

Remote Learning: Best Practices Today for a Better Educational Future

LESSONS LEARNED DURING THE CORONAVIRUS OUTBREAK IN GREATER CHINA



Stop going to school, don't stop learning.

停课不停学

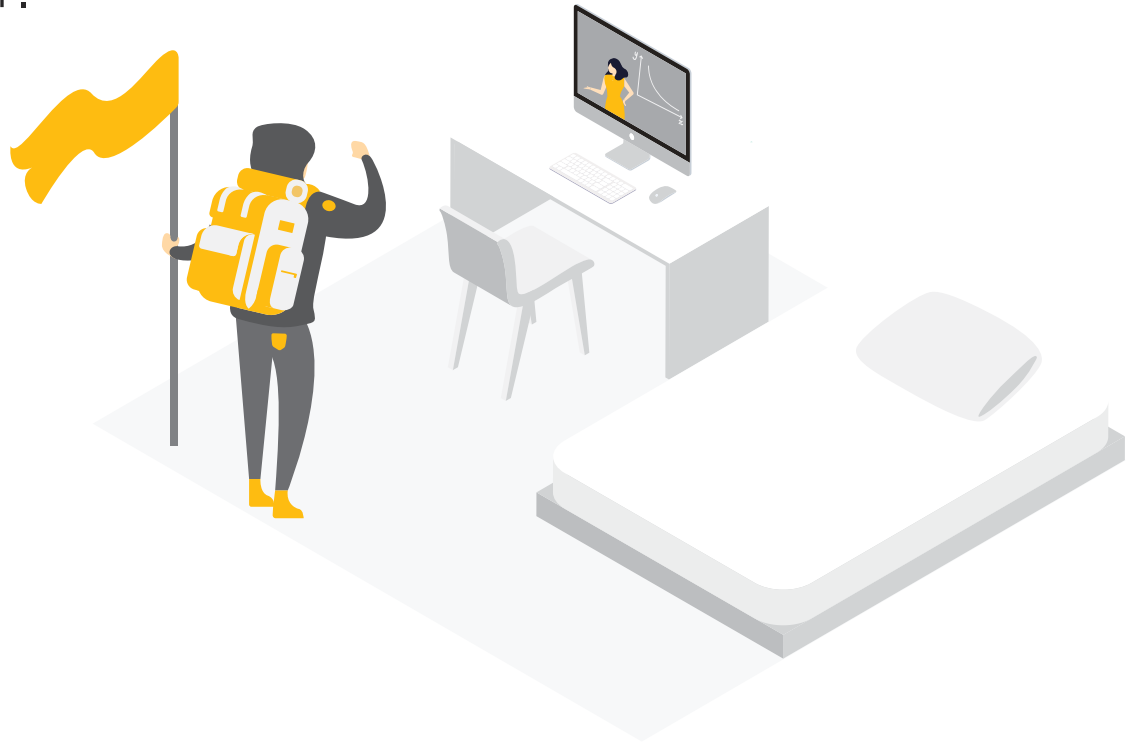


School's out! In Greater China, classes have been suspended since after the Lunar New Year. Because of the coronavirus pandemic, students—from kindergarten to university—are all learning through digital platforms and tools at home, embodying the motto, "Stop going to school, don't stop learning" across China. This is an immense moment in Chinese education. About 200 million students are learning at home digitally, and none of the schools, teachers, parents, or students have prepared for it.

The scale and practice of this sudden, national, remote learning project is unprecedented. Fortunately, today's technology enabled our educational ecosystem to shift quickly online. Chinese tech companies, such as Ali, ByteDance, Tencent, and NetEase Youdao, are responsible for digitizing Chinese education. Free livestream classrooms on Ali DingDing, free lessons on Tencent online video channels, and Tencent Education's cloud-based classrooms are being used by different provincial education departments across China. Hong Kong is adopting Western tools like Zoom, Google Classroom, Google Documents, Teams, Seesaw, IXL, and a handful of other local education platforms. All efforts are to help educators continue teaching during this extremely challenging school year.

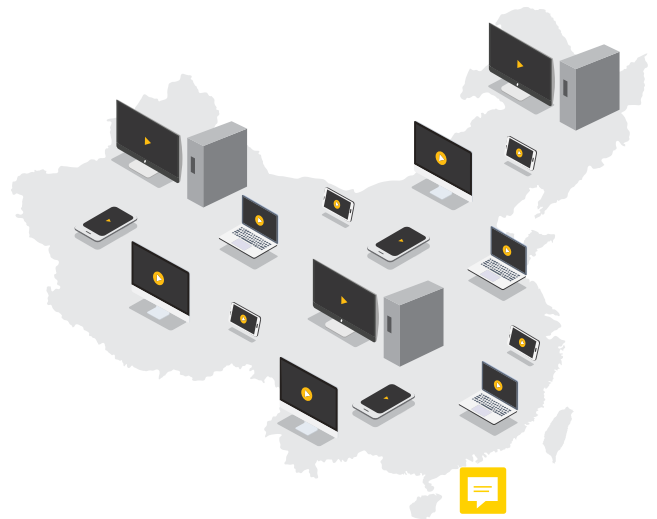
WHY CONTINUE?

