Review of China's Online Education Policy, 1999–2022

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Abstract

Purpose: This study traces the development of China's online education policy over the past 20 years.

Design/Approach/Methods: Employing a textual research method, this study examines online education policymakers, policy content and influence, and related policies and regulations.

Findings: This study identifies the starting point of China's online education policy and divides its development into four stages: namely, the pilot exploration stage (1999–2002), the standard development stage (2002–2012), the transformation stage (2012–2017), and the governance improvement stage (2017–present). Policy development reflects three characteristics: the need to meet the requirements of the times, shifting from a single management to multiple governance approach, and developing from one object for some people to one object for everyone. Current policy focuses on regulating institutions, content, and products, as well as guiding social capital to participate in online education.

Originality/Value: This study systematically analyzes the development of China's online education policies, discerns policy characteristics, and identifies current policy priorities. In doing so,

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this study enhances our understanding of the current status and potential needs of online education in China so as to promote its development from the perspective of education policy and governance.

In 2020, the COVID-19 pandemic resulted in schools around the world prohibiting in-person classes and asking 1.5 billion students to engage in online education from the safety of their homes. In China, which has the largest educational volume in the world, more than 200 million students had to study at home, with tens of millions of teachers forced to transition to online teaching. This move has had profound effects, with China's online education effectively supporting the learning of nearly 300 million teachers and students. In addition to promoting online education within China, the shift to online learning during the pandemic served to push the Massive Open Online Courses (MOOCs) into the mainstream of global higher education. It has also accelerated the development pace of China's higher education, with China now a leading force able to provide "Chinese solutions" or "Chinese experiences" to other countries via advances in large-scale online education.

However, despite attracting significant attention, China's online education is driven by capital and overtly chaotic. Indeed, after several online training institutions were exposed for engaging in "false propaganda" and "price gouging," the Chinese government strengthened the regulation and governance of online education. In late July 2021, the General Office of the Central Committee of the Communist Party of China (CPC) and the General Office of the State Council issued *Opinions on Further Reducing the Burden of Excessive Homework and Off-campus Tutoring for Students Undergoing Compulsory Education* (hereinafter, *Double Reduction*), indicating that China's online education industry was experiencing a "cold winter." Since the founding of the People's Republic of China, the country has introduced several policies promoting the development of online education. Accordingly, this study systematically analyzes the development of China's online education policies, discerns their characteristics, and identifies current policy priorities. In doing so, this study enhances our objective understanding of the current status and potential needs of online education in China, thereby aiding its development from the perspective of education policy and governance. The findings of this study also have practical application with respect to promoting the healthy and sustainable development of online education.

Online education and online education policy

An essential part of education services, "online education" refers to a new type of education model that uses modern information technologies, such as the Internet and artificial intelligence, in any aspect of education (The Ministry of Education of the People's Republic of China [MOE], 2019b). In China, "online education" is generally believed to have originated in the third generation of distance education in the late 1990s. In 1999, the MOE's *Action Plan for Education Promotion for the 21st Century* defined "modern distance education" as "a new type of education that has emerged with the development of modern information technology." Although different terms such as "online education" and "Internet education" have emerged in the Chinese discourse, they all refer to the form of education integrated with Internet technology. Online education has specific characteristics, including having no time constraints, free spatial mobility, diversity of forms, and the massive sharing of resources. First emerging during the third generation of distance education, China's online education has developed over the course of more than 20 years.

Terms adopted in China's online education policy documents include "online education," "modern distance education," and "Internet education." In the literature on online education policy, few studies have specifically examined online education policy for K-12 education. As online education is part of China's efforts regarding education informatization, several education informatization policies pertain to and influence the content of online education. Therefore, in this study, all expressions of "online education" in China's online education policies and education informatization policies are collectively referred to as China's online education policies. More specifically, in tracing Chinese policy development in the field of online education, this study adopts the perspective of education policy research (Lin & Chen, 2008) ,and conducts textual analysis of policy documents falling under the framework of national-level education and education informatization policies.

Development of China's online education policy

After China's reform and opening-up, the government strongly supported the development of adult education in an effort to improve the national education level and labor supply. In particular, the Chinese government encouraged the development of "modern education methods such as television and radio." Accordingly, the China Central Radio and TV Virtual University—the predecessor of The Open University of China—and the National Center for Educational Technology (NCET) were established, and specialized in the development of audiovisual education based on radio and television. In 1994, the State Board of Education presided over the collaboration between Tsinghua University and 10 other universities in the construction of the China Education and Research Network (CER)—China's first public computer network using the TCP/IP protocol. In 1999, the

State Council approved the MOE's *Action Plan for Education Promotion for the 21st Century*, resulting in the first program to explicitly develop modern distance education reliant on modern information technology (typically referred to as Internet technology). As such, the promotion of Chinese online education at the policy level began in 1999.

China's online education policy can be roughly divided into the following four stages: the pilot exploration stage, 1999–2002; the standard development stage, 2002–2012; the transformation stage, 2012–2017; and the governance improvement stage, 2017–present. This explores each of these stages in greater detail.

1999–2002: The pilot exploration stage

During this stage, emphasis was placed on the basic capacity building of online education, which was explored by piloting the infrastructure construction methods and the building of policy systems. These efforts were driven by the desire to promote the rapid development of online education in the country.

The MOE's *Action Plan for Education Promotion for the 21st Century* proposed the implementation of the "Modern Distance Education Project" to form an open education network and build a lifelong learning system. In June 1999, the *National Modern Distance Education Development Plan* proposed establishing a diversified modern distance education professional transmission network, actively encouraging and supporting qualified higher education institutions to participate in modern distance education, improving the level of distance education, and expanding the scale of schooling. It also proposed conducting pilot projects for distance education in selected primary and secondary schools in a few qualified areas. Based on these two key policies, building an infrastructure able to support a variety of distance education methods was the primary goal of this stage.

In accordance with these policies, distance education pilot projects were carried out in higher education institutions as well as a few qualified primary and secondary schools. The construction of the CER was a landmark project, as was the establishment of a modern distance education pilot in 68 higher education institutions, including Tsinghua University and Hunan University. Indeed, these two projects provided the basis for expanding people's access to higher education. These policies also served to regulate and standardize distance education pilot management, including the standard setup of learning technology, admission and registration, and off-campus learning centers.

At this stage, several education enterprises with Internet attributes were established, starting with the founding of the Beijing Huaxia Dadi Distance Education Network Service Co. Ltd. in 1999. In April 2000, this company established the China Dadi Education Network to provide online tutoring courses in various fields, such as language training and computer technology, for individuals and collective members at home and abroad. In the same year, the China Accounting Net School and the Ambo Education Group were founded. In spearheading the concept of "building China's

own open online education platform," Ambow became the first platform to develop international standards. During this period, several enterprises dedicated to the provision of technical equipment—that is, Internet education technology providers—were founded. These enterprises were mainly involved in providing information technology services in modern distance education, and include Beijing Wanty Technology Development Co. Ltd., which was founded in March 2000. Essentially, the expansion of Internet services triggered the first wave in the transition from offline education to online education. In 2000, New Orientals, one of the famous private education institutions in China, officially entered the field of online education by launching "New Oriental Online," successfully achieving profitability in its first year. Although Internet accessibility was relatively limited at this time, many enterprises were enthusiastic about the potentials of online education—reflecting the general optimism of Chinese society regarding online education.

