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Expansion of Vocational Education in Neoliberal China: Hope and Despair among

Rural Youth

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Abstract

The rise of China as the world factory in the last few decades has been accompanied by a

rapid expansion in vocational education. A growing number of youths from rural

backgrounds now have the chance to receive post-compulsory education in vocational

training schools. Using human capital theory as an analytical focus, this study examines their

strong desire to acquire educational credentials and explores the stress and frustration they

experience after finding out that graduates in vocational schools are sent to factories to work

as cheap labourers. This article argues that reform of the educational system in post-reform

China has channelled a large group of rural youth to vocational education without granting

them enough chance of upward mobility. When China relies heavily on a labour-intensive

manufacturing economy to secure its place in neoliberal globalization, most of the jobs

available are regarded as 'undesirable', dead-end, and low income. Returns of human capital

investment among rural youth are not guaranteed.

Keywords: vocational education, educational expansion, China, human capital, neoliberalism

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Introduction

After a series of expansions of vocational education in post-reform China, an increasing number of youths from rural backgrounds now have the chance to receive post-compulsory education. In 2012, vocational high school enrolment reached 21.13 million, compared with 2.26 million in 1980 (Central Government of PRC 2013). Although vocational school students are required to pay substantial tuition fees before their enrolment, which usually constitutes a large proportion of the household income in rural areas, most families are willing to pay for their children's education. The credentials earned in vocational schools are expected to increase their children's employability and future income.

However, in recent years, scholarly research and media reports have discovered that students and graduates of vocational training schools were sent to industrial towns to work as cheap unskilled labour in manufacturing and electronic factories (Pun and Koo 2015; Pun and Chan 2012; Hu 2010; Barboza and Duhigg 2012). For example, it is reported that a World Top 500 Enterprise in Guangzhou employed more than 1,200 students in their factory, outnumbering their 1,100 permanent workers (Xinhua Net 2011). As all vocational high school students have to complete a full-time 'compulsory internship' in their third year of study before getting their vocational degree, a large number of them are forced to spend at least nine months in these factories to provide cheap labour for the development of the export-driven economy of China. In principle, the compulsory internship is a skill development programme and prepares them for future employment (Ministry of Education 2006). Students are encouraged to stay and work in the enterprise after internship. In reality, students' working conditions, incomes, and social status are no different than those of uneducated rural-to-urban migrant workers. The benefits of additional years of vocational training are questionable.

Based on survey data and in-depth interviews with vocational high school students in Chongqing, this article looks into the impact of neoliberal economy and its discourse on disadvantaged students' educational decisions and aspirations. The study examines the expansion of vocational education in post-socialist China in the light of the neoliberal ideology of human capital, which stipulates that education and training increase productivities of the workforce. When the Chinese state envisioned education as a motor of economic growth, vocational education was imagined as a means to produce workers to meet the needs of industrial development. The study shows how the rise of China as the world factory in the last few decades has been accompanied by a rapid expansion of vocational education. I also investigate educational decisions and learning experiences among youth from rural backgrounds who enrol in vocational high schools. Their hopes of moving up the social hierarchy in an expanded labour market and their worries about becoming a new generation of migrant workers in cities will be explored. While widening access and increasing investment in education is commonly regarded as the way to deliver opportunity, prosperity, and justice that benefit both nations and individuals, this article reveals low mobility among the educated disadvantaged youths.

The larger theoretical issue explored in this study concerns the validity of the claims of human capital theory in this specific context, and its function as an ideology that maintains and strengthens social inequality in neoliberal China. The expansion of education increases the number of parents who aspire to more highly educate their children, as they believe education will open doors for their sons and daughters to better occupations and higher incomes. This belief leads to an increasing demand for education among youths and families in both urban and rural China, but their chances of educational assessment and occupational attainment vary considerably (Chan and Ngok 2011). Given the limited opportunities for rural youth to enter colleges and universities (Hannum et al. 2008), vocational training

schools have become the most feasible way for them to gain access to high school. With credentials from vocational schools, they compete with others for desirable jobs in the labour market. However, the labour structure is largely shaped by the manufacturing economy because the state government has adopted an export-led industrial growth model to attain its position as an economic superpower in neoliberal globalization. The investment of rural youths in vocational education does not improve their chances of upward mobility, but rather leads them mainly to cheap and unskilled jobs.

Human capital investment in the neoliberal economy

In the neoclassical school of economics, human capital is measured in terms of the association between levels of education and earning potentials. Human capital theory, which was developed by Gary Becker in the 1960s, aims to assess the relationship between education and employability and income return (Becker 1993). A principal proponent of the theory claims that individuals can increase their human capital through investment in education and training to maximize opportunities for selection by employers who value productive capacities. The more we learn, the more we earn.

Human capital theory promotes the idea that economic productivity is intimately connected to the skills level and ability of the workforce, which can be upgraded by education and training. Since its introduction, human capital theory has become increasingly important in economic thought and has had a significant impact on the social understanding of education and directions of educational policies (Blaug 1987; Brown, Lauder, and Ashton 2011; Down 2009; Gillies 2011). The associations among education, productivity, and economic performance become the legitimate foundations of economic and educational policies internationally. The phenomenon is well illustrated by Becker's description: 'this is the "age of human capital" in

the sense that human capital is by far the most important form of capital in modern economies. The economic successes of individuals, and also of whole economies, depend on how extensively and effectively people invest in themselves' (Becker 2002, 3).

