

# 40 Chinese Taipei: Contingency plans for hybrid models of learning

Yi-Hwa Liou, Associate Professor, National Taipei University of Education

Christopher Petrie, Head of Global Research, HundrED

---

Type of intervention: Governmental and Non-governmental

Website: [BEEP Lab](#) | [City Wandering Challenge](#) | [Co-Publishing Project](#)

---

## General description

Chinese Taipei has been successful in containing its number of COVID-19 infections to one of the lowest levels in the world. It has used many of the precautions, strategies and systems developed in prior experiences with the 2003 SARS outbreak and the 2009 H1N1 swine flu pandemic. It prioritised and implemented prevention strategies in the early stages of the COVID-19 crisis at the end of December 2019. As a result, there was minimal disruption to the regular operation of society and education at large in Chinese Taipei.

However, responding to the pandemic necessitated developing a number of policies, plans and central authority initiatives in relation to primary and secondary education. These included, but were not limited to: delaying the start of the spring semester by two weeks, developing class suspension plans if cases were suspected, school entry and exit controls for teachers and students, planning for continuity of teaching and learning, on-site health and safety protocols, and producing a contingency plan for the national assessment.

Alongside central authority initiatives, a number of non-governmental organisations also developed contingency plans. The focus of this education continuity story is the central authority action taken to ensure education continuity, but it also discusses three non-governmental organisation (NGO) initiatives

working to support students to engage with their local and built environments during the crisis as examples of non-governmental engagement:

- [BEEP](#) (Build Environment Experiential Program) Lab aims to enrich and engage the minds of students and educators through the lens of architecture. BEEP uses design thinking to nurture mastery in creativity, confidence and collaboration to prepare students to be responsible users and designers.
- [City Wandering Challenge](#) designs programmes for teams of 3 students who challenge themselves to complete 30 missions within 3 weeks. The missions encourage students to make the city their classroom and create meaningful growth through interactions with society.
- The [Co-Publishing Project](#) inspires children from remote schools to use smartphones combined with a “photography formula”. It aims to motivate students’ learning by publishing books of stories with visuals depicting cultural elements from their local area and families.

All three of these NGOs moved to remote activities by providing physical learning kits to students, developing online alternatives to regular events and using free local applications. They all took place in the context of widespread central authority policies to support hybrid and distance learning and to ensure the system was prepared for school closures during the health crisis.

## Main problems addressed

**Ensuring safe classroom environments.** From early in the crisis, the central authority created and promoted health and safety practices and protocols, such as handwashing, social distancing, personal hygiene, avoiding being in crowded and closed spaces, and other positive health-related behaviours. Teachers and students were required to wear a face mask in the classroom and keep a social distance of at least 1.5 metres indoors and 1 metre outdoors. No maximum class sizes were set as long as the classroom windows were kept opened to allow air to flow. The distance between desks was also increased, meal times were staggered and teachers moved between classrooms rather than students moving between classrooms. Schools were expected to clean and disinfect school and classroom environments regularly.

**Continued learning during class or school suspensions.** On 20 February 2020, before the start of the spring semester, the Ministry of Education issued a set of standards and procedures for the suspension of in-person classes in the event of confirmed cases of COVID-19, in accordance with the recommendations of the Central Epidemic Command Centre and health experts. If individual schools had two or more positive COVID cases, all classes and instruction provided on that campus had to be suspended for two weeks. If more than a third of educational institutions in one township, county or city were subject to class suspension due to COVID-19, then all the K-12 schools and higher education institutions in that township, county or city had to cease all in-person classes for two weeks. During the suspension, schools and universities needed to continue teaching and learning, as well as create a plan for in-person classes to resume with the safety of the students, staff and surrounding community members at the fore.

