



## Distance Higher Education and MOOCs in China

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### ABSTRACT:

China has the largest higher education system in the world. The aim of this study is to provide an overview of the literature on distance higher education, including MOOCs, development in China, its accompanying practices, challenges, and opportunities. The study also offers recommendations derived from the literature on how to make distance higher education benefit more Chinese. This study is mainly a literature review and the related discussion. I conducted a review of Chinese literature on distance higher education and MOOCs. I also reviewed well-known English international journals for articles on distance higher education and MOOCs in China. In addition, I reviewed the relevant information available at the website of the Chinese Ministry of Education. The study summarizes all the literature reviewed and concludes with a note on the probable direction of the future development of Chinese distance higher education, particularly MOOCs.

Keywords: Distance Higher Education, MOOC, China.

### 1. BACKGROUND AND DEVELOPMENT:

The purpose of this article is to provide an overview of the literature on the development of distance higher education, including MOOCs, in China, its accompanying practices, challenges, and opportunities. According to a statistical report on Chinese Internet development, by the end of 2018, 829 million Chinese had used the Internet, which was about 59.6 percent of the population, with an increase of 3.8 percent over the end of 2017 (China Internet Network Information Center, 2019). As more Chinese use the Internet, the importance of it in education increases as well. Online education is provided to more learners and it is becoming more specific for particular groups. By the end of 2018, approximately 201 million Chinese,

24.3 percent of those that had used the Internet, had received online education, with an increase rate of 29.7 percent over the end of 2017. Of those that received online education 96.5 percent used their mobile phones, with an increase of 19.9 percent over the end of 2017. One reason that online education has been increasing fast is that live broadcasting technology has been improving rapidly. As the techniques of voice recognition and cloud storage further advance, the quality of live classroom has been significantly enhanced, maximizing the effect of real classroom. The results of online education have been accepted by the market, meeting the needs of diverse learners. Without the restraints of time and space online education has been expanding in scope and depth (China Internet Network Information Center,

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2019). In 2018 the market value of Chinese online education is approximately 170 billion yuan (about 27 billion dollars) (Lu, 2018). One important aspect of Chinese online education is distance higher education.

To conduct this study, I did a review of recent Chinese and international literature on distance higher education in China since 2011. The Chinese academic journals I reviewed include: *Open Education Research*, *Open Education Review*, the *Chinese Journal of ICT in Education*, *Distance Education in China*, and *Journal of Distance Education*. I also reviewed well-known English international journals on online education and e-learning. These journals include *American Journal of Distance Education*, *Distance Education*, *Journal of Educational Technology Development and Exchange*, *International Journal of Education & Development Using Information & Communication Technology*, *Australasian Journal of Educational Technology*, and *Computers in Human Behavior*, where gradually Chinese scholars have started publishing their research articles, and Western scholars publish articles on MOOCs and Chinese distance higher education. In addition, I reviewed the website of the Chinese Ministry of Education to obtain information related to the development of distance higher education.

In 1978 when China opened to the world and started a reform the participation rate of higher education was 2.7 percent. By 2018 the participation rate of higher education is 48.1 percent (Yue & Cao, 2019). While higher education has developed fast in China in the last four decades, the current participation rate is still lower than that of the average of the Organization of Economic Co-Operation and Development countries (Organization of Economic Co-Operation and Development, 2018).

To increase access to higher education, instructors in four Chinese universities started to use ICT in their distance education programs in 1999 with 2,900 students. In 2002 the Ministry of

Education approved 68 universities to offer programs providing web-based education. These universities were given un-precedent autonomy in admitting students, offering programs, and granting degrees (Xu, 2016). Currently distance higher education through ICT is provided in all 31 provinces, ethnic autonomous regions, and municipalities directly under the national government. Besides the Internet, most distance education programs also use cable television networks and satellite technology. The admission rate for distance higher education programs is higher than that for face to face programs. Most students in distance higher education programs are people with a job, and their education is considered continuing education. However, the infrastructure is insufficient, students in distance programs tend to be less prepared, faculty tend to be weak, and there is a lack of learning support. There are also concerns over legitimacy, separate criteria of admission, teaching, graduation, huge enrollments, predominantly face to face classes, and misuse of funding (Xu, 2016).