Under human capital theory, students' motives for entering higher education are mainly associated with their desire to improve their labour market prospects, which leads to an increase in future income (Becker 1993). It has been critically argued that human capital is a core plank of neoliberal ideology as it draws education closely into the ambit of the economy and transforms the notion of education (Down 2009; Gillies 2011). On the one hand, credentials are believed to be the currency of opportunity, and education has been a central part of the neoliberal opportunity bargain (Brown 2003; Brown, Lauder, and Ashton 2011). The higher and the better credentials lead to good jobs and higher rewards. On the other hand, 'investing in themselves' stands for education and training, and it is understood as the crucial enabler of the development of human capital (Holborow, 2012). Education is narrowly treated as an investment for higher future income, as measured by jobs with higher social status. When the adoption of the human capital frame positions schooling as something primarily aimed at increasing an individual's earning potential, it inevitably individualizes people's educational choices and costs. Individuals, instead of society, should pay for their education, as a kind of 'self-investment' (Anagnost 2013; Bansel 2007).

Research studies show that in neoliberal economies, students are increasingly addressed as consumers of education products in expanding educational markets to make self-interested, as well as self-responsible choices (Ball 2003; Bansel 2007). Under human capital theory, a rational agent's choices of different kinds of education are primarily determined by the expected returns, compared to the opportunity costs, of different educational options. Educational decision-making has been normalized in a new form of individualism, where

individuals increasingly carry the responsibility to make their lives and are being held accountable for their own 'labour market fates' (Furlong and Cartmel 1997). The increasing call for personal responsibility has disregarded the reduction in welfare provisions and security systems of neoliberal economies and the increasing unevenness in the distribution of life chances within a global economy. The emphasis on marketization and rational choices has largely ignored the impacts of persistent inequalities of class, race, and gender on educational opportunities and occupational attainment (Apple 2001).

Currently, the basic assumption of human capital investment—a positive relationship between education (investment) and economic success (returns)—has been challenged in many of the developed countries. A number of studies have revealed that neoliberal states in a globalized market have great difficulty increasing, and even keeping, the quality and quantity of 'middle-class jobs' for their workforce with credentials (Anagnost, Arai, and Ren 2013; Brown, Lauder, and Ashton 2011). At a time when expectations of work, reward, and status are increasing among educated youth, national governments are failing to keep pace and guarantee the provision of stable employment in a competitive global environment. Recent studies (e.g. Ball 2003) have also discussed middle-class youths' and parents' perception of the 'congested labour market' with credential inflation and their anxiety to secure a stable future in a competitive job market. Advantaged families employ different strategies to maintain and improve their social advantages in and through education. The implications of these studies are clear: educational choice and attainment are increasingly associated with class difference. Working-class families are systematically disadvantaged by the strategic processes of 'self-investment' in neoliberal times.

In China, education is linked with the state's language of raising the quality of the population, framed by the discourse of building a strong nation to complete in the global market (Kipnis

2011). Moreover, the emergence of the labour market in the post-reform period has eroded the system of state assignment of jobs and signifies the increasing importance of education in determining individuals' occupational attainment and income rewards (Walder, Li, and Treiman 2000). The growing importance attached to education symbolizes a tightening bond between educational credentials, jobs, and rewards (Maurer-Fazio 2006). The change is usually regarded as a sign of a more open and competitive occupational system and a growing meritocracy under the reform. In the following section, I first consider the transformations in economic and educational policies and practices under the powerful discourse of human capital investment in China as a background of my study. Then, I discuss the impact of neoliberal education policies on the educational decisions and life trajectories of young people from rural backgrounds.

Educational expansion and an increase in rural enrolment

In post-reform China, the value of education is heightened in the country's development of a market economy (de Brauw and Rozelle 2008; Maurer-Fazio 2006). Driven by a neoliberal ideology of human resources, the Chinese state envisioned education as a motor of economic growth and has implemented a series of education reforms (Thøgensen 1990, 2002). Notably, the Law on Compulsory Education of 1986 designated nine years of education (six years of primary education plus three years of middle school) as mandatory for all children in China. The 'Action Plan for Revitalizing Education in the 21st Century' further confirmed a commitment to implementing that law across the country (Ministry of Education 1999). These policies sought to expand access to basic schooling in the late 1990s and early 2000s (Hannum et al. 2008). Furthermore, in order to meet the high demand for education in post-reform China, the state government drastically expanded higher education by encouraging the non-state sectors and actors to get involved in financing and providing education (Mok,

Wong and Zhang 2009), as mandated in the Higher Education Law of 1998. The growing demand for education has generated a large education market for higher education since the late 1990s (Wang 2011).

In addition to reforms to basic and higher education, vocational training has taken up a significant role in the post-reform education system. In order to maintain the supply of skilled and efficient labour to advance its neoliberal agenda, the state made great efforts to vocationalize post-compulsory education. The central government decided to expand its vocational education to train the urban and rural labour force to be 'millions of well-trained primary technical staff and skilled technicians to meet the urgent needs of industrial development' (Central Committee of the Communist Party of China [CPC], 1985). The State Council issued the 'Decision on Energetically Developing Vocational and Technical Education' in 1991 and the 'Outline on Reform and Development of Education in China' in 1993, which required different levels of government to develop vocational education in the light of economic and social development (Ministry of Education 2001). Since then, a large number of high schools, especially those in less developed areas, have been converted into vocational schools. By the early 1990s, nearly half of all high schools had become vocational schools (Lin and Zhang 2006). A large number of rural students were diverted away from the academic track of post-compulsory education to a vocational one.

