

Background

- Quickly adapt to virtual learning environment
- Drastically reduced budgets at universities for professional development, technology infrastructure, etc.
- Students returned home



Overview of Chapter

- **15 case studies from universities in Canada, Mexico & US**
- **Student Resiliency**
 - Course-based Experiences & Experiential Education
- **Faculty Resiliency**

Objective

Analysis of:

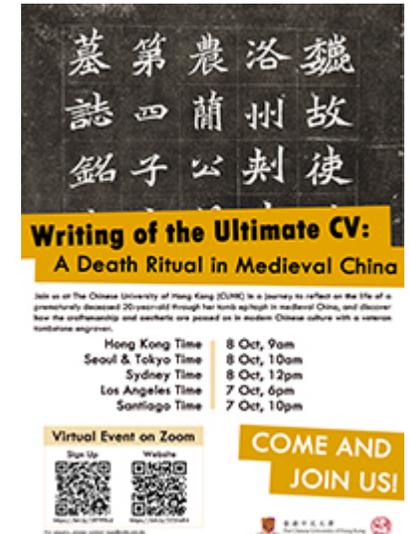
- designing effective online courses,
- providing students with virtual experiential education and leadership opportunities,
- engaging international students,
- creating a sense of community for students across geographies,
- supporting students' learning in the new online environment, and
- leveraging technological tools to meet shared educational challenges.

Example: APRU Virtual Student Exchange (student, course-based experience)

- Immersive virtual student exchange through digital technology allowed students to connect with peers to learn new knowledge and skills, exchange ideas and cultures, build new relationships
- **Academic courses; Co-curricular programs**-short, cultural immersion courses (28 offered in 2020 attracting over 400 students)

Examples:

- **Latitude Zero Talks: Explore Galápagos** (Universidad San Francisco de Quito)
- **Picturing Hong Kong through Historical Paintings and Photos** (CUHK)
- **Living in the U.S. and Studying at an American Research University** (UC Riverside)
- **Halal, Is It the Gateway to Win 1 Billion's Muslim Heart?** (Universitas Indonesia)
- **Mapathon@HKUST** (The Hong Kong University of Science and Technology)
- **Black Lives Matter: Global Perspectives: Contextualizing BLM in the History of Slavery & Segregation** (UCLA)



Source: <https://vse.apru.org/>

Example: Online Games

(student, experiential education)

- Build community, create a sense of being part of the Trojan family even when not on campus
- Built USC campus on Minecraft using reference photos and satellite images from Google Earth



Example: Corona Corps

(student, experiential education)

- University of Oregon partnered with local & state public health authorities to expand public health pandemic workforce & response
- Students were trained through extensive hands-on observation, mentorship and on-the-job training.
- Received academic credit or pay to participate in COVID-19 contact tracing, case management and case investigation
- Could be used in the future for natural disasters



Example: Academic Societies (student, experiential education)

- Based on Learning Communities Model, created in 2013
- Each Academic Society (9) has 180 students from many disciplines, assigned 1 faculty leader and 15 faculty mentors

Objectives:

- Support the academic and professional growth of its students through learning communities.
- Stimulate knowledge, personal growth and collegiality among students.
- Facilitate constant communication and support between students and faculty.
- Offer personal and professional guidance to students.
- Provide a safe space for integration, wellness and health.
- Establish a network and community of practice once students leave the program.

Example: Academic Societies (continued)

(student, experiential education)

- Effective communication channels already set up through WhatsApp
- 450 students in their final semester manned new lines for public about COVID
- “Pandemis” program shared info through several social media platforms, content created based on students’ clinical rotation. More than 500 posts in the first 6 months of the pandemic.
- Other activities:
 - Mentorship by faculty, as well as between jr/sr students
 - Online tutoring and counseling sessions, individually and in small groups
 - Entertainment-virtual escape rooms, online games, student-led workshops

Example: APRU Teaching in Virtual Environments (faculty)

12- part webinar series, interactive 90-minute sessions co-led by faculty experts from the APRU network on one key topic

Objectives:

1. Create space where APRU affiliated faculty could connect to share resources and experience with teaching in remote settings.
2. Provide pedagogical, technology, and peer support to faculty across the APRU network facing similar remote teaching challenges.
3. Build community for faculty across the APRU network

The image displays four posters for the 'Teaching in Virtual Environments' webinar series, arranged in a 2x2 grid. Each poster features a circular graphic with various scientific and educational icons. The top-left poster is green and lists sessions for August, September, and October. The top-right poster is blue and lists sessions for November and December. The bottom-left poster is red and lists sessions for March and April. The bottom-right poster is purple and lists sessions for May and June. Each poster includes the title, the APRU Global Health Program at USC and the Global STEM Education Program at the University of Oregon, and specific session details including dates, times, topics, and speakers.

Poster Color	Session Dates	Topic	Speakers
Green	August 27/28	Creative Ideas for Online and Remote Assessment	Eleanor Vandegrift, University of Oregon; Victor Ho, University of Malaysia
Green	September 3/4	Authentic Experiential Education	Eleanor Vandegrift, University of Oregon; Vivian WY Lee, Chinese University of Hong Kong
Green	September 10/11	Building Community in Remote Classrooms	Eleanor Vandegrift, University of Oregon; César Alberto Lucio Ramirez, Tecnológico de Monterrey
Blue	November 12/13	Technology for Remote Teaching	Eleanor Vandegrift, University of Oregon; Julie Clarke, University of Melbourne
Blue	December 3/4	Equity and Access in Remote Teaching	Eleanor Vandegrift, University of Oregon; Michael Antonio Mendoza, University of the Philippines Manila
Red	March 3, 6-7:30pm US Pacific; March 4, 10-11:30am Hong Kong	Supporting Students Beyond the Classroom	Eleanor Vandegrift, University of Oregon & Catherine Zhou, Hong Kong University of Science and Technology
Red	March 29, 6-7:30pm US Pacific; March 30, 9-10:30am Hong Kong	Creating an Active Learning Environment	Eleanor Vandegrift, University of Oregon & Maria Vassileva, Nagoya University
Red	April 26, 6-7:30pm US Pacific; April 27, 9-10:30am Hong Kong	The imperative need for collaboration during COVID for Higher Education	Eleanor Vandegrift, University of Oregon; Claudia Tobías, Universidad San Francisco de Quito
Purple	May 5, 6-7:30pm US Pacific; May 6, 9-10:30am Hong Kong	Connecting Classroom Teaching to the Real World	Eleanor Vandegrift, University of Oregon & Adik Wibowo, University of Indonesia
Purple	May 19, 6-7:30 pm US Pacific; May 20 9-10:30am Hong Kong	Developing Learners' Practical Skills in Remote Classrooms	Eleanor Vandegrift, University of Oregon & Yotsawee Saifah, Chulalongkorn University
Purple	June 2, 6-7:30pm US Pacific; June 3, 9-10:30am Hong Kong	Reflections on a Year of Virtual Teaching	Eleanor Vandegrift, University of Oregon & Melissa Withers, University of Southern California

Example: 55 Word Stories (faculty)

- Health care providers to share experiences during pandemic, increase connectedness and well-being, promote solidarity
- Shared reflections of up to 55 words on curated website
- Hundreds of stories posted with permission from authors or anonymous.
- Cathartic to read the words of others; helped to reinforce the notion that health care providers were not alone.
- Provided a creative outlet for healthcare workers, including students and faculty, for self-reflection and expression

Useless

Zoom. Computer screen. iPad to the side.

Don't forget your blue-blocking lenses.

“Clinical experiences have been suspended – indefinitely”

Immunosuppressed.

That's probably for the best. But how can I help? How can I help if I am stuck behind this screen? Are we even really a part of things? It's hard to feel like learning anything.

by Tiffani Lautenslager, Medical Student

Conclusions



- Capitalize on new technologies to offer experiential education, virtual exchanges, more leadership opportunities.
- Expand opportunities for low-income students, more equity
- Utilize these lessons for other crises, such as disasters
- Universities must adapt to changing world through innovation

Acknowledgements

- We would like to acknowledge the assistance of Budi Haryanto, Jim Huntley, Paulo Rodrigues, Jolanta Aritz, Anakkarat Tubtim Barth, César Alberto Lucio Ramírez, Claudia Treviño Alanis, Robin Young, Mark Carrier, Grace Honeywell, Jeffrey Measelle, Angela Long, and Jennifer Rice. We also wish to thank the APRU Secretariat for their dedication and hard work.

WEBINAR: INNOVATIVE ASSESSMENT STRATEGIES

Presented by the **APRU Global Health Working Group on Education & Technology**

July 6 from 6-8pm pacific time/July 7 from 9-11am Hong Kong time

In this session with international pedagogical experts, instructors will learn about innovative examples of how to use better assessment strategies in the classroom, including public exams, group performance and more.

