibre measurements are correlated with CVD risk factors and are associated with incident CVD events," the scientists said. "This will have immediate value for research application in clinical studies and -- ultimately, if proven in future studies -- for clinical CVD prediction and risk stratification."

Elsewhere, researchers from the University of Leeds in the UK have created a robot designed to perform guided colonoscopy procedures, with the belief it could help reduce procedure times and reduce training that would be needed to use a manual endoscope.

The semi-automatic robotic system relies on simple movement commands from the user, and moves using machine intelligence and image analysis to automatically guide itself along the colon.

As part of testing the technology, the researchers tested it in an artificial colon model, as well as in two pigs.

The research, which has been published in the *Nature Machine Intelligence*, revealed that using the semi-automated robot even by users who had no previous training was much more manageable than non-intelligent methods, such as ones that rely on using magnets outside the body to control how the robotic arm moves inside the body, or more traditional colonoscopy methods where experienced medical practitioners use conventional endoscopes and guide it through the colon.

"The inherent complexity of navigating magnetic endoscopes with a single external permanent magnet can be overcome by the developed intelligent control strategies. These were able to mask the unintuitive nature of interacting magnetic fields and field gradients," the research said.

In addition to being used for early detection of colon cancer, the technology also has the potential to be used in other procedures such as pancreatic endoscopy, bronchoscopy, and gastroscopy, the researchers said.

ZDNet

'Time for global solidarity' to overcome COVID's health, social and economic challenges

The COVID-19 pandemic has not only led to a "dramatic loss" of human life but also constitutes an "unprecedented challenge" to public health, food systems and employment, a group of leading UN agencies said on October 13, 2020.

n a joint statement, the International Labour Organization (ILO), Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD) and World Health Organization (WHO) highlighted that tens of millions are at risk of falling into extreme poverty.

"Now is the time for global solidarity and support, especially with the most vulnerable in our societies, particularly in the emerging and developing world", the statement said.

"Only together can we overcome the intertwined health and social and economic impacts of the pandemic and prevent its escalation into a protracted humanitarian and food security catastrophe, with the potential loss of already achieved development gains".

Jobs decimated

The pandemic has decimated jobs and placed

millions of livelihoods at risk, the UN agencies attested.



WFP/Vanessa Vick

The World Food Programme (WFP) assists local farmers with maize crops in Kapchorwa, Uganda.

Pointing out that "millions of enterprises face an existential threat", they indicated that nearly half of the world's 3.3 billion workforce risks losing its livelihood. Unable to earn an income during lockdowns and without sufficient social protections or health care, informal economy workers are particularly vulnerable — many powerless to feed themselves and their families.

Agricultural workers

At the same time millions of wage-earning and self-employed agricultural workers face high levels of poverty, malnutrition and poor health.

With low or irregular incomes and no social support, many are spurred to continue working in unsafe conditions, exposing themselves and their families to additional risks.

Moreover, amidst income losses, the agencies flagged that they may resort to unwise strategies, such as panic-selling of possessions, predatory loans or child labour.

"Migrant agricultural workers are particularly vulnerable, because they face risks in their transport, working and living conditions and struggle to access support measures put in place by governments", the statement detailed.

Food systems

The pandemic has also laid bare the fragility of the entire food system.

Border closures, trade restrictions and confinement measures have disrupted domestic and international food supply chains and reduced access to healthy, safe and diverse diets.

The UN agencies underscored that long-term strategies must be developed to "address the challenges facing the health and agri-food sectors" with priority given to underlying food security, malnutrition challenges, rural poverty and social protections, among other things.

Coming back stronger, together

The UN is committed to pooling its expertise and experience to help countries respond to the crisis and achieve the Sustainable Development Goals (SDGs).

"We must recognize this opportunity to build back better", the statement stressed.

The only way to protect human health, livelihoods, food security and nutrition while ensuring a 'new normal', is to "rethink the future of our environment and tackle climate change and environmental degradation with ambition and urgency", the joint statement declared.



ILO/Minette Rimando.

Women sell fruit and vegetables on a sidewalk in the Philippines, where workers in the informal economy are in danger of having their livelihoods destroyed by the impacts of COVID-19.

United Nations (UN) News



Telemedicine market grows in Asia Pacific

COVID-19 pandemic has helped to boost APAC telehealth equipment markets

By Leila Hawkins



he widespread adoption of telehealth throughout Asia Pacific is boosting the telemedicine equipment market, new research by Global Market Insights has found.

The telemedicine equipment market was worth over \$2 billion in 2019, and is expected to grow by 16.8 per cent between 2020 and 2026. The COVID-19 pandemic is encouraging this growth, with more remote consultations taking place as face to face visits are restricted.

In emerging countries like India, Vietnam, Indonesia and China, digital health has become a key enabler for their healthcare sectors. Meanwhile advanced economies like Australia and Japan have streamlined their use of telemedicine. By using new software and tools they're boosting new models of digital healthcare.

Patients can reap benefits from online symptom checkers, remote diagnosis, remote health monitoring apps and e-prescription services from the comfort of their homes.

At a time when telemedicine has come into the fray as a frontline weapon against COVID-19, these countries could save billions of dollars if they rev up their adoption of telemedicine equipment, the market researcher says.

The Australian Government announced a \$2.4 billion health package in March 2020 to protect citizens with chronic conditions. This included assistance for health care practitioners to provide telehealth services, such as video conferencing software.

Telemedicine kit usage has gained major traction in Australia to provide remote healthcare facilities. This is providing lucrative growth opportunities for stakeholders as they enable physicians to robustly set up walk-in clinics anywhere.

They are also used as distance learning kits for training purposes. Encrypted video apps allow physicians

to interact with teams remotely, overseeing educational initiatives.

Global Market Insights expect that demand for portable, durable telemedicine kits in remote areas will grow in the next five years.

China has not been far behind and is expanding its footprint across Asia Pacific, the report says. Together with Uzbekistan, China has established a telemedicine system to help the latter country fight COVID-19. The system rolled out in April, with telemedicine service platform Jiangxi undertaking remote diagnosis and medical consultations for the virus.

