Original Paper

Online Education for Chinese Elementary and Secondary School

Students: Experiences and Challenges

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Abstract

In addition to studying in schools where online learning has been increasing in recent years, many Chinese elementary and secondary school students participate in outside school online education programs, often urged by their parents so that their learning can be enhanced. Being descriptive, this is a literature review study. The purpose of this article is to provide a narrative of online education for Chinese students with regard to experiences and challenges in the last two years, particularly during the COVID-19 pandemic. The data sources of this paper are mainly documents published by the Ministry of Education, but literature published by other organizations and individuals are also referred to. Four hundred and twenty-three million Chinese had received online education by the end of March 2020. For elementary and secondary students, increasing online education in schools and outside schools plays a positive role in reducing the dropout number and provides other substantive benefits. In addition, online education for students during the pandemic allowed children to continue their learning without being on campus, but their overall experiences were mixed, and there were serious challenges to be dealt with.

Keywords

Online education, elementary and secondary, pandemic, experiences, challenges, China

1. Introduction

With 289 million students in schools from kindergartens to doctoral programs in universities, China has the largest education system in the world. There are 235,200 elementary and secondary schools with 197 million students (Ministry of Education [MOE], March 1, 2021). The 2018 Programme for International Student Assessment (PISA) results indicated that Chinese students from two municipalities and two provinces: Beijing, Shanghai, Jiangsu, and Zhejiang, were ranked number one among students from 79 education systems that participated in PISA (PISA, 2019). In addition to

studying in schools where online learning has been increasing in recent years, many students participate in outside school online education, often urged by their parents so that their learning can be enhanced. Being descriptive, this is a literature review study with the purpose of providing a narrative of online education for Chinese students with regard to their experiences and challenges in the last two years, particularly during the COVID-19 pandemic. The data sources of this article are mainly documents published by the Ministry of Education from July 2019 to the time when this paper is written, but literature published by other organizations and individuals are also referred to.

## 2. Online Education before the Pandemic

While Chinese students performed well in PISA, the Ministry of Education believes that the workload students carry are too heavy, and it needs to be reduced. In addition, as some Chinese parents use outside school education businesses extensively, there are concerns about some businesses. Some businesses provide face-to-face learning opportunities, but others provide online learning. The Ministry of Education (July 12, 2019) listed education businesses in six provinces that violated laws and regulations in operating programs without qualified instructors and with other problems. To help online education businesses develop and operate appropriately, the Ministry of Education (July 15, 2019) and five other ministries promulgated a directive on regulating online education businesses. The directive stated that these businesses should pay close attention to how students grow and focus on the development of student character. Businesses should continuously enhance their standards and increase their appropriateness for specific student groups. Following the relevant laws and regulations, government ministries should monitor online education businesses, urging them to self-regulate and orderly develop their operations. The directive indicated that by the end of December 2019 the government would register all online education businesses. By the end of December 2020, a national standardized monitoring system involving different government ministries would be established to create an environment, where following scientific rules government ministries would monitor online education businesses, businesses would develop orderly, and students would be able to self-select appropriate programs (MOE, July 15, 2019).

On August 28, 2019 Premier Li chaired a State Council Standing Committee meeting, where the Committee decided that to meet people's education needs, to facilitate the sharing of quality education resources, to better benefit remote and poor regions, and to improve educational equity, the State Council would promote "internet + education" (MOE, August 28, 2019). The Committee also decided to expedite the development of educational networks and build a fast and stable national network connecting all schools by 2022. The State Council would support developing rich online education resources particularly for poor regions. The State Council would also strengthen its monitoring efforts to protect the interests of all learners (MOE, August 28, 2019).