Because today, we can.



When was the last time schools closed this way? This moment is truly exceptional. We simply have not experienced this kind of prolonged suspension of school before and it doesn't look like there will be a return to the classroom anytime soon. The good news is that technology has provided a solution in the meantime.

It's obviously in the best interest of schools, parents, and students to continue studies even with physical schools shut down. And with the massive broadband coverage across China—from rural areas to busy cities—steady, high-speed high-speed internet enables most families to access remote learning at home. Today, millions of families can afford to own personal computers and smartphones. With RMB2000 (+/- \$300 USD), one can get a basic laptop with the capacity to run basic communication and documentation software.



for students?



This is not a normal break. Students can't spend leisure time outside with friends and family. They're stuck at home with their parents, who are also working from home. For students, eLearning and online classes are the only ways to stay connected with their community of teachers and classmates.

The "virtual classroom" is very different from the analog one. It's not a physical space outside the home, and not a face-to-face interaction with teachers and classmates. Students are learning with their parents sitting close by, along with all of the distractions that can come with being at home.

Digital schoolwork is challenging for younger kids. Some primary schools in Hong Kong, when they changed to a digital format, changed the inputs from hand-written student work to the keyboard, which requires typing skills. Many parents cannot type in Chinese—Chinese on the standard keyboard, let alone help their kids. Having to rely on parents to do their schoolwork is an additional stress on children.

"The first Zoom class was chaotic—all the students were talking at the same time."

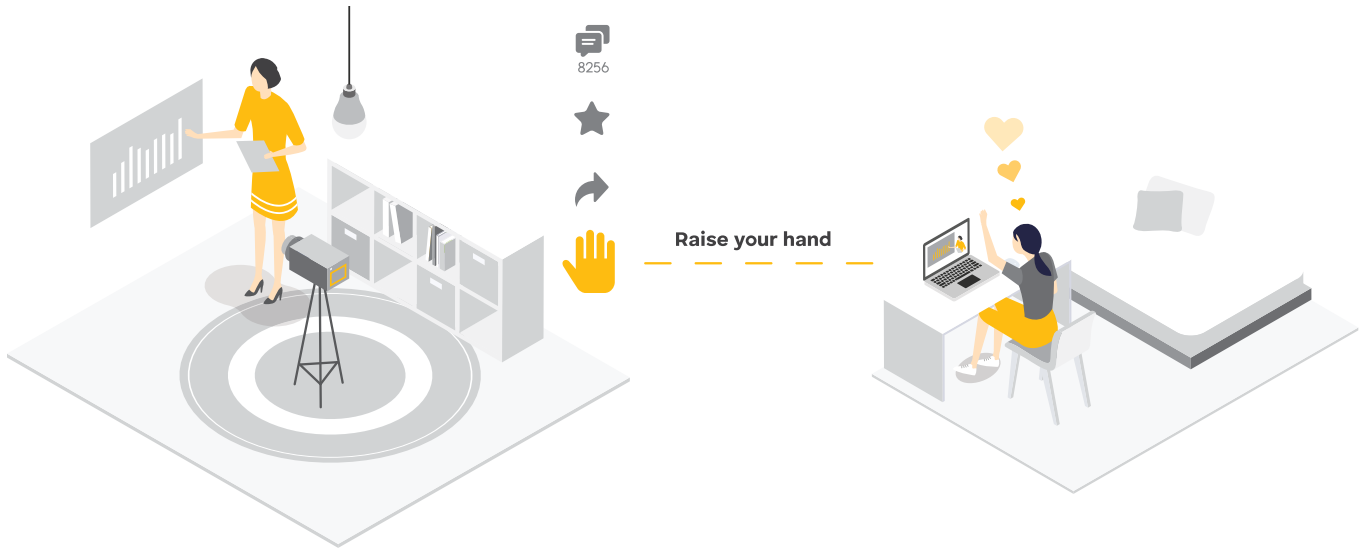
"The Zoom class is [for the students] to chat and let students ask questions, not a normal class."

