

## Motives, benefits, and challenges of Higher Education expansion in China

Jasmin Omary Chunga<sup>1</sup>, Ayubu Ismail Ngao<sup>\*2</sup>

Faculty of Education, Beijing Normal University, China

\*e-mail: ayubungao@gmail.com

### Abstract

China believes in education as an investment of human capital for future returns. It has been a long-time desire for the Chinese government to expand and invest in higher education. The leadership of Deng Xiaoping inspired Chinese people about education it should be open over the world, for the future, and towards modernization. The purpose of higher education in global views is to promote the development of a nation in political, economic, technical, and social spheres. There are gradual changes in higher education after the open policy in China, which influences the expansion of higher education institutions. Higher education acts as a tunnel to prepare several professionals and talents, which will be helpful to the social changes in science and social science programs. Global competence leads the Chinese government to expand higher education in enrollment rate and improves the quality of higher education in acquiring competent knowledge that copes with the global market. This paper focused on reviewing literary works on motives, benefits, and challenges of higher education expansion in China through reviewing different studies from local and international perspectives. From compulsory through higher education, the curriculum should place a greater emphasis on competency. To deal with the wind of unemployment caused by the rise of higher education in China, the government should encourage and support graduates to find innovative and creative skills. For China's economy to grow quicker, a well-educated society requires graduates to apply their skills to solve many societal problems.

### Keywords:

Higher Education; expansion; education in China.

### 1 INTRODUCTION

In history, Higher education in China can be traced from the ancient time of the Shang Dynasty (1600BC- 1046 BC). However, different scholars vary in history because no one evident it, most agreed about the existence of higher education history. It aimed at educating people who helped in ruling government on political issues. Higher education in ancient times had a ranking when one passed one rank to another as the highest rank was imperialist. As can be seen, modern higher education highest rank is professor. In a Confucius period in 770 BC – 476 BC on his academy was aimed at providing higher learning which produces intellectual elites, which were provided not only to the elite children but also to the low-income families. Confucius leads to the rise of private education in higher education as he had his academy that provided education in ancient times in China. It can be seen in modern higher education emergence of private universities and colleges, which reduce a burden to the government (Jiamin, Xueping & Lihua, 2009). Liu (2012) stated that higher education in China had been influenced from ancient time as in the Confucius dynasty, hierarchy and policymaking have delivered a higher learning education and certificates.

Several transformations have been changed from the open-up policy in China. During 1970s China education system has been influenced by Soviet Union. Managing education was a centralized system as the central government made all decisions and authorities. Only 5% of student got access to higher education in China (Wu & Zheng, 2008). Li and Xing (2010) asserted that there was a Great leap forward in higher education in China; it came up with the new reforms of decentralization policy, raising tuition fees, and expanding higher education. There are four major transformations in China during reforms and opening-up policy such as (i) Higher Education Law of the People's Republic of China, 1999, (ii) Deepening the Reform of the Higher Education System (The Ministry of Education, 1995) (iii) Decisions on Reforming the Education System, (Central Committee of CPC, 1985), (iv) Guides for China's Education Reform and Development, (The State Council, 1993).

Higher education reforms began in 1980's after policymakers and scholars agreed about increasing higher education in China. There were great debates on the expansion of higher education in China based on efficacy, efficiency, and equity. China government's emphasis on education expansion should be able to cope with individual and nation change so as to stimulate development (Wan, 2006). Also, according to Wan (2006), the expansion of higher education in China rose from the late 1990's to date. In 1998-2004 enrollment rate grew up to 26.9 % annually in the university. Higher education increased in 1998 from 1.01 million to 4.47 million 2004. Higher education expansion increases Gross Enrollment rate as in 2002 increased 15% from 9.8% in 1998 also in 2007 increased up to 23%. The Chinese government initiates different initiatives and reforms that stimulate increased access to higher learning institutions that enroll many students from different parts of China annually. Apart from government goals on higher education, many parents in China believe that investment in education will have a greater return in the future as they are willing to pay tuition fees and university expenses for their children.