The Ministry of Education (September 19, 2019) and 10 other ministries promulgated a directive on promoting the healthy development of online education. The directive stated that online education with the internet and artificial intelligence should be an important component of the education system. Online education was beneficial for establishing a networked, digital, individualized, and life-long education system and a learning society, where everybody would be able to learn anywhere anytime. To promote the healthy, standardized, and orderly development of online education, the directive instructed provincial departments of education to fully utilize contemporary information and communication technologies to provide online education services and offer effective educational resources. The Ministry of Education (September 19, 2019) would work with other ministries in creating a safe online education environment, where the government would provide guidance, educational institutions would self-administer programs, education businesses would self-discipline their operations, and the whole society would monitor the provision of online education services.

To meet the various needs of different groups, the Ministry of Education (September 19, 2019) would encourage social organizations to form online education institutions, develop online resources, and provide quality services. The Ministry would support collaborations between internet businesses and online education institutions. Through the "Network Learning Space for Every Teacher Project", the Ministry would facilitate the special training of 10,000 principals and 20,000 teachers by 2020. The Ministry would design 10,000 exemplar courses for grades 1-9, and support poor regions when they developed online education resources for English, math, music, physical education, and arts courses. The Ministry would regulate outside school online education businesses that used the internet to serve elementary and secondary students. The Ministry would seize the 5G technology opportunity to promote the educational application of internet of things, cloud computing, and virtual reality technology and enhance digital education services. The Ministry would encourage social organizations to participate in building and operating an infrastructure of online education. The Ministry of Education would work with the Ministry of Finance to increase the funding of building and operating online education platforms. The Ministry of Education would work with the State Intellectual Property Office, the State Administration for Market Regulation, and the Ministry of Public Security to strengthen the protection of intellectual property rights to promote the establishment of a fair, orderly, but competitive market. The Ministry of Education (September 19, 2019) would work with the State Administration for Market Regulation to make sure that laws and regulations were implemented, quality standards were followed, complaint mechanisms were abided by, and consumers' rights were protected.

On October 21, 2019, the Ministry of Education General Office promulgated a directive instructing provincial education departments to continue to create and expand network learning space, promoting "internet + education". The ministerial directive stated that provincial education departments should encourage teachers and students to connect to the national public digital education resource service system, gradually realizing the aim of "every student has a learning space and every student is utilizing

the learning space." With the consideration of their own local conditions, provincial education departments should make and implement a plan for creating and expanding their learning space. Every school and every student should be able to access a platform and the platform should be connected to the national public digital education resource service system. Based on their needs, provincial education departments and schools should also create learning spaces for classes, teachers, parents, communities, and regions (MOE, October 21, 2019).

The ministerial directive stated that provincial education departments and schools should utilize network learning space in teaching and learning, build a ubiquitous learning environment, optimize resources, create new service models, and promote resource sharing (MOE, October 21, 2019). Teachers should utilize network learning spaces to prepare for teaching, to guide students' learning, to offer differentiated and individualized instruction, and to develop cooperation across classes, schools, and regions. Teachers should utilize learning spaces to enhance their professional development, establish network learning space communities, increase their subject knowledge, and expand their learning space capabilities. Schools should encourage students to utilize network learning spaces to select online courses, take online tests, establish interest groups, exchange ideas and works, and receive online guidance for their self-study. The Ministry of Education (October 21, 2019) set a timeline for accomplishing the related tasks in stages, with the aim of reaching its general goal by May 2020.

On January 16, 2020, the Ministry of Education General Office promulgated another directive, instructing provincial education departments to prevent outside school education businesses from increasing their operations to augment students' learning burdens during the winter vacation, so that these students could enjoy a safe, pleasant, and family oriented vacation. Provincial education departments should work together with market monitoring and public security departments to conduct a comprehensive inspection of all education businesses before the winter vacation started. If these departments found businesses operating without a license, teaching ahead of the relevant curricula, and making students do excessive homework, education departments and other departments should deal with the regulation violation behaviours seriously. These departments should strengthen their regulation of fees education businesses charged before the actual provision of services, and fees should be charged at the time when the services were provided. No preservice fees should be allowed for over three months before the actual services. Once it was found that there was abnormal business capital flow, the relevant departments should take resolute measures to prevent a business from suddenly disappearing. Education departments and schools should let parents fully understand the relevant policies and strengthen their self-protection awareness and selection ability, so that parents would not fall into traps set up by businesses that violated laws and regulations. Parents should arrange their children's vacation activities reasonably and help children have a meaningful winter vacation (MOE, January 16, 2020).