– Patrick, father of an 8-year-old (Primary 2) and a 3-year-old (Kindergarden 1) in Hong Kong

"[T]he online class teachers (centralized/ designated teachers from the government) are not the teacher[s] from my school, I can try different learning ways."

– Xin, 12-year-old, elementary school student from China

for teachers?



Even with their years of in-classroom experience, remote education is a great challenge for teachers. It requires virtual presentation skills and tech savviness to operate live streaming tools while teaching. There's also additional administrative and IT work involved. Teachers now need to spend more time preparing for classes, uploading and downloading teaching materials, and checking the students' coursework. They clearly need training and upskilling to manage the new digital tools.

Ensuring that students are absorbing and retaining knowledge is the key for both online and physical courses. But right now, teachers can't read their students' faces all at once to tell if they're present and attentive during lessons. To keep things lively in the virtual classroom, teachers are experimenting with various tactics:

- Encouraging students to "raise their hand" on Zoom calls.
- Collecting jokes on the internet to re-tell during the online classes.
- Using existing online mini-games, on Tencent QQ, to encourage communication.
- Prototyping and iterating their classes to develop a unique 'new normal' teaching format.

"There's no training for teachers to do remote teaching before."

"I need to pretend [to be] a YouTuber now."

"It is okay to give lecture[s] that are straightforward, like art history, but not for a studio class to teach drawing/paintings."

– Celia, Hong Kong Baptist University Visual Arts tutor

"We are like tier-18 web Influencers—we are not good at talking in front of the camera to draw students' attention."

"[I] need to add jokes to control the emotions in the online class."

"Data is crucial for course design and iteration."

–Shanshan, 37, female, Quanzhou Vocational Technical Institute

"The [teenagers don't] want to turn on their cameras because they are afraid their classmate[s] would make funny stickers of them."

"They turned off their camera. I don't know if they are still here or out for breakfast."

–Judith, Hong Kong secondary school teacher

for parents?



It's surprising how much work needs to be done by parents to support remote learning for their kids, especially for K-6 students. These students currently need help to navigate the various communication tools and platforms.

There's a new set of responsibilities for parents. In addition to checking their kids' homework, checking their educational status, and chatting with other parents and teachers, they need to:

- Download and set up the necessary tools and platforms
- Upload/download homework assignments
- Set up/attend the online class sessions to ensure the tech runs smoothly
- Enable communication with teachers through the digital tools
- Reinforce students' understanding of what has been taught

Parents are worried about digital education. The screen-heavy learning, numerous educational videos and eBooks, and online classes can contradict the no-screen philosophy many parents have at home, concerning things like games and entertainment. With many parents now going back to work, there's less support for the students. The responsibility falls on grandparents and other caretakers who are also not equipped to help manage digital coursework.

"I have to warn my girl not to hold the computer around home when calling, not to disclose our fam[ily's] privacy like photos."

"Lucky that our printer's ink is not expensive."

"My daughter couldn't find the 'raise hand' button on the interface and accidentally closed the Zoom meeting. After the first time, she's getting familiar to the tools."

"I don't know how to type traditional Chinese, so I have to speak to the computer to help her to translate the handwriting homework into digital homework."

– Patrick, father of an eight-year-old (Primary 2) and a three-year-old (Kindergarten 1) from Hong Kong

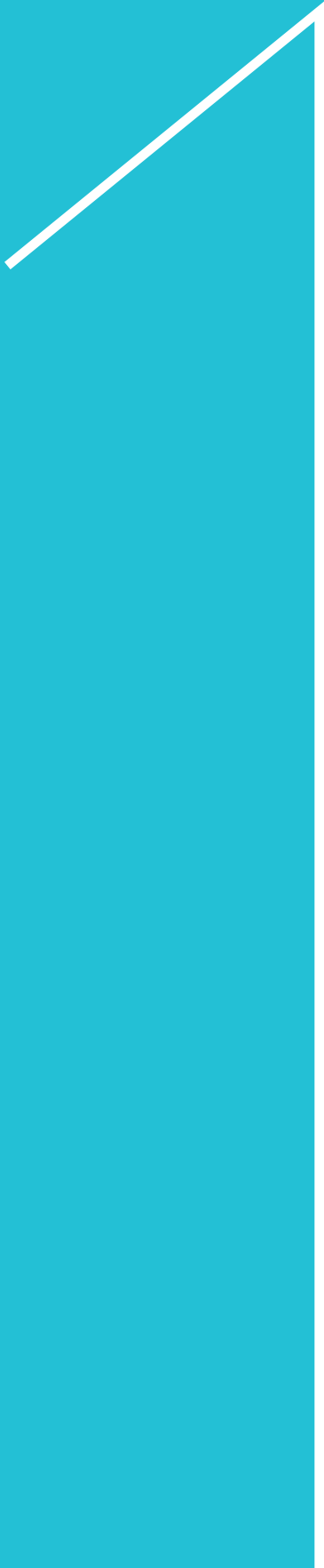
"Learning at home, I can ask questions to my mom... I feel embarrassed to ask questions in class."