After China became a member of the World Trade Organization in 2001, its economy was further embedded in global trade and production. A rise in manufacturing exports brought about an unprecedented demand for industrial workers. Vocational education was expected to help channel the 'surplus labour' from the agricultural sector to the industrial sector (State Council of the People's Republic of China [PRC] 2002). Subsequently, a lot of vocational schools were encouraged to merge and expand in scale. In order to further increase the total

student enrolment, vocational schools that were previously run by government departments were encouraged to privatize in order to expand the total number of vocational school places. Similar to the expansion of tertiary education, transformation in the provision of vocational education has been influenced by the trends of privatization and marketization (Mok and Lo 2007). Educational financing and provision now rely upon the financial abilities of local communities and individual contributions.

In China, vocational education has long held lower status than academic education as it traditionally leads to practical and labouring jobs instead of white-collar occupations (Schulte 2003, 2013; Thøgensen 2002). The general public, especially urban-dwellers, regard the academic track as the 'normal' educational path for youths (Woronov 2012). After marketization and privatization, the opportunities for academic higher education had increased in socio-economically prosperous regions (Mok and Lo 2007). As the state government has set a target that vocational school students should account for half of the entire high school population, local governments and vocational schools have to use different ways to attract students who have not previously had much access to post-compulsory education in order to ensure a large and growing enrolment. Poor and rural youths are targeted as a new source of vocational school students. The state has policies to reduce their tuition fees and increase subsidies for these disadvantaged youths. For example, the state promised to subsidize students with financial difficulties in their first two years of study; students were to work as interns to pay off their school and accommodation fees in the third year (State Council of PRC 2007). And in the first two years of study, students who have economic difficulties can join the 'voluntary internships' that are mainly organized during summer and winter holidays to earn their pocket money. These new policies are attractive to rural youths as they allow them to gain an educational qualification beyond compulsory schooling without adding a tremendous burden to their family.

Furthermore, an increasing number of 'migrant children' who were originally excluded from the urban post-compulsory education system are recruited by vocational training schools in cities. These children of migrants, who accompany their parents when they migrate from the countryside to urban areas, grow up in cities but are treated as rural population under the household registration system. In many cities, children of migrants who do not have an urban *hukou* (official registration) are barred from receiving even compulsory education in formal public schools and taking public examinations, and they do not have the chance to have post-compulsory education after graduating from low-end private schools for migrants (Koo 2012; Ming 2013). Now, more and more vocational schools admit graduates of middle schools without requiring them to submit their school transcripts with their application. Urban vocational schools attract a lot of youths from rural backgrounds who were originally excluded from the urban educational system.

After decades of educational expansion, Chinese youths, including many from disadvantaged backgrounds, now have chances to receive post-compulsory education that were not enjoyed by previous generations. What are the implications of this change for the openness of the opportunity structure in post-reform China? Would higher education qualifications increase individuals' social mobility in an expanded labour market? To answer these questions, this study explores the educational decisions of vocational school students and their learning experiences in relation to their aspirations and outcomes.

Data and methodology

In China, students who have finished their nine years of compulsory education have to go for the High School Entrance Examination (HSEE). Based on the results of the examination, students decide whether to enter a higher level of education. Those who leave school will probably find a job and start their career path. Those who stay in post-compulsory education choose between academic and vocational study. This article looks at the educational demands of students with rural backgrounds and reveals the impact of neoliberal discourse in China on youths' self-investment project. The accounts here are from survey data and in-depth semi-structured interviews with vocational students for an ongoing project concerning the school-to-work transitions of vocational school students in China.

A survey and interviews were conducted in three formal vocational high schools between October 2012 and June 2013 in Chongqing, the largest municipality in China located in the southwest of the country. School A is located in the inner city of Chongqing. School B is located in one of the nine districts that belong to the urban area of Chongqing municipality but actually lies at the outskirts of the inner city near a 'development zone' with a lot of new manufacturing factories. In recent years, both school A and school B have found it difficult to recruit enough local urban students, so they have to recruit students from other rural districts in the municipality. They even expanded the pool of potentials students by drawing rural students from other nearby provinces, such as Sichuan and Guizhou. School C is located in the rural district of the municipality and mainly recruits local rural youth as students. In each of the schools, we randomly selected four to six classes from the class lists provided by the school, the number of classes depending on the length of the class lists, which ranged from twenty-four to thirty-five classes. Students in selected classes assembled in their classrooms to complete questionnaires in the presence of research personnel. The survey aimed to systematically collect information related to their family background, educational decisions, and learning experiences in schools. Table 1 summarizes data about the background of sampled students. As expected, most of the students and their parents have a rural hukou and are regarded as members of the rural population.

[Table 1 is about here]

I have also conducted in-depth interviews with twenty-four students at the three vocational high schools. Informants were recruited in the student canteen and sports field during my fieldwork, and participation was voluntary. All of the interviewed students have a rural background, although many of their parents left the farmland and worked as migrant workers in different cities around the nation. They were 10th to 11th graders (aged fifteen to twenty) at the time of the interviews. Fifteen out of the twenty-four informants are from rural districts within the municipality. Three of the informants are from villages in the north part of Guizhou province that are located relatively close to Chongqing, each approximately two to three hours away by car. Another six informants are from Sichuan provinces. In all, twelve male and twelve female students are interviewed. I outlined my research to the informants before beginning the interviews, and many of the students were willing to tell me about their family background, explain the process of their educational choice, and share their dream or future plan. All interviews were conducted in Putonghua (the official language of the PRC). With informants' consent, all interviews were digitally audio-recorded and transcribed in Chinese; they were later translated into English when necessary for further analysis. During the fieldwork, school principal and teacher interviews were also conducted to get more information about the school and how their students were learning.