Speakers:

Ben Wiggins, University of Washington (US)

Lilian Chye Min Yen, Nanyang Technological University (Singapore)

Athel Hu, Nanyang Technological University (Singapore)

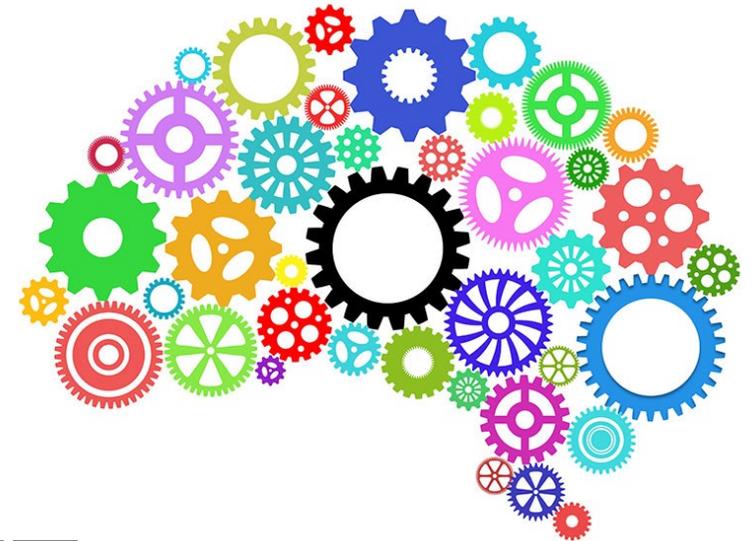
María Sol Garcés, Universidad San Francisco de Quito (Ecuador)

Lillian Luk, University of Hong Kong (Hong Kong)

Moderators:

Mellissa Withers, University of Southern California (US)

Catherine Zhou, Hong Kong University of Science & Technology (Hong Kong)



For more details or to register: https://bit.ly/APRU_edu_July2022

Questions? mwithers@usc.edu



THANK
YOU

- mwithers@usc.edu
- www.apruglobalhealth.org



國立臺灣大學 氣候天氣災害研究中心

Center for Weather and Climate Disaster Research, NTU

New role of universities: experiences from Taiwan

Speaker: Dr. Tsung-Yi Pan

Author: Tsung-Yi Pan, Hsin-Mu Tsai, Jen-Sen Liu, Chi-Huang Chen, Wei-Shun Chang, Yan-Hong Zheng, and Hung-Chi Kuo

Center for Weather and Climate Disaster Research, NTU

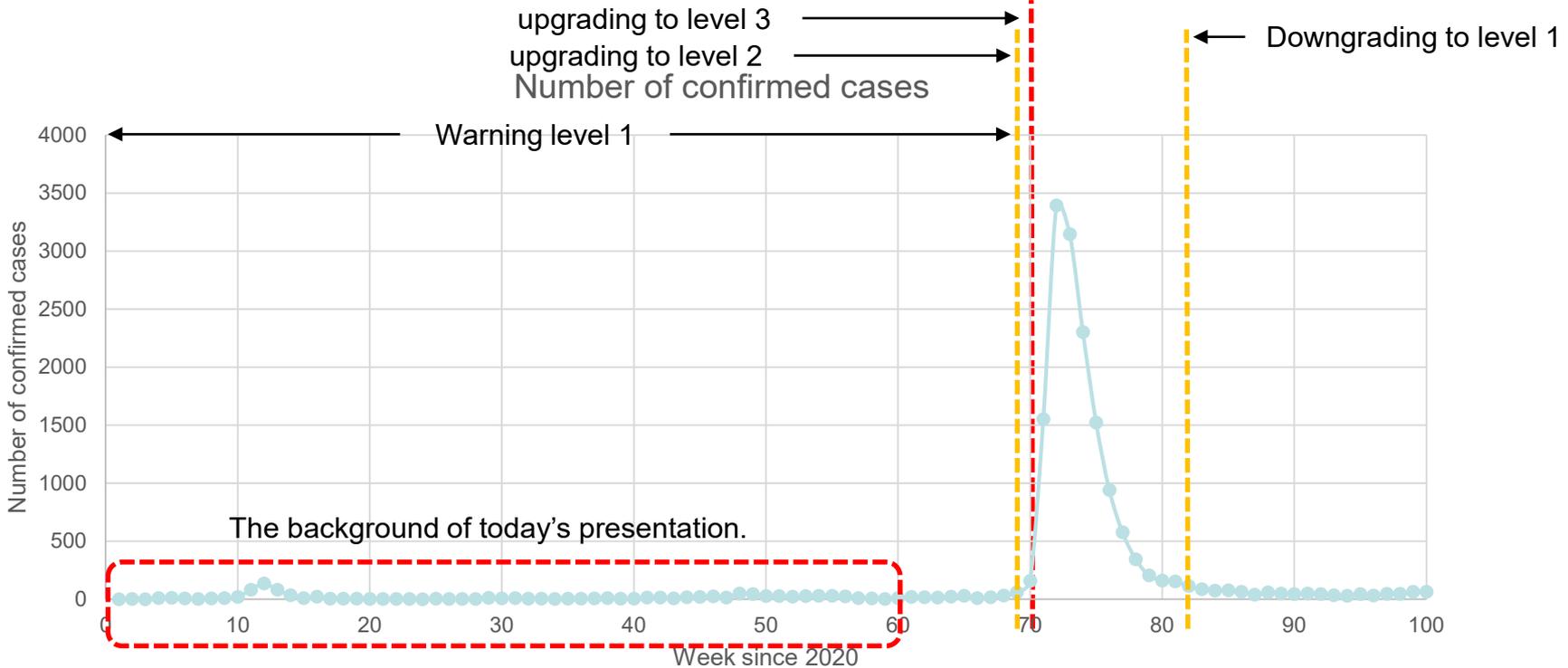


- Overview of Taiwan government's epidemic prevention in the higher education system
- Impacts of the epidemic on Taiwan's higher education system
- New role of universities for teaching and learning methodologies: a case of National Taiwan University
- Benefits and opportunities
- Conclusion



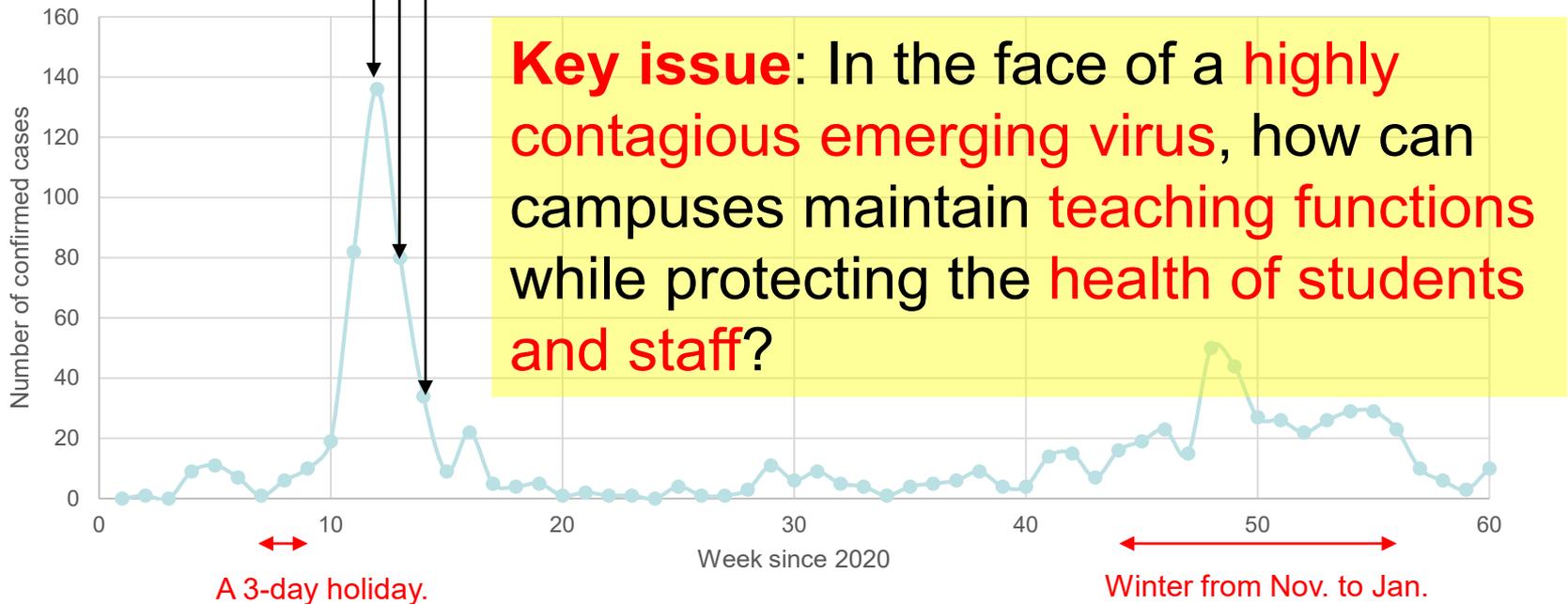
Overview of Taiwan government's epidemic prevention in the higher education system

The only time to upgrade to warning level 3 because large-scale local outbreaks infected by Alpha in May, 2021.



