

DECLARING WAR ON COVID-19: HOW CHINESE GOVERNMENT AND EDUCATORS ACT

DONGMEI LI

University of Wisconsin – Milwaukee, U.S.A.

TAK CHEUNG CHAN

Kennesaw State University, U.S.A.

ABSTRACT

The purpose of this paper is to highlight the joint effort of the Chinese Government and the educators in reacting to the threat of COVID-19 in China to keep learning continue while schools close. The sources of data in this paper are from the most current reports of the Chinese Government, newspapers, televisions and the latest published journal articles. These reports cover the challenges, the immediate actions of the Government and the stakeholders during the toughest COVID-19 period in China. The paper also includes the Post COVID-19 Plan of the Chinese Government to bring normal learning back after the pandemic. The courageous acts of the Chinese Government and the educators to save Chinese education during the pandemic have significant implications to educational planning worldwide.

OVERVIEW

Coronavirus Disease 2019 (COVID-19) as a pandemic disease was detected in China in December 2019 and then it started to spread fast around China. The Chinese Government has taken drastic measures to act on it by closing communities, businesses and schools to prevent its widespread. The Chinese Ministry of Education announced promptly soon after the COVID-19 outbreak the emergency policy of ‘Suspending Classes without Stopping Learning’ (McAleer, 2020; Ministry of Education of the People’s Republic of China, 2020a; Wang et al., 2020; Yue et al., 2020). Educational institutions have been directed to close their campuses after the winter break because of health threatening issues but to continue their teaching activities. Following the directions of the Chinese Ministry of Education, the administrators and faculty of schools and higher education institutions have taken the initiative to contribute to this pandemic fighting effort by providing quality education to all students despite campus closing (Zhang et al., 2020). This paper reports on the effort of the Chinese government and educators in confronting the pandemic challenges, their determination to overcome difficulties and their far-sighted plans to adjust to the post-pandemic period.

FACILITATION OF SCHOOL AND UNIVERSITY ACTION

For years, the degree of trust and coordination between government and educational institutions in China has remained high in comparison with many other international systems. (Edelman Trust Barometer, 2012; Kim, 2016). In major public crises, the Chinese Government has assumed a responsible role and taken advantages of its centralized and unified leadership. In January, 2020, the Chinese Government Central Committee formally established a leading group on COVID-19 to act as its core to comprehensively coordinate the epidemic prevention and control work. The leading group, headed by the Central Committee, is comprised of designated representatives from the major government departments. In the epidemic crisis, the Central Committee has made timely decisions to implement efficient and effective measures by building a unified command system.

The Central Committee worked closely with the State Council in establishing a joint prevention and control mechanism to coordinate the various government departments. Government entities at all levels carried out control strategies, on the basis of population, incidence, and epidemic risk ratings to adjust the risk level of emergency responses and education plans. Education systems at all levels have established a public information communication network to publicize timely information of public concerns (Xue and Li, 2020; Yi et al., 2020; Zheng et al., 2020). In higher education, Chinese universities were able to act quickly and responsibly because the Chinese higher education governance is not under the ‘audit culture’ that will limit the university authority in the COVID-19 spreading time (Yang, 2020).

ONLINE TEACHING DIFFICULTIES/CHALLENGES

Schools and higher education institutions shut their campuses and shifted teaching online. Chinese educators were facing a variety of difficulties and challenges including the weakness of the online teaching infrastructure, the inexperience of teachers, the online resource shortages, and the complex environment at home (Yang, 2020).

The Weakness of the Online Teaching Infrastructure

Because of the great demand of teaching needs, online teaching platforms in China such as Cloud Classrooms, Rain Classrooms, and Ding Talk are often overburdened. The network coverage in remote areas is insufficient leading to educational inequity. Then, the adequacy of signal strength is another serious issue. Students in some places had to travel quite a distance to access online classes on mountain tops, the only places they could get an adequately strong online signal for classes (Sohu News, 2020). Additionally, reliable Internet access devices are still the problem in many Chinese families. Some families have more than one child but may have only one device. In China, many parents cannot afford to buy multiple devices for themselves and their children. However, given that Chinese families are generally willing to make sacrifices for their children, they have long been expected to fully prepare children for schooling and step in whenever schools are falling short. As such, equal access to devices and Internet might fall out of schools’ priorities.