In addition to increasing access, distance education offers opportunities for sharing teaching resources among instructors, institutions, and platforms. To share resources, 29 national top higher education institutions formed a curriculum alliance in April 2013. By November 2015, over 1 million students had registered in online courses provided by the alliance, which included 93 institutions, and almost half a million students had earned credits through these courses. Courses from the alliance were made available for 10 million students in over 1,000 institutions (Ministry of Education, November 17, 2015).

Distance higher education provides a condition for student-centered learning. Through educational networks, students can individually obtain information on the most recent scientific development from institutions around the world. Without the constraints of time and space, distance higher education with information and communication technology (ICT) provides

an ideal venue of learning for anyone who has access to the Internet. As the open access movement increases its momentum, more educational resources are available on the Internet for anyone interested in learning. In addition, most Chinese higher education students are frequent Internet users (China Internet Network Information Center, 2019), and they may expect their instructors to deliver courses in a variety of ways.

With huge educational needs and geographic dispersion, Chinese distance higher education with the use of ICT has great potential. It should play a unique and increasingly important role in connecting the whole country for higher education. In 2012 the Chinese State Council decided to transform the radio and TV universities in five provinces and municipalities directly under the national government to open universities, where more distance education with ICT, satellite technology, and TV broadcasting will be provided to increase access to higher education. In July 2012 China Central Radio and TV University became the Open University of China, indicating that it is more open for people interested in learning. One thing the Open University of China did was to develop an education platform through ICT for all Chinese. The intention was to share educational resources, promote equity, satisfy increasingly diverse educational needs, and build a learning society.

On April 16, 2015, the Ministry of Education promulgated the “Directive on strengthening the building and administration of higher education institutions’ open online courses”. The Directive stipulated that higher education institutions establish quality open online courses, particularly massive open online courses (MOOCs). Institutions with disciplinary advantages and education technological advantages should pay more attention to general courses and key subject courses, which have many students and are more suitable for online teaching. Institutions should collaborate with each other to meet diverse students’ needs.

The Ministry would select, through self-application and expert review, a safe, well-operating, technologically advanced, and effective platform with a significant number of quality courses as the national public platform. The Ministry encouraged sharing among platforms, hoping to create an open teaching and learning environment. The Ministry would promote the extensive offering of open online courses and encourage open online public platforms to explore the marketization of operation to build courses and meet individualized needs, provided that these platforms serve the public good. The Ministry would regulate the introduction of foreign open online courses and the going overseas of Chinese open online courses. The Ministry would encourage the training of instructors and technicians for open online courses. The Ministry (April 16, 2015) would promote the accreditation of open online course credits and the establishment of a national credit administration system. In 2016 live broadcasting of education programs began, where instructors interacted with learners (Sun, 2016). The government encouraged higher education institutions to provide degree and non-degree programs with the Internet, collaborating with enterprises and combining online and offline education (State Council, 2017).

Another factor that influences Chinese distance higher education is the increasing impact of internationalization. Like their American distance higher education colleagues who espoused internationalization (Boubsil, Carabajal, & Vidal, 2011), Chinese educators also welcomed internationalization (Li & Wang, 2017). Open courseware from well-known Western universities, particularly those from the United States, was popular in China and was used to point out the shortcomings of Chinese open courseware (Wang, 2011). Xu and Rees (2016) found that there were important differences between Chinese and British responses about the value of open educational resources, the type of technologies for delivery of content and

for communication, the value of peer assessment, and the time expectations for feedback. Chinese open universities might still need to understand how to operate in an international context, and Chinese had much to learn from their colleagues in developed countries (Li, 2011).