Given that a mixed method approach is adopted in the research, findings obtained from quantitative and qualitative methods are expected to offer a balance between logic and stories, which enable a more holistic and contextual analysis of the phenomenon (Jaeger 1997). In interpreting the research findings, I attempt to triangulate findings obtained from different methods. Gathering and triangulating quantitative and qualitative information from different sources helps to increase the richness of and confidence in the information gathered.

Investment for a better future

During interviews, I spent a lot of time discussing with students their educational demands and the way they came up with their decision to go to vocational high school. They might have faced different difficulties and considerations during the decision-making process, but their major motivation for post-compulsory education was very consistent: obtain higher credentials to secure a better life in the future. For them, an individual's credential qualification is one of the most important determinants of his/her occupational outcomes; therefore, the more and the higher qualification is better. As one of the respondents, Fanfan (b05), a girl in a grade 10 information technology programme, explained:

I come here for credentials, which are very important in today's society. Having a higher level of credential is just like buying insurance for you and your family, you know, it gives you a stronger sense of security. [How?] It secures me better and secure employment in the future. Obviously, I have no way to support my family or even myself in the city if I can't get a good job. That would make my family worry about me. But if I earn a high-school degree, or even a college degree, all of us would feel safe.

In the survey, less than 10% of the students indicated that they had considered going to work right after graduation from middle school. Most aimed to stay in school after compulsory education when young. Moreover, over 30% of the vocational school students claimed that they would actively look for ways to obtain higher credentials such as college degrees after graduation.

During interviews, four out of the twenty-four sampled students admitted that they had worked for one to three years as factory workers or catering workers before enrolling in

vocational school. In their descriptions, these unskilled jobs are 'dead-end' and 'give them no bright future'; therefore they decided to return to school for additional credentials to 'increase their value in the labour market'. They usually have higher hopes for the vocational degrees. For example, Sea (b03), a boy in a grade 10 computer programme, had worked in electronics factories for two years after graduating from middle school. He said:

I returned to school to better develop and prepare myself for future career. I cannot be a normal worker in factories forever. . . . When I have the credentials, I will have a chance to be the leader, the manager, or a member in the innovation team. The higher credentials I get the better the chance for me to move up. So, I am determined to continuously upgrade myself.

Students without employment experience also told me that the jobs that require only a middle school qualification are 'tiring', 'meaningless', and 'could not help them survive in the city' in the long run. Spring (c22), an 11th grader in a computer application programme, whose father has been a construction worker in Guangdong province for more than seven years, commented:

I could have gone straight to join my father after I finished middle school. Construction sites need young workers, my father told me. But I can't be that shortsighted. I didn't want to go to work at that time and instead chose to invest more in myself. I don't want to follow in my parents' footsteps. They work tirelessly day and night just to make ends meet. . . . We suffer a lot from the unstable life.

The survey data show that over half of the vocational school students are children of migrant workers. Their parents are among the 262 million migrant workers who have left their farmland to search for jobs in cities. As shown in Table 1, parents of vocational students had

usually completed only primary or middle school and were clustered in the construction and manufacturing sectors. Accumulated research demonstrates that the low educated rural-to-urban migrant workers are valued for their cheap labour, compliance, and tolerance of harsh working conditions, but are treated as temporary workers who are disposable at any time (Fan 2002; Knight, Song, and Jia 1999). According to students' daily experiences and own observations, the jobs requiring low skill level only 'lead them to poverty and unstable living'.

Optimism for growth and opportunities

During interviews, students repeatedly mentioned that investment in higher credentials would lead them to better employment and a better future. So, in their eyes, what is the meaning of good employment? Not many of them had concrete answers. Most often, they just described their desirable job as 'high income', 'stable', and 'not tiring'. On top of that, jobs that 'match with the needs of economic development in the city' are the most promising type of job they aspire to have. This description was given by fourteen out of twenty-four of the interviewed students.

For sure, I aspire to work in urban centres. I'm equipping myself with a higher level of skills to win in job competitions in a modern society. In the information society, the increasing application of new technology requires educated labour and skilled workers. . . . In order to have a better future, I have to move away from the backwardness and enter the city. (c21 – Lily, a girl in grade 11, in a marketing and management programme)

In the survey, only one student (out of 820) chose farming as the job he aspired to after schooling. All of the twenty-four students interviewed come from a rural background, but none has thought of returning to the field. According to them, 'days in farmland are too harsh'

and 'the earnings are too little'; in contrast, urban areas 'are full of opportunities'. All the vocational school students who participated in this study were born in the 1990s. Having grown up in the reform era, they are heavily influenced by the ideologies of modernization in which peasants are labelled as backward and non-farming occupations are considered as advanced and modern (Kipnis 2011). They have also witnessed the shrinking of the agricultural sector and the fast-growing economy in cities. Due to the increasing post-reform income gap between urban and rural areas, all of them are eager to leave the countryside and stay in cities through education (Thøgensen 2002).

