# **Abstract**

By acting early and using a measured response to COVID-19, Singapore was able to keep higher education intact far longer than many countries. The government implemented rigorous contact tracing, social distancing regulations, and isolation strategies. With a recent surge in confirmed cases, the authors highlight several uncertainties for the coming academic year in Singapore higher education.

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# Singapore Higher Education and COVID-19: An Early and **Measured Response**

## **Natalie Ang and Dave Stanfield**

nce it became clear that the coronavirus from Wuhan in China would inevitably land on Singapore's shores, the small nation state's higher education sector reacted quickly but in a calibrated fashion. This approach allowed Singapore's tertiary institutions to continue operations for the better part of a semester with relatively minor modifications.

Singapore has received international praise for a proactive and transparent response to COVID-19. From the early days of the outbreak until now, citizens by and large have confidence that their government would manage this crisis well. Early intervention tactics included rigorous and quick contact tracing, incessant reminders to practice good hygiene, nationally enforced social distancing guidelines, required travel declarations, quarantine of those in close contact with confirmed cases, and a stringent stay-at-home protocol for those returning to Singapore from high risk countries.

The Singapore government releases detailed status updates every day with the number of new cases, which clusters they were linked to, how many patients are in the intensive care units (ICU) and the number discharged from the hospital. These labor intensive and tedious methods have largely proved effective. Despite the early arrival of COVID-19 on the shores of Singapore, the country did not report a death until March 21. Singapore tests widely for the virus and yet did not reach 1,000 total infections until April 1.

## **Keeping Higher Education Intact**

The government's measured response allowed much of life in Singapore to carry on as normal through the end of March. Schools, restaurants, and businesses remained open. Family and friends continued to meet and the ubiquitous Singapore malls stayed busy. Universities also remained operational until April, far longer than in many other countries.

As COVID-19 reached Singapore in January, strict measures were immediately put in place for higher education institutions. Protocols were rolled out in an orderly manner with students and staff working flexibly to align with ever changing directives from the government.

At the National University of Singapore (NUS), students, faculty, and staff were required to declare their travel plans and record their temperature twice daily on a centralized system. Students were told to self-isolate when exposed to someone with the virus, and those from the highest risk categories were transferred to a makeshift on-campus quarantine facility. When the number of cases in Singapore started to rise, NUS stepped up safe distancing protocols. Sports training and other cocurricular activities were canceled or modified to reduce physical contact and dining halls started to offer more takeaway options to decongest eating spaces. Distance learning was introduced, initially in a hybrid form where some students remained in the classroom, while others participated online.

Contact tracing procedures were also put in place such as attendance tracking during events, mandatory temperature screening, registration of guests on campus, and instructors awkwardly required to snap photos of seating arrangements in the classroom. Responses were fairly uniform across Singapore's autonomous universities. These measures were mostly successful, allowing the semester to carry on in a semimodified form, but even in a country accustomed to strict regulations, compliance was challenging. Travel declaration completion rates were low, many students failed to report their temperatures twice daily, e-learning was difficult for many professors to navigate, and administrators debated about the best way to organize online exams to minimize cheating.

Meanwhile, outside of Singapore the virus spread rapidly, so the ministry of education made a prudent decision to recall all students studying abroad. International students were asked to go back to their home countries and local students were told to come home to Singapore. What followed was a mammoth task to account for, and relocate, thousands of students studying abroad. The task was carried out with a degree of precision and speed that would only be possible in a country like Singapore with a highly organized national government and effective crisis response plans. Many international students that were told to return home petitioned to come back to Singapore, where they had more faith in the healthcare system and government's response to the crisis than their own countries.

#### **Pressing Pause**

Despite successful mitigation measures, in early April, Singapore experienced a surge in local cases, spurring the government to take more drastic measures. A version of a lockdown, labeled a "circuit breaker," aims to limit the spread of COVID-19 using stringent and legally enforced safe distancing measures. Under the new bill that was passed, residents in Singapore are allowed to leave their homes only for a short list of essential reasons or face serious consequences for noncompliance.

At this point, most universities decided to move to full e-learning and required students to move home. NUS permitted students to stay on campus in residence halls but implemented strict regulations. For instance, students cannot visit each other's rooms or gather in groups to eat or socialize. Naturally, this has proven difficult for many residents, with international students especially feeling isolated and longing for home.

### **Moving Forward amid Uncertainties.**

Like many countries in the world, uncertainty abounds for the next academic year, yet one can draw some reasonable conclusions based on how Singapore has managed COV-ID-19 until now. If the current circuit breaker measures prove effective in curtailing community spread, the government is likely to ease restrictions over the coming months in a predictably measured and calibrated approach. For higher education, that could mean a return to in-person classes below a certain size, ongoing temperature checks, and social distancing measures. In other words, universities would likely operate much in the same way that they have over the past two months-remaining in operation but with modifications.

If COVID-19 continues to spread locally at the current rate, most institutions will remain closed and start the new year in a full e-learning mode. The government may restrict student visas, which would have a significant impact on institutions and degree programs that typically count on a proportion of international students. Furthermore, local students with previously confirmed plans to study abroad are likely to be disappointed, as the government may ban students from leaving Singapore to participate in exchange programs.

Despite some degree of predictability, the impact on enrollment is difficult to ascertain. Admissions professionals face significant uncertainty, doubting whether historical 26

yield models will lead to accurate predictions of a new incoming cohort. There are many questions with no clear answers. Will incoming students be interested in enrolling at a traditional tertiary institution with temporary e-learning provision or would they prefer to defer? For institutions with international student recruitment goals, what are the implications of admitting a class fully consisting of local students? For students who do decide to enroll for the next academic year, assuming in-person gatherings are still prohibited, how can first-year orientation programs be adapted to a virtual environment? For institutions that offer a residential living-learning experience or emphasize cocurricular learning as a key component of their education, what elements of those experiences can be adapted?

In the coming months, Singapore will continue to work tirelessly attempting to contain further spread of the virus, and the country will begin a gradual and steady return to normal. Higher education is likely to continue reflecting broader society. Institutions will slowly lift restrictions in a calibrated and measured way, mirroring Singapore's approach to containing COVID-19 all along.

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