The Chinese government put two new strategies in Tenth Five-year Plan from 2001 to 2005 firstly, to increase higher education in China secondly, to introduce a world-class university known globally. It is considered in mounting a level of human resource and technological innovation to cope with the global economic growth (Levin & Xu, 2005). Higher education emphasizes producing competent graduates who will fit in a competitive global market and make their university prestige known worldwide by providing quality education in science programs and science programs. Dello-Iacovo (2009) showed that curriculum reforms in education emphasize the quality education as a person should be a well-rounded person have competent skills in many ranges to cope with the societal changes.

However, Europeans and Americans have influenced the Chinese higher education system (Xiao, Zhang, & Qiu, 2011). Also, the education system provided by public and private sectors in all educational institutions through the Chinese government manages all sectors through education policy (Hayhoe, 1996). Some of the universities in China celebrated their hundredth anniversary. After the Western oriented model, the first modern university in China was Peiyang University established on 2nd October 1895 in Tianjin. Later on, the university changed its name in 1951 to Tianjin University. It was followed by Jiaotong University, which was established in Shanghai in 1896 later named Shanghai Jiaotong University and Xi'an Jiaotong University during 1950's. Also, other universities were introduced later, such as Zhejiang University (1897), Beijing University (1898), and Nanjing University (1902) (Dua, 2003). The expansion of the higher education trend in China motivates many educators and researchers globally. This article reviewed the motives, benefits, and challenges of higher education expansion in China through focusing on the following questions: i) to review driven factors in the expansion of higher education in China ii) to investigate the opportunities/benefits of the expansion of high education to Chinese people and iii) to assess possible threats which may encounter expansion of higher education in China.

## 2 METHOD

This study used document analysis to review several literary works on higher education enrollment in China. The study focused on reviewing motives, benefits, and challenges of higher expansion in China in higher learning institutions. The reviewed literature helped broaden the researchers, academicians, and all education stakeholders. It will increase understanding about the motives and benefits of expanding higher education in China and the challenges that need immediate solutions to maintain the quality of education in China.

Table 1: A summary of reviewed articles in the study

N/S	AUTHOR (S)	TITLE OF THE ARTICLES
1	Bai, L. (2006)	Graduate Unemployment: Dilemmas and Challenges in China's Move to Mass Higher Education.
2	Bing, S. (2009)	"Gridlock and solutions: China's private education in the period of social transformation", Chinese Education and Society.
3	Duan, X. (2003)	Chinese Higher Education Enters a New Era. <i>Academe</i>
4	Gu, J. (2012).	Harmonious expansion of China's higher education: A new growth pattern
5	Hannum, E., & Buchmann, C. (2003).	The consequences of global educational expansion: Social science perspectives.
6	Hayhoe, R., & Zha, Q. (2005).	The Role of Public Universities in the Move to Mass Higher Education: Some Reflections on the Experience of Taiwan, Hong Kong, and China.
7	Hong, X., Liu, P., Ma, Q., & Luo, X. (2015)	The way to early childhood education equity - policies to tackle the urban-rural disparities in China.
8	Jacob, W. (2006)	Social Justice in Chinese Higher Education: Regional Issues of Equity and Access.
9	Jing, T. (2007)	The popularization of China's higher education and its influence on university mathematics education.
10	Levin, H., & Xu, Z. (2005)	Issues in the Expansion of Higher Education in the People's Republic of China.
11	Li, S., & Xing, C. (2010)	China's Higher Education Expansion and its Labor Market Consequences.
12	Li, H., Meng, L., Shi, X., & Wu, B. (2013)	Poverty in China's Colleges and the Targeting of FinancialAid.
13	Lin, C., & Lin, C. (2012)	Does Higher Education Expansion Reduce Credentialism and Gender Discrimination in Education?
14	Moe, (2007) China	Ministerial Press Release on the Development of Compulsory Education and Literacy Education.
15	Mok, K. (2012)	Bringing the State Back In: Restoring the role of the State in Chinese higher education.
16	Ngok, K. (2007).	Chinese education policy in the context of decentralization and marketalization: Evolution and implications.
17	Ou, D. & Yuna H. (2018)	"Bigger Pie, Bigger Slice? The Impact of Higher Education Expansion on Educational Opportunity in China."
18	Ronghuai, H., Xin, J., & Haishen, Z. (2007)	The Informationization of Higher Education in China: Present Situation and Challenges.
19	UNESCO	China education statistics <a href="http://uis.unesco.org/country/cn">http://uis.unesco.org/country/cn</a>
20	Wan, Y. (2006)	Expansion of Chinese Higher Education Since 1998: Its Causes and Outcomes.
21	Wang, X., & Liu, J. (2011)	China's higher education expansion and the task of economic revitalization. Higher Education.
22	Wu, B., & Zheng, Y. (2008)	Expansion of Higher Education in China.
23	Yue, J. & Ding, X. (2003)	Daxue jiuye de jingji fenxi (An economic analysis of university graduate employment).