Japan has remained at the helm of telehealth, the report says. The nation has upped investments in technology to protect its healthcare system from the perils of the virus.

More than 10,000 clinics were listed by the Japanese health ministry back in April, accepting new patients for online diagnoses. In March the Japanese Ministry of Economy, Trade and Industry rolled out free remote health consultation services. This has served as an ideal way to triage likely cases and as a first line of defense.

Next up Japan's social media giant Line are set to launch a telemedicine service. The company expects over 2,000 doctors to use it.

Now that online medical services are essential to connect patients and doctors without putting further strain on healthcare systems, investments in telemedicine equipment will save patients' time and money. Global concludes that APAC is likely to become a viable investment destination for telemedicine equipment producers.

Healthcare Global



Part II Education

After COVID-19: The coming upheaval in higher education

By Bart Édes, Alastair Dingwall

Universities that adopt quality online learning, forge significant partnerships, and demonstrate results in preparing students of all ages for work in a technology-driven economy, stand the best chance of thriving after the pandemic.



The college experience will change dramatically in coming years.

Three years ago, Clayton Christensen, who developed the theory of "disruptive innovation," predicted that half of colleges and universities in the United States would be bankrupt in 10 to 15 years. His prediction may be hastened by the COVID-19 pandemic, which has dealt a financial blow to universities across the US and globally. Seismic changes are on the way.

Beginning in March 2020, enforced social distancing sent faculty scrambling to their computers to download Zoom. Millions of students, forced to decamp from shuttered campuses, spent much of the Spring term logging on to classes from their parents' homes.

In June 2020, universities have been grappling with the decision of whether to welcome students back to campus, or continue teaching remotely for the rest of 2020. One of Asia's top-ranked universities, the National University of Singapore, will re-open all three of its campuses on 10 August, with a blend of online and

on-campus classes, a formula expected to be followed by many universities worldwide for the coming academic

The pandemic's budgetary toll on universities has already been enormous. Income has been lost and will continue to be lost in many areas, including on ancillary activities such as student accommodation and meal programs. Educational institutions that are heavily dependent on international students will be hard hit in the short term; a British Council survey suggests that only 39% of Chinese students (the largest group of overseas students by far) plan to continue their applications to British universities for the coming academic year.

Australia is trialing a program to fly in overseas students in a bid to avoid more than AU\$40 billion in potential losses by 2023 due to reduced numbers of international students. Management consultancy McKinsey & Company projects that eventual revenue

losses of US universities could reach \$19 billion from lost tuition and fee revenues alone.

More generally, the pandemic could reduce incoming student enrollment at US universities by up to 20%, according to Ted Mitchell, president of the American Council on Education. A gap year may well be an attractive option to teenagers who would rather not be guinea-pigs as higher education re-invents itself.

Universities are laying off staff, merging or closing programs and departments, and questioning the tenure system. There will be pressure to raise tuition to cover costs, yet a strong argument is also being made that tuition fees should move in the opposite direction, since students will no longer be receiving traditional face-to-face teaching and other benefits of campus life.

The pandemic will leave strong institutions stronger, and weak ones weaker, continuing the sector consolidation predicted by Christensen. Universities with resources and elite standing will remain intact, but others are already facing a cash crunch.

In the United Kingdom, SOAS, a university with strong links to Asia, has already sent out distress signals. Mergers between universities seem inevitable and those unable to find partners may simply disappear (as in the case of tiny Pine Manor College, which in May announced that it will be taken over by Boston College). Publicly funded universities in continental Europe will have to tighten their belts as well, even if they are able to stave off dramatic restructuring.

International students, mostly from countries in Asia, will be key to the survival of many institutions in anglophone OECD member countries. But will they return in force when travel restrictions are lifted, visas are granted, and economies recover?

Universities situated in countries like Canada that are seen as welcoming to foreign students, charge reasonable tuition, and allow graduates to remain and work, should continue to benefit. More Western universities will teach international students in their home countries, through improved online instruction and increased partnerships on the ground.

With the world tilting to Asia, many international students may conclude that they can obtain a quality education in or near their own country. In the People's Republic of China, students are increasingly learning online, with institutions like Tsinghua University, creator of the XuetangX learning platform, leading the way. The number of Asian universities in the top 100 of the QS World University Rankings has soared over the past decade.

Through trial and error, online teaching will continue to become more engaging as technology, design, and professors improve. To tackle screen fatigue, programs will feature dynamically curated course content, interactive exercises, online peer collaboration, and a role for students in shaping their own learning adventure. Demonstrated competence in leading virtual classes will become a prerequisite for teaching faculty.

Universities with leadership that embraces change, and that possess the will to adopt bold reforms, have a chance to reinvent themselves. Some are already

showing the way, like Arizona State University, which was named most innovative US university five years in a row. It is now launching a PhD Program in Innovation for Global Development where students spend no more than 18 months in residence to complete core classroom requirements. The rest of the time they hold down jobs and use digital platforms. More universities will partner with major corporations, which have an incentive to tap into R&D capacity on campuses, and to nurture pipelines of work-ready grads.

The full "college experience" and sense of community, with its range of human interactions and activities will not die, but may be restricted to the rich and status-conscious. Greater use of online and hybrid competitors could democratize education at the world's elite universities, which have been criticized by Yale law professor Daniel Markovits and others as a way of passing on privilege in the guise of meritocracy.

Moving forward, most students seem likely to be offered a hybrid model, with pandemic-induced online instruction continuing for basic courses for large numbers, complemented by smaller in-person classes for more advanced courses and subjects harder to teach online (think lab work). Across the board, individual classes will offer more online components.

COVID-19 has been a boom to "massive open online courses", which have seen a sharp rise in enrolment since mid-March. Demand will continue to grow for short programs that provide certification leading to jobs in the technology sector and other technical areas. Recovery from the economic crisis will take years, causing many to search out practical, low-cost educational options.