**Contingency planning for national assessment.** As the national high school entry examination for junior high school graduates took place in April and May, the central authority worked with the Central Epidemic Command Centre and testing experts on developing guidelines to facilitate the implementation of this nationwide assessment, including: wearing a face mask at all times during the test; checking temperature at the entrance of the test site; no parent or guardian being allowed into the testing site; keeping all windows open 10 centimetres to allow air to flow in each room with air conditioning on; frequently cleaning and sanitising all sites and rest areas; restricting entry and exit to all test sites; and monitoring the health status of those students who were in self-quarantine or self-isolation and ensuring their assessment rights.

**Alternatives to in-person NGO programmes.** Despite the minimal disruption to the normal running of society in Chinese Taipei, the COVID-19 crisis has nevertheless been described as a “roller-coaster ride” for NGOs in education. It became clear early on that any in-person interaction needed to be significantly modified or suspended, which made the health crisis particularly disruptive for NGO educational programmes.

## Mobilising and developing resources

**Distributing disease prevention resources to all primary and secondary schools.** Prior to the start of the spring semester, the central authority made sure that each school received the following equipment and resources: infrared forehead thermometer, face masks and alcohol-based sanitiser. During the semester, the central authority continued to supply these resources to schools and particularly provided large schools (700 or more students) with infrared thermal imaging cameras to reduce the time it took to perform the temperature checks as students and educators entered their schools. School-wide surveillance was also strengthened to support early detection and the reporting of suspected cases to local health authorities.

**Developing a disease prevention team.** Each primary and secondary school was required to create a strategic team of staff from across departments to implement health and safety policies. Each team had a designated spokesperson.

**Ensuring students had access to devices and connectivity for learning.** Schools were required to check their inventory of usable and loadable technological devices such as tablets, laptops, smartphones, etc., as well as the devices students have available at home, and prioritise the distribution of these devices in support of learning and instruction. If schools were in short supply of some of these devices, they could report to the local authorities and apply for more. If the local authorities were short of these supplies, they could apply for loanable devices from the Ministry of Education. In addition to the equipment/devices needed for online/remote learning, the Ministry of Education also built a budget to provide families with discounted data plans or free SIM deals.

**Providing flexible leave policies** for working parents or guardians with children under 12 years old or with disabilities.

Despite measures in public school classrooms, the three NGOs had to create and implement contingency plans to be able to continue their learning activities. NGOs tend to be smaller in scale, and as such, are often more agile to experiment, pivot and adapt quickly due to their size compared to the public school system. They came up with several innovative ways to deliver their programmes in a socially distanced manner.

**Providing guidance for setting up home studios.** Teachers at BEEP Lab set up a technically advanced home studio to deliver their architecture programme on line, although this was an initial challenge. They in turn needed to provide clear guidance to parents and children for setting up their own home studios and provide the necessary materials for families.

**Delivering physical learning kits to students.** City Wanderer Challenge created kits personalised to each student’s role in the challenge (e.g. developing self-confidence to speak in front of people in public spaces). The task assigned for each team member encourages co-operation in unique ways, which also utilises the local region (e.g. public spaces and institutions). A key difficulty with this approach was experimenting with different configurations and processes for making, co-ordinating and delivering these kits efficiently.

**Hiring additional staff and “guides”.** City Wanderer Challenge hired an intern with the specific task of designing solutions to organise online opening and closing ceremonies for each challenge. To help

manage the running of their three-week challenges, they also had the help of “spirit guides”, who guided and managed three groups each.

**Using free local applications.** The Co-Publishing Project used free local applications LINE and WebEx for communications. They provided additional professional development time for teachers to build their confidence with these technologies.

## Fostering effective use and learning

**A mix of synchronous and asynchronous learning.** School contingency plans outline several action items in response to class suspension, including stay-at-home learning and makeup classes. For instance, high school teachers were able to use weekends or summer vacation to make up for any missed classes using remote or online learning. Following the online instruction and learning guidelines issued by the Ministry of Education, elementary and middle schools were encouraged to provide synchronous instruction, asynchronous online personalised learning and other learning resources for students so they could conduct stay-at-home learning.