Opening the Chinese higher education services to the world allows Chinese educators to learn from international colleagues. The Chinese government encourages international education exchange and the introduction into China of quality international education institutions to establish collaboration with Chinese institutions. Currently there are 1,979 Chinese and foreign joint institutions and programs providing instruction to 550,000 students in China, among whom 450,000 are higher education students, amounting to 1.4 percent of all full time Chinese higher education students. From these joint institutions and programs 1.5 million students have graduated (Ministry of Education, January 2, 2019). In encouraging students to develop a strong international awareness, the Ministry of Education also decided to promote English as a medium of instruction for Chinese students in higher education institutions (China Education Association for International Exchange, 2015). In addition, there are Chinese students studying in Western programs through the Internet while staying in China, although these Western programs have not been approved by the Chinese government.

Being the most important source of international students, China also became the third destination for international students, next only to the United States and the United Kingdom (Chen, 2017). In 2018, 662,100 Chinese went overseas for education (Ministry of Education, 2019, March 27) and there were 492,185 foreign students in China (Ministry of Education, 2019, April 12). Online education with ICT should play a role in helping Chinese understand the world and the world understand China. The Chinese Language Center at the Open University of China (n. d.) uses open and

distance education to conduct Chinese language and culture instruction, develop multimedia teaching resources, and provide distance learner support services. At the Open University of China's website international open online courses are also available. In addition to the national open university in Beijing, there are six provincial open universities that enjoy degree granting authority as the national one. The open university system explores open education as a mode of learning, and it intends to focus on quality rather than quantity. One challenge the open university system faces is how to make the transformation from technology centered to learner centered (Xu, 2016).

While distance higher education has developed significantly in the last four decades, increasing access and enhancing resource sharing, distance programs are still at the margin of the higher education system, and they receive less appropriation from governments (Xu, 2016). Since 2004 students studying some general courses through distance higher education must take national standardized examinations, which is necessary to improve the quality of programs. In its directive, the Ministry of Education (April 16, 2015) stated that China should build an open online education platform with Chinese characteristics, particularly paying attention to sharing resources. By the end of 2017, 144 million Chinese had received online education. It was expected that the number would grow to 296 million by the end of 2020, with a market scale of 433 billion yuan (approximately 63 billion dollars) (Wu, D., 2018).

On January 15, 2018 the Ministry of Education introduced 490 "national quality open online courses". Most of these courses are provided for undergraduate students, and 12 of these courses are also provided through international platforms. The Ministry of Education will continue to promote the integration of ICT and education to enhance the quality of education and promote equity in the provision of education. On April 13, 2018 the Ministry

of Education announced the “Education informationalization 2.0 action plan”, which stated that the goal was to make digital campuses available for all schools, teaching resources available for all teachers, and learning resources available for all students by 2022, when there would be a national “Internet + education” platform serving all citizens.

One important aspect of distance higher education is massive open online courses (MOOCs). The concept of MOOC was introduced into China in 2012, and by 2013 a few important universities developed their own MOOCs. By October 2015, 1.29 million students from 126 countries and economies had registered in 504 MOOCs provided by Tsinghua University (Zhao, A., 2015). On November 28, 2015, over 40 highly ranked universities and key secondary schools launched MOOCAP, a project that prepared secondary school students and graduates for university study (Zhao, X., 2015). In the same year, Liu, Sun, Wang, and Wei (2015) recommended that Chinese open universities make more efforts in developing MOOCs.

In its directive the Ministry of Education (April 16, 2015) indicated that with universities it would facilitate the growth of MOOCs by doing seven things. These seven things were: 1) Establishing quality open online courses, especially MOOCs, that provide learning support; 2) recognizing a group of national quality open online courses; 3) building public open online course support platforms; 4) promoting the provision of open online courses; 5) standardizing the introduction of international open online courses and the promotion of Chinese open online courses abroad; 6) strengthening the education of open online course instructors and technicians for building these courses; and 7) promoting innovation in recognizing and managing open online courses. At the same time, the Ministry of Education would provide policy analysis, macro direction, and favorable conditions for building open online courses and their public service

platforms. Provincial departments of education and universities should design policies that take into consideration their specific circumstances (Ministry of Education, April 16, 2015). By 2016 there were over 100 MOOC platforms in China. These platforms were built by higher education institutions and enterprises, or they were the products of higher education institutions and enterprises collaborations. These platforms served higher education students and the general public (Xu, 2016).