- 1 case from NCKU: caused 2 students to be isolated.
- 1 case from NTHU: may affect 26 students who have been in close contact, and 20 courses with more than 900 students.
- 1 case from NCCU: No contact.
- 1 case from USC: caused 10 teachers and students to be isolated.
- 1 case from NTNU: The school decided to temporarily suspend classes, and distance learning from 4/6 to 4/17.

Number of confirmed cases



Lesson learn from **SARS** in 2003, **H1N1** in 2009, and **H7N9** in 2013.

H1N1
衛生保健要徹底 新型流感不找你

讓我們一起認識H1N1新型流感!

- 主要的症狀包含發燒、咳嗽、喉嚨痛、全身酸痛、頭痛、寒顫與疲倦等
- H1N1新型流感可以透過飛沫傳染與接觸傳染

如何預防H1N1新型流感!

- 勤洗手，養成良好個人衛生習慣
- 注意個人保健，充足休息、多運動及均衡營養
- 避免前往H1N1新型流感發生地區
- 避免至人潮聚集處

疫情通報及諮詢專線：1922

行政院衛生署疾病管制局網站 <http://www.cdc.gov.tw>

行政院衛生署 關心您



2003:
partition isolation is important.

2009:
Personal hygiene habits are important.

預防H7N9流感
Yes!

從中國大陸有H7N9流感病例地區返國時，若出現發燒、咳嗽等症狀，請立即戴口罩就醫，並告知醫師旅遊史。

- 1 要重衛生**
勤洗手，養成良好個人衛生習慣。
避免前往H7N9發生地區。
避免至人潮聚集處。
- 2 要遠離禽鳥**
不要到疫區(活)地區的禽鳥市場。
避免與禽鳥接觸，也不接觸禽鳥。
不要購買或食用來源不明的禽鳥。
- 3 要吃熟食**
肉、雞、鴨肉及蛋類，要煮熟後才能吃。

2013:
Keep distance from birds.

Ministry of Education:

Advisory Group



Formulating the Outline



Host the Seminar for epidemic prevention



Review school-wide contingency plans



On-site school visits

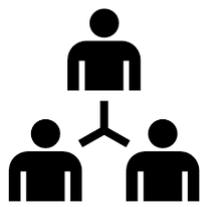


Establish a regional center



Colleges and universities:

Epidemic prevention team Prevention propaganda



Planning for remote teaching

Safe schooling for isolated cases



Health management measures



Tracing activities in campus

Pre-planned isolation dormitories



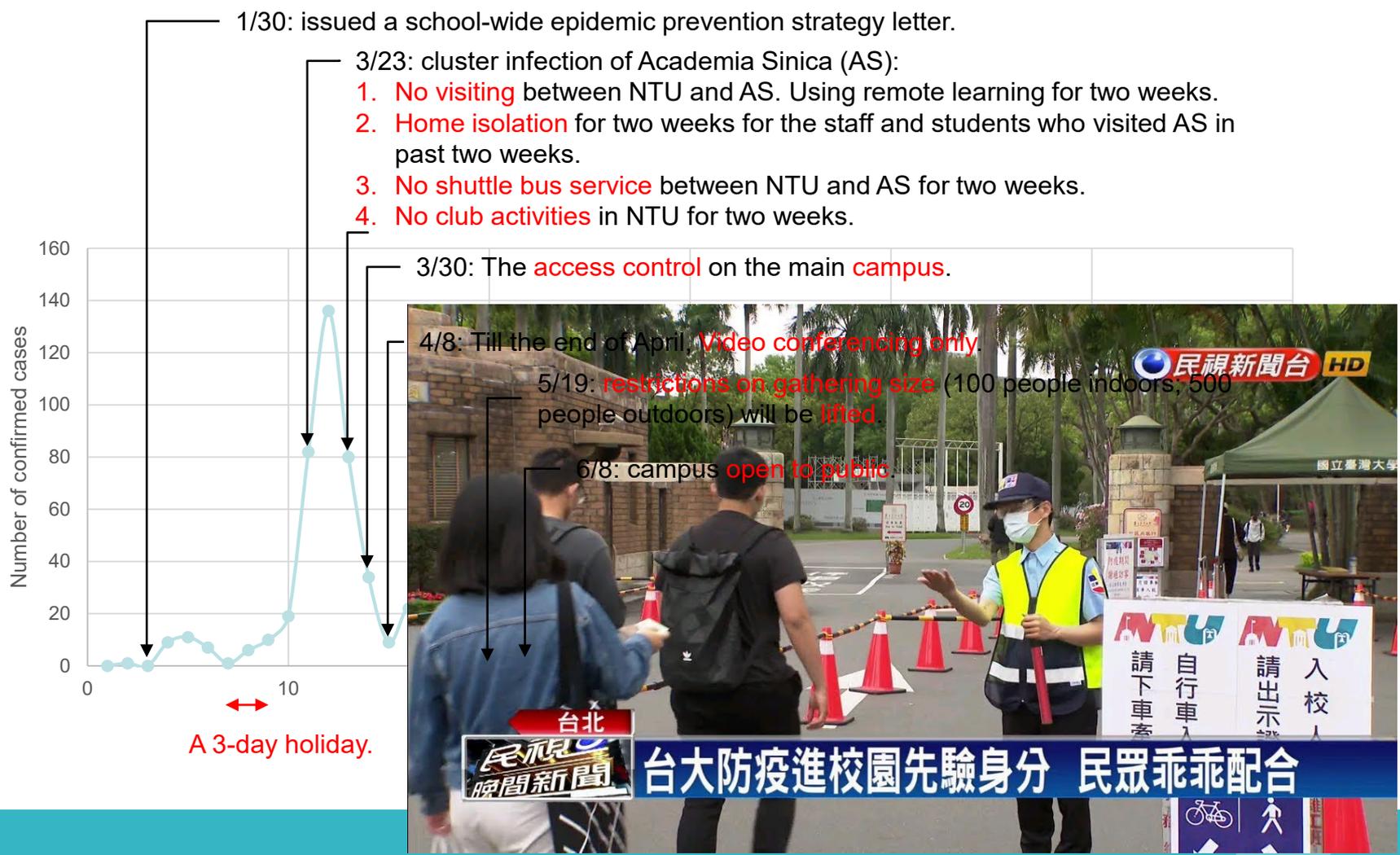
Environmental cleaning before school starts