**Teaching from interesting locations.** Some teachers used remote learning to engage their students in learning experiences. For instance, one elementary school social studies teacher provided synchronous instruction via a live streaming from one of the historical places related to her lessons to engage her students with real-time learning and experiences of the actual historical site.

**Supporting a range of learning platforms.** Central and local authorities made sure schools, parents and students were able to access and use online resources such as the [CloudEducation](#) learning site developed by the Ministry of Education and other online courses provided by local departments of education such as Taipei Cooc-Cloud, Cooc Teaching Platform, etc. (more resources from the Ministry of Education are available [online](#)). Some schools have adopted additional learning platform technologies; some are best used for asynchronous learning, classroom management and communications (e.g. Classting, Adaptive Learning from the CloudEducation site, Juiker, LINE, LearnMode, PagamO, etc.), while others are suited for a mixture of synchronous and asynchronous instruction (Google Meet, Jitsi Meet, Microsoft Teams, Cisco WebEx, YouTube, etc.).

**Providing teacher training.** Teachers were provided with training that helped them understand what and how to use each of these platforms. In addition, teachers were also able to select the kind of platform that they felt the most comfortable and confident using with students and parents.

**Addressing achievement gaps.** In facilitating (a)synchronous online or remote learning, schools needed to attend to the learning needs of all students, and thus developed remedial education programmes for higher and lower achievers. These programmes offer additional short-term courses on core school subjects (language and mathematics) which took place in-between class periods, after school and/or during the summer. The courses were designed in a way that imbued learning with fun activities through differentiated teaching strategies, co-teaching, team learning and mobile learning to ensure the additional learning needs of students were met.

**NGOs delivering hybrid-learning modules.** BEEP Lab developed self-paced “hybrid” learning modules in addition to synchronous teaching where students have the opportunity to ask questions. They offered not only synchronous video streaming that addressed students’ learning needs in real time, but also channels such as Facebook Messenger, which allowed students to send messages with questions about their project. This helped students have time to focus on mastering the knowledge and skills required in each stage of learning for their project.

**Involvement of parents/guardians.** The intentional involvement of parents became a major silver lining of the implementation strategy for BEEP Lab and the Co-Publishing Project. Before the pandemic, the

majority of parents rarely got involved with their children's learning. However, because adult help was now required to ensure the smooth operation of lessons, the opportunity to deepen the relationship between the educator, parent and student arose, which also supported social and emotional learning.

***Finding alternative learning challenges.*** The City Wanderer Challenge experimented with alternative ways to help students to grow and overcome personal boundaries on their missions without the presence of a live audience or group of people. One example of this is for students to broadcast a live video on line to demonstrate how they have managed to develop their own way of active participation and connection with the society in initiating change. However, this process comes with unique challenges, such as privacy concerns and the potential permanence of a digital footprint, and limited scale of change that can be accomplished without the in-person support of teammates.

## Implementation challenges

### Central authority and school level

Several challenges arose while implementing the policies and measures for public schools to ensure educational continuity:

1. Co-ordinating efforts between central and local authorities in prioritising the distribution of learning resources, such as technology equipment/devices, and at the same time working together with major telecommunication service carriers to provide smart devices, 4G and home networking packages.
2. Integrating online learning resources provided by the public and private sectors, and making these resources accessible to students and teachers.
3. Planning nationwide operational exercises and drills for online teaching and learning, and ensuring all schools have access to online learning resources and were able to execute them.
4. Although there have been structural procedures in place for case reporting, health screening, resource distributions, etc., some of these procedures can be further simplified at the school level, not only to reduce the workflow of school administrators, but also to increase efficiency and effectiveness in preventive practices. "We do not want to overwhelm our schools during this crisis, but we made sure not to take shortcuts that may lead to an outbreak", said the Director-General of K-12 Education Administration (Ministry of Education).
5. Despite these efforts, teachers expressed the need for more direct guidance and professional development to equip them with the skills and competencies necessary for the implementation of a fully student-centred, self-directed learning approach.