2002–2012: The standard development stage

In the field of higher education, institutions turned their focus to mandatory normative policies and adjusted the direction of online education in pilot units. In the field of basic education, schools carried out pilot programs for modern distance education from the national to municipal level, learned from the experience of network colleges of higher education institutions, and promoted the construction of online education capacity system in rural areas through various projects. During this stage, the online education infrastructure of schools at all levels and of all types was improved and the online education policy system further developed.

In 2002, the MOE issued *Several Opinions of the Ministry of Education on Strengthening the Management of Colleges and Universities' Online Education Colleges and Improving Teaching Quality*, a policy document summarizing the achievements and issues in online education over the past decade. With respect to the main problems in online education, the document noted:

> [A] small number of pilot universities have an incomplete understanding of online education; the management system is not well established as of yet; the school conditions are relatively lagging; the excellent teaching resources are relatively lacking; and some universities have seriously violated the rules and regulations, which negatively affected running of online education in normal and orderly way.

From the perspective of legitimate rights and interests, it is necessary to regulate online education, including ensuring teaching quality and providing out-of-school learning support. The policy indicated a policy change from the vigorous promotion of development to mandatory regulation. The MOE also issued *Announcement on the Annual Inspection of the Network Education College of the Modern Distance Education Pilot School (2003)*, *Modern Distance Education Learning Center Interim Measures (2003)*, *Emergency Notice on Enrollment Management of Strict Modern*

Distance Education (2003), *Notice on the Problems of Illegal School Running in Some Modern Distance Education Pilot Universities (2005)*, and *Notice on Further Strengthening the Standard Management of College Online Education (2006)*. These policies were intended to strengthen the management of online education. Shifting from decentralization to centralization, the MOE has sought to balance the interests of three parties: the government, the market, and the society. In light of these shifts, some scholars argue that China's online education policy underwent a major change during this stage. As online education is a kind of innovative education model, continuous policy adjustments have largely been perceived as a form of "learning" (Guo, 2009).

In addition to standardizing the running of online colleges, online education resources in higher education institutions experienced rapid development as a result of the government's attention during this stage. In 2003, the MOE issued *Notice of the Ministry of Education on Starting the Development of Quality Courses for Teaching Quality and Teaching Reform Projects in Higher Education*, which asserted that "quality courses should employ the Internet for teaching. The syllabi, lesson plans, activities, experimental guidance, and references should be online and open for free. Sharing courseware, lecture recordings, and other online resources are encouraged." The MOE subsequently issued *Implementation Measures for the Construction of National Excellent Courses*. Starting in 2003, five consecutive years of the review were conducted to provide financial support for these "national quality courses." In 2007, when the 5-year review came to an end, the MOE and the Ministry of Finance jointly issued the *Approval of 2007 Annual National Quality Course Construction Project*. This project was continued until 2013, and later replaced by national-level quality online education courses. These national quality courses promoted the application of modern information technology in curriculum development and the use of high-quality teaching resources in a shared network of colleges and universities. Regarded as China's "Open Educational Resources Initiative," this policy proposed the "reasonable use of modern information technology and other means to reform traditional teaching ideas, teaching methods, pedagogies, and educational management" (MOE, 2003). From 2008 to 2011, the MOE continued to standardize and regulate student enrollment and registration, unified examination, annual inspection and reports, and quality course development. No other new policy measures for distance education in higher education were proposed (Shen et al., 2014).

In 2003, the State Council issued *Decision of the State Council on Further Strengthening Rural Education*, in which they proposed the *Implementation of the Modern Distance Education Project for Rural Primary and Secondary Schools* (hereinafter, the Nongyuan Project) and advocated a 5-year initiative "*to enable rural online education with the aim of having computer classrooms in middle schools, equipment to receive satellite signals, and CD players and a complete set of teaching CDs in primary schools*." Accordingly, the MOE launched the Nongyuan Project, 2003–2007, focusing on expanding three modes of education in primary and secondary schools

in rural areas: namely, equipping classrooms with CD players to provide teaching CDs, providing equipment to receive satellite teaching and computer classrooms to conduct distance education (Zeng, 2011). A total of RMB 11.1 billion was invested in the Nongyuan Project (National Modern Distance Education Office for Rural Primary and Secondary Schools, 2008). The Nongyuan Project was conducted in the same way as other modern distance education projects in higher education institutions: a pilot scheme followed by broader promotion. However, where higher education institutions spent nearly two decades moving from the first and second generation of distance education using satellite and radio and television equipment to the third generation of distance education using Internet technology, K-12 education achieved this shift within just 5 years, the three generations coexisting with one another. Significantly, the experiences of the distance education pilot schemes conducted in higher education institutions were used as references in the policy formation of the Nongyuan Project.

A number of policies were issued during this stage, including the *Modern Distance Education Project in Rural Schools Pilot Program (2005)*, *Examination Opinions on Pilot Work Program (2004)*, *Technical Scheme for the Receiving Site of the Pilot Work of Modern Distance Education Projects in Rural Primary and Middle Schools (2004)*, *Administrative Measures for the Procurement and Bidding of Pilot Work Equipment for Modern Distance Education Projects in Rural Primary and Middle Schools (2005)*, and *Administrative Measures for the Acceptance of Pilot Work of Modern Distance Education Projects in Rural Primary and Secondary Schools (2004)*. In addition to providing legal guarantees for policy implementation, these policies helped mitigate detours.

In terms of the development of learning resources for K-12 online education, the National K-12 Education Resource Network was established and managed by the K-12 Education Resource Center of the MOE and NCET. As a resource service platform for modern distance education in rural primary and secondary schools, it also acts as the authority on distance learning in China and provides guidance. Integrating service, practicality, and professionalism, the National K-12 Education Resource Network not only transmits high-quality educational resources to rural areas but provides information services and a strong teaching resource library for all elementary and middle school teachers in need. This resource website served as the foundation for the development of the national K-12 education resource public service platform (www.edunyun.cn).

Issued in 2010, the *Medium and Long-Term Education Reform and Development Plan (2010–2020)* clearly states that it is necessary to ensure that schools have "multiple ways to access the Internet" to ensure the vigorous development of modern distance education and build an open distance continuing education and public service platform using satellite, TV, and Internet technology as carriers. This marked the first time that the Internet, TV, and satellite were listed in national documents for distance education in China, a huge step forward. By December 2009, China had an

Internet access rate of 28.9% and 3.84 billion Internet users. However, nearly 60% of people were dubious of the Internet, while almost 30% claimed to distrust or not understand it (China Internet Network Information Center, 2010). At the time, the Internet access rate of primary and secondary schools was less than 40%.