Provincial education departments and other departments should well administrate the work related to the "National Outside School Education Business Management Services Platform for Elementary and Secondary Students", publicize a list of approved businesses and a list of businesses that should be watched out for, and make it convenient for people to find the relevant information and make complaints about violations of laws and regulations (MOE, January 16, 2020). Provincial education departments and other departments should deal with complaints seriously and provide responses to complaints in time, so that the whole society would participate in the monitoring of education businesses and facilitate the regular development of these businesses (MOE, January 16, 2020). On January 22, 2020, the Ministry of Education General Office announced its report on ministerial websites that functioned for monitoring and reporting on education businesses in 2019, which indicated that the Ministry responded to and addressed all users' criticisms.

## 3. The Pandemic and Online Education

On January 10, 2020, the World Health Organization published a comprehensive package of guidance documents for countries, covering topics related to the management of an outbreak of a new disease, COVID-19. On January 23, 2020 the Chinese government decided to lock down the Municipality of Wuhan to stop the spreading of the COVID-19 virus. It was two days before the Chinese Lunar New Year, January 25, when students from kindergartens to doctoral programs were at home on winter vacation. As the virus spread to other places of China, when the time for students to return to school after the winter vacation was approaching, on January 29, the Ministry of Education decided to postpone the reopening of all school campuses across the country (MOE, May 14, 2020).

The Ministry of Education set up a committee to lead the fight to prevent COVID-19 from spreading into schools. On February 6, 2020 the ministerial committee promulgated a directive instructing provincial education departments to develop online education resources to meet students' needs when school campuses were not open. The Ministry would collaborate with national information and communication technology corporations to ensure the stable operation of their networks and platforms to facilitate network services for teachers, students, and parents for online learning. These corporations should ensure the safe operation of video conference systems utilized by educational systems and institutions. Provincial education departments and schools should utilize national and local platforms to create a stable online teaching and learning environment. The Ministry would depend on national capabilities to provide rich and free education resources for provincial education departments, schools, students, and parents. The Ministry (February 6, 2020) would also encourage enterprises to share their quality resources and provide "internet + education" technological support and application services.

The Ministry (February 6, 2020) would open a national platform to establish a national elementary and secondary school cloud computing network classroom to offer free courses for teachers, students, parents, and social learners. With the consideration of their own conditions, provincial education

departments and schools should develop online education via network platforms, digital TV, and mobile stations to select online virtual classrooms, network courses for choices, massive open online courses, small private online courses, student self-study platforms, and questions and answers services. Provincial education departments and schools should provide "internet + services" to offer mental health services to promote campus safety and social stability. The Ministry of Education would mobilize enterprises to provide free platforms, resources, and teaching tools for provincial education departments and schools should make online education plans and organize teachers to receive online training for online education to strengthen teachers' capabilities of conducting online teaching. Education departments and schools should make comprehensive arrangements for teaching schedules to ensure that the workloads of students, teachers, and parents would not be increased. Normally online teaching periods should be shorter than face-to-face teaching periods, and recess times should be increased. Schools and teachers should guide parents to let their children use electronic products scientifically, strictly control gaming, and protect students' vision (MOE, February 6, 2020).

On February 10, 2020 the Ministry of Education committee leading the fight against COVID-19 promulgated a directive instructing provincial education departments to assist teachers in their fight against the pandemic, as they were the frontline workers that would have close contact with students. To keep students healthy, teachers must stay healthy. All provincial education departments and schools should consider the health of teachers and students as their first important responsibility. Without approval no students should be allowed to return to schools. No visitors should be allowed to enter schools. All teachers and students who entered a school should show their identification and have their body temperature measured. Anyone with a fever or coughing should be put under medical observation in isolation. Anyone who violated rules should be dealt with seriously. No gatherings should be allowed (MOE, February 10, 2020).