This could boost the fortunes of community colleges and technical and vocational schools, as well as a growing number of serious online degree programs offered by major universities (such as the University of Illinois, which offers an MBA or master's degree in data science for under \$22,000).

In short, COVID-19 has thrown higher education into an age of upheaval. Circumstances have never been riper for re-imagining how a university operates. Those universities that seize the moment to adopt more quality online learning, forge significant partnerships, and demonstrate results in preparing students of all ages for work in a technology-driven economy, stand a chance of not only surviving, but thriving.

About the Authors:



Bart Édes Representative, North America Representative Office Bart W. Édes has served as ADB's Representative in

North America since October 2, 2017. In this capacity, he mobilizes financing for ADB's developing member countries; shares development knowledge and experience; establishes and deepens partnerships with public, private and nonprofit organizations in North America; and raises public awareness of ADB in Canada and the United States.

His earlier ADB experience includes leading teams responsible for knowledge management, social development, gender equity, the social sectors, civil society engagement, ICT for Development, inclusive business, governance, and public sector management. He guided the formulation of ADB's Public Communications Policy, which set a new global benchmark for transparency and information sharing among the international financial institutions. Mr. Édes has also served as Alternate Chairperson of ADB's Appeals Committee, and Member of the ADB Integrity Oversight Committee.

Between 1994 and 2000, Mr. Édes managed communications at SIGMA, a joint initiative of the European Union and the Organization for Economic Cooperation and Development providing support to public governance reform in Central and Eastern European countries. Mr. Édes has also worked as a journalist, researcher, policy analyst, and specialist on international trade and foreign direct investment.

He has a Master's Degree in Public Policy from the University of Michigan, and a Bachelor's Degree in Government (cum laude) from Georgetown University. Mr. Édes is a dual national of Canada and the United States.



Alastair Dingwall Former Senior Editor, Asian Development Bank

Alastair Dingwall has held senior editorial positions at ADB, the World Health Organization, and Butterworths (Asia). He has been the editor of the journals Cities, Marine Policy, and Industry and Higher Education and edited the Traveller's Literary Companion to Southeast Asia. He has a master's degree in political science from SOAS, and an undergraduate degree in history from the University of Sussex.

Asian Development Blog

COVID-19 increases the urgency to upgrade skills and prepare for a new world of work

By Hasitha Wickremasinghe

In Sri Lanka, an effort to match education with the skills needed in the workplace provides valuable lessons for the future of work.



In Sri Lanka, a good education does not always lead to a good job. Policymakers are working to change that. Photo: ADB

ne of the biggest challenges that countries face today is to educate their future workers to fit into a fast changing, technology-driven, world of work. Sri Lanka's policy makers too need to focus on reforming the country's education system to respond to these emerging trends.

Supported by a free education system that includes the university level, Sri Lanka stands out among economic peers in human development, reaching 92.5% literacy as of 2018. However, with an overall unemployment rate of 4.8% in the country in 2019, finding work was hardest for the most educated, resulting in an unemployment rate of 8.5% for those completing secondary school and above. Qualified females find it harder to obtain employment, with 11.9% of females in this category being unemployed compared to 5.0% of males.

The underlying reasons for high unemployment among the educated could be twofold. One reason could be the lack of jobs in the economy to absorb the educated population. The other could be the lack of relevance of education and available skills to meet the requirements of the labor market.

A recent report by ADB explores the second possibility and finds significant gaps between labor demand and supply in two types of manufacturing industries: food and beverage and electronic and electricals. The findings of the study confirm that there is a misalignment in the skills held by graduates and those needed in the job market.

In the medium term, one issue that needs to be addressed to close the skills gap is increasing young people's awareness of what employers are looking for in the relevant sectors, especially among girls. The report also recommends greater industry input to revise course curricula, training-of-trainers, and providing young people with industry experience.

In the long run, preparing skilled workers to meet the needs of industry requires an understanding of the rapidly changing nature of industries and jobs. Fast-paced technological developments in areas such as robotics, artificial intelligence, 3D printing, blockchain technology, and others, will change the way industries operate and business is conducted. These technologies will shape the nature of work, replacing some jobs and creating others. This revolution in technology, known as the Fourth Industrial Revolution, will define the types of skills needed over the longer term.

The COVID-19 crisis has in certain ways quickened the trends of the Fourth Industrial Revolution. It has forced large sections of the global workforce to adapt to new methods of working and shifted many activities to technological platforms. These changes compel a fresh and urgent look at skills for the future that need to be trained now.

As many were forced to work from home, a new way of working has emerged, which is likely to be an appealing option to many, especially women, who often require flexible work arrangements. Services such as education and medical consultations have increasingly shifted online. In education, teachers will need to be trained in the use of technological tools and remote teaching methods as distance learning expands. In the hospitality industry the focus on hygiene aspects, health checks, and new travel procedures is likely to become the norm. Therefore, workers have to be educated and reskilled to handle these new aspects.

With these changes the need for skills to navigate in a virtual environment and the ability to work with internet and communication technology tools have become more pronounced. While the general workforce will need to be better skilled to work in this environment, the technology industry itself is likely to increase its demand for more workers and innovators as well.

However, low digital literacy and poor internet infrastructure will deepen the divide between social groups and 'digital poverty' could become a new dimension of deprivation. In Sri Lanka, only 29% of households had access to the internet in the first six months of 2019. Of this, 71% connected using a smart phone. Digital literacy among the population is 44.3%. Discrepancies exist between urban and rural sectors, male and female, and educational levels.

In preparing skills for the future labor market, the government needs to identify emerging trends and formulate policy to support the development of a workforce that will be able to respond to the needs of the evolving labor market. School curricula need to be reformed to align with the emerging labor market trends.

The private sector has a role in providing inputs to policy reforms and in training workers to obtain new skills to respond to future market demand. Infrastructure investments by both public and private sector also need to take a futuristic view to facilitate the development of modern industries and the new ways of working that COVID-19 has brought into focus.