In 2002, the MOE approved the *Building of the Distance Education Public Service System Pilot Project*. Jointly established by the Open University of China and the Open University of China Online Distance Education Technology Co., Ltd., the Aopeng Distance Education Center illustrates how the MOE encouraged higher education institutions to carry out online education based on the public service system. With the popularity of Web 2.0 in China in 2006, many Internet education platforms featuring language learning emerged, signaling a new wave of Internet education.

2012–2017: The transformation stage

During this stage, online education shifted its focus from adult academic education and distance education in rural areas to core elements of online education such as digital education resources, network infrastructure, and teaching models. This transition from distance education to "Internet + Education"—the amalgamation of online education in higher education and distance education in basic education—was achieved by 2015. Online education inherited the definition, characteristics, and concepts of its precursor, distance education, while acquiring new attributes and features via network technology. Compared with distance education in the past, online education benefits from the openness and convenience of network technology, thus providing more forms of education (Yang & Lei, 2020).

In March 2012, the MOE issued the *Decade of Education Information Development Plan (2011– 2020)*, the first development plan related to information technology and educational planning since 1949. The plan involved various types and stages of education, including K-12 education, higher education, ethnic education, and vocational education. The first full-caliber online conference on education informatization since 1949 was held in the same year. In an important speech in 2012, Yandong Liu, then State Councilor, proposed the "three connections and two platforms" project, the meeting and resulting report initiating a new round of strategic opportunities for China's education informatization.

The MOOC emerged in China in 2012, and was characterized by prestigious schools, famous teachers, fine products, no fees, openness, and mobility (Shang, 2013). As a disruptive and innovative technology, the MOOC opened up an emerging education market in which originally expensive and complex education products were made increasingly cheap and easy to access and use. This market gave emerging and low-cost institutions the opportunity to penetrate into higher level markets (e.g., by establishing graduate courses), and eventually develop into market leaders (Yang, 2014). As such, MOOCs are highly valued by almost all universities, including first-tier

universities and emerging institutions around the world. At the forum for MOOCs held by Tsinghua University, Huiqing Lin, former MOE Assistant, argued for the need to emancipate the mind and seize the opportunity to create the conditions for and actively promote Chinese education and the development of online education reform and innovation (Wu & Zhao, 2013). In the same year, MOOCs, micro-courses, and flipped classrooms became popular throughout the Chinese education system. Several primary and middle schools spontaneously began designing and developing micro-courses and encouraged teachers to engage in teaching practices based on the concept of flipped classrooms. Moreover, during this stage, Internet technology was widely adopted by teachers at various levels, creating a positive sociocultural foundation for the development of online education.

In 2012, the MOE, through the *Approval of Establishing of National Open University*, agreed to expand the Open University of China, shifting the institution from a "radio and television university" to an "open university." This resulted in the transition of the National Radio and TV University to an "open" and "shared" Internet education center. In 2014, the Chinese government successively canceled the right of approval of online schools delivering higher education degree courses via the Internet, extracurricular learning centers, educational websites, and other online schools. This policy served to promote the greater development of Internet education in China at any educational institution—regardless of whether it is a pilot or non-pilot distance education university, Internet education company, training institution, or vocational education institution (Gu, 2019).

In July 2015, the State Council issued *Guiding Opinions of the State Council on Actively Promoting "Internet +" Action*, confirming the revolutionary position of the Internet for all industries and clarifying that "Internet + Education" is intended to use the Internet to improve and optimize educational resources. Simply put, the policy advocated allowing "enterprise and private training and educational organization to develop digital education resources according to market demand and provide networked education services." It also encouraged schools to "use digital education resources and education service platforms to explore new models of networked education gradually." According to this policy, "exploring the networked education model" is necessary for universities and primary and secondary schools to carry out "Internet + Education."

Subsequently, in 2016, the MOE issued *Education Informationization "Thirteen Five" Development Planning*. In terms of the resource supply capacity of digital education, the policy advocated the need for clear educational administration at all levels and for departments to "make use of Web-based resources to provide a variety of means to all kinds of educational institutions." Schools were encouraged to explore online education to promote the reform of education supply—including education resources, teachers, and teaching services—and to push distance education in K-12 education to a new stage by relying on the Internet, indicating the need for comprehensive adjustment and transformation. It took about 10 years at the national macro-policy

level (K-12 education) for the TV broadcast and satellite technology explored by the Nongyuan Project to rely mainly on the Internet.

In 2015, the MOE issued the *Opinions on Strengthening the Application and Management of Online Open Courses Construction in Higher Education Institutions*, advocating the need to,

> [B]uild a batch of high-quality and large-scale online open courses, integrating course applications and teaching services; design a number of national quality online open courses; build online open course public service platforms; promote online open courses; regulate the promotion of online open courses overseas and the introduction of high-quality open courses into China; strengthen the training of the relevant teachers and technicians; and advance online open course credit recognition and the innovation of credit management system.

In *Guiding Opinions on Deepening the Education and Teaching Reform of Higher Education Institutions Affiliated to the Central Department*, issued in 2016, the Chinese government announced that it would provide special financial support to assist higher education institutions affiliated to the central department to facilitate the rapid development of online open courses.

In 2012, the central government established the National Public Service Platform for Educational Resources in an effort to provide basic public services for education. Over the past few years, the central government has explored the formation of a new mechanism of "enterprise competition, government accreditation, and school choice." At present, the public service platform provides more than three million online resources, bringing together more than 40 enterprises to provide competitive resource services for online K-12 education nationwide. It also provides a "cyber learning space" function to encourage tens of millions of teachers and students to build a personal learning environment online. To further promote the application of resources on public service platforms, the MOE has used the platform to carry out the activities of "one teacher, one excellent class, one teacher per class" since 2014, which has shifted from highlighting teaching and learning in the information technology environment to doing so in the network environment. Teaching and learning in such an environment have served to improve teachers' skill and ability in online teaching. This has become the most popular information platform in the world, with the largest numbers of courses and participants as well as the widest coverage of subjects. Indeed, more than 12 million teachers use the platform, a figure covering almost all teachers in the K-12 education in China. As such, the platform has had a significant impact on the popularity of online education in K-12 education in China.

The online education industry has promoted this transformation, with the use of "Internet thinking" to reshape education regarded as a weapon by online education companies. A number of Internet giants turned their attention to building their own online education platforms. Other internet companies also began providing their own online public classes and education products, while

online educational start-ups experienced explosive growth during this stage. Indeed, statistically, in 2013, an average of 2.6 Internet education companies were founded per day. On the business side of online education, providing a rational explanation to obtain capital and investor support proved relatively easy. Meanwhile, more traditional offline educational institutions shifted to online education, with the Internet serving to expand the market.