The economy is growing here: a lot of foreign big corporations come and look for business. When I have the knowledge and am willing to work hard and seize the opportunities, I'm sure I have high chance of success. . . . I will be able to develop my career and earn a lot of money (b04 – Luk, a boy in a grade 10 microelectronic programme)

Chongqing is now one of the popular sites for investment, as the third fastest growing economy in China with 17.1% GDP growth in 2010. In 2013, it was revealed that about one in four laptop computers in the world is made in Chongqing, with production reaching 12.34 million (China Daily 2014). During interviews, most of the students excitedly told me that a number of well-known enterprises such as HP, Quanta, and Foxconn Technology Group have developed super-size production bases in Chongqing. It makes the city the biggest production base for notebook computers in Asia or even globally. One informant, Fanfan (b05), who came from the former rural areas of Chongqing, which were developing rapidly as sites for new industrial parks, shared a lot with me about how her family migration represents the drastic changes in Chongqing. In her eyes, the change leads to economic development. And

the development provides educated youths, including Fanfan, abundant employment opportunities for 'stable jobs with high income and high social status'.

Rapid economic growth plus access to post-compulsory education offers hope to these rural youths and boosts up their aspirations. In contrast to Woronov (2011, 2012), this study finds that vocational school students in Chongqing have strong desires for upward social mobility through educational credentials and do not intend to take up low-end service jobs after graduation. The dreams shared by the students match the neoliberal discourse that jobs and rewards flow to individuals who upgrade their skills to meet the requirements of the modern knowledge economy (Anagnost 2013; Bansel 2007; Brown, Lauder, and Ashton 2011). All the student informants are very anxious to be part of urban modernity and eagerly invest in themselves to ensure that they can seize opportunities in an expanded market.

Cost of the investment

Youths now have greater chances for high school education to pursue their dreams as the sector has drastically expanded in the past two decades. However, as post-compulsory education in China has been severely marketized and privatized, youths, especially those from a disadvantaged background, have to consider the costs when they make their investment in human capital. In the survey, less than 40% of the students planned to go to vocational schools; over half declared that they initially wanted to go to academic high schools after compulsory education.

Then, why did these students eventually enrol in vocational high schools rather than the preferred academic schools? Students indicated that academic performance in middle school, evaluation of chances of success if they went to academic high school, the family's financial situation, and their own interests were their major concerns when they made their education

decisions. Among these concerns, students' poor academic performance in the HSEE and the availability of financial resources to meet the costs of education stand out as key determinants. Over half the students mentioned the high expenses of attending academic high schools. Two of the interviewed students declared that they had to turn down the offer due to the high tuition fees. Yan (a01), a girl in grade 11 marketing programme, is one of them:

My family has economic difficulties. I can't be selfish, asking them to bear the educational costs for me. And it is quite impossible for them to do so in reality. . . . I analyse the situation for myself: if I fail in the *gaokao* (College Entrance Examination) three years later, I can't get into a university, which means I waste the whole three years of investment in academic high school. And even if I have high marks in the examination, we can't afford the expensive university fees for sure. I won't go to university anyway. . . . So, I choose to study in vocational school, earning my own tuition fees for the high school degree.

Recently, the high level of tuition and miscellaneous expenses in China, especially for education beyond the compulsory level, has drawn the attention of local and overseas scholars. For example, it is found that if a family wants to secure a place in a good academic high school for a child who performed marginally in the HSEE, they have to pay more than 20,000 RMB (about 2,000 pounds) for the chosen school (Hansen and Woronov 2013; Jiang and Cheung 2009). When children from resourceful families can afford to chase academic qualifications, vocational degrees are left for poorly performing students and those from poor families (Woronov 2012). Many of the students interviewed knew, deep in their heart, that they had limited chances of pursuing university education; therefore they 'chose' to go to vocational high school and 'learn a skill for employment after graduation'.

Even for vocational schools, the tuition fees are not cheap. At the time of interview, tuition fees charged by the three vocational schools ranged from 2,200 RMB to 4,600 RMB (about 220 to 460 pounds) per year after government subsidization, depending on the types of programme taken. A lot of students have to work to earn towards their living costs and tuition fees. Data from the survey reflects that over 40% of the sampled students in the three schools had joined 'voluntary internships' to work in factories inside and outside Chongqing municipality during the school holidays. The students got between 950 RMB and 1,600 RMB (about 95 to 160 pounds) for one month's work, including up to 120 hours of overtime. Confirmed during in-depth interviews, many students worked very hard during internship, taking up overtime and night shifts, to 'cover both the school fees and daily expenses for two years'. Although they are paid less than normal factory workers, ¹ the income from an internship allows them to earn a credential 'without adding a burden to the family' but rather 'through their own hard work'.

In the newly developed education market, young people are expected to train themselves at their own expense, as a kind of self-investment in their human capital (Anagnost 2013; Bansel 2007). Increased education expenses become dominant mechanisms through which students from disadvantaged positions are being excluded from higher education. Vocational education becomes the 'most bearable' and 'most feasible' way for students with poor and rural family backgrounds to earn an additional educational credential. The increasing gaps of income between regions and classes are expected to maintain and reinforce the educational inequality in neoliberal China.

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¹ The minimum wage in Chongqing was 1050 RMB in 2013. Formal workers in factories, who take up over 100 hours of overtime, would receive more than 2000 RMB per month.

Internship: a real touch of reality

Most of the time during the fieldwork interviews, students expressed optimism toward their future development. However, whenever we talked about their internship experience or internship plan, most became very pessimistic. They did not only show frustration with the internship arrangement but also revealed a lot of worry related to the chances of getting a desirable job after graduation.

Among the twenty-four informant students, twelve had participated in voluntary internship: three were 10th graders and nine were 11th graders. All were sent to work in electronics factories for internship regardless of the programme they took in schools. According to the students, they did not receive any type of meaningful training during their internships in the factory. From what they understood, they were randomly assigned to different production lines after arrival, depending on the needs of the factory.