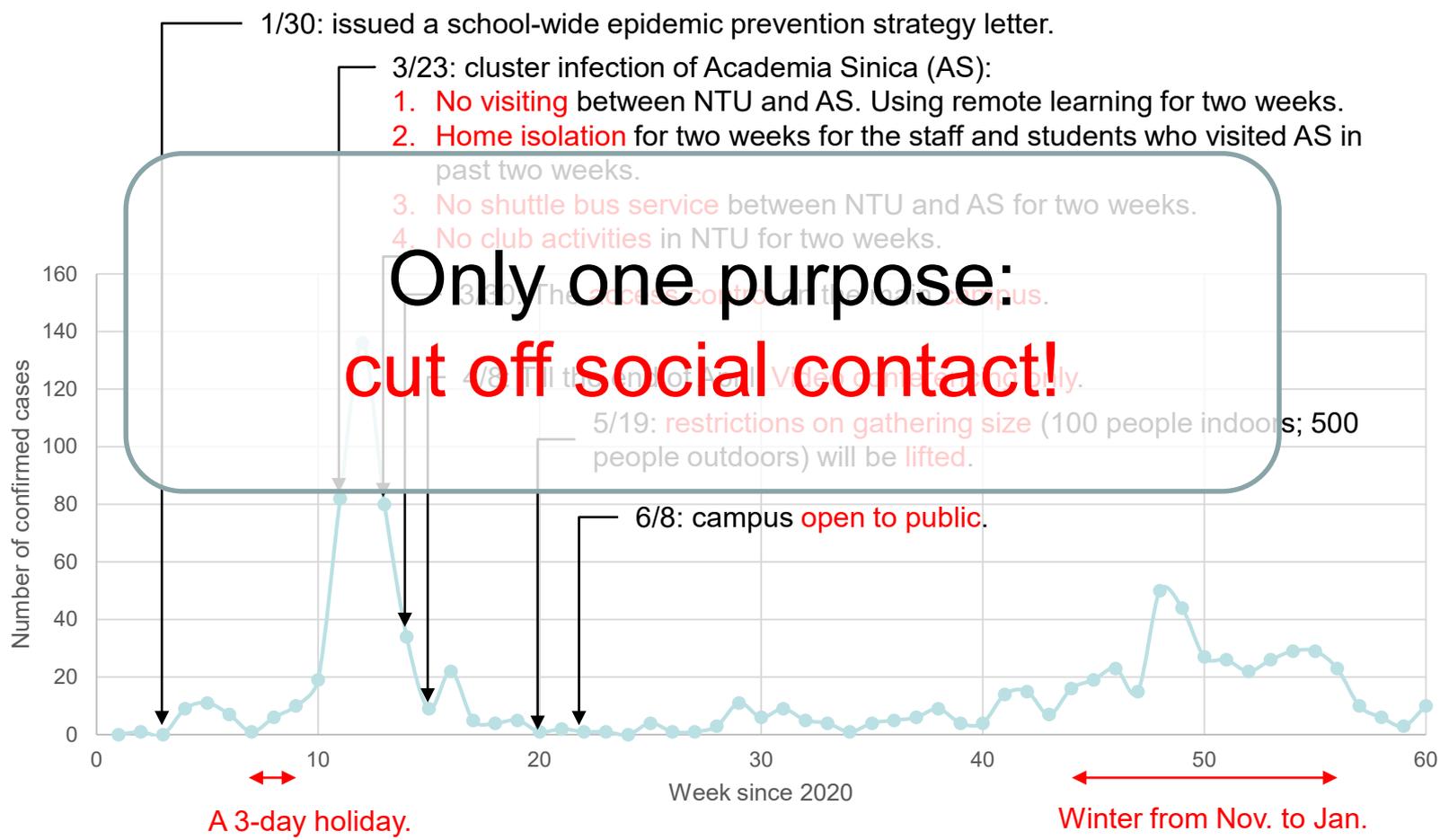


Impacts of the epidemic on Taiwan' s higher education system

The timeline of NTU's responses to the epidemic



- The timeline of NTU's responses to the epidemic





New role of universities for teaching and learning methodologies: a case of National Taiwan University

- The purpose of the new role of universities for teaching and learning methodologies was **to effectively prevent the expansion of COVID-19**, to ensure both the **safety** of the large number of faculty, staff, and students as the new semester began, and also the school's **normal operations**.

cut off social contact!



Non-contact teaching:
NTU COOL

Contact teaching: an automated temperature-measuring device





- NTU COurses OnLine (NTU COOL), a digital learning platform developed and operated **by NTU**.
- It served approximately **1/3 of NTU courses**, i.e., more than 2000 courses, in the **Spring 2020 semester**. (**6 times** to those of the previous semester)



video learning

online interaction

learning footprint
tracking



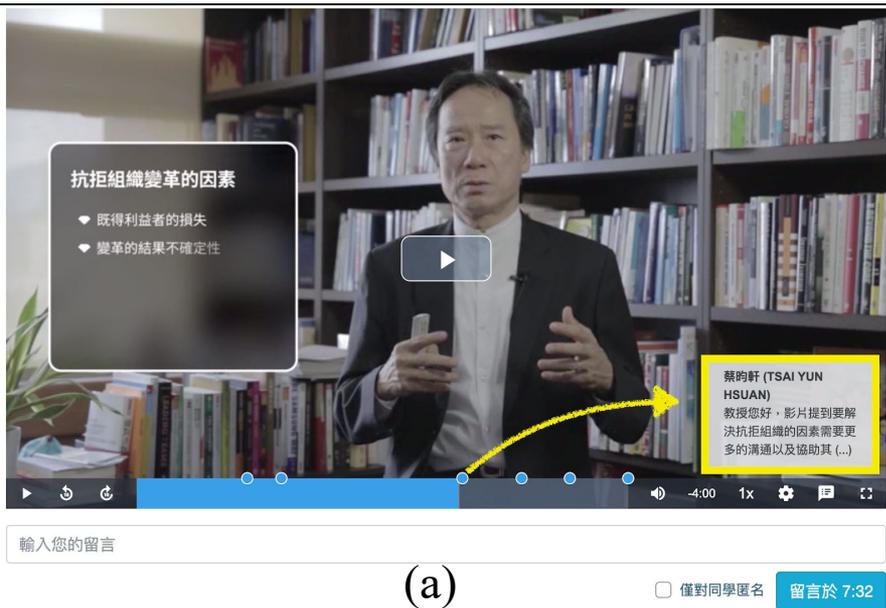
Contact teaching: an automated temperature-measuring device



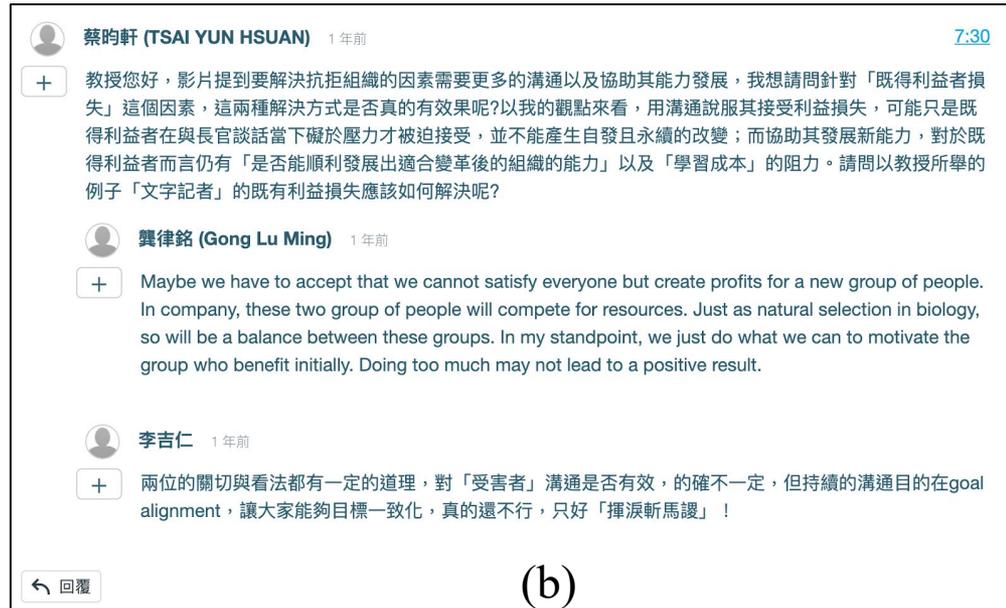
APRU

- One of NTU COOL's best developed features is a **custom Video Learning module** that lowers the threshold of online teaching.
- It allows users
 - to **upload their own videos** and import videos from **YouTube**,

- One of NTU COOL's best developed features is a **custom Video Learning module** that lowered the barrier of online teaching.
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(a)



(b)

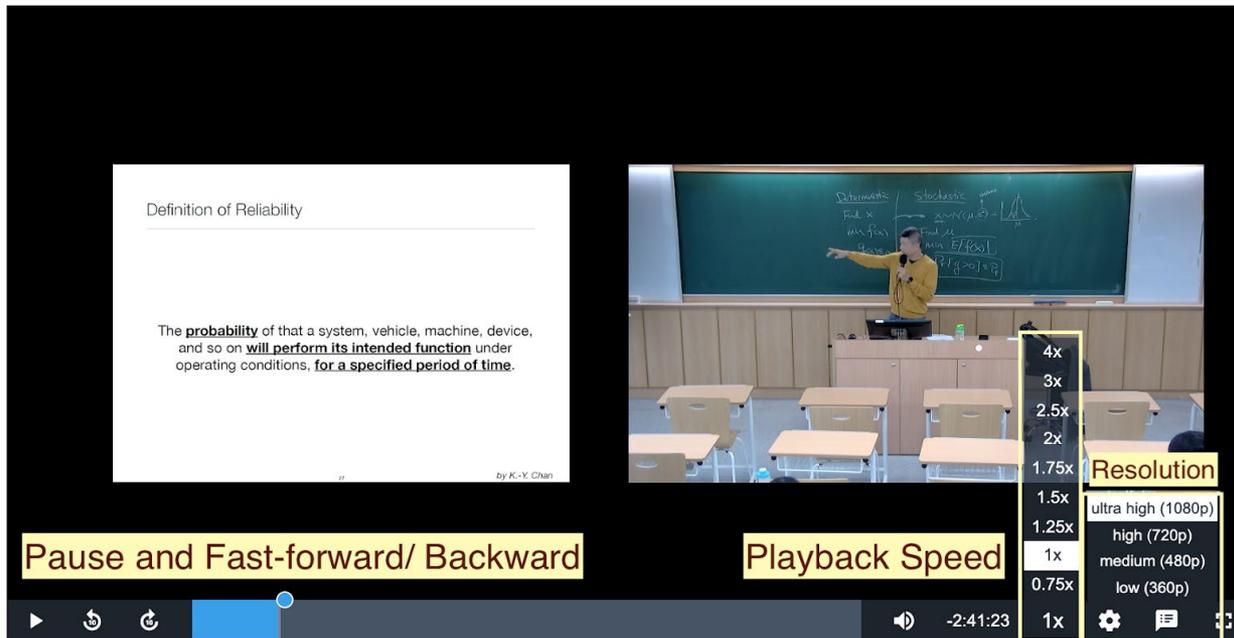


Contact teaching: an automated temperature-measuring device



APRU

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 - play videos at **different speeds**,





Contact teaching: an automated temperature-measuring device



APRU

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- It allows users
 - to **upload their own videos** and import videos from **YouTube**,
 - to **post comments** and **replies on specific parts of videos**,
 - play videos at **different speeds**,
 - collect video **viewing behaviors** of students,
 - provide **visualized statistical charts/graphics**.