About the Author:



Hasitha Wickremasinghe Senior Economics Officer, Sri Lanka Resident Mission

Hasitha holds a Master's degree in Economics and works on macroeconomic analysis, knowledge management, and Technical Assistance implementation.

Asian Development Blog

How to invest in remote learning while building the education system of the future?

By Harry A. Patrinos



School hallway in Turkey.

Social distancing measures in response to the risk of coronavirus (COVID-19) have closed schools, which at the peak has affected more than 1.5 billion children and young people around the world. This is having a negative impact on learning outcomes, and estimates suggest that significant losses will become evident when schools re-open. These lags in learning will last a lifetime by decreasing the earnings potential of the affected students. Moreover, it is likely that these learning and earnings losses will not be evenly distributed but will affect the disadvantaged learners much more than others. Some modeling suggests that the loss of learning during the extraordinary systemic crisis of World War II was still having a negative impact on the lives of former students some 40 years later.

With this in mind, it is crucial to find ways to protect learning outcomes during the current crisis and going forward, build a system that is resilient to future shocks. Over the past few months, governments around the world have put emergency remote learning efforts in place, but they have been plagued by limited capacity, weak student connectivity, constrained interactions between students and teachers, and poor attendance.

To fix these shortcomings going forward, governments need to: (i) protect education spending; (ii) provide a one-off increase in spending to the schools that have been hardest hit by learning losses; (iii) invest in summer learning programs and high-dosage tutoring to help those students falling furthest behind; (iv) implement just-in-time learning assessments so that teachers can plan their lessons to accelerate the learning recovery once schools re-open; (v) provide scholarships to keep children enrolled; and (vi) develop employment programs and

lifelong learning opportunities for at-risk youths. In addition, they need to continue to address the ongoing public health emergency.

COVID-19 is forcing us to rethink the education system, and it is clear that automation will play an increasingly significant role in the process of teaching and learning in the future. To a large extent, the employment effects of the COVID-19 pandemic are skill-biased. For those with lower levels education, COVID-19's negative effect on employment has been much more severe than for those with higher levels of education. Under a worst-case scenario, those workers with automation-substituting skills (in other words, skills that machines can replace) will see their productivity drop as they are replaced by technology. However, these outcomes can be mitigated by improving the quality of education. Recently, the World Bank approved a US\$160 million Safe Schooling and Distance Education Project loan to the Republic of Turkey to enhance the capacity of the education system to provide e-learning equitably to school-age children during and following the COVID-19 pandemic and in any future shocks. This was the World Bank's first stand-alone education lending response to the COVID-19 crisis.

While the project supports Turkey's immediate education response to the COVID-19 outbreak, it also builds the foundation for critical investments aimed at building human capital equitably over the mid-term and at developing the systems needed to withstand future shocks.

The Safe Schooling and Distance Education Project is entirely appropriate for Turkey's needs and builds on the country's education platform, but it is also relevant to many other countries, whether rich, poor, or middle-income. All countries are facing challenges in terms of their capacity. This project extends the reach of Turkey's education system to enable it to serve more than 12 million students over the next two years. The online education platform is being designed and scaled not only to respond to the present crisis but also to build a future-oriented and resilient digital education system for the long term. It will integrate physical teaching and learning with remote teaching and learning. The project is also investing in a strong remedial system to help students when they return to school.

All countries are facing the fallout from the school closures induced by COVID-19 and will need to mitigate these effects and to build their education systems to come back stronger. This project provides a blueprint for other countries to follow. As in Turkey, an effective response requires at least three actions:

- 1. Investment in Emergency Connectivity and IT Infrastructure. This is needed to expand the country's e-learning platform as part of the response to COVID-19. It is an essential part of the development and implementation of a new digital education system for the emergency and beyond.
- 2. Production of Digital Content. As the remote learning platform is developed, there will be a need for goods, services, expertise and training to support the delivery of distance education content while schools are closed due to COVID-19. In Turkey, an innovation hub and professional learning labs are being set up to support a gradual return to classroom-based teaching. In addition, the Turkey project is strengthening the blended teaching and learning process that will be needed going forward.
- 3. Building Institutional Capacity. It is important to strengthen the system's capacity for coordination, management, and monitoring and evaluation as well as for the continued delivery of safe and equitable digital education services. The capacity of Ministries of Education needs to be strengthened not only for the immediate implementation of emergency projects but also to build the system of the future.

Developing a high-capacity, relevant digital education system will be imperative to minimize the educational costs of school closures stemming from the COVID-19 outbreak as well as any future crises. While

educational achievements need to be protected in the short term, we also need to make the right investments to ensure that education systems are resilient and are prepared and equipped for the years to come.

About the Author:



Harry A. Patrinos Practice Manager, World Bank Education

Harry Anthony Patrinos is a Manager at the World Bank's education sector. He specializes in all areas of education, especially school-based management, demand-side financing and public-private partnerships. He managed education lending operations and analytical work programs in Argentina, Colombia and Mexico, as well as a regional research project on the socioeconomic status of Latin America's Indigenous Peoples, published as Indigenous Peoples, Poverty and Human Development in Latin America (Palgrave Macmillan, 2006). He is one of the main authors of the report, Lifelong Learning in the Global Knowledge Economy (World Bank, 2003). Mr. Patrinos has many publications in the academic and policy literature, with more than 40 journal articles. He is co-author of the books: Policy Analysis of Child Labor: A Comparative Study (St. Martin's, 1999), Decentralization of Education: Demand-Side Financing (World Bank, 1997), and Indigenous People and Poverty in Latin America: An Empirical Analysis with George Psacharopoulos (World Bank/Ashgate, 1994). He has also worked in Africa, Asia, Europe, the Middle East and North America. He previously worked as an economist at the Economic Council of Canada. Mr. Patrinos received a doctorate from the University of Sussex.