There is no relationship between our study and the work in the factory. The two hundred students from our school were sent to different workshops after arrival, and no pre-work training is required. Well, the leader of my production line did teach me how to do the job, but I didn't learn any real type of skills. My work is to repetitively fix the small part onto the motherboard of computers, a repetition of one or two simple motions for ten hours per day, six days per week. (Clear – b18)

Clear (c18) is a girl in a grade 11 railway programme, who spent three months in an electronic factory during the summer holiday. Coming from a poor rural family, she felt grateful to be able to join the internship, where she earned around 4,500 RMB. The amount not only covered her living and tuition costs but also allowed her to remit 600 RMB to her grandparents in the countryside. At the same time, she was very angry about the arrangement

as the school failed to keep its initial promise to send the interns to have their internship in railway stations. Similar findings are revealed in the survey data. All students expected to receive training related to their specialties during internship. In reality the students, who studied a wide range of subjects, including accounting, marketing, railway, and software design, were all sent to electronics factories for their internship during summer and winter holidays.

The demand for cheap factory labourers in Chongqing is significant when an increasing number of enterprises relocate their production bases from the coast to the interior. Foxconn, one of the world's largest contract electronics manufacturers, signed an agreement with 119 vocational training schools to arrange student internships and employment at its local plants (Hu and Wang 2010). The principals of vocational schools confirm that local government 'intensively promotes and encourages', if not forces, cooperation between vocational schools and enterprises to help maintain a large supply of cheap and young labour for the use of new production bases in the special economic zone in Chongqing. From what they understood, some schools were even asked to adjust their course arrangements, such as having longer winter holidays, to allow students to stay longer in factories to solve the 'labour shortage' problem for enterprises.

Similar to other young workers in factories (Pun and Chan 2012), vocational students constantly described the days and nights on assembly lines as 'harsh', 'inhumane', 'bitter', and 'completely exhausting', although some claimed that they did not mind working there as short-term interns to earn quick money. What really concerns them is the high chance of them continuing in the stressful and tiring labouring work in their compulsory internship and even future employment.

I met my seniors in the factory during my last internship. Some were in their compulsory internship year, some were graduated. I knew a girl who graduated last year from the same programme, same school as me. She end up working there as a normal worker! No difference with other migrant workers. . . . She noticed that it upset me a lot, so she told me that she would be promoted to management very soon. I don't know if that would happen, and I don't really care. I just don't want to work on assembly lines anymore. (Tina – b07, a girl in grade 10, marketing programme)

It is so meaningless to work inside factories. I earn 3,500 RMB in the winter, but I really don't want to burn my life there. I'm thinking to arrange for my own formal internship in the summer. I want to try something meaningful and related to my specialty. . . . However, it is not easy to find one as I don't have any network in the city. No, no network to find an internship or employment. Sigh. . . . I have no idea yet, I just feel sad. (Sing – al 1, a girl in grade 11, computer application programme)

According to the students, during internship they worked side by side with graduates from middle schools, migrant workers, other student interns, and graduates from vocational high schools. They, as student interns, are used as cheap and unskilled labour in factories, forced to endure the same exploitative labour conditions as other uneducated vulnerable migrant workers. They found no connection between their learning and the work, and more importantly they found a vocational credential unable to lead them to a path away from factory work.

'Shall I drop out?'

Many of the informants face enormous emotional stress because of the discrepancy between their dreams of relocation to urban areas in order to benefit from the infrastructure and opportunities large cities offer, and the harsh reality of their factory lives during internship. Some declared that they had no more motivation to study after 'discovering that they were trapped by the schools'. Sleeping and playing games on mobile phones during classes become an expression of their strong grievances against the teachers, and a way of 'passing time' before graduation (Woronov 2012).

During interviews, a couple of students revealed that they were struggling between dropping out of school and staying to get the credential. In contrast to the urban kids, who could afford years of 'passing time' in school (Woronov 2012), rural students in my study prefer to earn from a full-time job. When a vocational credential does not secure them a proper, stable job in the city, they prefer to quit and stop 'pouring money' and 'wasting time' in school. For example, Ren (b02), a boy in a grade 10 railway programme, explained:

I've overheard that students in our programme have only two choices for compulsory internship: being a factory worker on assembly lines or being a cleaner or a guard in railway stations. I'm very angry. I don't need to spend two years in school if I want to become a cleaner, right? We are trained as a steward on high-speed trains. . . . And if I want to work in a factory, I could just go there. All factories need young workers now. So, what's the point of me staying here?

For Ren and his friends, the greatest problem that they have to overcome before quitting school is not to disappoint their parents. As mentioned, many vocational school students are from poor rural families. Some of their families have spent all their savings or even gone into debt for their schooling. Although these students have discovered that the investment in

education will not give them a proper employment with desirable income, they find it very difficult to reveal the truth to their parents. They are the most frustrated group of students that I met during the fieldwork.

In the survey data, 23% of the vocational students declared that they want to drop out of school; 34% of those had internship experiences compared with 15% of those without one. According to the principals of the three schools, the dropout rates range from 15% to 20% per year. Many teachers and principals were upset by the high dropout rates in vocational schools but felt helpless to keep their students in school:

What we can do is to encourage them that opportunities are only provided for those who are well prepared. It's important to learn as much as possible and get additional certificates. At the same time, the students have to learn to be realistic. They can't aim too high. . . . When most available jobs in the market are these types of jobs, we can only help the students to adjust their expectations. (T04 – class teacher of a grade 11 computer programme, whose class shrank from 45 to 35 students in 1.5 years)

The class teacher admitted that more than 70% of the graduates from his school ended up working on assembly lines in factories, their monthly incomes ranging from 1,500 to 2,500 RMB depending on the amount of overtime work.