我的影片

匯出留言 統計數據 + 新增影片

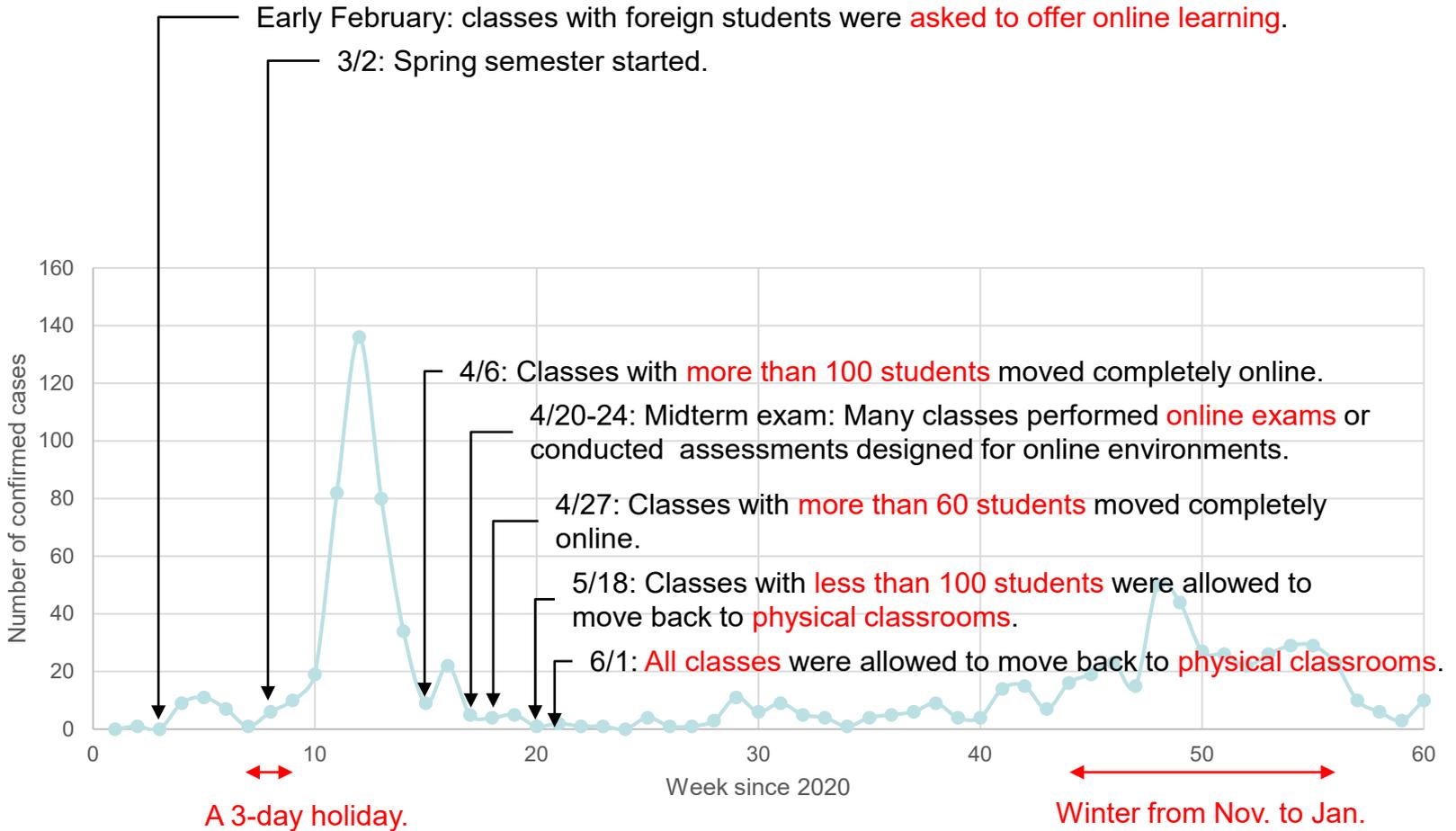
完成率

匯出 CSV

	V4「建構與發展 團隊」-- 團隊發...	V5「解決問題從 建立問題開始」...	V6「建立問題的 分析邏輯」-- 金...	V7「計畫一定趕 不上變化」-- 規...	V8「建立有效的 策略與執行」--...	V9「建立目標 動績效」-- 該目
Progress bar	98%	100%	99%	100%	100%	100%
Progress bar	100%	100%	100%	100%	100%	100%
Progress bar	100%	100%	100%	100%	100%	95%
Progress bar	78%	100%	100%	75%	100%	91%
Progress bar	100%	100%	99%	99%	100%	98%
Progress bar	100%	78%	65%	96%	85%	80%
Progress bar	80%	64%	89%	100%	99%	100%
Progress bar	100%	100%	100%	99%	100%	100%
Progress bar	100%	100%	100%	100%	100%	100%

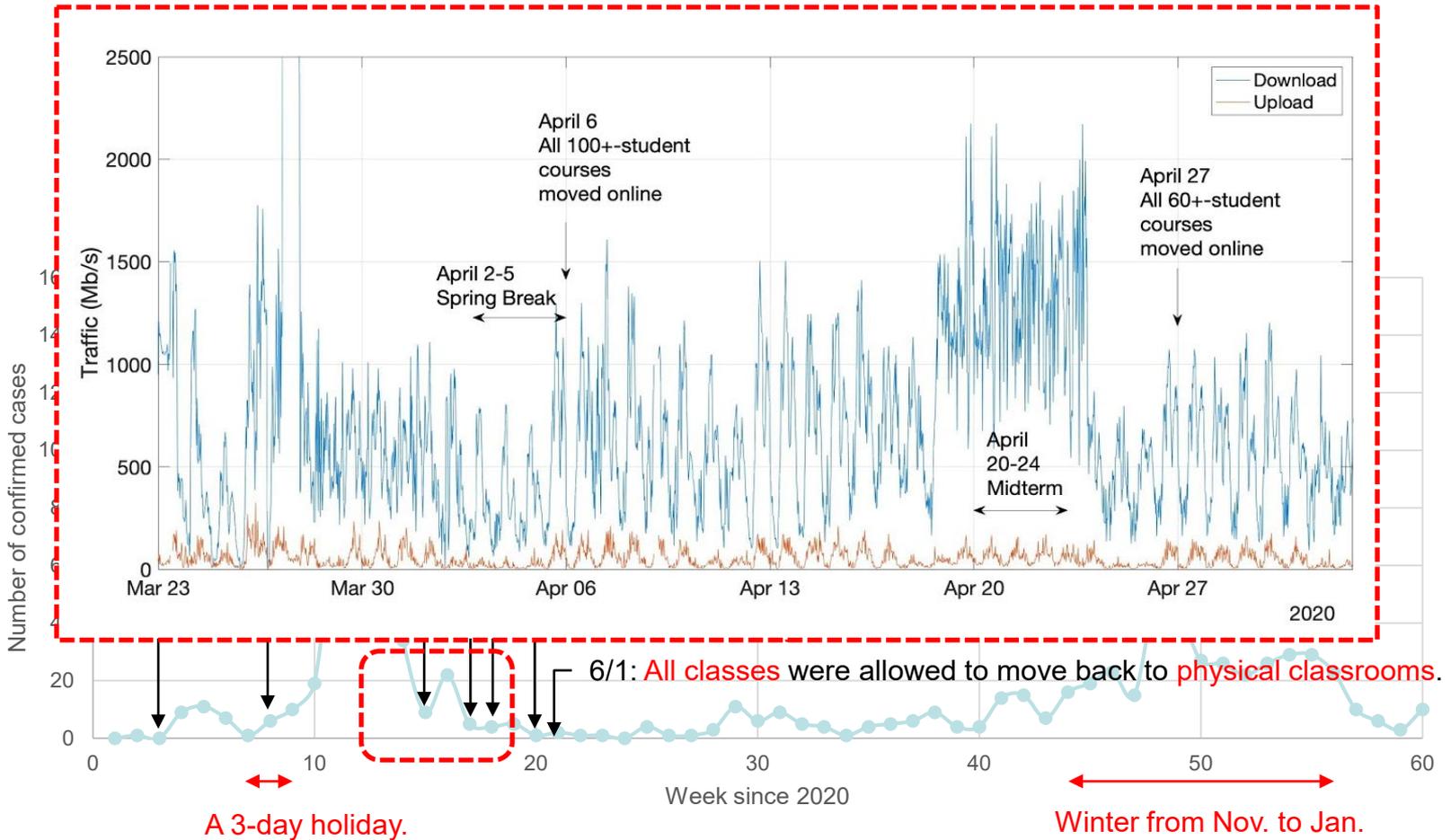


- Timeline of NTU teaching policy for Spring 2020.





- the outgoing throughput of the object server.



- During severe acute respiratory syndrome (SARS) in 2003 or new influenza in 2009 (H1N1), and the current COVID-19 pandemic period, infected patients usually have elevated **body temperature**. Thus, body temperature is a **preliminary screening** to determine whether or not they are infected.