World Bank Blogs

Papua's clever teachers keep schools going amid COVID-19 lockdown

By Deutsche Welle (DW)

nggi Crestamia, 29, left her job as a journalist in Jakarta as soon as she was accepted into a program to teach elementary school children in a faraway island in the Indonesian archipelago. It had been her long-cherished dream to reach out to children in

inaccessible places, and this was her third application to the Indonesia Mengajar Foundation, which trains young people to educate and interact with locals in remote areas. "I always wanted to do something useful for other people. The more people the better. When I got accepted, I thought, this is my time to do so," Anggi said in an interview with DW. She and some other colleagues were assigned to teach on some of the islands located north of Cendrawasih Bay in Papua province.

The elementary school, where Anggi was asked to teach, is fairly remote. It took her eight hours and two layovers to fly from Jakarta to Biak Island in Papua. From Biak, it took around the same amount of time to reach Yapen Island by boat. From Yapen, another 30-minute boat ride got her to Ambai. A flight would have been faster, but far too expensive. When Anggi arrived, she was welcomed by the local priest - her local guardian for the duration of her stay in Ambai.



A month of celebrations

Ambai is a tropical island with white sandy beaches. Most people live on the water in stilted houses and only a few buildings like churches, schools and other public facilities are built on land. Anggi was lucky because her school was close by. "When I opened my door, I could see the school," she said, laughing.

December is a month of celebration in Ambai. Several days before Christmas, locals decorate their boats and ride from one house to another, inviting everyone to join in the festivities. There is little school activity and in the first weeks she arrived, Anggi used the time to socialize with the locals and explore the place she would call home for the next 14 months.

In January, she walked across the village to inform people that school had begun and that all children were expected to come back. There were four teachers including Anggi, who taught around 50 students.

In early 2020, news about the spread of a novel coronavirus in China began making its rounds in the media. At that time, Indonesia had yet to officially report any infection - the first case was reported in early March 2020. Anggi and colleagues assumed that even if the virus arrived in Indonesia, they would be fine because they were far away from urban centers. However, once the pandemic hit, Papua was affected too and the authorities imposed a lockdown.

'We heard you on the radio'

Other than teaching, Anggi's responsibilities also included meeting with different people living in

neighboring villages and islands. "Each month, I stayed in the village in Ambai island for 2-3 weeks and spent the rest of the time in the district capital in Serui," she explained. When the lockdown was imposed at the end of March, she and her colleagues were stuck for months in Serui without any possibility to return to their respective villages.

To keep educational institutions functioning during the pandemic, the central government in Jakarta decided to promote distance learning using mobile internet connections. However, success was limited because about 54 percent of thousands of students had no access to the internet. "Many still use what we called a 'wooden cell phone' as their mobile device," she said referring to outdated series of cellphones that cannot access modern apps.

Almost a month went by without any educational activity. Around the end of April, a representative from RRI, the national radio broadcaster, approached them and discussed the possibility of holding classes on the radio. The young teachers thought it was a brilliant idea. "Since I also taught arithmetic, I used ways to trigger the imagination of young children. Once, I taught them how to read the concept of time; hopefully, they understood it," Anggi said. Initially, she was not sure that the broadcast would reach her students in Ambai island, but her fears were baseless.

"When I came back to my village and met my students, they said, 'Hey teacher, we heard you on the radio! We kept learning through your lessons on air!' it was a heart-warming, joyful moment," Anggi said, happily.

Door-to-door teaching

During the lockdown, 25-year-old Radhiyan Pribadi, another teacher in Papua, knocked almost every door in Sambrawai village to check on his pupils. He managed to visit up to 10 houses per day and was surprised that the parents were more enthusiastic about their children's education.

"When I came to collect their homework, the parents were curious and wanted to know if the answers were correct to the assignments I had given the day before," he said laughing. Radhiyan expanded his activities and started teaching students individually, carrying a whiteboard and markers everywhere he went. However, he couldn't reach students living in nearby villages.

"I needed to cross two rivers, which could not be crossed after heavy rains," he said. But at some point, he decided that he could not let those children go without basic education for any longer and bought a motorbike. "By bike, it takes only about 20 minutes one-way," he said. He is grateful that the situation is slowly returning to normal.

Perks of the countryside

Papua's generous people never cease to amaze Anggi and Radhiyan. For example, the captain of a boat

they were taking to Serui offered to move them from normal economy-class seats to VIP seats after he got to know they were volunteers.

Radhiyan was also impressed by his students' enthusiasm to learn. "Children in Papua are different. They are not shy and are willing to engage in schoolwork. If I give them homework, they ask for more."

He wishes the government would do more to help educate these children and reduce the developmental gap between different parts of the country.

Prihardani Ganda Tuah Purba contributed to this article.

Taiwan News

Taiwan helps Caribbean ally introduce Mandarin classes in high school

By Peggy Carr



Taiwanese teacher Yvette Huang (left) poses with first-year students at Girl's High School in the Caribbean country of St. Vincent and the Grenadines, one of Taiwan's diplomatic allies, on September 14. Huang was assigned by the Taiwan government to assist the school in its initiative to place Mandarin classes on its curriculum for the first time. Photo taken from the Facebook page of the Taiwan Technical Mission in Saint Vincent and Grenadines

high school in St. Vincent and the Grenadines (SVG) has put Mandarin language classes on its curriculum for first-year students, in a program initiated by the country's Ambassador to Taiwan Andrea Bowman and supported by the Taiwan government.

At the start of the new academic year on September 7, the St. Vincent Girls' High School (GHS) added Mandarin classes to its curriculum, scheduling two periods per week for each of its four first-year classes, Bowman said on September 15.

Approximately 130 students are currently taking the classes, which are being taught by a teacher provided and remunerated by the Taiwan government through its technical mission in SVG, Bowman told Central News Agency (CNA).

"The broad curricular plan is to introduce the students to the history and culture (of Taiwan) in order to contextualize an introductory language course," said Bowman, a former educator who served as GHS principal for 13 years.

In a Facebook post on September 14, the Taiwan Technical Mission in SVG said that on the first day of Mandarin classes, the GHS students were excited to be given Chinese names.

"They not just learned how to introduce themselves, but also some classroom phrases," the mission said in the post, which was accompanied by photos of the students and teacher.