The Ministry committee (February 10, 2020) directive instructed schools to make arrangements for teaching and learning without students on campus. Schools should organize teachers to develop online education resources with the consideration of students' physical and mental health and the appropriateness of course contents and time. Schools should not make teachers teach ahead of the curriculum and teach at a time when normally teachers were not working. Schools should fully utilize national educational resources. Teachers should participate in online education professional development to strengthen their online teaching ability. The works teachers did in online teaching, online learning guidance, and online marking students' works should be counted as their workload and be considered when their performance was appraised (MOE, February 10, 2020).

The Ministry committee (February 10, 2020) directive further instructed that provincial education departments and schools should guide teachers to adjust to the challenge of COVID-19. Teachers should educate students to protect themselves against the virus and help students grow healthily,

physically as well as mentally. Education departments and schools should particularly take good care of students who were the children of frontline doctors and nurses (MOE, February 10, 2020).

On February 12, 2020, general offices of the Ministry of Education and the Ministry of Industry and Information Technology promulgated a joint directive on the provision of education when schools would delay reopening their campuses. To prevent the spreading of COVID-19, the directive instructed provincial education departments and bureaus of communication and technology that their first important responsibility was to firmly prevent the virus from spreading on to school campuses. To meet the learning needs of students, the Ministry of Education would collaborate with provinces in providing free education resources for grade 1 to grade 12 via the national cloud computing network platform and national TV classrooms. For remote rural areas where there was no cable TV, the Central China TV would, from February 17, 2020, broadcast these education resources via its education channel, which covered the whole country through satellite technology. The most important education publisher in China, People's Education Press, opened all its digital education resources (MOE, February 12, 2020). The Ministry (February 12, 2020) directive urged provinces to consider their own resources and conditions to arrange practical approaches. The directive also urged economically and educationally more developed provinces to open their own online education resources to the whole country. To avoid overworking teachers, provinces and schools should not make every teacher video record their lessons. Schools should encourage students to pay attention to their physical as well mental health, do physical exercises, and read on their own. Teachers should provide online guidance and help students reasonably arrange their learning. Provincial education departments should prevent schools from being replaced by outside school education businesses in the provision of education. Schools should guide students when they learned from home, helping them select the right online learning resources. Schools should develop courses that were appropriate for online learning, instead of simply moving normal face-to-face teaching methods and time arrangement online. Schools should develop students' ability of self-studying. Schools should allow flexibility and avoid standardizing requirements for young students in elementary schools and let them and their parents select contents that were suitable for them (MOE, February 12, 2020).

Schools should ensure that they did not overburden students with excessive learning contents (MOE, February 12, 2020). Schools and teachers should guide students to properly arrange their online learning time with the consideration of their age. Schools should not force students to learn too early and too much, to report to school daily at a school regulated time, and to upload videos of their actual learning process. Schools should guide students to protect their vision. Schools and teachers should guide students' learning with the consideration of their practical conditions, help them select the right online or TV learning contents, and avoid forcing them to purchase new equipment, which would increase their financial burden (MOE, February 12, 2020).

Before reopening campuses, schools should carefully analyse students' at home learning progress and quality and arrange teaching accordingly (MOE, February 12, 2020). Before teaching new contents schools should help students review what they had learned at home and offer assistance to those who had difficulties. For young elementary students who did not receive online education at home, schools should start teaching from where students stopped the last time (MOE, February 12, 2020).

When the new semester started on February 17, 2020, students did not return to school campuses, but education was moved online. The Ministry of Education launched the "Disrupted Classes, Undisrupted Learning" initiative, directing schools to provide flexible online education to over 270 million students at home (Huang et al., 2020). This was possible because by 2019, 98 % of elementary and secondary schools were connected to the internet and 90 % of schools had multimedia classrooms (MOE, May 14, 2020).