Shortage of Online Team Resources

Even before the outbreak of COVID-19, numerous national-, provincial-, and municipal-level online courses were developed with the support of the Chinese government to supplement the off-line education. It was barely able to meet the educational demand of the time. Now, the COVID-19 outbreak has pushed the demand for online courses to the highest. In addition, these online courses contain regional differences, inter-school differences, and subject differences in the limited amount of selected quality courses. Therefore, teachers have had limited choices of available online courses. Many of them had no choice but to copy the offline teaching contents to the network space with no adaptive modifications (Fang, 2018).

Teachers’ Online Ability and Experience

Many teachers were afraid of teaching online because they did not want to show their technology weaknesses in front of the students. They had limited or no online teaching experience. Even though some teachers received various degrees of technical training during the outbreak, they did not have full confidence of delivering the entire course online. After all, teachers’ differing attitudes towards, and ability to learn online teaching affect the adoption of high-end teaching quality of the online teaching. All have an impact on the general effectiveness of online education across the country (Zhang et al., 2015).

Home Environment for Teaching and Studying

Teachers teaching online and students studying online at home could face different degrees of distraction from the home environment. Not all teachers and students are able to find suitable spaces for teaching and studying at home. Some of them may not have adequate hardware and network connection at home. Students' mental health is another challenge educators have to face. Even though some children were happy for a while for not having to go to school, however, they could not stand the loneliness and isolation of simply learning at home. Children may feel stressed, anxious, or lost dealing with the COVID-19 outbreak (Gulati, 2020).

STAKEHOLDERS' EFFORT TO SUPPORT ONLINE TEACHING AND LEARNING

The Chinese government mobilized efforts of all the stakeholders to implement the country's policy to guarantee the provision of network services to teachers and students, providing teachers with online teaching training, and allowing local governments and schools to deliver online teaching with reference to the local needs. Guidelines were also created by the government to prepare for teaching to be transitioned back to normal face-to-face education after COVID-19 (Yang, 2020).

Internet Structure

Early in March, 2020, China's Ministry of Industry and Information Technology asked the country's telecommunication carriers to guarantee the provision of network service resources by widening the broadband coverage in the rural areas and also offering lower rates to poor families. (Ministry of Education of the People's Republic of China, 2020b). The China Education and Scientific Research Computer Network, China Mobile, China Telecom, China Unicom, and China Satellite Communication responded immediately by committing to the maintenance of public service platforms and school networks at different levels (Ministry of Education of the People's Republic of China, 2020c). On the other hand, China Education Television broadcasted online learning programs through satellite to remote areas with weak Internet connections (Gulati, 2020). This government action guaranteed the provision of reliable networks for online education and ensured the access to digital educational resources and online education (Jee, 2020).

Online Resource Support

The government worked on making educational resources accessible to the general public. Efforts were made to increase society's participation in online education. Thirty-seven qualified institutions and Internet companies have been approved by the Ministry of Education to provide online teaching services (Ministry of Education of the People's Republic of China, 2020d). Large technology companies have moved quickly to develop new online educational tools to support teachers and students. The virtual classroom lessons covered basically the 12 academic disciplines. Teachers have been sharp in following up with updated platforms and new study materials. Education content providers have modified their online teaching materials to make it easier for access in places with slow Internet (Ning and Corcoran, 2020). In higher education, the Education Ministry has developed 24,000 free online courses on 22 web platforms, covering both undergraduate and vocational areas of study (Evans, 2020).

Teacher Support

Teacher training for online teaching has been offered by a joint effort of the government education departments of different levels, schools, and teacher training companies. Teacher resource packages have been developed by the Department of Teacher Education and various educational institutions. These packages include practical information on online teaching strategies, information technology

applications, school epidemic prevention actions and contents of local teacher training sessions (Xinhua Net, 2020). Furthermore, the Department of Teacher Education has established an online teaching feedback system for teachers to actively share their online teaching experiences and thoughts. Teachers can discuss with their colleagues and learn from one another. Online teaching technology consultants are also available in every school to support teachers on online teaching (Ning and Corcoran, 2020).

Deliver Online Teaching Referencing Local Conditions

Local education departments and schools are encouraged to adjust their online teaching strategies to local conditions for organizing teachers to carry out online teaching, to develop teaching contents, and to arrange the teaching format (Xue, Li, Li, and Shang, 2020). Since differential regional development exists in China, therefore, the Chinese government has made online education platforms and resources available to all schools and individuals. The government even distributes teaching resources by using satellite TV in areas with limited Internet coverage (Ministry of Education of the People's Republic of China, 2020e). In the teaching process, to develop students' independent study abilities, the teaching pedagogy and time arrangements were adjusted to help students plan to suit their home-based environment. For example, Guangdong province adopted an emergency measure to equip poor students with tablets (Southcn News, 2020). Zhejiang Province issued guidance requiring each class to last for about 20 minutes in primary school and 30 minutes in middle school (Ning and Corcoran, 2020).