In January 2017 the Ministry of Education announced its work priorities for the year. Developing systematic quality open online courses and recognizing a group of such courses at the national level was 1 of the 35 priorities. In July 2017 the Ministry of Education announced that it would start the process of recognizing national quality MOOCs to promote the developing and sharing of MOOCs.

In January 2018 the Ministry of Education held a news conference announcing four achievements in the development of Chinese MOOCs since 2012. First, the number of MOOCs increased dramatically. Over 460 higher education institutions built more than 10 MOOC platforms and provided 3,200 MOOCs to 55 million students. Second, in developing and providing MOOCs, quality learning resources were shared and institutions in western China received support from top national universities in teaching MOOCs. In China there are differences in education provision between urban centers and rural areas, between eastern coastal regions and western inland regions, between institutions, and between groups of citizens, with rural areas, western inland regions, and certain groups falling behind. While these differences have been narrowing over the years, if not carefully dealt with, they can increase again (Chen, 2019). Over 6 million students had received MOOC credits (Ministry of Education, January 15, 2018). Inter-regional, inter-institutional, and inter-disciplinary MOOC alliances were

expanding, which promoted flipped classroom, blended learning, and other learning models that took regional and institutional contexts into consideration. Third, MOOCs were receiving more recognition among those who worked in the higher education sector. Provincial departments of education and universities were making plans for developing and providing MOOCs, and they were working on credits recognition and transfer. Fourth, China had the largest number of MOOCs in the world, and over 200 Chinese MOOCs were offered through well-known international platforms. A Chinese model of providing MOOCs had been established (Ministry of Education, January 15, 2018).

With these achievements, the Ministry of Education (January 15, 2018) recommended 490 national quality open online courses, hoping to further promote the integration of ICT and education, raising the quality of education, and advancing equity of provision. These selected courses had massive numbers of students and generally represented the highest level of Chinese open online courses. Of the 490 courses selected, 78, about 16 percent, had over 100,000 students registered in each course. “University Oral English” by National University of Defense Technology had over 980,000 students registered. The goal of the Ministry of Education was to have 3,000 national quality open online courses by 2020, strengthening interaction between learners and instructors, increasing the number of learners, providing more opportunities to learners in western and central China, and introducing more Chinese open online courses to the world (Ministry of Education, January 15, 2018). Lu (2018) reported that there had been 5,000 Chinese MOOCs that had had 70 million students and 11 million people had received MOOC credits.

## 2. PRACTICES, OPPORTUNITIES, AND CHALLENGES:

In the provision of MOOCs, the

interaction between instructors and learners and the interaction among learners was important. To have interaction forums were potentially a very important tool in MOOCs (Diver & Martinez, 2015). Sun, Zheng, and Chen (2016) found that students in 622 courses provided by 14 major Chinese MOOC platforms were mainly bachelor’s program and graduate students. Sun et al.’s (2016) finding was different from that of Liu, Kang, Cao, Lim, Ko, Myers, and Weiss (2014), who found that 84 percent of their international research participants in an American MOOC were working professionals. Sun et al. (2016) found that the postings from instructors were unbalanced, and of the 622 courses 327 (52.6 percent) did not have interactive forums. Only 295 courses (47.4 percent) had some interaction but the level of interaction was low. The level of interaction in lectures was low but it was higher in courses focused on solving problems and performing tasks. Courses that adopted the Khan Academy model videos had a higher interaction level. Courses that provided learning support had a much higher level of interaction. Courses that used formative assessment had a higher level of interaction. Courses that offered certificates had a higher level of interaction. Courses that offered certificates with a fee had more interaction than those offering certificates without a fee (Sun et al., 2016).