### Non-governmental organisations

The pressure to quickly adapt to sudden restrictions and notify parents about their plans was a stressful experience for NGOs, particularly because there were no assurances that any experimentation to overcome these restrictions would work. The initial planning stage involved addressing learning challenges, which included:

1. Fostering social-emotional skills like empathy, co-operation and collaboration between students as core to the value they deliver.
2. Facilitating spontaneous interactions.
3. Developing 21st century skills like design thinking, architecture education.
4. Providing activities that involved overcoming personal barriers.
5. Promoting team building and deep reflection.

6. Logistics: packaging and delivering learning kits to students' homes; managing different types of channels to communicate with parents; moving and purchasing equipment to build a home studio; etc.

## Monitoring success

At the central authority level, measures have been taken since February 2020 to ensure preventive practices were carried out at the local school level as mandated. The initial strategy included establishing strategic teams of central authority officials to supervise primary and secondary schools' implementation of health and safety procedures. Between February and April 2020, the teams visited 187 public schools in person and made telephone supervision arrangements with 38 schools across approximately 22 cities and counties. Regional superintendents exercised supervision over the schools in their region to evaluate the effectiveness of their preventive practices.

From the NGO perspective, monitoring and assessing progress was supported through increased interactions and check-ins with parents. Some of the significant action taken during this time to monitor the preventive practices includes: check and record the temperature of students and staff three times a day (self-reporting temperature for the City Wanderer), disinfecting learning tools and environments multiple times a day, etc. However, no additional barriers were reported in assessing progress that were not in place prior to the pandemic.

## Adaptability to new contexts

These solutions can be implemented in any setting and provide several lessons that can inform their adaptability to new contexts. As the COVID-19 pandemic and economic disruptions are changing the landscape for education globally, it is important to use co-operation, communication and the exchange of ideas to understand what this means for schools, practitioners, families and communities, and policy makers and how each of these parties can respond and evolve during this crisis.

***Ensuring equity in online and distance learning.*** The COVID-19 outbreak has made equity an even more central concern when it comes to remote education. As schools prepare themselves for remote education, it is imperative to address any equity issues, such as access to technology or online tools, and consistent high-speed Internet. Resources need to be prioritised accordingly so that the inequalities exposed by the COVID-19 crisis are not exacerbated.

***Ensuring the social and emotional well-being of teachers and students.*** When preparing for or transitioning to online or remote learning models, the social and emotional well-being of students and teachers should also be of the highest priority. Structures that can be put in place to address the well-being of students and teachers include:

- making sure the basic needs of students (stable home environments, health and access to education) and teachers (safe workplace, access to technology and digital tools and being able to use them, etc.) are met
- establishing clear routines for communications and encouraging prosocial behaviours
- providing social and counselling services to students, staff and communities
- prioritising relationship building and psychosocial well-being over tasks and assignments
- creating innovative ways to increase connectivity among and between students, teachers and parents/guardians.

***Ensuring efficiency and effectiveness in the operation of health and safety practices.*** The central authority has been able to effectively minimise the spread of COVID-19 by issuing sets of well-planned

national policy mandates and prioritising the distribution of resources needed for health and safety practices.

***Design of self-paced/directed learning and instruction.*** The use of tech-supported, self-directed learning has become one of the core instructional practices for teachers during this pandemic. However, adopting this style of education systematically across the school is not simple. Together, teachers and parents can help students to be independent learners by giving them more time to self-discover learning opportunities from daily life, such as running scientific observations with the objects around their home. In some schools, teachers are encouraged to provide (asynchronous or synchronous) online learning opportunities to their students over the weekend as a way to simulate the lockdown situation, hone their skills in making personalised assignments and ensure their students have access to online resources in support of their learning.