Communicate with Parents

Many schools took advantage of the online teaching and learning opportunities to get parents involved in their children's schoolwork. Parents were asked to share their impressions of how their children learn online. Some parents even offered helpful ideas for delivering more effective online teaching. A few parents suggested that teachers could design homework assignments that would serve as practical experiences such as housework or volunteering jobs. Teachers asked the parents to video-tape the students' physical activities at home as evidence of their performance. The parents seemed to be enjoying this kind of connection with the teachers (Ning and Corcoran, 2020).

SPECIAL EFFORT BY HIGHER EDUCATION INSTITUTIONS TO FIGHT PANDEMIC

The pandemic has offered unique opportunities for Chinese universities to examine their technical capacity for challenges. Universities had to reflect on how they could manage disruptive technologies under severe environments to better serve the needs of education. To quickly address their technological shortcomings, universities negotiated with network providers to strengthen the data plans of faculty and students (Peters et al., 2020). Some went out of their way to ensure faculty and students are poised to continue with teaching and learning.

Zhejiang University (ZJU) is a comprehensive research university serving as an excellent example of higher education institutions to confront the COVID-19. ZJU currently offers more than 5,000 undergraduate and graduate courses to students. Post-lockdown, smart classrooms were made available for teachers to live stream their classes. Since not all faculty members are equally capable in managing virtual classroom activities, ZJU organized many training sessions for over three thousand faculty members. Massive Open Online Courses (MOOC) specialists were employed to prepare faculty to convert course contents to online tuition (Wu, 2020). The one-stop "Research at ZJU" platform was created to allow scientists and students to collaborate online. ZJU also funded disadvantaged students to enable them to access to online learning (CCTV News, 2020a) In addition,

ZJU provides lecture playbacks and courseware packages for students with weak or no Internet access (Gulati, 2020).

As part of its response to the crisis, China's Ministry of Education declared China's firm determination to adhere to further opening education to the outside world by offering government scholarships for foreign students to study in China. China has been one of the first to make such an official statement about its attitude toward global engagement in higher education in a post-COVID-19 era (Stevenson, 2020).

PLANNING FOR POST COVID-19 PERIOD

The Ministry of Education has worked out a plan for school reopening after the epidemic. The plan has comprehensively taken into consideration epidemic risk levels, traffic conditions, emergency preparedness, school population density, and school age. Staggered plans have been made to reopen schools in a stepwise manner to spread out the peak demands of education resources. A smooth and careful transition has been planned to allow students to progress from home-based learning to normal class learning (Ministry of Education of the People's Republic of China, 2020f). Teachers are encouraged to be prepared to teach normal classes at the post-COVID-19 time by fully making use of the online teaching strategies and to teach in an independent way while drawing on online teaching resources. Moreover, the government has urged students to get ready to quickly transition back to normal class activities. They were asked to strike a balance between work and rest, continue physical exercise, and maintain their physical and mental health. An interim checking system of online teaching was also established by the government to closely monitor online teaching activities along the way. Any information about the online teaching and learning activities will be incorporated to the school transition plan (CCTV News, 2020b).

HELPING TEACHERS AND STUDENTS IN RURAL AREAS

Because of cultural and economic differences in the rural and urban areas of China, the Central Committee understands the online teaching and learning difficulties of the rural areas: limited Internet access; lack of online teaching resources; shortage of hardware and software for teachers and students; and poor level of family affordability to equip for online learning (CCTV News, 2020a; Sohu News, 2020; Southcn News, 2020). To address these online teaching and learning issues in the rural areas, the Central Committee together with all the stakeholders of the anti-COVID group have launched their special effort to ensure equal opportunity of receiving online education by students of rural and urban areas.

First, responding to the request of the China's Ministry of Industry and Information Technology, China's telecommunication carriers widened the broadband coverage in the rural areas and also offered low subscription rates to poor families. (Ministry of Education of the People's Republic of China, 2020b). China Education Television also prepared special online learning programs through satellite to remote areas with weak Internet connections (Gulati, 2000).

Second, students in slow Internet access areas have received modified online learning materials to make it easier for them to study online (Ning and Corcoran, 2020). In addition, 24,000 free online courses on 22 web platforms have been developed by the Ministry of Education to cover many areas of undergraduate and vocational studies (Evans, 2020).