To predict learners’ intention of using a MOOC platform, Zhang, Yin, Luo, and Yan (2017) introduced perceived learner control, e-learning self-efficacy, and personal innovativeness in information technology into the technology acceptance model. They collected data from 214 MOOC learners in China, of whom 116 used Coursera and 98 used Icourse 163, a popular Chinese MOOC platform. The learners using the two different platforms selected similar courses, and most of these learners had heard about 2 or 3 platforms. Zhang et al. (2017) found that e-learning self-efficacy positively influenced

perceived learner control positively influenced perceived ease of use and perceived usefulness. There was a difference between learners using Coursera and learners using ICourse 163, with Coursera users paying more attention to the perceived ease of use but ICourse 163 users paying more attention to the perceived usefulness (Zhang et al., 2017).

Chen and Jia (2016) compared the achievements and learning experiences of onsite students and online students taking the same course but participating in a MOOC. One hundred and ninety-two students learned face-to-face, and 311 students participated online. Respecting learning performance, onsite learners had a lower attrition rate than online learners. However, for learners who had completed all their learning assignments, no significant difference was detected between onsite and online learners' average assignment scores, and they were equally likely to win two learning awards. As to their learning experiences, there was also no significant difference between online and onsite students' ratings of technology quality and usability, instructional content, and the design of learning assessment.

After surveying students who took MOOCs in several Chinese universities, Fang, Chui, and Yang (2016) found that the satisfaction students felt for the support they received while taking MOOCs was not high but that there were three factors positively affecting the effectiveness of learning. The first was that the little support and encouragement students received had a positive relationship with learning effectiveness. The second was that the guidance students received had a positive relationship with learning effectiveness. The third was that the administration service students received had a positive relationship with learning effectiveness (Fang et al., 2016).

Liu and Wang (2016) proposed five online learning activities that were related to the effectiveness of MOOCs. These five activities were learning guidance, understanding construction, interaction

and sharing, reflection and assessment, and learning support. They designed a scale to assess 30 MOOCs offered by 6 platforms, three international and three Chinese, using content analysis. They found that all MOOCs they studied were well designed, which provided adequate activities related to learning guidance, understanding construction, and learning support. However, when compared among the five activities, both in quality and quantity, activities related to interaction and sharing was weak. In addition, reflection and assessment activities also needed improvement.

Considerable defects such as inequality and an increase in costs exist in the current Chinese education system (Tang & Carr-Chellman, 2016). MOOCs give the hope of alleviating the educational inequality in China with the potential of empowering a diverse population with free and open access to prominent educational resources. Tang and Carr-Chellman (2016) applied narrative inquiry to examine Chinese MOOC learners' perceptions of their lived experiences and how MOOCs attended to the problems in Chinese education. Their inquiry included triangulated data in the forms of interviews, observations, and online posts. They found that MOOCs had limited influence on the issue of educational inequality in China. By identifying the perceptions Chinese learners had towards MOOCs, Tang and Carr-Chellman's (2016) study provided insights into the adoption and diffusion of MOOCs in China.

Yin, Zheng, and Chen (2016) used content analysis, questionnaire, and literature review to understand the status of MOOC credits recognition in China. They investigated how Chinese MOOCs awarded certificates and how universities recognized MOOC certificates as credits. Their results indicated that most MOOCs were mainly provided for attracting students and for enhancing institution reputation. Different platforms had different forms of certification. Although MOOCs were popular in a significant

number of important Chinese universities and the Ministry of Education (April 16, 2015) encouraged universities to establish systems recognizing MOOC credits, the recognition of these credits was still quite limited. Credits were mainly conferred upon students on campus, and few credits were awarded to social learners (Yin et al., 2016).

In comparing different approaches of recognizing MOOC credits, Qiu (2017) found that there were four approaches in the world: collaboration, alliance, self-recognition, and third-party recognition. In collaboration, a MOOC platform collaborated with universities and the MOOC credits conferred by the platform were recognized by universities that participated in the collaboration. Coursera and Udacity did that (Qiu, 2017). With the second approach universities formed alliances where they recognized each other's' credits. In the third approach universities conferred credits for their own MOOCs and these credits could be used to apply for entrance into these universities or be transferred to other universities that recognized the credits. With the fourth approach a third-party organization evaluated MOOCs and recognized those that met their standards. These third-party recognized MOOC credits could be used in universities that acknowledged the reliability and authority of the third-party organization. Qiu (2017) noticed that higher education markets and systems had an impact on the cost and revenue of awarding MOOC credits. In China most recognized MOOC credits were those received through collaboration and alliance. There were also a few self-recognized credits, but there were no third-party recognized credits. There were 2,000 courses provided by Chinese MOOC platforms, but the progress in recognizing MOOC credits was slow. Since China was a developing country, most universities had a strong motivation to introduce quality courses from developed countries. For Chinese MOOC platforms collaborating with universities was the most convenient approach, and