"They can even sing a Chinese song within an hour! Well done!! Perhaps soon the same song will be spread along the streets in Saint Vincent!"



much they enjoyed the class from the photos.
TaiwanICDF財團法人國際合作發展基金會
Taiwan in St. Vincent and The Grenadines



According to Bowman, the idea for the Mandarin classes was proposed by a GHS alumnus who was studying at a Taiwan university and graduated in 2020 under Taiwan's scholarship program for its diplomatic allies.

"Zuleika Lewis planted the idea, and our embassy then contacted the GHS headmistress and its Foreign Languages department," Bowman said. "This was then followed by our embassy's outreach to the Ministry of Education in SVG and the Taiwanese embassy in SVG. The headmistress, Michelle Beache, embraced the idea right away and worked towards its realization."

Bowman said that within the context of SVG-Taiwan relations, the benefits and potential of the Mandarin language program are boundless.

"A country's language carries its culture," she said.
"Therefore the cultural exchange through language automatically deepens our 39 years of diplomatic relations."

The Caribbean country of St. Vincent and the Grenadines is considered one of Taiwan's strongest allies, having maintained unbroken diplomatic ties since 1981.

Central News Agency (CNA)

Gov't seeks more inclusive education for foreign children in Japan



Teachers and children engage in a Japanese language class for kids of foreign nationalities in Kani, Gifu Prefecture, in February 2020

The government aims to improve its outreach to foreign children in Japan to provide them with learning opportunities as part of strategies adopted on June 23 to promote Japanese-language education.

A survey conducted in 2019 by the education ministry yielded an estimate that more than 19,000 elementary or junior high school-age children of foreign nationalities in Japan do not attend school at all, including international schools.

In Japan, compulsory education covers nine years starting at first grade, from about age 6 to 15.

Foreign residents of Japan are not subject to compulsory education but the ministry urges public schools to accept and provide free tuition to any child who wishes to enroll based on international treaties.

The government wants to ensure that all foreign children in Japan have the same educational opportunities as local students.

The basic policy to promote Japanese-language education endorsed at a Cabinet meeting on June 23 says

it is the responsibility of the central and local governments to offer Japanese-language education to foreign children.

Under the new policy, local governments will work closely with international schools and relevant nonprofit organizations to better assess the situation and offer parents of foreign children information about their educational options.

Amid growing demand for Japanese-language education both at home and abroad, the basic policy also affirms the need to create new licenses for Japanese-language teachers.

Education minister Koichi Hagiuda stressed the need to deliver best-practice regulation at the municipality level to guarantee learning opportunities for foreign children.

"Based on the basic policy adopted this time, we will strengthen the system" to promote Japanese-language education, he told a press conference.

The policy was adopted based on the law on promotion of Japanese-language education that took effect in June 2019. The policy will be reviewed every five years if deemed necessary.

The law stipulates the central government must make legal changes and provide necessary financing to promote Japanese-language education, while local governments are responsible for crafting and implementing specific measures and policies.

It was a major turnaround of the country's policies on language education, which have conventionally depended heavily on municipal and private efforts. The legislation initiated by lawmakers was compiled as Japan introduced a new visa system in April 2019 to accept more foreign blue-collar workers to deal with severe labor shortages caused by the country's rapidly aging populace.

The number of foreign nationals in Japan stood at record-high 2.93 million as of the end of 2019, up 7.4 percent from the previous year, according to the Immigration Services Agency.

The ministry's first survey conducted on foreign children's school attendance in May and June 2019 found 19,654, or 15.8 percent, of foreign children eligible to enroll may not be attending Japanese elementary or junior high schools.

In addition to education being not compulsory for foreign nationals, the lack of sufficient command of the Japanese language among some children and guardians as well as the varied quality of local government support are suspected as reasons for the result.

The policy was adopted based on the revision to the law on promotion of Japanese language education that was put in force in June 2019. The policy will be reviewed every five years if necessary.

Amid growing demand for Japanese language education both at home and abroad, the basic policy also affirms the need to create new licenses for Japanese language teachers.

Kyodo News

'COVID-19 speeds up revolution in education'

By Ock Hyun-ju



Seoul Metropolitan Office of Education Superintendent Cho Hee-yeon speaks during an interview with The Korea Herald in his office in central Seoul. (Park Hyun-koo/The Korea Herald)

he COVID-19 pandemic has brought forward much-needed revolution in education.

Ready or not, the schools have moved

online, opening a new space for both education equality and inequality, said Seoul's education chief Cho Hee-yeon.

"In online learning, there is more room for educational inequality to worsen, but at the same time, there exist opportunities to enhance personalized learning," Cho, superintendence of Seoul Metropolitan Office of Education, said in an interview with The Korea Herald at his office in central Seoul.

Despite the many drawbacks of online learning, some positive changes are also noticeable. Some students who have been shy in physical classrooms become more active. Teachers can give each student different feedback customized for their needs, Cho explained.

"In the process of preparing for online classes, cooperative school culture has been formed through active exchanges among teachers seeking to raise their quality of lectures," he said, calling it a "revolution" in classrooms.

The online learning cannot entirely replace traditional education held in classrooms because the meaning of education goes beyond accumulating knowledge. It is rather the process of forming their personalities and growing as a member of society by interacting with peers and teachers and learning to respect each other.

"So the future of education is blended learning," Cho said, adding the optimal ratio for online learning and in-person classes could be divided half and half. "Remote learning, which was triggered by the COVID-19, will accelerate a transition from in-person classes-focused education to blended learning-focused education."

While many other countries interchangeably choose between the opening and closing of schools, Korea is promoting continuity of education for students through blended learning, an approach that combines distance learning methods with in-person education methods.

Faced with the novel coronavirus epidemic, Korean schools began offering online classes in April in the country's biggest online learning experiment. Starting from May 20, the phased reopening of schools ended on June 8, with virtually all Korean students now back in classrooms.

Currently, classes are held both online and offline for most schools to reduce the number of students in physical classrooms. Depending on grade and class, it is recommended that about one-third of total students of a school receive in-person classes while the rest learn from home.