Third, an online teaching feedback system has been developed by the Department of Teacher Education to provide opportunities for rural teachers to communicate with other online teachers countrywide to share their online teaching experiences and learn from one another (Ning and Corcoran, 2020).

Fourth, a parent feedback platform has also been established to allow parents of rural areas to directly communicate with teachers online. Parents have taken advantage of the feedback system to share with teachers how their children learn at home (Ning and Corcoran, 2020).

Fifth, some provinces like Guangdong have offered special emergency measures to equip poor students of rural areas with tablets (Southern News, 2020). Zhejiang Province also funded disadvantaged students of remote regions to enable them to access to online learning (CCTV News, 2020a). In addition, for students with weak or no Internet access in rural areas, Zhejiang has made arrangement for lecture playbacks and courseware packages to facilitate their learning (Gulati, 2020).

Sixth, due to regional development differences, all the stakeholders of the anti-COVID group have encouraged local governments and schools of remote rural areas to adjust their online teaching to suit local needs. These adjustments could include instructional strategies, class organization, teaching contents and even instructional time (Xue, Li, Li, and Shang, 2020).

CHARACTERISTICS OF CHINA'S EDUCATIONAL MEASURES ON PANDEMIC

What Chinese government and educators have done in response to the COVID-19 outbreak is timely and responsible. While their pro-active effort has yet to be fully evaluated, some of the initial results have shown that at least teaching and learning continue as directed by the Central Government. Meanwhile, Xue, Li, Li and Shang (2020) have taken the initiative to summarize the effort of the government and the educators and identified the characteristics of their educational measures as follows:

1. Forming a governance system under centralized and unified Leadership of the Chinese government.

A leading group on COVID-19 under the leadership of the Central Government has acted as its core to comprehensively coordinate the epidemic prevention and control work. The group has made prompt and scientific decisions, implemented efficient and effective crisis response, and built a unified and efficient command system. Within a short period of time a crisis response mechanism was established to effectively arouse the initiative of all parties. The State Council has played a coordinating role among various government departments to track, analyze and determine the epidemic situation. The education departments evaluate the operation of online teaching infrastructure, strengthen material dispatching and network support, and adjust prevention and control strategies.

2. Building a pattern in which families and schools cooperate to promote educational development.

China has established a working mode of cooperation between the family and the school, advocating the cooperation of school administrators, teachers and parents in promoting a smooth educational development during the COVID-19

period. The school actively communicates and cooperates with parents to provide technical guidance to parents to check on students' home assignment completion. A series of family education curriculum resources have been developed and shared among parents. Through parents' feedback, the school can ensure online teaching quality by understanding more on the students' online learning input, progress and effect. The school and family cooperation has contributed to finding online teaching and learning problems and respond to them in a timely manner.

3. Online education is emerged from an emergency substitute into an important transformation of education paradigm.

The outbreak of epidemic has promoted the widespread use of online education in China. The application of online education simply cannot stop with the end of the epidemic. Because of online teaching in China, the educational concepts have been updated, the teaching methods have been changed, and the teacher-student relationship has been reformatted. Profound changes in education have taken place in China during the epidemic and these changes will serve as driving forces for the transformation of education paradigm.

4. Paying attention to remote and poor areas and disadvantaged student groups

Because of the unbalanced development of urban and rural areas in China, rural network conditions are relatively behind. Children's online learning is seriously affected by the lack of home network and equipment. Offering help to the disadvantaged children, governments at all levels, enterprises and social organizations work together to make sure that broadband networks are unblocked, mobile Internet is publicly available, and free online learning equipment is provided.

DISCUSSION/OUTCOMES OF ONLINE TEACHING

The Chinese Government recognized that it was not easy for schools to be closed but education to be continued. The Government soon mobilized all the stakeholders to include local district officials, school administrators, teachers, parents, community leaders, and technology service providers to join effort to get the problem resolved. All the stakeholders were able to take their responsibilities and contribute to the mission of closing schools but continuing education.

Because of the immediate need to take action to address the COVID-19 situation in China, online teaching and learning was launched with no common standards across academic disciplines and regions all over the country. That creates a problem for outcome evaluation during and after the COVID-19 period. Many teachers are still new to online teaching and are performing the online teaching task by trial and error. They plan to go over the same material a second time as and when normal classes restart. However, what they learn from their online teaching experiences is valuable. They could use their initial online teaching contents, resources and activities as a basis for continuous improvement.