The Ministry of Education (May 14, 2020) formally opened the national elementary and secondary school cloud computing network platform and the national education TV classroom on February 17 in the "Disrupted Classes, Undisrupted Learning" initiative. The Ministry of Education coordinated 22 online learning platforms that offered over 24,000 free and open online courses at the national level (Huang et al., 2020). The State Administration of Radio and Television promulgated a directive instructing television stations around the country to ensure that their TV classrooms were accessible across the country, so that students in remote poor regions and rural areas where there was no internet, or internet speed was slow, were able to learn at home and share quality resources (MOE, May 14, 2020). The contents of the national elementary and secondary school cloud computing network platform were updated and supplemented weekly. On February 24 the platform was upgraded. From the upgrading to May 11 the platform operated smoothly and visits increased gradually, covering all provinces. The platform received 2 billion visits. The viewing of the TV classroom also increased dramatically, particularly among rural area students who welcomed quality resources. Some provinces opened 12 TV channels, one for each grade, and provided the service of viewer selected replays. Most provinces' online teaching periods were shorter than face-to-face periods (MOE, May 14, 2020). The national cloud computing network platform provided 4,649 periods of learning resources for the spring semester, which covered all subjects for all grades in elementary and secondary schools (MOE, February 8, 2021). Most resources were offered in the format of micro-videos in the length of 15-20 minutes for elementary schools and 20-25 minutes for secondary schools (MOE, February 8, 2021). Schools should particularly support children who stayed in the countryside without their parents at home and children from families with financial difficulties (MOE, May 14, 2020). Schools should encourage all teachers to actively participate in guiding students' online learning and strengthen communication between schools and families. Schools should not force every teacher to teach with a video conference system. Schools should also avoid increasing financial burdens for families by making them purchase new equipment for printing (MOE, May 14, 2020).

Two hundred and sixty-five million students received online education (Cyberspace Administration of China, 2020). There was an explosion of online education needs. With such huge online learning needs, not only all schools worked feverishly to teach online, but online education businesses also acted quickly, some of them even offered free online programs. The online education industry grew substantially. Data indicated that during the pandemic everyday several online education applications had over 10 million users (Cyberspace Administration of China, 2020). Schools used Chinese internet communication tools such as: WeChat, QQ, DingTalk, and Tencent Meeting (Huang et al., 2020).

When the COVID-19 pandemic was largely brought under control, on March 17, the Ministry of Education General Office promulgated a directive instructing provincial education departments to prepare for the reopening of school campuses. Education departments should continue to fight against the pandemic but at the same time they should work on connecting what students had learned while staying at home to what would be normally taught in schools when campuses reopened to ensure the safety of students and their learning quality. Schools should orderly arrange their reopening to prevent the virus from entering any campus. Schools should have mental health education specialists to guide teachers and students when they were dealing with the impact of the pandemic. Schools should particularly pay attention to students with special needs and students who would proceed to senior secondary school or post-secondary education. Schools should firmly support students at risk of leaving school without graduation and make sure that no child would be left behind. Schools should analyze their experiences of providing online education, continue to provide online education, normalize online education to share quality resources, and assist schools in poor remote rural areas to continue their online teaching to enhance their teaching quality. Schools should encourage teachers to apply information and communication technologies in enhancing their teaching (MOE, March 17, 2020).

Provincial education departments should strictly monitor outside school education businesses and prevent any education businesses from providing face-to-face education without approval (MOE, March 17, 2020). Education departments should work with other departments to seriously deal with regulation violators. For education businesses that would receive approval, they should be strictly monitored as school campuses. Following the relevant laws and regulations education departments should strengthen the monitoring of online education businesses (MOE, March 17, 2020).