### 3 FINDINGS AND DISCUSSION

This section presents reviewed documents in responding to the study objectives. Firstly, identifying the motives or factors for the expansion of higher education in China: Secondly, the benefits for prioritizing expansion of high education and lastly, the challenges associated with the expansion of higher education in China.

#### 3.1 Motives for Expansion of Higher Education in China

Numerous driven factors lead to greater expansion of higher education in China. It may be economically, socially, historically, politically, and technologically. Wu and Zheng (2008) stipulated three strengthen factors for the expansion of higher education in China as follows:

##### 3.1.1 Decentralization

It is a political change influence; from the end of the 20th century to the new century, China faces several reforms in higher education, resulting in the central government distributing power to local authorities. Years back, the central government made all decisions, even higher education institutions managed and controlled by the government. The Chinese government has demanded that higher education graduates utilize their abilities and capabilities in different fields.

It started in 1997 a distribution of management to the local authorities, which is market oriented as universities are responsible for controlling their resources to achieve their Higher Education aims. The central government directs provinces in different functions to strengthen the quality of Higher Education in China. There was internal competition between provinces in establishing and increasing the enrollment rate of higher education institutions as local authorities controlled them. In 1997 there were 61% local university and college authorities after reform but still developed in 2006 there were 92% of the local universities in China (Wu & Zheng, 2008). Local universities and colleges increase, which leads to the expansion of access, which stimulates an increase in the enrollment rate in higher education.

Also, the strong desire within Chinese leadership influenced the expansion of higher education. In the 1970s China got a disaster of Cultural Revolution whereby many things stopped in education; political leaders aimed to expand and provide higher education in China after a new reform emerged. All provinces have a different plan and initiative to achieve the aim as expected by the central government (Wan, 2006).

##### 3.1.2 Commercialization (economic factor)

Lack of huge investment in Higher Education was a problem as a GDP of 3% was education expenditure in education (MOE, 2007). The government measures are cost-sharing among education stakeholders such as parents paying tuition fees for their children to pursue High Education and other education stakeholders after the decentralization policy. Moreover, tuition fees increased to ensure available resources in High Education, which improves quality of education and reduces the burden to the government.

Wan (2006) shows that Mr. Lanqing Li, as a vice-premier in charge of education, noted that the main reason for Chinese expansion in higher education is four in economic aspect. Firstly, need for cultivating different personnel to utilize, maintain and foster economic growth in China. Secondly, to reach government plans and demand in higher education in China. Thirdly, expansion of higher education graduates can lead to unemployment as it may lead to increased educational consumption, which is significant to economic growth in domestic consumption. Fourthly, Higher education expansion will lead to competency-based education to lower levels and teachers. Education must be based on promoting well-rounded people as proposed in China educational reforms.

##### 3.1.3 Privatization

Public higher institutions were insufficient to fulfill economic demands as open a room for private higher education institutions due to the decentralization policy reform as they have a local authority to control and own higher education institutions (Bing, 2009). Emerge of private ownership in Higher Education as a non-state control influences accessibility and high enrollment rate in China. Private universities include independent colleges. In the late 1990s the government merged universities, whereby many teachers got redundancy. There was a need to establish private universities that would help a government foster Higher Education institutions in China and become a solution to the redundant personnel. Non-state universities and colleges increased in 2006 were 278 compared to 173 in 2003 (Wu & Zheng, 2008). Also, China had 640 private universities and colleges up to 2008 (which provide bachelor's degrees), and the general enrollment in higher education reached around 20 % of total higher education enrollment (Zhou, 2009, p.8).