The outbreak of COVID-19 has given a boost to China to pursue on online education. Though the outcome of online teaching and learning is still unknown, the trends of future development seem to be clear. As Stevenson (2020) has pointed out that after the COVID-19 period, blended teaching

and learning models will definitely become more common with a reduced reliance on face-to-face format especially in higher education.

Some students have gone through their online learning experience by means of the MOOC in higher education. They were opened to opportunities to access learning materials and classes by best-in-the-field scholars. Even within a school, because of the formation of teaching teams in online teaching, students were able to take advantage of the rich resources of the teaching team in broadening their horizon by learning from different teachers in the same subject area.

IMPLICATIONS FOR EDUCATIONAL PLANNING

The effort of the Chinese government and the stakeholders in fighting the COVID-19 war to save education is certainly remarkable. While the final outcome of their effort has yet to be determined, the drastic measures they have taken so far offer valuable lessons for educational planners to learn in confronting future crisis. Their practices carry significant implications for educational planning worldwide.

First, the Chinese government together with all the identified stakeholders of this anti-COVID movement were able to pull their effort together to contribute to the cause of continuing education with school closing. The Central Government was able to appoint a special COVID-19 Group to take the leadership of planning and coordinating all the actions to address the problem. It is this centralized leadership that was able to save time and effort in analyzing the disastrous situation and prescribing the right medicine for curing.

Second, the COVID-19 Group was able to act fast in identifying the core of the issue and recommended the course of actions to take in addressing the problem. With the support of the Central Government and the provincial and the local governments, huge amounts of requested resources were poured in to ensure that the recommended measures could be smoothly implemented. No time was lost in coordination, communication, deliberation and administration. Though no formal evaluation of these courses of actions have been made, the effort of the government and the stakeholders at all levels are recognized for providing guaranteed access to network connections to all teachers and students (Jee, 2020), and monitoring the implementation of the online program through teacher and parent online feedback systems with constructive suggestions for improvement (CCTV News, 2020a). All the stakeholders of the anti-COVID group are also credited with the development of the post-pandemic plan that prepares to bring the educational operation back to normal after the pandemic period.

Third, understanding that there are equity issues involved in implementing online teaching because of cultural and geographic differences in China, the COVID-19 Group was particularly aware of the poor and disadvantaged group of students and their families. The Group has exerted extra effort to ensure that the interest of the poor and disadvantage group of students was well protected. The mission was to provide equal online learning opportunities to all students irrespective of their family background.

Fourth, because of the short of planning time, the strategies of closing schools and continuing education were quickly drafted and implemented without an outcome evaluation component. This has become a drawback of this anti-COVID effort. Even though some provinces noticed the lack of evaluation plan later and tried to complement by some piecemeal plan to assess interim results, a standardized overall outcome evaluation plan of anti-COVID effort has not been created. This

missing component of the planning process will become a barrier for outcome assessment at the end of the COVID-19 period.

Fifth, in declaring war on COVID-19, the Chinese Government and the stakeholders started to bring the classes online to ensure continuous student learning. To traditional educators, this online approach to learning seems to be a substitute in time of crisis. What about at the Post COVID-19 period? Will online teaching and learning continue the way it is? Or should it be going back to face-to-face format of instruction? The COVID-19 Group has developed a post COVID-19 plan to indicate the future direction to go and the ways how online teaching and learning can be smoothly transitioned back to a new blended mode of instruction delivery. The COVID-19 Group's far-sightedness in creating the post COVID-19 plan is to be complimented.

CONCLUSION

This paper has presented how the Chinese government and educators acted to combat the pandemic challenges, overcome difficulties and craft and implement far-sighted plans to adjust to the post-pandemic period. It also summarizes the characteristics of china's educational measures on epidemic and discusses the outcomes of online learning and implications for educational planning. However, the paper does not intend to provide an exhaustive picture of what happened to public schools and institutions of higher education given the scope of the Chinese context. Outliers and exceptions are likely to exist and it warrants further study.

Planning strategies to meet with the challenges of unpredicted crisis have been most difficult. Educational planners in China need to hastily come up with an emergency plan to deal with the urgencies all over the country. Consideration had to be given to problem identification, resource allocation, implementation strategies, plan modification for changes and outcome evaluation. Chinese Government and the stakeholders of the COVID-19 fighting group have been doing extraordinarily well in demonstrating their best in achieving the mission called upon them to continue learning while closing schools. Even though what they have done still has areas to be expected, the difficult process they have gone through with great courage and determination presents a case study of lessons for universal educational planners to learn.

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