- National Taiwan University Pandemic Prevention No. 1, automated temperature-measuring device was released on March 10, 2020.

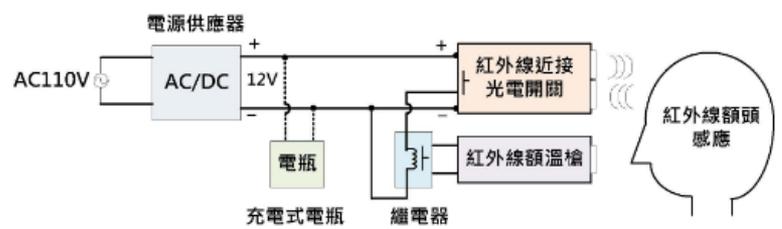


- This "epidemic prevention control system" can upload temperature and foot traffic data taken at each control point on the campus to the NTU database.



- This is a **cost-effective** system. Only 3,000 NTD (12,700 JPY; **100 USD**)
- The **design drawing was published** on the NTU's Department of Electrical Engineering's website, and units were offered to those in need across the country.

設計說明

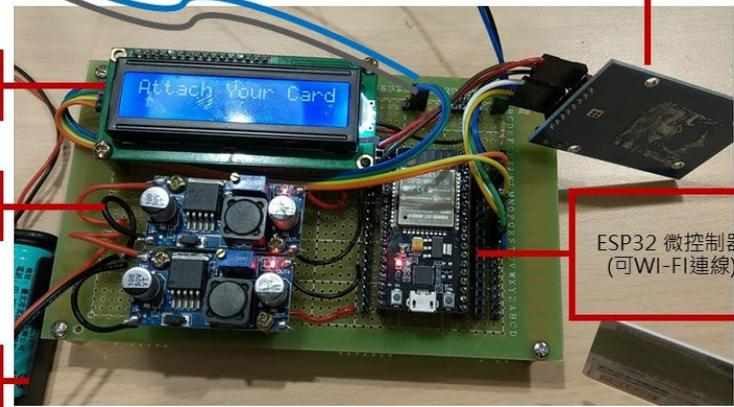


- 在機架上固定一組紅外線額溫槍，此溫槍啟動線路連接一可調整感應距離的光電偵測器，該偵測器設置於體溫槍口旁。
- 當人靠近光電偵測器範圍內，偵測器起動時，體溫槍顯示量測溫度。
- 裝置之電源供應來自機架下方箱體，內含繼電器及交流轉換成直流電源供應器，並附加充電電池。



防疫一號改良試作品

5577 額溫槍



RFID 讀卡器

LCD 顯示螢幕

電源供應模組

18650 鋰電池

ESP32 微控制器 (可Wi-Fi連線)



- The visitor does **not need to touch any part** of the forehead thermometer, as long as the forehead is close to the temperature measurement sensor. **Temperature value** can be seen from the **L-shaped mirror**.





Contact teaching: an automated temperature-measuring device



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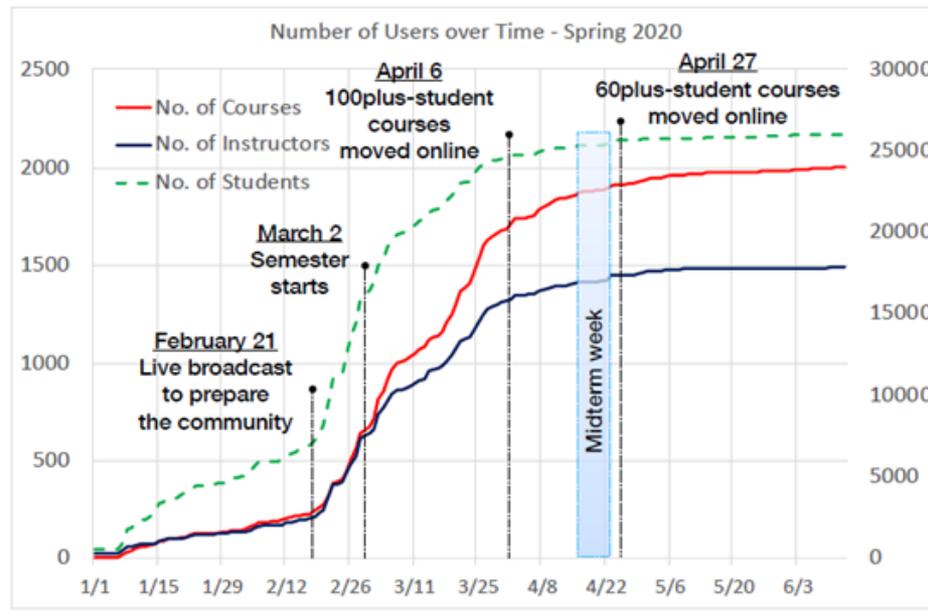
- The visitor does **not need to touch any part** of the forehead thermometer, as long as the forehead is close to the temperature measurement sensor. **Temperature value** can be seen from the **L-shaped mirror**.





Benefits and opportunities

- For facing COVID-19 or such a new epidemic in the future, NTU:
 - develop the **digital learning platform**, NTU COOL, for non-contact teaching,
 - create the **low-cost automated temperature-measuring device** with a contact tracing system for face-to-face learning.
- **Most of the courses** and teaching videos were designed and uploaded **before early April 2020**, i.e., within one month after the beginning of the semester. This demonstrates teachers can start implementing **online teaching without much difficulty**, by using the training courses about online teaching on NTU COOL.





- The number of people visiting NTU's campus reached nearly 26,000 every day, and the number of ID card scans between buildings reached more than 80,000. The system helps avoid cluster spreads in the university.

Card swiping times in 7 days / single visit



Powered by National Taiwan University.



Conclusion

- Taiwan has developed its current anti-epidemic system based on its previous anti-epidemic experience. Because Taiwan **did not have a vaccine for COVID-19 in 2020**, so the **border epidemic prevention strategy** is given priority to prevent the virus from entering the community.
- In terms of colleges and universities, the main strategy is to require everyone **wear masks** and maintain sufficient **social distance** to reduce the risk of contracting the virus. At the same time, the **real-name system** is adopted to improve the accuracy of the **epidemic investigation**.
- Through cross-domain integration, NTU not only **strengthens NTU COOL's remote teaching services**, but also **develops an automated temperature-measuring device with a contact tracing system** to help the Epidemic Prevention Command Center quickly grasp the chain of infection.
- Finally, through the sharing of Taiwan's experience, we hope that Institutions can refer to it and further **enhance campus safety and resilience**.

Thank you very much.



Vigorous, Vital, Vulnerable: Universities and COVID-19, Aotearoa New Zealand

Safety and Resilience of Higher Educational
Institutions: Considerations for a Post-COVID-19
Pandemic Analysis

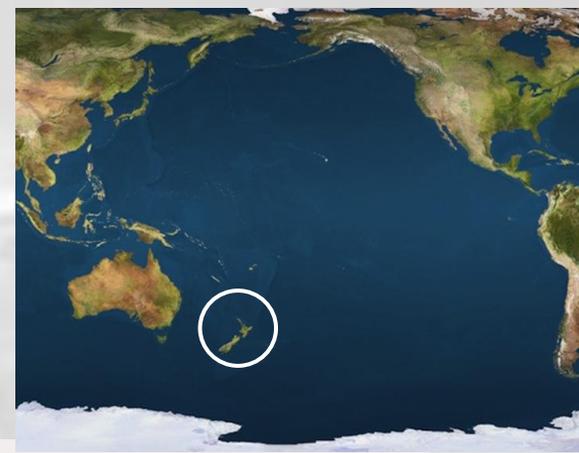
2022 APRU Multi-Hazards Webinar Series:

24 May, 2022

Ailsa Holloway,
Auckland University of Technology

Three Key Themes

Aotearoa NZ
pop. 5.1million
(March 2022)



- HE governance systems that systemically incorporate disaster risk considerations are better placed for a *vigorous* and *coherent* emergency response.
- Universities are *vital* in the frontline response to public health and other emergencies.
- Universities are also *vulnerable* – both externally, with respect to exposures outside the institution and internally with respect to students, staff and operating systems.