#### 3.2 Benefits for Higher Education Expansion in China

##### 3.2.1 It stimulates the economic growth of China.

It has been an audacious and innovative decision of the Chinese government to include expansion of higher education in a part of investment in economic growth as they established in a policy of economic revitalization in 1999 (Wang & Liu, 2010). Moreover, Jing (2007) noted that for more than 20 years, China's economic growth poppers attention and respect in the world, which well-educated society may easily foster a rapid economic rate in the future, which is why many developed nations invest more in all education levels. Scholars agreed on a long-term beneficial effect in expanding higher education as a graduate has a higher return to the nation and world in general (Hannum & Buchman, 2003; Li & Xing, 2010). Globally, economic growth is essential to involve an educated labor force that may influence changes in society.

### 3.2.2 Expansion of qualified personnel in the fields.

Expansion of higher education needs to match with the global digital world in the growth of the market economy. Different courses have been provided by the higher education institutions in science and technology as in first- and second-year graduate are core course in undergraduate; aiming to add general knowledge and skills to the student which can be helpful after graduating their programs. Ronghuai, Xin, and Haishen (2007) many students specialize in technological fields as there are over 500 higher education institutions that provide a career in information technology and computer science. Furthermore, in 2003, students who specialized and enrolled in that course were 1.2 million to pursue their undergraduate levels. Dua, (2003) noted that expansion of higher education builds up a balance of programs in all fields. China stressed engineering and computer programs more as many graduates came from those careers, and other social science careers were lagging. Higher education expansion maximizes the number of enrolled students and graduates in social science programs. It aims for Chinese students to acquire firm foundation knowledge to promote wisdom and civilization.

### 3.2.3 Expansion of higher education increase accessibility and equality to Chinese people.

Jacob (2006) Chinese expansion in higher education gives access and equity to the minorities in China, especially in the Western part. In the 21st-century minority, societies are highly increased in high education enrollment rates in different universities and colleges. Li & Xing (2010) show that nearly 12-13% of students claim that they cannot join in higher education without expansion of higher education. The expansion paves a beneficial effect in the access of majority students to enter higher education. Also, Gu (2012) asserted that expansion of higher education improves interaction among developed and developing provinces through accessing and enrolling higher education students. Lin & Lin, (2011) found that expansion of higher education promotes equality, especially in families that have gender discrimination as support male students more than female students. The statistics reported by UNESCO (2018) identified the increase of enrollment rate in higher education from 20%, 25% of male and female respectively in 2009 to 45%, 55% of male and female respectively in 2018. This data shows that female students are more than males in enrollment rate due to different initiatives of gender issues.

### 3.2.4 Employment freedom, flexibility and adaptability among Chinese graduates.

Before reforms in higher education was tuition fee free and graduates were hired in the government whatever job based on their career soon after graduation (Dua, 2003). Graduates had no choice on the place or job; they worked in a directed post by the Chinese government. Currently, graduates choose according to the criteria they want; most search for good jobs in cities and good salaries that can afford living expenses. Also, they choose to work in government or private due to the global technology. Many graduates have self-employment whereby they endow their talents in a creative and innovative in a global market. There is a large number of graduates supply compared to government demands. So many graduates tend to search and hire in the industries and construction companies to manage a home life basic need. Ministry of Education in China professed that, in 2001 there was 340,000 unemployed graduates, in 2002; 370,000, in 2003:520,000 in 2004; 690,000 in 2005; 790,000 and the large increase in 2007 by 1,590,000 (Wang & Liu, 2010). Therefore, a short-term graduate has competent knowledge that may apply in the job market to work and establish entrepreneur companies.

### 3.2.5 Increase of private higher education institutions.

Establishing decentralization and marketization policy leads to privatization, reducing the government burden in managing higher education institutions in China. In 2001, 89 universities provided both degrees and diplomas as registered by the Ministry of Education. In Shaanxi province, owning several private universities and colleges is about 22 universities, each university enrolled more than 1000 students per year. Shaanxi province's private higher education institution is characterized by adequate teaching and learning resources that stimulate students to gain competent knowledge for their careers (Dua, 2003).