Contrary to students' imagination, the economic growth and increased investment in Chongqing do not bring along high status and high-income jobs but rather a large number of unskilled labouring jobs. It has been widely argued that thirty years of market reform have enabled China to attain membership in the ranks of the global economic superpowers by turning it into the world's factory (Guthrie 2009; Pun and Chan 2012). This Chinese growth model mainly relies on the massive use of cheap labourers in light industries, which largely

determines the structure of the labour market (Hung 2009; Solinger 2009). The astonishing economic growth fails to provide sufficient numbers of high income and high status jobs for educated youths but creates an unprecedented demand for inexpensive labour. In such an economic context, students with vocational credentials have limited chances to improve their social and economic status. What they can do is adjust their unattainable aspirations and prepare to stay at the bottom of the social hierarchy.

Discussion and conclusion

In contemporary China, under the ideology that education is the key to the future of individuals and the nation, families place a high value on education and children usually have high educational goals (Kipnis 2011; Thøgensen 2002). At the same time, academic credentials are traditionally valued higher than vocational ones as they are commonly regarded as more promising for social mobility and economic success (Schulte 2003, 2013; Thøgensen 1990, 2002). The findings of this study reveal the eagerness to participate in postcompulsory education, even in the vocational track, among youths with rural background. In post-reform China, privatization and marketization of the expanded educational sector has significantly involved a diffusion of responsibility from the state to individuals and, more importantly, has justified the inequality of life chances (Ball 2003). Data revealed that the majority of the vocational school students value academic studies more highly than vocational training. However, not many of them had considered the social inequality that has shaped educational inequality, which benefits resourceful families but ostracizes the poor. Instead, in an educational market that emphasizes 'freedom' and 'choice', most of the students see this pathway as their own 'choice' or recognize only their failure to achieve good grades in examinations.

Due to regional and class income inequalities, rural students are systematically diverted away from a more valuable academic track in post-compulsory education and then higher education. At the same time, the educational market seduces them into thinking that upward social mobility is attainable for them. As the expansion of vocational schooling in post-reform China operates in the guise of training, skill development, and self-investment that match the needs of industrial development (Schulte 2013; Thøgensen 1990; 2002), youths' high demand for the vocational credentials represents their strong commitment to the belief in human capital investment – training and education will increase their future income and occupational status in urban areas. This study finds that students' avidity for a degree in a vocational school is driven by their strong desire to take part in the modernization project in urban areas. They are optimistic about the employment opportunities provided by urban economic development. Employability in urban areas becomes contingent on young people's willingness to pay for their own development. Students are heavily influenced by the belief that only through investment in education will they be able to develop embodied human capital and be selected for high income and high status jobs in the growing economy (Anagnost 2013).

The expansion of vocational training has increased the chance for disadvantaged youth to receive post-compulsory education, but it has not increased their chance for upward mobility. This study finds that a large proportion of vocational school students and graduates end up working on assembly lines in factories. In other words, more investment in human capital does not increase individuals' employability and economic return. This finding extends our conventional micro-level interpretation of human capital theory and its significance in our understanding of the association between educational opportunities and economic success / upward mobility at a macro level. Human capital theory claims that economic return is intimately connected to investment in education and training. Over the years, the explanative

and predictive power of the theory in weaker economies or developing countries has been questioned and challenged (Blaug 1987; Gillies 2011). Research studies have reviewed the uncertain relations between educational qualifications and economic benefit in the third world (Blaug 1987). Adding to them, findings of this study point to the fact that even in a strong economy with substantial growth like Chongqing, the claims of human capital theory fail to materialize. Students' experiences and observations during internship tell that credentials granted by their schools are unlikely to add much value to their labour in the expanded economy.

When we take into account the wider political and economic forces that shape labour market structure, we understand that individuals' investment in education leads these young people nowhere but to cheap and unskilled jobs. Since the 1980s, the Chinese state has adopted an export-oriented growth model that heavily relies on foreign direct investment. In order to create the competitive advantage to attract investment in the globalized economy, economic growth can only be enhanced by maintaining a large supply of inexpensive and unskilled labour. In this export-driven economy, no matter how strong it is, there is low capacity for occupational upgrading – the jobs remaining for youths are mainly cheap and unskilled. In this sense, the economic rationalism of the human capital theory fails to account for the fate of educated youths with limited chances of upward mobility even in strong and successful economies. The association between education and earnings accounted by human capital theory therefore happens only in developed economies when the chances of moving up are enhanced by the change in occupational structure and the capacity for occupational upgrading in a period of economic growth, such as in Western societies in the 1950s and 1960s (Breen 2004; Brown 2013). In the absence of stable, secure, and promising employment with a sufficiently robust middle-class sector in the market, the human capital regime cannot promise any guaranteed returns on any investment.