While in school, students also take breaks and dine at different times. They get temperature checks twice a day and wear a mask at all times except during meals.

"COVID-19 provides us a chance to develop into a leading country in distance learning, keeping pace with our reputation as a leading IT country," he said, vowing more investment in building infrastructure at schools for remote learning.

The Seoul education office has already offered digital devices to students from low-income families to bridge the digital divide, seen as one of the steps to increase Korea's preparedness for digital learning.

"Even though the virus situation gets worse, we don't consider all-out school closures. Students' learning will continue online," he said, referring to various quarantine measures put in place at Korean schools. He labeled it "K-education," the signature Korean quarantine model in the education sector.

Reopening of schools is a major test for the country's efforts to return to normalcy in the people's daily lives while keeping the virus situation under control, as the pandemic is expected to prolong.

Safety concerns persist over school reopening, as Korea continues to see sporadic, small-scale coronavirus outbreaks in the Seoul metropolitan area. As of June 8, some 517 schools, nearly all in the Seoul metropolitan area, had suspended their school operations.

However, there has not been a reported incident of a coronavirus transmission at a school, according to the Education Ministry.

"Our strategy is to find a way to harmonize and achieve both -- quarantine measures and education -- in the COVID-19 crisis," he said.

And the revolution in the country's education system should go beyond establishing a stable online learning system, he said.

The COVID-19 pandemic showed the world that only cooperation beyond borders can tackle global issues such as climate change and infectious diseases, which is why educating Korean students to become "global citizens" is necessary, he said.

For that, Cho plans to further pave the way to raise awareness of human rights, peace, cultural diversity and environment in classrooms across the country's capital.

A former liberal sociology professor at Seoul' SungKongHoe University, Cho, who was elected to his post in 2014 and was reelected for his second term in 2018, has been at the forefront of tackling the education gap stemming from parental wealth that often affects students' academic performance and their chances to go on to university.

His liberal yet controversial policies have put a focus on offering equal opportunities for education -- rooting out hierarchy in Korea's school system by abolishing elite schools and boosting the quality of public education by customizing it to each student's needs.

The Korea Herald



4 ways to use Twitter as an educational tool



WITTER is where you can find all the latest in #WhatsHappening on various topics worldwide. You can get updates and new knowledge on current trends, events and even about education.

At first thought, people might not think of Twitter as a learning tool. But as a place for conversation and real-time info, it can actually be a helpful tool for students, teachers or parents to enhance or supplement their blended learning.

Here are four tips and tricks on how to maximize the use of Twitter for educational purposes:

To get education-related tweets on your timeline, use the topics that allow you to see the tweets without completely following an account.

Tweet to draw tips and insights from communities. Surround yourself (online) with a community that shares information and encouragement on how to support distance learning at home. To make the conversation more relevant, you can now choose who is allowed to reply to your tweets.

Follow and organize education or learning accounts. Twitter can be your bulletin board for real-time information on the latest news and announcements related to education here in the Philippines. Teachers and parents can keep track of the school calendar and other information by following authoritative sources.

Learn from interactive content. Studying a new concept may take time; so, having visual aid such as videos is an interactive way to learn. There are tons of educational content on Twitter; just use the right keywords.

The Manila Times

Building research capacity for a disaster-resilient Australia

By Paul Barnes

ustralia's threat landscape has changed dramatically over the past 12 months—starting with last summer's cataclysmic bushfires, followed by the appearance of Covid-19 and its cascading impacts on society and the economy, and now the expected arrival of La Niña weather patterns bringing increased rainfall and the onset of an early monsoon

season in the tropics as well as increased cyclonic activity.

While current conditions are very different to those leading up to 2019's crises, state, territory and federal agencies and local governments have sustained their efforts over the winter period to mitigate risk factors critical to the summer ahead. A viable question, however, is what does Australia need to emphasise now to position

itself to better cope with the conditions of our near future?

Some steps towards answering that question have been taken by the initiation of the Royal Commission into National Natural Disaster Arrangements. The royal commission published a set of interim observations on 31 August providing some insight into the direction of its thinking. These observations cover a selection of issues ranging from cultural burning practices and existing national natural disaster arrangements (including constitutional issues) to community health impacts and the role of local government.

Collaboration within Australia's higher education system on disaster resilience outcomes is obviously of benefit to all, but a question of some interest is how to structure a collective effort. Here are two ideas to support this important outcome.

The first focuses on intra-university teaching and research collaboration. In August 2011, the Innovative Research Universities (IRU) group published a brochure titled 'Disaster resilience: preparing, responding and adapting'. It outlined a variety of teaching areas and research strengths among its members that showcased different yet complementary expertise across a range of



Image: Peter Parks/AFP/Getty Images.

A few days later, on 4 September, counsel assisting the royal commission released a set of draft propositions covering aspects of the terms of reference for the commission, informed by submissions and evidence supplied since hearings began in May 2020.

While each document addresses several important elements, both focus on supporting increased research to enhance Australia's resilience to natural hazards and reduce disaster risk, aligned to national research priorities.

A key driver of that research capacity is the new national disaster research centre, announced by the government on 23 July with a commitment of \$88.1 million over 10 years. The centre will be 'co-funded by partners from across Australia, including state and territory governments and emergency service agencies, universities and industry partners'. It is expected to be collaborative on a national scale.

disaster management and resilience knowledge areas.

A logical extension of the intent of the IRU group could have been the establishment of a consortium to combine the teaching and research expertise of the member universities. Such a step could have led to unique learning opportunities by allowing students to combine units from different institutions, while cross-registered, and receive full credit for towards their final qualification.

Access to these types of opportunities would also allow undergraduate and postgraduate students to complete modularised units of study that match their professional development needs: some in their home university and others with partner institutions. In the case of disaster management agencies, in-service students could have combined units of study that meet institution-specific needs.

Further collaboration among consortium partners for joint supervision of higher degree research students

would have required little additional effort given the processes already used in the Cotutelle model common in many Australian universities for linking with international universities on joint supervision of local PhD candidates.

