



# Education in and After Covid-19: Immediate Responses and Long-Term Visions

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Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of Covid-19 pandemic. These nationwide closures are impacting over 91% of world's student population (UNESCO 2020). In China, schools and universities are deploying a mix of innovative and renewed approaches to ensure the right to education.

## Chinese Higher Education in the Pandemic Outbreak

Chinese government has imposed strict measures to contain the spread of the Covid-19 pandemic. Most face-to-face activities, including teaching, have been banned. Chinese universities and colleges have postponed the beginning of spring semester. Students are not allowed to return to campuses without approval. To provide flexible online learning to over 270 million students, Ministry of Education has launched an initiative entitled 'Disrupted classes, undisrupted learning'.

On February 5, 2020, the initiative was followed up by 'Guidance on the Organization and Management of Online Teaching in the Higher Education Institutions During Epidemic Prevention and Control Period' (Ministry of Education 2020). The Guidance requires national and local governments to encourage colleges and universities, together with the rest of the society, to participate in joint implementation of online education. Ministry of Education further requires that new online courses are of the

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same quality as previously delivered face-to-face courses. It demands that teacher workload in delivering online courses should be recognized as equivalent to teacher workload in delivering face-to-face courses; it also encourages students towards online self-directed learning. The Ministry urges universities to conduct multi-dimensional learning evaluation, and to appropriately credit student online achievements.

Institutions of higher education systems promptly reacted to these measures. By February 2, 2020, 22 major online curriculum platforms opened 24,000 online courses for higher education institutions to choose from, including 1,291 national excellence courses and 401 national virtual simulation experimental courses, covering 12 undergraduate programs and 18 tertiary vocational programs (Wang 2020).

## Faculty of Education, Beijing Normal University

On February 24, Beijing Normal University (BNU) started its new semester with online national flag-raising ceremony. The campus is vacant, yet online classrooms are full. A total of 4,036 courses have been planned for this semester, involving tens of thousands of students, with 3,238 courses being offered online by 1,151 faculty. For the first time in its 118-year history, all courses at BNU's 30 schools and faculties are delivered online. This historical move demands joint efforts from faculty, staff, and students, in equal measure.

Faculty of Education responded immediately. We developed an online teaching implementation plan covering components of teaching delivery, online classes management and supervision, and learning assessment. Faculty are encouraged to choose appropriate learning platforms they are familiar with. In order to support faculty in their work, we developed five actions:

1. A line-up of main online education platforms were introduced to all faculty by email, Wechat discussion groups, and school website.
2. Faculty were encouraged to share their previous experiences with platforms including Blackboard, TronClass, Zoom, Classin, Wechat group, and QQ group.
3. School of Educational Technology assembled a professional team for providing faculty-wide support. The team shared their knowledge and skills about different platforms and conducted online training. Further, professional companies were invited to train our faculty on using specific tools.
4. Learning online is a big challenge for our 2,096 students. The team informed students about changes, provided two teaching assistants for each online class, and ensured that every student is able to participate in digital learning. Special attention was given to students coming from poor regions and difficult family backgrounds.
5. The team collected information about all online courses, including their delivery platform, class size, schedule, and student readiness. Few classes were selected for trial lessons at a variety of platforms with the aim to pilot online learning strategies before their large-scale implementation.

Following these activities, on Feb 24, Faculty of Education successfully implemented 307 courses through online systems, 15 of which are aimed at international students and taught in English. This involves over 183 faculty and over 2,000 students at all

levels including 250 international students. At the moment of writing this article, the transition has been under way for about 6 weeks. Most courses seem successful; students seem to enjoy online learning, and some professors even report that students seem more active than in their physical classrooms. At the research front, we organized a series of webinars which created opportunities for scholars within and beyond China to share their research and thoughts on issues relating to the transition, with the aim to start developing more resilient education systems for the future.