As a result of the influence of Internet thinking, "free" became the slogan of many online education companies entering the market. However, while learners became central to the industry, the quality of the content remained relatively overlooked. The model of pursuing profit at the cost of student learning outcomes had a short shelf life. From about 2016, the expansion of online education gradually plateaued and then declined, with many educational institutions shutting down their Internet services. As Zhuzhu Wang, former director of the NCET, noted, "The operation model of 'Traffic First' in the Internet industry should be reexamined and redefined when it is applied in the educational context" (2019).

2017–present: The governance improvement stage

In response to the needs of technological and social development, education informatization shifted its focus from the elements of things to the elements of human development. Integrated into the overall strategy of "building a lifelong learning system," the role of online education has expanded from promoting education equity to placing equal emphasis on equity and quality. With the advance of Internet and education reforms, China has prioritized the optimization of the online education system and the improvements of the online education governance system.

The CPC first mentioned "online education" in the report of the 19th National Congress, held in 2017. The CPC's emphasis on the importance of online education in the "priority to developing education" section of the report marked a new and significant leap in the development of China's online education (Guo & Chen, 2019). In April 2018, the MOE released the *Education Informatization 2.0 Action Plan*, a systematic application of the "development of online education" proposed in the report of the 19th National Congress. With the word "Internet" appearing some 16 times in the full text, the report identified the goal of "developing a new model of Web-based education services" as part of the broader implementation of "Internet + Education." Several other relevant policies were issued at the same time, including *Guidance of the Ministry of Education on the Construction and Application of Digital Education Resources Public Service System*, *Guidance on the Application of Cyber Learning Spaces*, and *Specification for the Construction of Digital Campuses in Primary and Secondary Schools (Trial)*. This was the first time that such a barrage of relevant policies was introduced into the field of education informatization, pushing education informatization from stage 1.0 to stage 2.0.

In September 2019, the MOE and other departments issued an instructional document entitled, *Guidance on Promoting the Healthy Development of Online Education* (hereinafter, *Guidance*)—the first such document under the name "online education." Developed on the basis of the "Internet education" discussed by the 19th National Congress, *Guidance* focused on the promotion of "Internet + Education" in the education sector and sought to specialize "online education" within a span of just 3 years. In this respect, *Guidance* noted that the development of online education would "help to build a networked, digital, personalized, and lifelong education system and even a learning society where 'everyone can learn, anywhere and anytime.'" Consequently, the status of online education was formally established within China's education sector. As *Guidance* notes, the significance of developing online education services lies in the construction of a learning society, making online education both a strategic and promising field. The policy document clearly advocates expanding the supply of high-quality online education resources, building a policy system that supports the development of online education, and forming a diversified online education management service structure.

In accordance with *Opinions of the Ministry of Education on Strengthening the Application and Management of Online Open Course Construction in Colleges and Universities*, the MOE accredited the first batch of national high-quality online open courses in the field of higher education in 2017, with this accreditation continued in 2018 and 2019. When the accreditation began, the MOE emphasized the significance of online open course for "service-learning society construction." For the accreditation of national quality courses, the MOE stipulated that "those courses that do not belong to MOOC or do not have completed teaching plans and activities are not within the scope of recognition." Such a stipulation reflects the orientation of online education resource development in higher education. Certainly, the development of MOOCs has seen a shift in emphasis in online Chinese higher education from the accessibility of course content to teaching plans and activities. In addition to college students, K-12 teachers were the main target of Chinese MOOCs. For example, on the icourse163 platform, organized by the Higher Education Press of the MOE, courses such as "Flip Classroom Teaching Method," "Gamification Teaching Method," and "English Teaching and Internet" were launched specifically for K-12 schoolteachers in an effort to improve their online teaching abilities. A total of 490 national quality online open courses were accredited in January 2018, and some 801 in April 2019.

In 2018, a number of developed countries and international organizations started reviewing the impact of technology on young people, consequently redefining and regulating technology at the legal level. In China, this move facilitated the standardization of online education. First, the government sought to rectify issues surrounding education applications in primary and secondary schools. In 2018, an increasing number of issues pertaining to education applications emerged in Chinese society, including the "*pornographic violence, online games, commercials, and crime*

included in the applications" etc. (MOE, 2018). In December 2018, the MOE issued *Notice of the General Office of the Ministry of Education on Prohibiting Harmful Applications From Entering Primary and Secondary School Campuses*. According to this policy, applications must undergo a "dual review" process before they can be used by primary and secondary schools. More specifically, before using an application, schools are required to check the content, links, and functions of an application and then submit their request to the higher-level education department for approval. These strategies effectively solved the issues surrounding the use of learning applications in the primary and secondary schools.

Meanwhile, with respect to tertiary education, in 2018, the MOE issued *Notice of the General Office of the Ministry of Education on Carrying Out the Annual Report on the Development of Continuing Education in Colleges and Universities*. This policy requires "independent colleges, open universities, and other types of adult higher education institutions" to submit an annual report detailing the institution's strategic positioning, administration system, background, development plan, social contributions, and reform and innovation to the MOE. This policy is indicative of the government's closer supervision, a move that has served to gradually improve and ensure the quality of adult education.

In July 2019, the MOE and other six ministries jointly issued a policy document entitled, *Implementation Opinions on Regulating Online Training Outside Schools*. As the first normative document issued at the national level to supervise online education providers, this policy sought to "regulate the use of Internet technology for primary and secondary school students." However, the applicable range excluded non-disciplinary online training activities and failed to specify whether such online educational institutions require a business license. Rather, supervision mainly focused on training institutions, training content, and training personnel. Nonetheless, the policy has strong operability, which reflects the characteristics of entry-based registration and ex post supervision. It requires that the duration of a course not exceed 40 min or the fee more than 60 class hours at a time. The teacher's qualification certificate must also be visibly publicized by the online platform. These requirements have had a significant impact on the online training industry.

Issued in August 2019, *Opinions of the Ministry of Education and Eight Other Departments on Guide and Standardize the Orderly and Healthy Development of Mobile Internet Applications* underscored the importance of educational applications as carriers of "Internet + Education." In this respect, the policy noted that the standardized management of these applications is intended to promote "Internet + Education" as an important part of online education development. The policy marked the first national-level document specifically targeting online educational products, and educational applications in particular. In addition to improving supply quality, standardizing application management, improving the supervision system, strengthening support and quality

guarantee, the policy outlined the need to implement "inclusive and prudential supervision" of educational mobile applications. The policy was formulated in accordance with the principle of national unified standards, separate implementation by individual provinces, and the local registration of enterprises (MOE, 2019). Emphasis was placed on the fact that this guidance is applicable to all schools and educational institutions, including but not limited to primary and secondary schools, extracurricular training organizations, and language training organizations. Indeed, the scope of the policy covers all and any education mobile application. In November 2019, the General Office of the MOE issued *Educational Mobile Internet Application Registration Management* for online education applications, stipulating that educational mobile application providers register through the public service system and be reviewed by the provincial education administrative department. Suppliers can "register in its affiliated province but be effective nationwide."