collaboration was the most frequently used approach for recognizing MOOC credits. Next to collaboration, some universities formed alliances to recognize each other's' MOOC credits. The challenge Chinese higher education faced was to raise the quality of education with the provision of MOOCs (Qiu, 2017).

Ma, Yuan, Bai, Fan, Mei, Sun, and Luo (2017) contacted Chinese universities and British universities that carried out practices pushing Chinese academics to integrate British MOOCs with Chinese local face-to-face instruction. Ma et al. constructed an interactive activity framework for video conferences among British academics and Chinese learners. The results of the transnational blended learning model indicated that Chinese students and academics were satisfied with this new approach towards the internationalization of their curriculum. Chinese learners also demonstrated a positive attitude towards the British MOOCs and interactive video conferences. However, language barriers and network challenges were issues that must be dealt with (Ma et al., 2017).

Trehan, Sanzgiri, Chenxi, Rongsbeng, and Joshi (2017) situated the discourse about MOOCs from the unique perspectives of India and China with three broad objectives of sharing MOOC development in the two countries. They conducted a high-level discussion of the potential value of MOOCs for the two higher education systems. They critiqued current issues with MOOC development in India and China. They found that concepts and practices of MOOCs in the two countries were emerging. From the supply side, there was a need to focus on sound design, quality and accessible delivery, multi-lingual facilitation and efficient regulation of MOOC credits, besides the development of critical literacies for MOOCs in learners to realize the potential and promise of MOOCs (Trehan et al., 2017).

Xu (2016) stated that there was a high homogeneity among Chinese MOOC platforms. In addition, there was a lack of



interaction between students and instructors, and between students, a lack of sound business mode, and a lack of quality mechanism. There was high enthusiasm, but low participation. In addition, Chinese learners were more interested in overseas MOOCs (Xu, 2016).

### 3. RECOMMENDATIONS:

This article offers recommendations derived from the literature on how to make distance higher education and MOOCs benefit more Chinese. Although the Internet usage rate in China is higher than before, when compared with the rate in developed countries it is still low. In addition, there is a digital divide between urban centers and rural areas, between developed eastern regions and less developed western regions, and between certain groups (Xu, 2016). At the same time Chinese MOOCs encounter similar issues as in developed countries: how to attract more learners, how to make MOOCs financially sustainable, and how to help more MOOC learners complete their courses.

Zhang et al. (2017) recommended that Chinese MOOC platforms improve their perceived usefulness to attract more learners. Providing unique courses and courses that are peculiar to the Chinese culture helps Chinese platforms compete with international platforms in the provision of quality courses. Fang et al. (2016) recommended that learning facilitation need to be strengthened in the provision of Chinese MOOCs, particularly in designing effective assessments. Fang et al. (2016) also recommended that learning guidance need to be improved, especially in increasing the interaction between learners and instructors. Liu and Wang (2016) recommended enhancing activities that aimed at strengthening interaction and sharing. Sun et al. (2016) suggested that to enhance interaction, in designing MOOCs it was important to explore instruction models, design learning support, conduct data-based formative

assessment, and improve certification systems. Zheng, Chen, and Chen (2016) recommended that in designing courses, providing learning support, and improving functionality of platforms, Chinese MOOCs pay more attention to learners' competency.

Yin, Zheng, and Chen (2016) recommended that Chinese universities be encouraged to recognize MOOC credits, universities' authority to confer MOOC credits be respected, third party institutions for credit evaluation be established, and MOOC credits be included in government credit banks. Qiu (2017) recommended that MOOC platform, universities, and the Ministry of Education work together to establish a functioning system to recognize MOOC credits across the country.