***Changes in student learning assessments.*** When schools work towards adopting remote education or blended learning strategies, they often face a challenge of differentiation in instruction, learning and assessments. As with face-to-face instruction, teachers need to attend to students' different learning styles, preferences, levels and needs in the remote learning space. Some students may fall off the grid, while others face barriers to accessing course content or completing course assignments on line, such as a lack of Internet access or unstable home environments. These challenges require teachers to create alternative learning assessments that can effectively diagnose students' learning progress.

***Integration of virtual and in-person professional collaboration.*** Such changes to teaching and learning create a pressing need for teacher professional development. One of the strategies that was widely used globally before the outbreak for capacity building is collegial collaboration. In the new teaching context, many teachers realise they cannot do it alone, so a shift towards a more collaborative mindset to learn from colleagues, plan together and share resources via virtual professional communities has been witnessed.

### Box 40.1. Key points to keep in mind for a successful adaptation

1. Develop contingency plans in response to the pandemic that are made in accordance with the recommendations of health experts, including requiring all schools to implement on-site health and safety measures.
2. Distribute disease prevention resources to all schools and continue to do so during and after the outbreak.
3. Create a disease prevention team at the school level to promote and implement health and safety protocols, and to be a focal point in disseminating disease prevention information, monitoring the health status of students and staff, and reporting suspected cases.
4. Complete an inventory of the existing learning resources available to teachers and students in their home, and prioritise the distribution of these resources in support of learning and instruction.
5. Develop and implement flexible leave policies for working parents or guardians with children under 12 or with disabilities so that they can provide immediate support for their children's learning at home.
6. Provide timely and adequate training that teachers need to be ready for planning, designing and implementing high-quality online courses and learning assessments.
7. Continue to monitor the social and emotional well-being of school staff and students.
8. Decrease cash flow dependence on physical face-to-face events for educational non-governmental organisations. One way to achieve this is to build the capacity for hybrid teaching methods; for example, self-paced blended learning where students can progress with a mastery style of learning. Another example is to deliver home learning kits to students.

## Acknowledgements

The authors acknowledge the contributions of the Director-General of K-12 Education Administration (Ministry of Education), the selected schools and the non-governmental organisations for their invaluable and unique perspectives and practices that informed this report. They would also like to acknowledge the support of HundrED.org (a Finland-based education non-profit) and [Saying Wen Cultural and Educational Foundation](#) (a Chinese Taipei non-governmental and non-profit organisation), without which this report would not have been possible.

## Further reading

Basham, J., W. (Skip) Stahl, K. Ortiz, M. Rice and S. Smith (2015), *Equity Matters: Digital & Online Learning for Students with Disabilities*, Center on Online Learning and Students with Disabilities, Lawrence, KS, [https://centeronlinelearning.ku.edu/wp-content/uploads/2017/04/2015\\_COLSD\\_Annual-Publication\\_FULL.pdf](https://centeronlinelearning.ku.edu/wp-content/uploads/2017/04/2015_COLSD_Annual-Publication_FULL.pdf).

Foundation for International Cooperation in Higher Education of Taiwan (2020), "Responding to COVID-19: Government-led actions and policies on course delivery", *The New Southbound Talent Development Program*, [https://www.edunbsp.moe.gov.tw/news\\_en1048.htm](https://www.edunbsp.moe.gov.tw/news_en1048.htm).



Guernsey, L., K. Ishmael and S. Prescott (2020), "Online learning in the wake of COVID-19: Tips and resources for preK-12 with equity in mind", *New America*, <https://www.newamerica.org/education-policy/edcentral/online-learning-wake-covid-19>.

Honigsfeld, A. and J. Nordmeyer (2020), "Teacher collaboration during a global pandemic", *ASCD*, Vol. 77, pp. 47-50, <https://www.ascd.org/el/articles/teacher-collaboration-during-a-global-pandemic>.