– Xin, 12-year-old, elementary school student from China

It's not all bad news.

This is the new normal. For the foreseeable future, schools will remain closed—students will have to continue to learn at home, teachers will teach through a webcam, and parents will be tech support and tutors. But not everyone has to struggle in these roles.

Just because this is a new situation for everyone doesn't mean it can't be made better. We see the following key opportunity areas as vital to improving the home learning experience.



How might we enable new roles and responsibilities for students, teachers, and parents?



New roles and responsibilities mean new needs.



Parents

(Esp. for children ages 3-11)

NEW ROLE:

1. Computer technician and support person
2. Homework upload manager
3. Tutor/learning buddy

NEW RESPONSIBILITIES:

- Get online class tools ready before classes
- Stand by during online classes for any upcoming technical issues
- Keep students focused
- Be prepared to answer questions during class
- Stay updated about latest homework and class announcements
- Print out homework and learning materials
- Locate different learning materials online
- Film, edit, digitize, and upload homework
- Set up the live streaming environment

Students

NEW ROLE:

1. Remote learner
2. Administrator of coursework

NEW RESPONSIBILITIES:

- Attend online classes at home
- Become self-aware regarding knowledge transmission
- Cultivate self-discipline without the benefit of a regular school routine
- Stay focused despite distractions at home
- Learn to use digital tools to keep up with the class and interact with teachers
- Protect family privacy

Teachers

NEW ROLE:

1. Technical operator and support
2. Digital experience designer
3. Teaching administrator
4. Broadcaster

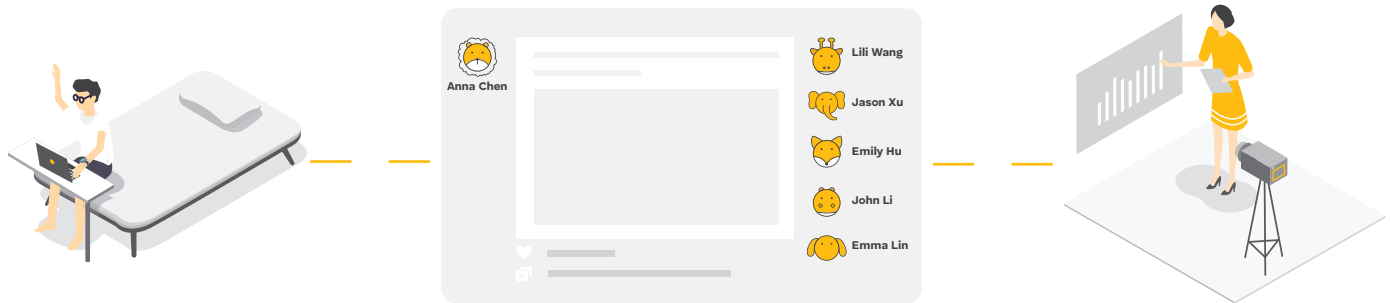
NEW RESPONSIBILITIES:

- Fluently use the tools and platforms to share materials, host Q&A sessions
- Prepare teaching materials creatively to ensure knowledge transmission and retention
- Set up the live streaming environment

How might we evolve online tools to enable better learning and teaching?



Evolve online conferencing tools for education to help teach and learn better.



FOR Students

- To understand and receive new knowledge
- To keep up with the fellow classmates
- To ask questions when necessary

DESIGN PRINCIPLES

1. Create an intuitive user interface for a wide age range of students
2. Encourage instant engagement, but ensure that it doesn't degenerate into a form of online entertainment
3. Protect privacy for the family (e.g. only the teachers can see the student cameras)

FOR Teachers

- To teach students more effectively
- To meet the students where they are
- To provide extra help, individually, when necessary

DESIGN PRINCIPLES

1. Enable quick and simple assessment (e.g. multiple choice)
2. Maximize teaching time (e.g. an automated attendance-tracking system; preload teaching materials on the platform)
3. Facilitate or guide teaching rhythm
4. Maintain the professionalism of teachers (e.g. ensure that teachers aren't rated like Uber drivers or YouTubers)

How might
we create
more human
moments
when there
is less human
interaction?



More augmented humanity when there's less human interaction.