<https://www.transpacificproject.com/index.php/maps/>

New Zealand Disaster Risk Context, 2019 - 2020

NZ Measles Outbreak

<https://www.stuff.co.nz/national/health/119222371/measles-outbreak-no-new-new-zealand-cases-for-only-the-second-time-in-11-months>

Samoa Measles Outbreak

<https://www.who.int/docs/default-source/wpro---documents/dps/outbreaks-and-emergencies/measles-2019/measles-pacific-who-unicef-sitrep-20200103.pdf>

Figure 1. Number of confirmed measles notifications by week, 1 January 2019–14 February 2020

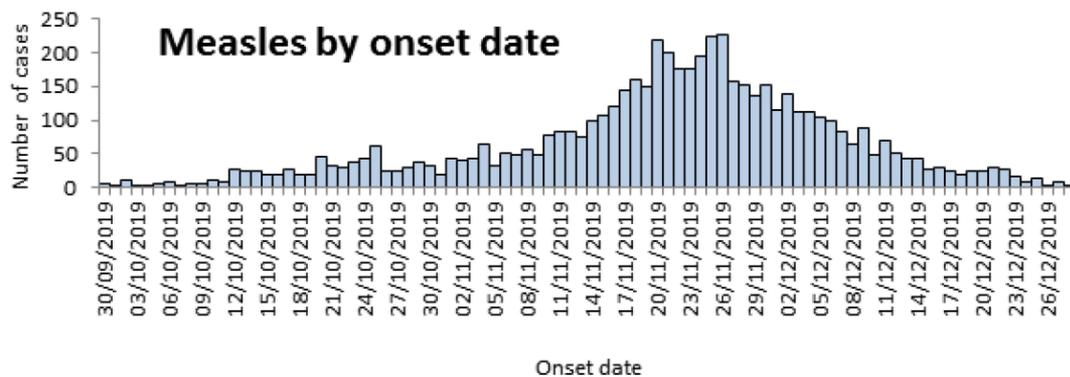
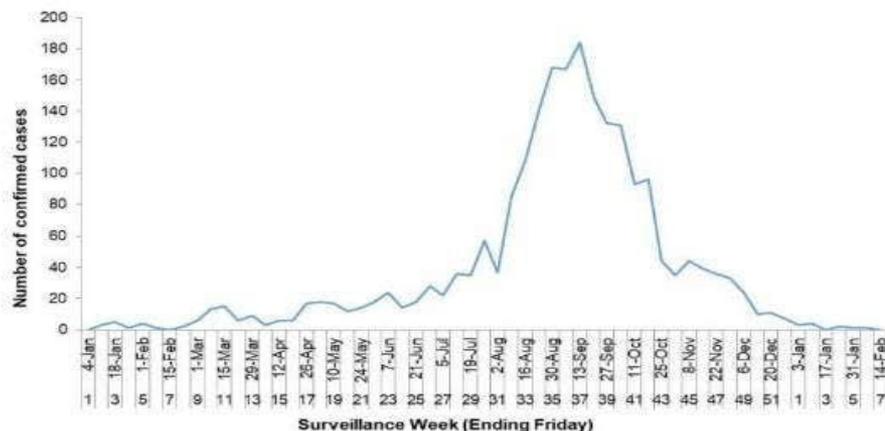


Figure 1. Epicurve Measles in Samoa by date of onset, date of report: 29 December 2019 (N=5,675). Source: Health Emergency Operations Centre (HEOC) Situation Report, Ministry of Health Samoa; Incident Name: Measles outbreak - October 2019: Sitrep No. 44



Whakaari White Is. Eruption

<https://www.rnz.co.nz/news/national/457528/whakaari-white-island-finger-pointed-back-at-worksafe>



Australian Bushfires

<https://www.sciencenews.org/article/australia-wildfires-climate-change-carbon-dioxide-ocean-algae>

2010-2011 Canterbury earthquakes



2016 Kaikoura earthquake



<https://www.gns.cri.nz/Home/News-and-Events/Media-Releases-and-News/Ten-years-on-Christchurch-earthquake-a-watershed-in-so-many-ways-22-02-21>

<https://teara.govt.nz/en/video/46856/uplift-of-the-kaikoura-coastline>

New Zealand University Sector

Eight universities

180,000 students (2019)

81% domestic

19% international

3,000 (Lincoln Univ –
43,000 (University of
Auckland)



National Structures

Ministry of Education

Tertiary Education Commission

NZ Vice-Chancellors' Committee

- Universities NZ
- Academic Quality Agency for NZ Universities

Tertiary Education Union

NZ Union of Students Associations

Te Mana Ākonga, the National Māori Tertiary Students Association

Focus on Early Response 2020

Phase I: 2 February – 15 March Initial travel restrictions	Restrictions on arrivals from mainland China, Iran, N. Italy, S. Korea.
Phase II: 16 March – 25 March “Rapid escalation of non-pharmaceutical interventions” (Jefferies et al., 2020).	25 March: Declaration of State of Emergency
Phase III: 26 March – 10 April First half of nation-wide lockdown	26 March: Alert Level 4: Stay-at-home orders.
Phase IV: 11 April – 27 April 2 nd half of nation-wide lockdown	Continuation of Alert Level 4: Stay at home
Phase V: 28 April – 13 May Two-step de-escalation	14 May: Step-down to Alert Level 2

New Zealand COVID-19 Alert Levels Summary

- The Alert Levels are determined by the Government and specify the public health and social measures to be taken in the fight against COVID-19. Further guidance is available on covid19.govt.nz.
- The measures may be updated based on new scientific knowledge about COVID-19, information about the effectiveness of control measures in New Zealand and overseas, or the application of Alert Levels at different times (for example, the application may be different depending on if NZ is moving down or up Alert Levels).

- Different parts of the country may be at different Alert Levels. We can move up and down Alert Levels.
- Services including supermarkets, health services, emergency services, utilities and goods transport will continue to operate at any level. Employers in those sectors must continue to meet health and safety obligations.
- Restrictions are cumulative (for example, at Alert Level 4, all restrictions from Alert Levels 1, 2 and 3 apply).

Updated 17 August 2021

ELIMINATION STRATEGY – New Zealand is working together to eliminate COVID-19

Alert Level	Risk assessment	Measures that can be applied locally or nationally
Level 4 – Lockdown Likely the disease is not contained	<ul style="list-style-type: none"> • There is sustained and intensive community transmission. • Outbreaks are widespread. 	<ul style="list-style-type: none"> • Stay home in your bubble, other than for essential personal movement. • Safe recreational activity is allowed in your local area. • Travel is severely limited. • All gatherings are cancelled, and all public facilities close. • Businesses close except for essential services (for example, supermarkets, pharmacies, clinics, petrol stations) and lifeline utilities. • Educational facilities close. • Rationing of supplies and requisitioning of facilities is possible. • Reprioritisation of healthcare services is possible. • You are encouraged to wear a face covering whenever you leave the house.
Level 3 – Restrict High risk the disease is not contained	<ul style="list-style-type: none"> • There are multiple cases of community transmission. • There are multiple active clusters in multiple regions. 	<ul style="list-style-type: none"> • Stay home in your bubble, other than for essential personal movement, including going to work or school if you have to, or for local recreation. • Keep 2 metres apart from people you do not know outside home, or 1 metre in controlled environments such as schools and workplaces. • Stay within your immediate household bubble, but you can expand this to reconnect with close family/whānau, enable caregiving, or support isolated people. This extended bubble should remain exclusive. • Schools (years 1 to 10) and Early Childhood Education centres can safely open, but with limited capacity. Children should learn at home if possible. • You must work from home unless it is not possible. • Businesses cannot have customers on site, unless it is a supermarket, bank, primary produce retailer, pharmacy, petrol station or hardware store providing goods to trade customers, or it is an emergency or critical situation. • Other businesses can open premises, but customers cannot enter. • Low-risk local recreation activities are allowed. • Public facilities are closed (for example, libraries, museums, cinemas, food courts, gyms, pools, markets). • Gatherings of up to 10 people are allowed but only for weddings, civil union ceremonies, funerals and tangihanga. Physical distancing and public health measures must be maintained. • Healthcare services should use virtual, non-contact consultations if possible. • Inter-regional travel is highly limited, for example, for critical workers, with limited exemptions for others. • People at high risk of severe illness, such as older people and those with existing medical conditions, are encouraged to stay at home where possible, and take additional precautions when leaving home. You may choose to work.
Level 2 – Reduce The disease is contained, but the risk of community transmission remains	<ul style="list-style-type: none"> • There could be limited community transmission. • There are active clusters in more than one region. 	<ul style="list-style-type: none"> • You can reconnect with friends and family, and socialise in groups of up to 100, go shopping and travel domestically, if following public health guidance. • Keep 2 metres apart from people you do not know in retail stores. Try to keep 2 metres apart from people you don't know when out in public. Keep 1 metre apart in controlled environments like workplaces, where practicable. • No more than 100 people allowed at social gatherings, including weddings, civil union ceremonies, birthdays, funerals and tangihanga. • Businesses can open to the public if following public health guidance, such as physical distancing and record keeping. Alternative ways of working encouraged where possible. • Hospitality businesses must keep groups of customers separated and seated. Maximum of 100 people in a defined space. • Sport and recreation activities are allowed, subject to conditions on gatherings, record keeping, and – where practical – physical distancing. • Public facilities such as museums, libraries and pools can open if they comply with public health measures and ensure 1 metre physical distancing. • Event facilities, including cinemas, stadiums, concert venues and casinos, can have more than 100 people at a time, provided that there are no more than 100 in a defined space, and the groups do not mix. • Health and disability care services can operate as normally as possible. • It is safe to send your children to schools, early learning services and tertiary education. There will be appropriate measures in place. • People at higher risk of severe illness from COVID-19 (for example, those with underlying medical conditions, especially if not well-controlled, and older people) are encouraged to take additional precautions when leaving home. You may work, if you agree with your employer that you can do so safely. • Passengers and workers in transport stations must keep 1 metre apart, as far as reasonably practicable.
Level 1 – Prepare The disease is contained in New Zealand	<ul style="list-style-type: none"> • COVID-19 is uncontrolled overseas. • There could be sporadic imported cases. • There could be isolated local transmission in New Zealand. 	<ul style="list-style-type: none"> • There are border entry measures to minimise the risk of importing COVID-19 cases. • Intensive testing for COVID-19 is carried out. • Rapid contact tracing of any positive case is carried out. • Schools and workplaces can open and must operate safely. • There are no restrictions on personal movement, but you are encouraged to maintain a record of where you have been. • There are no restrictions on gatherings, but organisers are encouraged to maintain records to enable contact tracing. • Stay home if you are sick, report flu-like or COVID-19 symptoms. • Wash and dry your hands, cough into your elbow, do not touch your face. • Avoid public transport or travel if you're sick. • There are no restrictions on workplaces or services, but you are encouraged to maintain records to enable contact tracing. • NZ COVID Tracer QR codes issued by the NZ Government must be displayed in workplaces and on public transport to enable use of the NZ COVID Tracer App for contact tracing. • Face coverings are required on public transport and aircraft, but not inter-island ferries and school buses. Children under 12, passengers in taxis or ride-share services, and people with disabilities or mental health conditions do not have to wear face coverings.