### 3.2.6 Central government supporting in improving educational quality.

The Chinese government gives financial support to the universities to stimulate educational quality by pledging adequate teaching and learning resources. Hayhoe and Zha (2005) stipulated that a foundation introduced in 1986 called the National Science Foundation of China (NSFC), in 2002 funded top 56 universities in their research fund as each university received more than 100 million RMB. Also, in 2001, 797.6 million RMB was given for research activities and innovations in the universities as bases on supporting high technology research funds.

## 3.3 Challenges of expansion in higher education

### 3.3.1 Teaching quality

Rapid expansion affects teaching skills, as the way to train students in a classroom, it's a challenge that needs to be considered by the Chinese government to ensure education quality. It affects student lesson delivery, assessment, and evaluation due to the mismatch of the student-teacher ratio. A strategy set a ratio of Tenth Five-year Plan was set at 14:1 with a goal of 16 million students in 2005. Meanwhile, the student-teacher ratio in 2001 on the autumn semester was 17.0:1 as expansion of higher education increase for 2005 teacher ratio also increased in huge disparity. Also, in 2010, teachers' needs to impact knowledge to 23 million students as their number are 1.4 million qualified teachers in a full-time faculty (Levin & Xu, 2005).

### 3.3.2 Labor market

It is a serious distortion of unemployment among graduates as cause by expansion of high education in China and the world at large (Wu & Zeng 2008). Increase of graduates in different field's leads to the large number of personnel in China as others they left behind. There are two main reasons for unemployment whereby the curriculum itself has no room for graduates to be flexible depending on the labor market. Also, stiffness in the labor market lack of satisfactory wages to encourage graduates to acquire different skills and knowledge. However, Levin & Xu, (2005) identified noted that the system of Hukou is a restriction for working in other places where it's easy to find job like in prestigious cities. Their findings show that labor market demand is lower than the supply of graduates in different programs due to a higher expansion rate in 2015.

### 3.3.3 Tuition fees to a low-income family

Dua (2003) affirmed that the Minister of Education and provincial bureaus of education guide and standards stipulated that, in 2002, in Beijing, tuition fees ranged from 4200 Yuan to 6000 Yuan. The tuition fees themselves are an income to some families whereby they need to get basic needs in that payment and pay tuition fees for their child. Li, Meng, Shi and Wu (2013) on their study found that 28% out of 32% poverty rate of the college student from rural areas lived in severe poverty in managing their campus university life. Furthermore, rural students in 37% borrow tuition fees for their higher education studies. Many rural students work while they study to get money for basic needs and to pay school fees research found that 75% of the students work in their higher education. Also, Mok (2012) reported from China Youth and Children Research Center, public higher education institutions were highly increased, in 1989 was 200 Yuan as in 2007 became up to 5,000 Yuan and still increasing to date. The high tuition fee cost creates education inequality to those who cannot afford to pay fees and cannot gain access to acquire higher education.

### 3.3.4 Inequality of higher education among Chinese provinces

Wan (2006) explains that expansion of higher education plans does not emphasize equalize access and enrollment among provinces. In the study done by the Higher Education Research Institute at Beijing University of Science and Technology, there is many students' enrollment in higher education from urban areas than the rural areas. More prestigious cities such as Shanghai, Beijing, and Hong Kong tend to have more student enrollments than other provinces due to different motives such as teaching and learning resources, especially science and technology programs.

Moreover, there is inequality in a labor market. Students who graduate in less valued and famous cities are easily to get jobs as in 2003 was fair as in Zhejiang at Suren University in 2002 there over 700 graduated students as more than 500 students got a job in July (Wan, 2006). Also, most graduate students prefer more to work and study in a prestigious city. There is strong competition in a job market for prestigious cities as many students prefer to study there also a limited number of employments.

In the study, Ou and Hou (2018) found that expansion of higher education plans to reduce educational opportunity inequality while lagging in rural areas. Ngok (2007) revealed that the student enrollment rate is lower than in urban cities due to different factors. During the expansion of higher education, tuition fee increases limits higher education access to the student with low family background as they cannot afford to pay school fees. The Hukou system has restrictions that limit rural students to access education in public higher education institutions in urban areas; students from rural areas can stimulate rural changes through learning, observing, and exchanging ideas when they study in urban (Hong, Liu, Ma & Luo 2015).