Since the outbreak of COVID-19, the MOE has issued a number of policies to guide teachers and students in conducting and engaging in online education more effectively, particularly with respect to the use of digital resources, teaching models, and connection with school education. With the normalization of the pandemic, the MOE and four other ministries jointly issued *Opinions on Vigorously Strengthening the Construction and Application of Online Education and Teaching Resources in Primary and Secondary Schools* in January 2021. This policy underscored the need to fully motivate schools, teachers, and students to utilize online education and teaching resources, promote the integrated development of online and offline education, and prevent online teaching from simply replacing offline teaching. In the field of higher education, a world online education cooperation institution was built to gather specialists and high-quality resources to construct an online education platform suitable for China's national conditions (MOE, 2021).

In late July 2021, the General Office of the Central Committee of the CPC and the General Office of the State Council issued *Opinions on Further Reducing Students' Homework Burdens and Off-campus Training Burdens in Compulsory Education*. Significantly, this policy—the so-called "Double Reduction" policy—focused on reducing the burdens of excessive homework and off-campus tutoring placed on students in compulsory education. The policy includes four measures related to online education. First, it prohibits the capitalized operation of the online education industry, including the listing of discipline training institutions for financing and the involvement of foreign capital in shareholding and management. Second, associate parties are required to establish a training content filing and supervision system and resolutely investigate and deal with outstanding problems such as out-of-scope training, uneven training quality, vulgar and illegal content, as well as piracy and infringement. Third, associate parties must strictly implement the relevant provisions of the *Law on the Protection of Minors*, not use students' rest days for subject training, and are prohibited from disclosing the personal information of parents and students. Fourth, associate parties are advised to strengthen normal operation supervision, keep the fees for training institutions open

and transparent, and prohibit unfair competition such as false propaganda. These four measures demonstrate the determination of the government at the national level to standardize and regulate online education from the perspective of information security (Yuan et al., 2021). In addition to capitalized operations, the Double Reduction policy contains specific requirements regarding the establishment of a filing and supervision system, strict implementation of relevant laws and regulations, and strengthening of normal operation supervision. These measures are also mentioned in the detailed provisions of *Implementation Opinions on Regulating Off-campus Online Training (2019)* and *Opinions on the Orderly and Healthy Development of Guiding and Regulating Educational Mobile Internet Applications (2019)*. As such, the *Double Reduction* policy sounded the rallying call for online education governance.

In recent years, the scale of online education has grown at a rate of more than 10%. In 2018, capital investment returned, with online education projects in the fields of language education and K-12 education receiving the largest investment. Of these, STEM education has increased the most, especially for programming education. With the help of artificial intelligence education policies, an increasing number of companies are becoming involved in this field, resulting in the emergence of several children's programming education brands. However, immediately after the release of the Double Reduction policy, the online education industry entered a bitterly "cold winter."

Figure 1 is a summary of main policies and main measures in different development stages of higher education and K-12 education. Before 2012, online education was successively promoted in the form of pilot projects in higher education and K-12 education. Since 2012, with the development of technology, the online education has turned to the construction of teaching resources and innovation of instruction mode relying on Internet. After 2017, the content of policy governance has been constantly enriched, and the unified governance ecology of online education has begun to form.

Through policy support and guidance, online education in China has experienced rapid development. According to a report released by the China Internet Network Information Center, the number of online education users in China reached 325 million by mid-2021, the penetration rate of Internet users exceeded 32.1%, and the Internet connection rate of Chinese schools is close to 100%. Meanwhile, the ability of teachers to apply ICT in education has improved significantly. The ever-increasing coverage of cyber learning spaces has provided teachers and students with unique online homes. Large-scale online education experiments have laid a solid foundation in terms of technology, capabilities, and content, particularly during the novel coronavirus epidemic prevention and control period. Although some problems in large-scale online education have come to light, the strategy of "Disrupted Classes, Undisrupted Learning" has garnered support nationwide. Indeed, due to the early accumulation of online educational resources
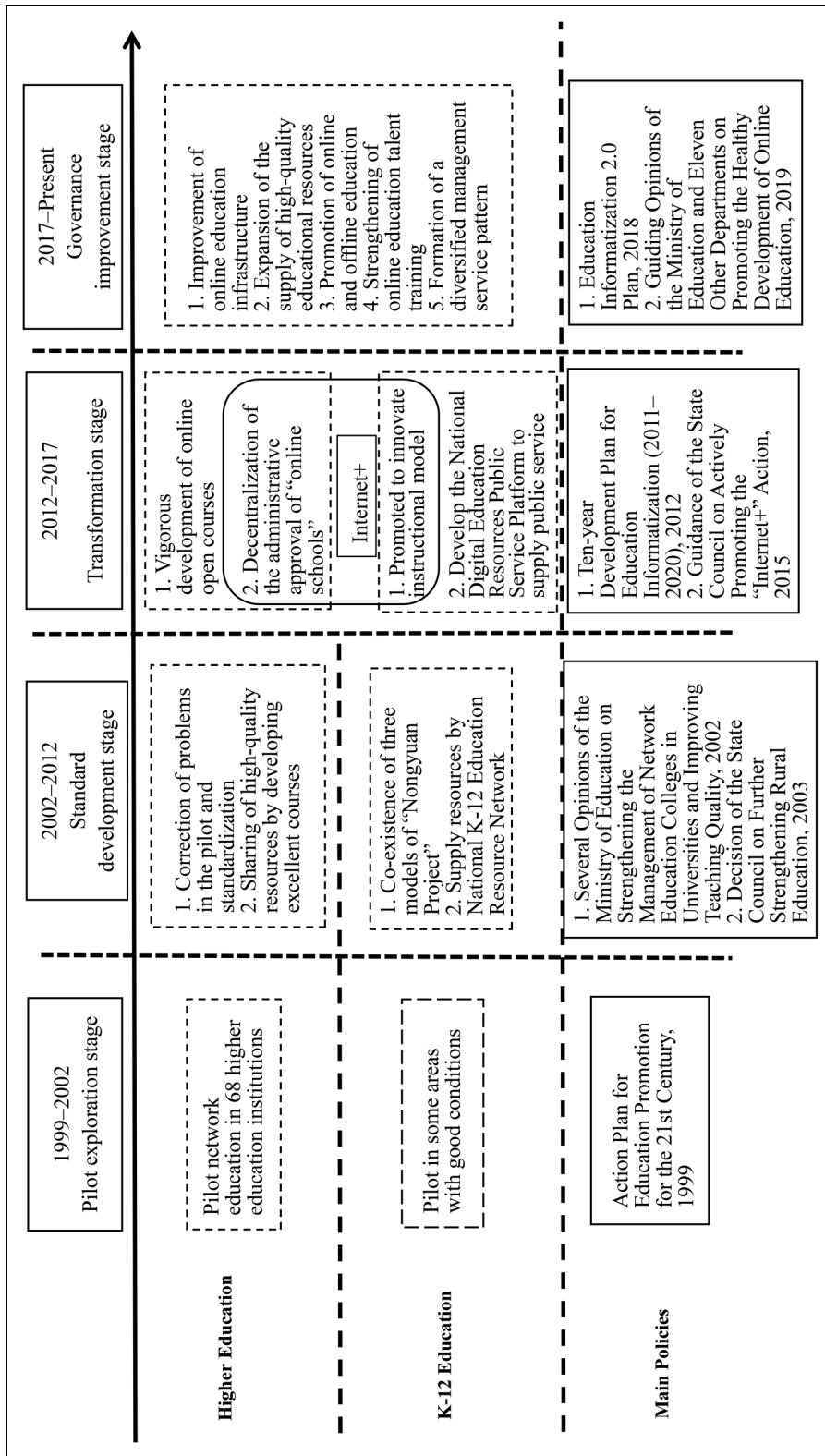
Figure 1. Stages of and key points in online education policy development.