On 23 March, the MoE convened a consultation with representatives of key education sector coordinating organisations

Its COVID-19 Bulletin stated:

“All education and research services requiring face to face contact should be suspended immediately. As much delivery as possible should be shifted online...”

“medical research required for combatting COVID-19 is an essential service.”

Within 48 hours of the PM’s announcement, all NZ universities ceased on-site delivery.

Vigorous: An Agile, Cross-Scalar Architecture for Risk Management

- Pre-existing risk management guideline statements through the Academic Quality Agency of NZ Universities as part of (Cycle 5) Academic Audit Framework (2013-2016). These specified “recovery plans & procedures which are designed to facilitate continuity of teaching and learning in instances of infrastructure system failure”
- Anticipatory UNZ coordination action
On 3 February, 2020, UNZ’s Chief Executive emailed all NZ’s Vice-Chancellors – to clarify UNZ’s role as central sectoral coordinating mechanism for nationwide university response to the novel coronavirus.

Guidelines for Tertiary Education Organisations on how to operate under different Alert Levels

Detail on the [public health control measures](#) for TEOs at Alert Level 2, along with a set of FAQs, can be [found here](#).

Updated as at 17 November 2020	Overarching principles for TEOs	What this means for...			
		Teaching and learning	Conducting research	Accommodation and student support	Campus operations and management
<p>Level 1 - Prepare</p> <p>Status: <i>The disease is contained in New Zealand</i></p> <ul style="list-style-type: none"> Wearing a face covering is mandatory on all public transport in to, out of, or within Auckland, and on all domestic flights across New Zealand, from Thursday 19 November. More information, including exemptions, can be found here. <p>The Golden Rules for everyone at Alert Level 1:</p> <ol style="list-style-type: none"> If you're sick, stay home. Don't go to work or school. Don't socialise. If you have cold or flu symptoms call your doctor or Healthline and make sure you get tested. Wash your hands. Wash your hands. Wash your hands. Sneeze and cough into your elbow, and regularly disinfect shared surfaces. If you are told by health authorities to self-isolate you must do so immediately. If you're concerned about your wellbeing or have underlying health conditions, work with your GP to understand how best to stay healthy. Keep track of where you've been and who you've seen to help contact tracing if needed. Use the NZ COVID Tracer app as a handy way of doing this. Businesses should help people keep track of their movements by displaying the Ministry of Health QR Code for contact tracing. Stay vigilant. There is still a global pandemic going on. People and businesses should be prepared to act fast to step up Alert Levels if we have to. People will have had different experiences over the last couple of months. Whatever you're feeling — it's okay. Be kind to others. Be kind to yourself. 	<p>Principles for TEOs under Alert Level 1</p> <ul style="list-style-type: none"> All on-site activities at tertiary education facilities can resume as normal, including classes, lectures, labs, workshops, tutorials, noho, meetings, etc. All staff and students should return to on-campus activities. TEOs (along with all businesses and services) are <u>required</u> to display the official NZ COVID Tracer QR code posters in a prominent place at or near the main entrances, even at Alert Level 1. This helps enable individuals (i.e. staff, students, and visitors) to keep track of where they have been. TEOs may also continue to collect contact tracing information through other mechanisms so long as they protect peoples' privacy and safety. TEOs are not required to maintain physical distancing. Remote learning and teaching systems should be maintained in case of a move to a higher alert level. TEOs should be ready to move up alert levels at short notice (i.e. be ready to implement the required public health control measures of each level) If a staff or student is concerned about their wellbeing, or has underlying health conditions, they should work with their GP or other health professional to understand how best to stay healthy. 	<ul style="list-style-type: none"> All teaching and learning activities may run as normal, with no COVID-19-related restrictions other than what would normally be required under the Health and Safety Act and relevant Worksafe regulations. This means that classes, lectures, labs, workshops, tutorials, noho (including overnight noho marae), close-contact courses, workplace-based learning, pastoral care, and meetings, etc. may all run as normal. Guidance for TEOs on how to run <u>on-site examinations</u> at different Alert Levels can be found here 	<ul style="list-style-type: none"> All research and related activities are allowed as normal, with no COVID-19-related restrictions other than what would normally be required under the Health and Safety Act and relevant Worksafe regulations. 	<ul style="list-style-type: none"> Student accommodation, such as hostels and halls of residence, may operate as normal, with no COVID-19-related restrictions other than what would normally be required under the Health and Safety Act and relevant Worksafe regulations, and the Pastoral Care Code. Maintaining 'bubbles', physical distancing, restricting visitors or social events, etc. are <u>not required</u> for student accommodation. Tertiary accommodation providers are <u>required</u> to display the official NZ COVID Tracer QR code posters in a prominent place at or near the main entrances of accommodation facilities. Shared kitchens and communal areas are allowed to open as normal. Students may travel domestically as normal, though strict border control measures will still be in place for anyone entering New Zealand, including students or staff. Student counselling & health services are allowed to operate as normal. 	<ul style="list-style-type: none"> All operations and management staff are allowed on site, as normal. On-campus businesses such as gyms, pharmacies, cafes, restaurant, etc. may operate as normal, with no COVID-19-related restrictions other than continuing to use NZ COVID Tracer QR Codes, and what would normally be required under the Health and Safety Act and relevant Worksafe regulations, and the Pastoral Care Code. Libraries, recreation areas (e.g. sports grounds, tennis courts etc.), etc. may operate as normal. Staff may travel domestically as normal, though strict border control measures will still be in place for anyone entering New Zealand, including students or staff.

Vital: University as Front-line Responder

- A response that engaged science advocacy, epidemiology & rigorous mathematical modelling.
- A response that was enabled by the rapid advancement of COVID-19 genomic sequencing capability.
- A response that profiled effective risk communication. Scientists played prominent roles in augmenting government messaging but adding a vigorous & critical voice.

The bumper Toby Morris & Siouxsie Wiles Covid-19 box set



Risk communication
partnership of microbiologist
Dr Siouxsie Wiles & Spinoff's
illustrator Toby Morris

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Vulnerable: Existing issues - new challenges

- Major upheaval for students & staff, despite govt financial assistance, on-line mental health services and intensified university support.
- Increased study-related stress levels, mental health challenges due to social isolation. Intense financial pressures.
- Challenges of interpreting complex university communications
- Māori students stayed with their whānau (family). Only 25% indicated these incl. financial support, although approx 17% had to stop work.

Border Restrictions and Financial Vulnerability

- In 2019, 33,905 international students in NZ. This dropped to 17,570 in April 2020 & to 26,040 (2021).
- Financial “early warning” to NZ’s higher education sector (13-15% NZ university revenue is from international students).
- Materially, 700 university jobs lost due to reduced earnings.

Navigating Future Risk

- HE governance systems that systemically incorporate disaster risk considerations enable agility for a *vigorous* and *coherent* emergency response.
- HEIs are *vital* in the frontline response to public health and other emergencies.
- HEIs are also *vulnerable* – both externally & internally, and ...
- ... they are crucial for *building societal agility* for unexpected change across time and space (in other words, to advance resilience).

Epilogue

On 13 May, the Minister of Education, launched a consultation on a refreshed International Education Strategy for 2022-30.

This followed the PM's 11 May announcement that NZ's borders would fully open from 31 July 2022.

<https://conversation-live-storage-assets-storage3bucket-jsvm6zoesodc.s3.ap-southeast-2.amazonaws.com/public/Uploads/Draft-refresh-New-Zealand-International-Education-Strategy-2022-2030.pdf>

Thank you