To promote more effective MOOC learning and to increase completion rates, Li, Chen, and Zheng (2016) recommended SMART learning objectives, diverse assessment methods, scaffolding learning activities, effective micro courses, and multiple strategies for designing learning paths. Lee, Watson, and Watson (2019) find that self-regulated learning (SRL) is a factor positively influencing learning in MOOCs. SRL strategies include motivational regulation strategies, specifically self-efficacy, task value, and goal setting. Goal setting is found as a metacognitive regulation strategy. Regarding behavioural and contextual regulation strategies, help seeking, time management, and effort regulation are identified. In addition, several MOOC designs and SRL interventions that consider unique characteristics of MOOCs are proposed to promote SRL (Lee, Watson, & Watson, 2019).

Li et al. (2016) predicted that with the implementation of the "Internet +" plan, mobile technology, big data, networking, cloud computing, affective computing and robotics, curriculum design of MOOCs in China would become more effective. Fang and Yang (2016) recommended that universities offering MOOCs establish

systems to encourage more instructors to participate in the provision of MOOCs. Fang and Yang (2016) also recommended that these universities provide financial and human resource support to MOOC instructors. I would suggest that providing financial aid to students is necessary, since there is a positive relationship between providing even small financial aid to students with high-financial need and their persistence in their studies (Qayyum, Zipf, Gungor, & Dillon, 2019).

#### 4. CONCLUSIONS:

In the United States in the past six years completion rates for MOOCs offered by Harvard University and MIT on the edX platform declined (Young, 2019). MOOCs are growing in China and the credits learners earn from completing Chinese and international MOOCs are often recognized (Li & Li, 2016). While the low completion rates of MOOCs are issues worldwide, there are different opinions about how completion rates should be counted (Diver & Martinez, 2015; Henderikx, Kreijns, & Kalz, 2017).

Li and Li (2016) believed that among currently popular MOOCs a kind of “super open online courses” would emerge, which in their own specific disciplines were likely to have these characteristics: high popularity, strong influence, high academic value, high completion rate, social acceptance, recognition by other institutions, low cost or free, and sustainable advantages. Li and Li (2016) believed that China has the conditions to build super open online courses. They suggest that the Ministry of Education design and build an environment favourable for the development of Chinese super open online courses and government resources facilitate the establishment of these courses.

In its announcement of the “Education informationalization 2.0 action plan”, the Ministry of Education (April 18, 2018) indicated that it would promote the collaboration between higher education institutions and enterprises in providing

quality MOOCs to meet individualized needs from learners, educators, and administrators. On October 17, 2018 the Ministry of Education stated that to expedite the enhancement of undergraduate education and comprehensively strengthen the capacity of educating talents the Ministry would promote the development, adoption, learning, and administration of MOOCs to establish quality Chinese MOOCs. The Ministry would facilitate the mutual recognition of MOOC credits among higher education institutions, introduce quality teaching resources into central and western regions, raise the level of teaching in higher education institutions, and encourage the development of educational equity.

In January 2019 the Minister of Education, Chen Baosheng, stated that the Ministry of Education would actively promote the development of “Internet +” in education, continue to work on the implementation of “Education informationalization 2.0 action plan”, and facilitate the sharing of quality education resources. On February 22 the Ministry of Education announced its work priorities for 2019, where the Ministry indicated that it would hold a national MOOC conference and promulgate a regulation on the development, adoption, and administration of open online courses. The Ministry would facilitate the offering of more courses from Chinese higher education institutions at well-known international course platforms. The Ministry would also systematically promote the development of a national virtual reality experimental teaching project. On March 5, 2019, in his report on the government’s work, Premier Li stated that the government would promote “Internet + education” and encourage the sharing of quality learning resources. While there are challenges in making distance higher education, particularly MOOCs, more attractive, more effective, and benefit more learners, indications are Chinese distance higher education including MOOCs will continue to grow

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to contribute toward the improvement of education.

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