	1999–2002 Pilot exploration stage	2002–2012 Standard development stage	2012–2017 Transformation stage	2017–Present Governance improvement stage
Higher Education	Pilot network education in 68 higher education institutions	1. Correction of problems in the pilot and standardization 2. Sharing of high-quality resources by developing excellent courses	1. Vigorous development of online open courses 2. Decentralization of the administrative approval of "online schools" [Internet+] 1. Promoted to innovate instructional model 2. Develop the National Digital Education Resources Public Service Platform to supply public service	1. Improvement of online education infrastructure 2. Expansion of the supply of high-quality educational resources 3. Promotion of online and offline education 4. Strengthening of online education talent training 5. Formation of a diversified management service pattern
K-12 Education	Pilot in some areas with good conditions	1. Co-existence of three models of "Nongyuan Project" 2. Supply resources by National K-12 Education Resource Network		
Main Policies	Action Plan for Education Promotion for the 21st Century, 1999	1. Several Opinions of the Ministry of Education on Strengthening the Management of Network Education Colleges in Universities and Improving Teaching Quality, 2002 2. Decision of the State Council on Further Strengthening Rural Education, 2003	1. Ten-year Development Plan for Education Informatization (2011–2020), 2012 2. Guidance of the State Council on Actively Promoting the "Internet+" Action, 2015	1. Education Informatization 2.0 Plan, 2018 2. Guiding Opinions of the Ministry of Education and Eleven Other Departments on Promoting the Healthy Development of Online Education, 2019

such as national quality classes, open online courses, and K-12 education resources and networks, the MOE was able to open 22 online course platforms with 24,000 courses—including MOOCs, small-scale online courses (SPOCs), and virtual courses—in less than a week. The MOE also cooperated with the Ministry of Industry and Information Technology to coordinate multiple operators to build the National Network Cloud Platform for Primary and Secondary School, enabling 50 million students to engage in online learning at the same time ("No class and no school suspension," 2020).

In China, there are currently more than 30 major online course platforms offering 34,000 MOOCs to some 540 million students and social learners, 150 million of whom have obtained course credits (MOE, 2021). The Chinese online education industry chain has continued to mature, forming a closed loop of teaching, learning, management, evaluation, and testing. Many online education companies have actively taken the initiative during this period and cooperated with the government and schools to provide strong support for the provision of high-quality, large-scale online education. In the context of the popularity and advancement of the Internet in China, the information and media literacy of both students and parents are being shaped by these developments, guaranteeing the effectiveness of students' online learning. In general, online education has played an important role in the "Disrupted Classes, Undisrupted Learning" strategy, demonstrating its massive potential to support education and teaching during emergencies via the use of ICT in education.

Characteristics of online education policy development

Development positioning: Advancing with the times under the guidance of national strategy

At the turn of the 21st century, China's had a relatively low degree of Internet access, with distance education methods typically reliant on broadcast television and satellite transmission. The Internet has come to play a significant role in continuing education for adult learners. Accordingly, earlier policy tended to focus on "actively [implementing] modern distance education in colleges and universities meeting conditions." At the K-12 education level, policy initially sought to "implement distance education pilot projects in a few good-conditioning areas and primary and secondary schools." In the initial stage of the pilot project, the development of online education focused on computer network upgrades, satellite TV education channel expansion, and software development (Zhang, 1999). In this respect, online education was more a discussion of technical issues, with the construction of an information infrastructure the primary goal.

In 2007, Apple released the iPhone 1, launching the smartphone era. Internet-connected mobile terminals allowed more people to access the Internet. Indeed, the Internet access rate has accelerated

since 2007, as has the number of mobile Internet users. As noted, in 2009, Chinese people had relatively little trust in the Internet, China possessing a network rate of less than 30%. However, in 2010, the popularity of the Internet, television, and satellite carrier in distance education was even for the first time. Meanwhile, online education has become a key tool for continuing education, shifting from a "supplementary" role to one of the key pillars of Chinese education, with policy seeking to "vigorously develop" this "forward-looking" sector with a strategic vision.

In 2015, the "Internet+" concept was formally advanced as a national policy. "Internet+ Education" was officially perceived as the use of cloud computing, learning analysis, networking, artificial intelligence, and new network security technology across schools and classes for individual learners, providing a new service model of high-quality, flexible, and personalized education (Chen, 2016). As "Internet+", an education integration service model, online education acts as a form of distance education providing adult learners with degree or nondegree education. In contrast to traditional school education, online education is characterized by the use of technology and education integration and innovation. Online education has pushed education to a new stage, solidifying the value assumptions that it can innovate education supply. Online education services no longer require administrative approval. It is an inevitable choice for society to "improve and optimize the supply of education resources."

As such, understanding online education policies in different periods needs to consider the national demand for talent reserves and education reform and development at the time, particularly in tracing the shift from "passive acceptance" to a "forward-looking" trend. Policy development reflects the policy changes, political origins, and ideology of the political party. The country's strategic leadership—including strategies to improve the quality of laborers, supply-side education reforms, and education to strengthen the country—constitutes the political environment for policy change. Statements like "implementing the spirit," "implementing the requirements," and "accelerating the construction of" are often conceived as the "goal" in online education policy documents. Certainly, research shows that the major decisions of the CPC and the State Council on national education reform and development have significantly impacted the formulation and implementation of education informatization policies. Indeed, the CPC or State Council's release of important documents on national education reform and development frequently resulted in changes in education informatization policies (Zhang & Xue, 2018).