Melnick, H. and L. Darling-Hammond (2020), *Reopening Schools in the Context of COVID-19: Health and Safety Guidelines from Other Countries*, policy brief, Learning Policy Institute, Palo Alto, CA, [https://learningpolicyinstitute.org/sites/default/files/product-files/Reopening\\_Schools\\_COVID-19\\_BRIEF.pdf](https://learningpolicyinstitute.org/sites/default/files/product-files/Reopening_Schools_COVID-19_BRIEF.pdf).

Ministry of Education (Chinese Taipei) (2020), "Overseas students Q&A", Ministry of Education (Chinese Taipei), <https://english.moe.gov.tw/cp-117-23014-1429f-1.html>.

Ng, C.Y. and R.H. Brook (2020), "Response to COVID-19 in Taiwan: Big data analytics, new technology, and proactive testing", *JAMA*, Vol. 323/14, pp. 1341-1342, <http://dx.doi.org/10.1001/jama.2020.3151>.

Noonoo, S. (2020), "Here's what schools can do for the millions of students without internet access", *EdSurge*, <https://www.edsurge.com/news/2020-03-20-here-s-what-schools-can-do-for-the-millions-of-students-without-internet-access>.

OECD (2020), "A framework to guide an education response to the COVID-19 pandemic of 2020", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, <https://doi.org/10.1787/6ae21003-en>.

OECD (2020), "Social economy and the COVID-19 crisis: Current and future roles", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD, Paris, <https://www.oecd.org/coronavirus/policy-responses/social-economy-and-the-covid-19-crisis-current-and-future-roles-f904b89f>.

Our World in Data (2020), "Economic decline in the second quarter of 2020", *Our World in Data*, <https://ourworldindata.org/grapher/economic-decline-in-the-second-quarter-of-2020> (accessed in September 2020).

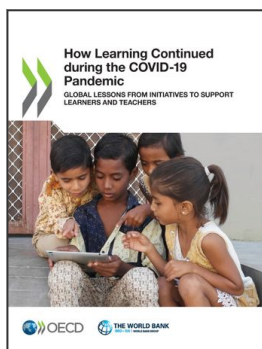
Rose, R. (2014), "Access and equity for all learners in blended and online education", International Association for K–12 Online Learning, <https://files.eric.ed.gov/fulltext/ED561307.pdf>.

Taiwan Centers for Disease Control (2020), "In response to the outbreak of 2019 novel coronavirus (2019-nCoV) in China, Central Epidemic Command Center (CECC) decides that all primary and secondary schools postpone first day of spring semester until 2 weeks later", Taiwan Centers for Disease Control, <https://www.cdc.gov.tw/En/Bulletin/Detail/ZXg7cwUw7JlpVwftHatGKw?typeid=158>.

Taiwan Centers for Disease Control (2020), "Prevention and control of COVID-19 in Taiwan", Taiwan Centers for Disease Control, [https://www.cdc.gov.tw/En/Category/Page/0vq8rsAob\\_9HCi5GQ5jH1Q](https://www.cdc.gov.tw/En/Category/Page/0vq8rsAob_9HCi5GQ5jH1Q).

Teaching Tolerance Staff (2020), "A trauma-informed approach to teaching through coronavirus", *Teaching Tolerance*, <https://www.tolerance.org/magazine/a-trauma-informed-approach-to-teaching-through-coronavirus>.

Tsai, J.-K. (2020), "Prepare now for online education", *Taipei Times*, <https://www.taipetimes.com/News/editorials/archives/2020/03/17/2003732829>.



**From:**  
**How Learning Continued during the COVID-19 Pandemic**  
Global Lessons from Initiatives to Support Learners and Teachers

**Access the complete publication at:**

<https://doi.org/10.1787/bbeca162-en>

**Please cite this chapter as:**

Liou, Yi-Hwa and Christopher Petrie (2022), “Chinese Taipei: Contingency plans for hybrid models of learning”, in Stéphan Vincent-Lancrin, Cristóbal Cobo Romaní and Fernando Reimers (eds.), *How Learning Continued during the COVID-19 Pandemic: Global Lessons from Initiatives to Support Learners and Teachers*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/53435672-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.