### 3.3.5 Limited learning and teaching resource

In China, the central government and local authorities provide resources in public and private higher education institutions, respectively. The expansion of rate goes parallel with the adequate and increment of resources in a ratio with student enrollment. An expansion of higher education had a weakness in shortage of resources such as teacher-student ratio, student classroom, and accommodation for teachers and students. Wan (2006) found that student-teacher ratio increases due to the expansion of higher education compared in 1999 were 9.8: 1 but in 2006 increase 17.9:1 keep on the increase as years go on. Also stipulated that allocation of resources is not equal due to lack of centralization in China. Since other universities and colleges are not under central power, there is a huge possibility of differing in the distribution of human and non-human resources, improving education quality.

## 4 CONCLUSION

Higher expansion in education worldwide may create blessings or curses. It depends on how the nation utilizes graduates as human resources. In China, they succeed a lot in using their population as a source of stimulating development in the country to become a donor in a world economy. China's expansion of higher education leads to graduates who can influence civilization and changes in society. Also, the expansion of higher education influences the development of international students in China from different parts of the world. Chinese dreams are progressive, but most plans reach their goals, and others archive them. Recently, China revealed their early desired goals to have known worldwide higher education institutions that provide quality education.

They are a great debate on the expansion of higher education in China based on efficacy, efficiency, and equity. Different scholars recommend and suggest several ways to deal with the expansion of the higher education rate in China. Yue and Ding (2003) recommended that China should balance enrollment rate with learning and teaching resources in order to reform, restructure and reorganize the quality of education which is provided in the higher education; expansion

rate affect teaching quality of personnel in higher education hence may lead to a graduate who not match in a competitive global market. The Chinese government should attract foreign Chinese students to return after completing their studies in other countries to share and exchange personnel development to improve educational quality in higher education. Levin and Xu (2005) expansion of higher education led to the increase of international students, so they suggested that China recruit qualified international professors to gain new sight on teaching methods.

Moreover, to develop training concerning different instructional strategies in a digital world to develop competence knowledge to higher education graduates. Bai (2006) shows that China government has different measures to maintain and balance the pressure of graduates' unemployment. They establish the project of Go West, which will reduce the unemployment rate in China. The changes of the residence registration system allow diversity integration in a countrywide job market. For instance, a graduate can search job anywhere which prefer or can be easy to find a job as in rural to urban or vice versa. It is easier to be employed in urban areas due to different activities than in rural areas. The curriculum should be focused more on competence-based on compulsory education to higher education. The Chinese government should encourage and support graduates to find innovative and creative skills to cope with the wind of unemployment due to the expansion of higher education. A well-educated society also needs graduates who can use their potential to solve the different social problems to foster China's economic growth.