Support development: From single management to multiple governance

Over the past 20 years, the Chinese government has consistently supported the development of online education. In addition to leading policy formulation and publication, the MOE has served as the main body of policy promulgation and implementation. Under the Chinese political system, national education policy is formulated by officials, with the ruling party using its role

of the "official policymaker" to develop education policy through the national administrative agency (Zhang, 2013). A modern distance education pilot program was first established by the MOE in 1999. Prior to 2010, a pilot network education program was primarily conducted in the field of higher education, while the Nongyuan project was carried out in the field of K-12 education. Although the MOE is responsible for policy formulation and implementation, the Nongyuan project was developed by the Reform Commission and jointly issued by the Ministry of Finance. However, these two bodies typically play a role in providing a policy or funding guarantee, with little involvement in the education business process. Online education falls under the scope of the education system. With the revolution of Internet technology, online education—breaking the boundaries of the education sector and other departments and industries—has a stronger dependence on the information industry as well as intellectual property rights, laws, and regulations, resulting in the policy environment becoming increasingly complex. After the State Council issued the "Internet +" guidance in 2015, the provision of innovative educational resources on the Internet became an internal matter of the education sector on the one hand, and a project dependent on the cooperation of multiple sectors on the other. While the education sector cannot solve or interfere in some issues, it needs to cooperate with the other sectors and jointly formulate policies. For example, issued in September 2019, *Guidance on Promoting the Healthy Development of Online Education* was developed by the MOE and other eleven departments—the largest number of departments to cooperate in policy formation in recent years. This is consistent with the diversified development of policymaking subjects for education informatization after 2010. However, regardless of how many ministries are involved, the MOE holds primary authority for formulating and publishing policy. In addition to demonstrating that "online education" falls under the scope of education, this hierarchy is conducive to the continuity of the policy.

While diversifying the main body of policy production, the development of China's online education reflects the characteristics of the shift from management to governance. In 2013, the 3rd Plenary Session of the 18th National Congress issued a government report entitled, *Decision on Several Major Issues in Comprehensively Deepening Reform*, which prosed the need "to achieve [the] governance system and governance capacity of … modernization." The core of "modernization" is the simplification of government and decentralization, that is, a shift away from the highly centralized and government-supplied education system (Yang, 2017), and the transformation of education from management to service. Under the macro background of the national governance policy of "deregulation and service," online education has shifted from a single top-down "management" and "authorization" system to a multi-governance body with supervision during and after the event.

Taking regulation policy in the field of online education as an example, over the course of more than 20 years of development, two amendments have been made in online education (Table 1

Table 1. Online education policy development: Main policy documents, departments, targets, content, and objectives.

	2002–2012 Normative development stage	2017–Present Governance improvement stage	
Main policy documents	*Several Opinions of the Ministry of Education on Strengthening the Management of Network Education Colleges in Universities and Improving Teaching Quality*	*Implementation Opinions of the Ministry of Education and Six Other Departments on Regulating Online Training Outside the School*	*Opinions of the Ministry of Education and Eight Other Departments on Guiding and Standardizing the Orderly and Healthy Development of Mobile Internet Applications in Education*
Department	MOE	MOE; Office of the Central Cyberspace Affairs Commission; Ministry of Industry and Information Technology; Ministry of Public Security; National Radio and Television Administration; Office of the National Working Group on "Eradicating Pornography and Fighting against Violence"	MOE; Office of the Central Cyberspace Affairs Commission; Ministry of Industry and Information Technology; Ministry of Public Security; National Press and Publication Administration; Office of the National Working Group on "Eradicating Pornography and Fighting against Violence"; Ministry of Civil Affairs; State Administration for Market Regulation
Target	College of Network Education	Online training institutions outside K-12 schools	Mobile education Internet applications
Content	Enrollment management; teaching process management; examination management; teaching management; examination and approval of the establishment of learning centers; examination and approval of online academic education	Training institutions, training content, and trainers' conduct record review; daily supervision of content, duration, teachers, information security, operating standards, etc.; strengthening of industry self-discipline	Strengthening of content construction, data management, network security, and industry standards

presents the main policy stages). From the perspective of main policy documents and makers, the MOE issued a series of documents to rectify the network college of the higher education institute. This caused different evaluations of the same issues, such as those regarding the illegal admissions incident of the Hunan University Tax Remote Center. The second instance occurred in 2018, with the issue of *Notice of the Ministry of Education on Prohibiting Harmful Applications from Entering Primary and Secondary School Campuses (2018)*. Subsequently, the normative documents of online institutions and educational mobile Internet applications issued by six or eight ministries appeared in the tone of "implementation opinions" and "opinions." The policy also proposed that the MOE "control the chaos by special actions in the short term, standardize management by regulations and policies in the medium term, and meet the needs of students by improving quality in the long term" (MOE, 2019). From the point of view of the rectification object, the regulation has changed from mainly managing school institutions to mainly targeting online education products and services. The content of the regulation also reflects the change from pipeline management to data and content management, and the governance mode has also kept pace with the times. In terms of governance methods, off-campus online training institutions and educational mobile Internet applications rely on the National Public Service Platform for Educational Resources for registration, publicity, and supervision. The national digital educational resource public service system dynamically monitors the accessed applications and controls users' basic information and the relevant data derived from the applications. Collected data provide evidence for policy implementation and enforcement, which is conducive to the conversion of data collected from the information and evidence policy to connect micro- to macro-data policies. In this sense, big data has become a practical policy concept (Chen et al., 2014).

On the one hand, these two changes can be understood as the requirements of national policies. On the other hand, they reflect another driving force behind the development of China's education policy, namely the transition to collective consensus and "strategic space." Online education stakeholders—including policymakers, online education providers, learners, and the general public—constitute a community of policy production. Stakeholder perceptions of online education have expanded with the popularization of "technical revolution" and "lifelong learning." The awareness of online education is constantly deepening, producing a collective understanding of the value and implementation of online education. This consensus plays a significant role in the formulation and implementation of policy texts. In this regard, "strategic space" involves the explicit constraints of the policy department, the implicit constraints of the policy environment, the procedural constraints of the policy text, and the incompleteness of the substantial constraints of the policy resources (Lin, 2006). This space gives policy objects—such as online education providers, learners, and the general public—the opportunity to implement "strategic behavior" and act within the confines of the policy arena. Overstepping the bounds of this policy arena results in a new round of policies.

Value orientation: From something for some to one thing for all

The primary objective of Chinese education policy is to create and ensure education equity. The specific goal of education equity is education equality and compensation for vulnerable groups (Liu, 2002). Since the 19th National Congress, the pursuit of fair and quality education has resulted in changes to and the transformation of China's education equity policy in the new era (Zheng & Wu, 2018).

China's online education originated in higher education as a means of meeting the needs of learners, upgrading their academic qualifications, and providing them with continuing education opportunities. For instance, in 2002, the primary objective of the Cyber Academy was to,

> [P]rovide in-service personnel with updated knowledge, enhanced skills, continuous learning, and continuous improvement to provide good services, not only to actively carry out an academic education but also to actively carry out vocational qualification education, job training, and other forms of continuing education (MOE, 2002).

The goal of online education lay in the provision of continuing education for employed people, forming a modern distance education system combining online education and adult education (Guo, 2009). This elucidates why "online education has basically been in the low-end market, such as informal education and training" for many years (Shang, 2020).