When the spreading of the virus was almost stopped, school campuses reopened in early May. On May 7, a national newspaper, *People's Daily*, published an article summarizing the experiences of online education during the national school campus shutdown from mid-February to early May (Liu, 2020). The results were mixed. While online education provided the opportunity for 265 million students to receive education without being on campus, there were challenges. Access to the internet was provided to children all the time and parents became kind of education assistants at home. When online education started after the winter vacation, it was chaotic for many families. Parents were not familiar with online education, but teachers depended too much on parents to provide the necessary support to

their children. Schools did not know how to administer online education effectively and parents did not know how to assist their children in receiving online education and often had no time to assist. National Statistics Bureau Shanghai Branch conducted a survey asking parents about their experiences of assisting their children's online learning at home. Most parents gave positive feedback, but about 28% of them had impulses of scolding or even spanking their children, 22% were not satisfied with the effectiveness of learning, and 7% were tired and bored (Liu, 2020).

Moving education online was also a challenge for teachers (Liu, 2020). They felt that they must spend more time preparing teaching resources. There were teachers that felt that they had difficulty moving their teaching online. All teachers felt that there was a difference between them who were immigrants to the internet and their students who were netizens. There were also differences between old and new teachers, between teachers in different regions, between teachers in urban and rural areas, and between technology savvy teachers and teachers who had hardly used the internet before (Liu, 2020).

One study conducted by Xi'an Communication University revealed that Chinese online education was still at the stage of adjusting and problem-solving (Liu, 2020). The number of online courses was huge and the participation rate was high, but there was significant room for improving effectiveness. COVID-19 forced Chinese educators to make online education available for all students, provided an opportunity to strengthen educational equity, but it also displayed challenges for institutions and educators (Liu, 2020).

Another study conducted by Imedia Consultancy indicated that 55% of their respondents stated that online education was not as effective as off line education (Liu, 2020). The most serious problems were weak learning environments and low students attentiveness. One reason was that some educators simply moved their teaching resources online without the necessary adaptation. Educators needed to find the dynamic correspondence between off line and online education in contents, interaction, and assessment (Liu, 2020).

One significant challenge of the online education activities during the pandemic was that the internet was not available everywhere in China (Liu, 2020). By March 2020 out of 1.4 billion Chinese about 500 million had not used the internet. Most of these people were in rural areas. There was a variety of reasons for not using the internet: no devices to connect to the internet, no internet in the area, and internet too expensive. Some remote rural area students, particularly those in Western China, were off line or semi-off line. They did not have access to online education at home, let alone video conferencing. There were stories of rural students moving around to chase internet signals. Even in urban centres at the beginning of the online education after the winter vacation, falling off line and intermittent videos were frequent as the networks were not ready for the high volume traffic. To solve these problems, government departments and businesses acted promptly, providing satellite technology to facilitate online education. Through cloud computing technology internet enterprises and operators improved networking for online education and provided discounted deals to reduce prices for students

from low social-economic status families (Liu, 2020).

On May 12, 2020, the Ministry of Education held a news conference to brief the nation on the situation of students returning to school campuses and what to do as the next steps. The Ministry insisted that before any school could reopen its campus it should make sure that the spreading of the virus was largely contained in that area, that the school had the conditions of preventing the virus from entering the campus, and that the safety of students and staff would be ensured. The Ministry invited medical experts to guide provincial education departments and schools in how to reopen their campuses. The Ministry stated that school campuses around the country gradually reopened, and that by May 11, approximately 40% of all students, from kindergartens to higher education institutions, had returned to their campuses. Some provinces tested their students to have an understanding of what they had learned while receiving online education at home. Other provinces provided differentiated instruction to meet students' needs. The Ministry estimated that by the end of May the vast majority of students would return to school campuses. The Ministry (May 12, 2020) urged provincial education departments and schools to continue to consider the safety and health of teachers and students as their most important responsibility.

On May 14, 2020, the Ministry held another news conference when a ministerial document entitled, "The Situation of Elementary and Secondary School Teaching and Learning During the Pandemic", produced by the Basic Education Branch was released to the media. In China basic education referred to education from grade 1 to grade 9. The document stated that during the pandemic provincial education departments and schools lead teachers to act quickly to make utmost efforts in providing quality online education for students to learn from home. It was an unprecedented massive online education experiment, which achieved positive effects. While the massive online education was generally positive, it exposed serious challenges. There were issues with network operations, systematic quality education resources were inadequate, teachers' information and communication technology application abilities were inadequate, and online interactions between teachers and students were inadequate. These all needed to be improved (MOE, May 14, 2020).