Online learning is defined as learning experience in synchronous or asynchronous environments using different devices (e.g. mobile phones, laptops) with Internet access. Using these environments, students can learn and interact with instructors and other students from anywhere (Singh and Thurman 2019). The easiest part of this transition for Faculty of Education was providing online learning platforms and courses. However, we are meeting some persistent obstacles and challenges. Online course delivery, interaction, and data collection require stable digital infrastructure and platforms, yet learning of some students across China and overseas is interrupted by poor Internet access. Students require capacity to conduct self-disciplined and self-directed active learning, and faculty require further professional development. Challenges also include lack of holistic quality assurance systems for online teaching and learning. The pandemic has revealed that quality does not refer only to achieving learning outcomes, but also to social and emotional development of students (see Peters et al. [forthcoming](#)).

Chinese institutions of higher education have initiated a series of real-time research projects about higher education experiences during the pandemic. It is believed that this research will result in improved evidence-based policy-making mechanisms and more user-friendly digital learning systems.

## Vision for Future: Teaching and Learning After the Pandemic

Coronavirus outbreak has significantly accelerated development of online education in Chinese higher education. Internet, big data, Artificial Intelligence, 5G, and cloud-based platforms, among other technologies, have been put into service of education. However, a more flexible way of teaching and learning does not end up with infrastructure. Rather, infrastructure is only the first step towards a new paradigm of teaching and learning in post-pandemic time. This paradigm could represent a shift from traditional, teacher-centered, and lecture-based activities towards more student-centered activities including group activities, discussions, hands-on learning activities, and limited use of traditional lectures. This requires conceptual and philosophical rethinking of nature of teaching and learning, roles, and connections among teachers, learners, and teaching materials, in postdigital learning communities (Jandrić et al. 2018).

Full long-term integration of online teaching and learning into university curricula implies further attention to quality. Nearing the end of Covid-19 pandemic in China, we think that our further steps should be focused to the following activities:

1. We need to continue development of open educational platforms which allow access to the high quality of learning resources.

2. We need to conduct quantitative and qualitative research and evaluate current models of online teaching and learning, with a particular focus to their long-term sustainability.
3. We need to develop staff–teachers’ capacity for online teaching, and professional staff capacity for supporting teachers and online systems.
4. We need to encourage cooperation between universities, international organizations, private sector, civil society, and other stakeholders, to promote high-quality online learning throughout the society.

Teachers are crucial for inclusive and equitable provision of high-quality distance education. They are expected to have knowledge, skills, and ethics to conduct online teaching, and that calls for more flexible and dynamic post-pandemic teacher education. Post-pandemic national teacher education could be composed of face-to-face teacher education, blended teacher education, and online teacher education (Zhu 2020). National online teacher education could be categorized into sections which provide learning opportunities to future teachers at all levels: early childhood education, primary education, secondary education, vocational education sectors, etc.

Online teacher education platforms could function as a traditional teacher education institute which provides pre-service and in-service programs. This could be supported by online platforms with rich digital materials and resources. Curriculum and pedagogy need to be updated, and should become models of successful online pedagogies that could be taken into future teachers’ practices. Last but not the least, it is critical to build up an enabling institutional environment for sustainable national online teacher education. We need to develop evidence-based policies supported by guidelines for their implementation. To provide professional reference base for online teacher education, a framework of competencies for conducting online teaching, and other standards, should be developed.

In our postdigital context, online and offline (teacher) education cannot be thought of without each other (Jandrić et al. 2018). Therefore, we advocate development of a holistic teacher education system, regardless of used mode of delivery, which could support present and future teachers in becoming more resilient to crisis similar to the Covid-19 pandemic.

Covid-19 pandemic has brought about a huge disruption to all spheres of human life. Chinese higher education, and Beijing Normal University in particular, have responded to the crisis with reasonable success. However, we strongly believe that the impact of Covid-19 pandemic on Chinese education system should extend well beyond tackling the current crisis—it should also bring out potential development opportunities for the future (Jandrić 2020). Our current situation requires innovation and renewed attention to more research, study, and reflection, about each sector of education in China and globally. It is only by doing this research within the pandemic that we can develop a more sustainable, inclusive, and equitable education after the pandemic is gone.

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