With the popularization of terminals and network infrastructure, online education has expanded from urban to rural areas, adults to minors, and from academic education to nonacademic education. Meanwhile, the coverage of online education policies has expanded from serving some people to serving all people. In 2003, an online K-12 education pilot focusing on underage learning in remote areas was implemented with the objective of improving network conditions in rural areas using computer network-based resource transmission as a supplement to broadcast TV, satellite, and CD-ROM transmission modes. In 2015, in a congratulatory letter to the International Education Informatization Conference, General Secretary Xi Jinping noted the need to "build a networked, digitalized, personalized, and lifelong education system and build a school where everyone can learn, learn everywhere, and can always learn." He also asserted that online education opportunities should be equal for all learners. Simply put, online education should be provided to every citizen regardless of age or stage of life by ensuring equal and guaranteed access to quality development learning.

The expansion of online education services from catering to specific groups to serving all citizens reflects the connections and differences in China's K-12 and higher education policies with respect to online education. Online education was implemented in K-12 education after gaining a foothold in higher education. The *National Modern Distance Education Development Plan*, issued by MOE in 1999, is considered the first policy to specifically deploy modern distance

education in higher education institutions. It facilitated the formation of the National K-12 Education Resource Network in 2003, the establishment of which is based on the rural modern distance education project. Before 2015, China did not issue any specific online education policies or projects for K-12 education. Indeed, the *Ten-Year Development Plan for Education Informatization (2011–2020)* only mentions K-12 school networks, with no recourse to an education model relying on such networks. Essentially, China was relatively cautious in its approach to online education in the field of K-12 education. Announced in 2015, the State Council's "Internet + " action plan was the first policy document to promote the use of the Internet in K-12 education and schools. In this respect, K-12 schools perceived "Internet + Education" as a form of national will rather than an endogenous education system. However, the inheritance of policies from higher education was advantageous insofar as it prevented several detours in the development of K-12 online education. For example, between the planning and implementation of the Nongyuan Project, which was officially launched in 2003, the MOE issued five relevant normative documents covering aspects like terminal reception site technical solutions, equipment bidding, and project inspection, thereby strengthening the National Development and Reform Commission (NDRC), the Ministry of Finance, and other departments to ensure the smooth implementation of the project. These moves were partially based on the experience of network education colleges and universities from the development of the "Great Leap Forward" to the 180-degree "rectification."

China's current online education policy: Priorities and development trends

Previous studies have shown that existing policies have relatively weak teaching process supervision. China has yet to issue independent and completed teaching management documents or establish a modern distance education quality assurance standard system (Shen et al., 2014). Moreover, there is no clear guidance on how to promote school-enterprise cooperation, despite school-enterprise cooperation to promote the development of new public service delivery methods constituting a clear initiative of "Internet + ". From the perspective of organizational innovation, school-enterprise cooperation faces organizational, institutional, and technical challenges (Yang, 2018). How to effectively implement long-term and sustainable cooperation so that enterprises can proactively provide the public with high-level, information-based support services is in urgent need of further exploration (Chen, 2020). Furthermore, as the "digital divide" highlighted by online education cannot be avoided, it is imperative that policy preferences and guarantees for vulnerable areas and groups are strengthened (National Institute of Education Sciences Research Group,

2020). As online education involves many aspects of education, the market, technology, and society, only a multifaceted joint effort can promote its further development.

On the surface, the shift to comprehensive online education during the epidemic sought to "rebuild schools" using a technology platform. However, it also demonstrated the practicality and value of students and teachers engaging in learning and educational communication around courses and teaching in asynchronous and different time spaces (Cui et al., 2020). Although years of development have provided the foundation for large-scale and established online education, it still faces problems. For instance, there are structural deficiencies in the construction of long-term digital education resources; some students lack learning terminals, limiting their access to online learning; and some teachers have failed to adapt their teaching ability to the needs of online education and have little motivation to continue engaging in online education. In response to these issues, the MOE has issued further policies pertaining to the construction and application of online resources, the construction of new educational infrastructure, and a project to improve the information technology application abilities of teachers. The goal of developing online education and building a lifelong learning system within the education system has not changed. On the surface, the *Double Reduction* policy brings great pressure to online education, but it needs to be clear that its purpose is not to suppress the online education industry, but to promote the benign development of online education and build a healthier education ecology (Yuan et al., 2021).

Under the dual logic of advocacy within the education system and normative governance outside the system, the development of online education in China reflects three trends.

First, a pattern of co-management and collaborative governance by all departments has emerged. As mentioned above, multi-governance is reflected in both policy subjects and policy texts. The network information department has been deeply involved in all aspects of institutional filing and content review, with the control of ideology becoming more stringent over time. The Cyberspace Administration of China has also guided the establishment of online education industrial organizations, relying on such bodies to carry out industry self-discipline, guide other industry enterprises to practice social responsibility, and promote integration with the overall national situation, such as rural revitalization and network support.

Second, the education sector is the main body providing high-quality online education services. During the pandemic, there was a resurgence of the discussion regarding "online education"; although such discussion will eventually recede, the close integration of technology and education has been successfully established (Hu, 2020). In response to the current deficiencies, the MOE has allocated resources to online education, infrastructure construction, information technology application capabilities, and students' information literacy. For example, launched the *National Primary and Secondary School Network Cloud Platform* during the pandemic. In doing so, the MOE not

only provided a basic guarantee of education in the areas affected by the pandemic in China, but tens of thousands of high-quality courses, which replaced off-campus training institutions after the implementation of the *Double Reduction* policy.

Third, pure online education for adults and online and offline integrated education for learners under the age of 18 will be further developed. Under the guidance of the policy of "building a lifelong learning system," different development strategies will be adopted for different groups of people. Measures should be taken to promote local community education and education institutions for seniors to actively carry out special training on intelligent technology application skills that benefit the elderly, as well as encourage the elderly to update their concepts and improve their comprehensive information literacy and application skills (MOE, 2021). Measures should also be taken to ensure that people make use of the advantages of online education in adult and continuing education with the goal of increasing digital literacy. For children, the MOE requires schools at all levels to clarify what and how to teach, and to explore the organic combination of offline classroom teaching and online education. With the introduction of the *Double Reduction* policy, off-campus online education has entered a difficult period. In this respect, the integrated development of online and offline education is set to become the focus of the digital transformation of the schools and colleges.

Conclusion

Based on existing research, this study identifies the starting point of China's online education policy, divides this policy development into four stages, and comprehensively compares important projects in K-12 and higher education. The empirical description and analysis of the policies are intended to be understood as objective. This study is limited insofar as it examines the historical background and effects of these policies, but does not address the process by which they were formulated. Online education allows students to independently choose the learning content and level, ways of presentation, and communication methods most suitable for them, thus providing a form of education accessible to anyone (Yuan, 2020). In China, large-scale education integrating individual online learning seeks to support the vision of "lifelong learning." Under the guidance and norms of relevant policies and various supports, China's online education has a promising future.

Contributorship

Yu Jiang was responsible for completing the collection and analysis of the policy text, proposing the policy change stage, carrying out the research on the policy characteristics, revising and finalizing according to the review comments. Junjie Shang was responsible for writing the abstract, completing the development trend research, and revising according to the review comments. Lizhen Jiao contributed to literature research on existing relevant policies and revision according to the review comments.

Declaration of conflicting interests

Funding

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