The ministerial document (MOE, May 14, 2020) stated that this massive online education experiment was revolutionary in the application of information and communication technology. It provided the opportunity to test the feasibility and advantages of large scale online education and produced valuable experiences and achievements. The Ministry would carefully summarize experiences and attentively analyze outstanding issues and continue to guide provincial education departments when schools made efforts to connect online education with face-to-face education. The Ministry would work towards improving the operation of online education systems that provided resources. The Ministry would strengthen its public basic education service capacities. The Ministry would expedite the building and sharing of quality online resources, narrow the gap in resources between urban areas and rural areas, extensively promote equity, facilitate the application of information and communication technologies,

encourage reforms in teaching approaches, serve students' self-study, serve teachers in improving teaching, help comprehensively raise the quality of basic education, and speed up the modernization of basic education (MOE, May 14, 2020).

To regulate outside school education businesses' services and to protect the rights of those involved in disputes, in June 2020 the Ministry of Education and the Bureau for Market Monitoring promulgated a directive promoting a standard contract form for all outside school education businesses. This standard contract was designed based on the Education Act, the Act for Promoting Private Education, the State Council Directive on Regulating Outside School Education Businesses, and other relevant laws and policies. The Ministry of Education and the Bureau for Market Monitoring directive stipulates that in signing a contract, the involved parties should clearly specify their responsibilities and rights in every step, particularly when it comes to the rules concerning fees, refunding, and responsibilities when one party violates the contract. Signing such a contract is beneficial for parties involved to understand and follow the related laws and policies, for students and their parents to choose the appropriate education businesses, for parties involved to protect their lawful rights, for properly dealing with disputes, for strengthening the regulation of outside school education businesses, and for promoting the healthy development of these businesses. The directive urges provincial departments around the country to encourage people to use the standard contract and to help parties involved, particularly students' parents, fully understand the laws and policies that regulate outside school education businesses. Government departments need to substantially raise parents' self-protection awareness and their abilities in choosing the right education programs for their children (MOE, June 16, 2020).

By July 2020 the proportion of schools that had multimedia classrooms increased to 93% (Liu, Yu, & Ding, February 14, 2021). On August 20, 2020, the Ministry of Education promulgated a directive instructing provincial education departments and schools to continue to prevent COVID-19 from coming back and to prepare for the new semester in early September. Education departments and schools should understand the importance of normalizing education in economic and social development. School leaders should well organize their staff to prepare for the new semester, ensure the monitoring of the health of staff and students, and comprehensively restore the normal teaching and learning arrangements (MOE, August 20, 2020).

## 4. Conclusion

Cyberspace Administration of China (2020) reported that 904 million Chinese had used the internet by the end of March 2020, which was about 64.5% of the population, with an increase of 4.9% over the end of 2018. Approximately 423 million Chinese, who were 46.8% of the internet users, had received online education, with an increase of 222 million people over the end of 2018. The increase rate over the end of 2018 was 110% (Cyberspace Administration of China, 2020). In 2019 the number of children that dropped out of school before they completed grade 9 was approximately 600,000 across

the country. By November 30, 2020, the number of these dropout children was reduced to 831 (MOE, December 10, 2020). For students, increasing online education in schools and outside schools played a positive role in reducing the dropout number and provided students with other substantive benefits. In addition, online education for students during the pandemic allowed them to carry on their learning without being on campus, however, their overall experiences were mixed, and there were serious challenges to be dealt with. Chinese education has returned to normal, but educators continue to make effort to increase and improve online education to benefit students (Zhao & Wu, 2021). The Ministry of Education (July 24, 2021) urges provincial education departments to strengthen free online education to promote equity in the provision of educational resources. The Ministry's (February 8, 2021, March 25, 2021) goal is to establish a clearly articulated online education system that covers all curriculum subjects, developed, built, operated, and promoted with a series of related policies by 2025.

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