Alliances like the IRU group's are not uncommon among Australian universities. The NUW Alliance for example, comprising the University of Newcastle, the University of New South Wales and the University of Wollongong, cooperates on shared strategic priorities in research and teaching that each institution might not be able to pursue on its own.

The second idea entails establishing or reinvigorating applied research centres or institutes to examine natural hazards and disaster resilience within universities and act as enablers of innovative thinking in private-sector and public-sector institutions active in disaster management. Australian universities have a long history of supporting research groups in these areas. Notable among those currently active are the Torrens Resilience Institute at Flinders University, the Australian National University's Disaster Risk Science Institute, the Centre for Disaster Management and Public Safety at Melbourne, University of and University's Disaster Resilience Initiative. They, like those that came before, play important facilitation roles between academia's 'hallowed halls' and the real world.

Creating wider opportunities to educate new cohorts of disaster management professionals and to generate new and easily utilised knowledge at both regional and national levels is critical. Australia can't afford to be in a position in which new entrants to the professions active in emergency and disaster management and resilience building must wait to learn real-world skills and develop insight on the job. Neither can we afford to leave emergency and disaster management agencies reliant on underdeveloped internal

research capabilities, especially as research and development may not be core business.

The royal commission's advice on our national research needs can be supported through the creation (where needed) of university-based research and collaboration centres operating in close coordination with state-based disaster management agencies. In addition, we need to encourage the development of a consortium of universities collaborating on teaching core and evolving skills for enhancing disaster resilience. Such programs should be offered at both undergraduate and post-graduate levels, using the established Cotutelle model (where feasible) for domestic co-supervision of higher degree research candidates across consortium members.

The intellectual capability for these innovations exists already in our universities. We need to apply our productive higher education sector to support the new all-hazards, all-threats crisis-readiness and response repertoire required for the near future and beyond. Australia needs a networked consortium of teaching universities—including regional research centres—supporting our emergency and disaster management needs across the broad spectrum of existential threats we face.

About the Author:

Paul Barnes is a senior fellow at The Australian Strategic Policy Institute (ASPI). He has a current academic affiliation with the Torrens Resilience Institute and the University of New South Wales.

> The Strategist — The Australian Strategic Policy Institute (ASPI) Blog

Turkey: demand for study abroad endures

By Viggo Stacey

ovid-19 has not caused a drop in demand for study abroad among students in Turkey, agents in the country have highlighted, but short-term study visa delays are thwarting student attempts to travel for language studies.

However, study travel agents appear confident that embassies and consulates in the country are working hard to deal with visa requests.

"Numbers will not drop because of Covid-19," said Aslihan Özenç from ASBA Education Consulting and president of UED.

"What do we expect now? Maybe we [can] expect a shift towards countries that open up their consulates as soon as possible. They can work with our students...there's a great demand," she explained, speaking at a StudyExpo webinar. Vice President of FELCA and manager of GKR Educational Counselling Eren Göker explained that the visa approval rate for the UK – not including Tier 4 visas – is currently around 50% of UED members. In 2019, this rate stood at around 99%.

"Students – strangely – if they are refused, they reapply and they get their visas," Göker highlighted.

Long-term study visas for higher and secondary education seem to be on the whole processed "much quicker", he added.

"Of course, there will be changes after Covid, but the changes will be according to consulates and the borders," he said.

"If your consulate in Turkey is open and issuing visas and your school is open, don't worry. We will sort the rest."

While the Irish embassy is collecting student applications for higher education and language courses, there is a backlog of at least 400 applications for the latter courses due to the embassy not being able to issue language school student visas – adding up to around 6,000 student weeks, Göker noted.

Meanwhile, processing times for visas at the Canadian embassy are around 20 weeks, he continued.

"We are enrolling students for February 2021 and they're paying for their course from now on. So once the borders open in Canada, get ready. We'll be sending."

Malta's recently implemented new regulations will create a "much more successful" process, he predicted.

"Maltese schools are lucky. They should thank their government."

While Australian and New Zealand borders remain closed, the US embassy "is trying its best".

"They are in communication with UED. They're sending regular information," he said, but added that appointment slots have been unavailable.

"We need more appointment slots because there is more demand for US. We are getting applications for the visa appointments two months time. We need immediate appointments."

Quoting statistics from a SODEV report from May, Özenç said two-thirds of Turkey's youth have plans for studying abroad and living abroad in the future.

"They don't think the jobs [in Turkey] are merit based," she said.

"They're not going to be able to land a job if they don't know anyone up in the system in Turkey.

"And they do not believe education in Turkey will provide them with the future they are hoping for. So, unfortunately, our youth has lost their hope in the Turkish higher education system.

"I think whoever can establish the safety and the well-being of the students and receive those students are going to benefit from the Turkish student numbers because the demand is there."

Despite some consolidation such as agencies closing or merging branches, until now no Turkish agencies have known to be closed as a result of the pandemic, Özenç added.

"We have UED members who are cooperating with each other in sending certain students to certain countries.

"I think we're going to see a stronger connection and links between them agencies and organisations and institutions. So if we are closer and stronger together, I think we're going to pull out of this one as well," she explained.

Despite economic worries – the Turkish lira has recently hit record lows – Özenç suggested that demand for international education will remain.

"During economic crises in Turkey and the desire to study abroad doesn't diminish. Those families have savings," she explained, often in foreign currencies.

"Families in Turkey save for their children," she concluded.

The Pie News



Despite the global pandemic and economic crises, interest in international study remains high in Turkey.

Photo: pexels.

Published by the Secretariat, Confederation of Asia-Pacific Chambers of Commerce and Industry Ernest Lin, Director General; Amador R. Honrado, Jr., Editor

Wendy Yang, Assistant Editor

7F-2, No. 760, Sec. 4 Bade Road, Taipei 10567, Taiwan; Tel: (886 2) 2760-1139; Fax: (886 2) 2760-7569

Email: cacci@cacci.org.tw; Website: www.cacci.biz