HELP

Parents

- Gain confidence and master the tasks that must be done for their kids' education
- Share their concerns and observations with teachers and schools in an easy and effective way

HELP

Students

- Gain confidence in learning with different tools
- Get positive memories of their growth with classmates and teachers
- Receive knowledge in a digestible way
- Share their emotions in a light-hearted way
- Feel safe with internet security

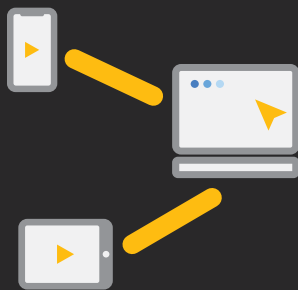
HELP

Teachers

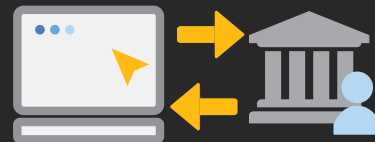
- Get nuanced and instant feedback without reading all the students' faces at once
- Get more time to teach, engage, and give attention to students according to their personalities, learning styles, needs, and emotions

Remote learning beyond the here and now.

As we take steps to augment and improve the current remote learning experience, here's some food for thought on how this mode of learning will impact the future of education by improving the home learning experience.

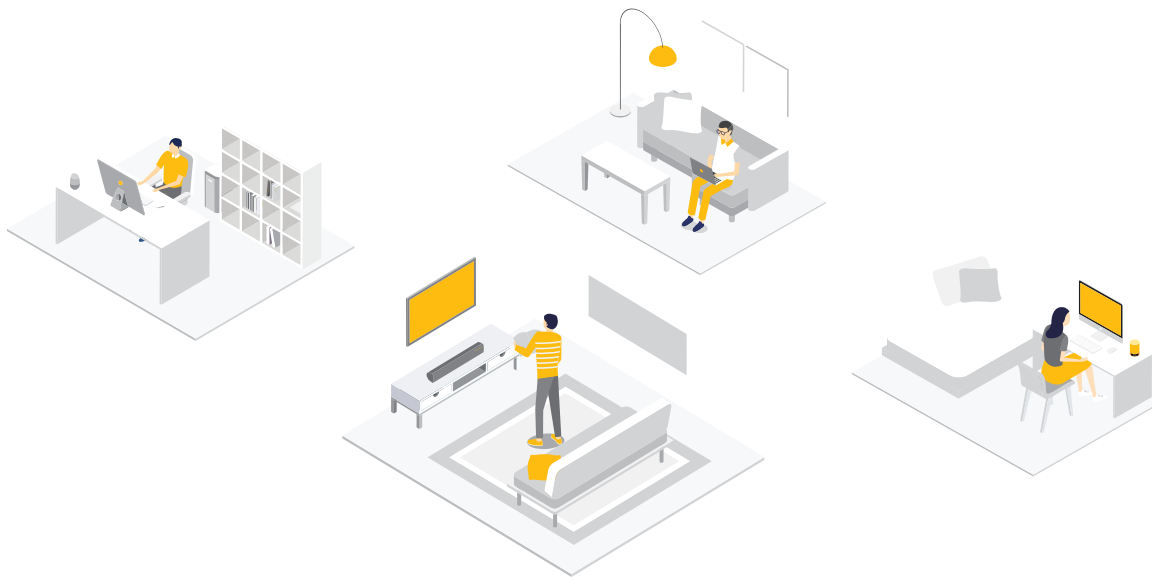


It is conceivable that students will have more flexibility in how they receive their education. They'll be exposed to different ways to learn, enabled by a variety of courses across multiple platforms.



Beyond K-12, university students and adult learners will have built up a foundation with remote learning to enable lifelong learning.

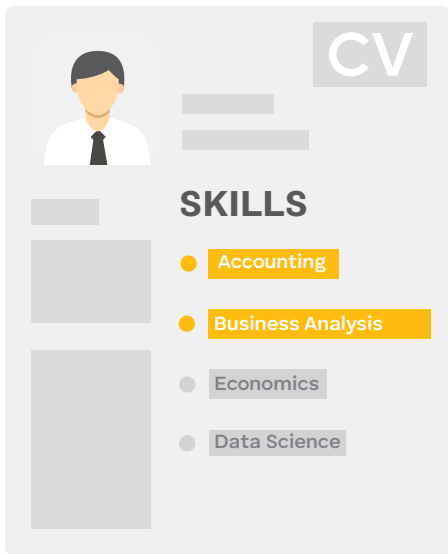
Personalize the methods of learning. Use technology to group students based on learning styles, not just by age.



Continue the habit of lifelong learning, tailored to specific subjects and topics that can be mastered at one's own pace.



Enable employees to learn new skills and develop their careers.



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