## REFERENCES

- Archer, M. S. (1982). Introduction: Theorizing about the expansion of educational systems. In M. S. Archer (Ed.), *The sociology of educational expansion: Take-off, growth and inflation in educational systems*. Beverly Hills: Sage.
- Bai, L. (2006). Graduate Unemployment: Dilemmas and Challenges in China's Move to Mass Higher Education. *The China Quarterly*, (185), 128-144.
- Bing, S. (2009), "Gridlock and solutions: China's private education in the period of social transformation", *Chinese Education and Society*, Vol. 42 No. 6, pp. 3-5.
- Craig, J. E. (1981). The expansion of education. *Review of Research in Education*, 9(1), 151-20
- Dello-Iacovo, B. (2009). Curriculum reform and "Quality Education" in China: An overview. *International Journal of Educational Development*, 29(3), 241-249.
- Duan, X. (2003). Chinese Higher Education Enters a New Era. *Academe*, 89(6), 22-27.
- Gu, J. (2012). Harmonious expansion of China's higher education: A new growth pattern. *Higher Education*, 63(4), 513-528.
- Hannum, E., & Buchmann, C. (2003). *The consequences of global educational expansion: Social science perspectives*. Cambridge, MA: The American Academy of Arts and Sciences.
- Hayhoe, R. (1996) *China's Universities 1895-1995: A century of Cultural Conflict*. New York and London, Garland Press.
- Hayhoe, R., & Zha, Q. (2005). The Role of Public Universities in the Move to Mass Higher Education: Some Reflections on the Experience of Taiwan, Hong Kong, and China. In Iacobucci F. & Tuohy C. (Eds.), *Taking Public Universities Seriously* (pp. 5-25). University of Toronto Press.
- Hong, X., Liu, P., Ma, Q., & Luo, X. (2015). The way to early childhood education equity - policies to tackle the urban-rural disparities in China. *International Journal of Child Care and Education Policy*, 9(1), 5.
- Jacob, W. (2006). Social Justice in Chinese Higher Education: Regional Issues of Equity and Access. *International Review of Education*, 52(1/2), 149-169.
- Jiamin, G., Xueping, L., & Lihua, W. (2009). *Higher Education in China: Carlo Socol*. ZHEJIANG UNIVERSITY PRESS & Homa & Sekey Books.
- Jing, T. (2007). The popularization of China's higher education and its influence on university mathematics education. *Educational Studies in Mathematics*, 66(1), 77-82.
- Levin, H., & Xu, Z. (2005). Issues in the Expansion of Higher Education in the People's Republic of China. *China Review*, 5(1), 33-59.
- Li, F. (2018). The expansion of higher education and the returns of distance education in China. *International Review of Research in Open and Distance Learning*, 19(4), 242-256.
- Li, S., & Xing, C. (2010). China's Higher Education Expansion and its Labor Market Consequences. *Institute for the Study of Labour*, 1-34.
- Li, H., Meng, L., Shi, X., & Wu, B. (2013). Poverty in China's Colleges and the Targeting of Financial Aid. *The China Quarterly*, (216), 970-992.
- Lin, C., & Lin, C. (2012). Does Higher Education Expansion Reduce Credentialism and Gender Discrimination in Education? *Social Indicators Research*, 109(2), 279-293.
- Liu, J. (2012). Examining massification policies and their consequences for equality in Chinese higher education: A cultural perspective. *Higher Education*, 64(5), 647-660.
- MoE China. (2007). Ministerial Press Release on the Development of Compulsory Education and Literacy Education. Beijing. Retrieved from <https://www.kpmpg.de/docs/Education-in-China-201011.pdf>
- Mok, K. (2012). Bringing the State Back In: Restoring the role of the State in Chinese higher education. *European Journal of Education*, 47(2), 228-241.
- Ngok, K. (2007). Chinese education policy in the context of decentralization and marketization: Evolution and implications. *Asia Pacific Education Review*, 8(1), 142-157.
- OECD. (2016). *Education in China: A Snapshot*. OECD China Report, 19(5), 3-12.
- Ou, D. & Yuna H. (2018). "Bigger Pie, Bigger Slice? The Impact of Higher Education Expansion on Educational Opportunity in China." *Research in Higher Education*.
- Xiao, Q., Zhang, X., & Qiu, J. (2011). China's Archival Higher Education: Its Features, Problems, and Development. *The American Archivist*, 74(2), 664-684.
- Ronghuai, H., Xin, J., & Haishen, Z. (2007). The Informationization of Higher Education in China: Present Situation and Challenges. In Spencer-Oatey H. (Ed.), *E-Learning Initiatives in China: Pedagogy, Policy and Culture* (pp. 221-232). Hong Kong University Press.

UNESCO China <http://uis.unesco.org/country/cn>

Wan, Y. (2006). Expansion of Chinese Higher Education Since 1998: Its Causes and Outcomes. *Education Research Institute*, 7(1), 19–31.

Wang, X., & Liu, J. (2011). China's higher education expansion and the task of economic revitalization. *Higher Education*, 62(2), 213–229.

Wu, B., & Zheng, Y. (2008). Expansion of Higher Education in China: *China Policy Institute*, (36), 1–13.

Yue, J. & Ding, X. (2003). Daxue jiuYe de jingji fenxi (An economic analysis of university graduate employment). *Xinxi Daokan (Information Guide)*, 32 6.

Zhou, J. (2009). Higher education for a sustainable future. Paper presented at the 2009 World Conference on Higher Education, Paris.