Under the human capital regime of neoliberal times, youths' demand for vocational education represents aspirations of disadvantaged classes in the globalized neoliberal economy. Committed to the belief in human capital investment, students have high expectations for occupational achievement, income rewards, and social status. At the same time, they are frustrated by the limited upward mobility opportunities brought by their vocational degrees when they start taking up repetitive and monotonous factory work. Even though the certificates of vocational training can hardly offer them job security or proper employment after graduation, many students choose to stay in school for the credentials. Conforming, as well as perpetuating, the hierarchical divide between academic and vocational education in China, vocational qualifications act as a defence against complete economic hardship and rural employment (Thøgensen 2002). Similar to the phenomenon in other developed countries, the youths do not want to lag behind the crowd and they assume that opportunities will expand as the economy continues to grow (Brown 2013; Brown and Lauder 2006).

The hope and despair of this neoliberal time, shaped by global forces in labour markets, frame the life prospects for youth, which intensifies their frustration as they realize how extremely difficult it is to climb up the social ladder and settle in cities. In recent years, increasing forms of protest on the shop floor, of which suicide is the most desperate expression, showcase the despair of this new generation of youth (Pun and Chan 2012). This paper reveals an urgent need to look into the problem of blocked mobility among a large group of youth with vocational credentials.

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References:

Anagnost, Ann. 2013. "Introduction: Life-Making in Neoliberal Times." In *Global Futures in East Asia: Youth, Nation, and the New Economy in Uncertain Times*, edited by A. Anagnost, A. Arai and H. Ren, 1–28. Stanford: Stanford University Press.

Anagnost, Ann, Andrea Arai, and Hai Ren. 2013. *Global Futures in East Asia: Youth, Nation, and the New Economy in Uncertain Times*. Stanford: Stanford University Press.

Apple, Michael W. 2001. "Comparing Neo-liberal Projects and Inequality in Education." *Comparative Education* 37: 409–23.

Ball, Stephen. 2003. Class Strategies and the Education Market: The Middle Class and Social Advantage. London: Routledge Falmer.

Bansel, Peter. 2007. "Subjects of Choice and Lifelong Learning." *International Journal of Qualitative Studies in Education* 20: 283–300.

Barboza, David, and Charles Duhigg. 2012. "China Contractor again Faces Labour Issues on iPhones." *New York Times*, Sept 10.

Becker, Gary. 1993. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. London: University of Chicago Press.

Becker, Gary. 2002. "The Age of Human Capital." In *Education in the Twenty-First Century*, edited by E. P. Lazear, 3–8. Palo Alto: Hoover Institution Press.

Blaug, Mark. 1987. *The Economics of Education and the Education of an Economist*. Aldershot: Edward Elgar.

Breen, Richard. 2004. Social Mobility in Europe. Oxford: Oxford University Press.

Brown, Phillip. 2003. "The Opportunity Trap: Education and Employment in a Global Economy." *European Educational Research Journal* 2 (1): 141–79.

Brown, Phillip. 2013. "Education, Opportunities and the Prospects for Social Mobility." *British Journal of Sociology of Education* 34: 678–700.

Brown, Phillip, and Hugh Lauder. 2006. "Globalization, Knowledge and the Myth of the Magnet Economy." *Globalization, Societies and Education* 4 (1): 25–57.

Brown, Phillip, Hugh Lauder, and David Ashton. 2011. *The Global Auction: The Broken Promises of Education, Jobs and Incomes.* New York: Oxford University Press.

Central Committee of the Communist Party of China. 1985. *Decision on the Reform of the Education System*.

Central Government of the People's Republic of China. 2013. "Education at High School Level." *Central People's Government of the People's Republic of China Website*, Oct 29. Retrieved April 15, 2014 (http://big5.gov.cn/gate/big5/www.gov.cn/test/2013-10/29/content-2517467.htm).

Chan, W. K., and K. Ngok. 2011. "Accumulating Human Capital while Increasing Educational Inequality: A Study on Higher Education Policy in China." *Asia Pacific Journal of Education* 31 (3): 293–310.

China Daily. 2014. "Chongqing: Land of Laptops" China Daily, June 16.

de Brauw, Alan, and Scott Rozelle. 2008. "Reconciling the Returns to Education in Off-Farm Wage Employment in Rural China." *Review of Development Economics* 12: 57–71.

Down, Barry. 2009. "Schooling, Productivity and the Enterprising Self: Beyond Market Values." *Critical Studies in Education* 50 (1): 51–64.

Fan, Cindy. 2002. "The Elite, the Natives, and the Outsiders: Migration and Labour Market Segmentation in Urban China." *Annals of the Association of American Geographers* 92 (1): 103–24.

Furlong, Andy, and Fred Cartmel. 1997. *Young People and Social Change: Individualization and Risk in Late Modernity*. Philadelphia: Open University Press.

Gillies, Donald. 2011. "State Education as High-yield Investment: Human Capital Theory in European Policy Discourse." *Journal of Pedagogy* 2 (2): 224–45.

Guthrie, Doug. 2009. China and Globalization: The Social, Economic, and Political Transformation of Chinese Society. New York: Routledge.

Hannum, E., J. Behrman, M. Wang, and J. Liu. 2008. "Education in the Reform Era." In *China's Great Economic Transformation*, edited by L. Brandt and T. Rawski, 215–49. Cambridge: Cambridge University Press.

Hansen, Mette Halskov, and Terry E. Woronov. 2013. "Demanding and Resisting Vocational Education: A Comparative Study of Schools in Rural and Urban China." *Comparative Education* 49: 242–59.

Holborow, Marnie. 2012. "Neoliberalism, Human Capital and Skills Agenda in Education: The Irish Case." *Journal for Critical Education Policy Studies* 1: 93–111.

Hu, Yinan. 2010. "Students 'Forced' to Work at Foxconn," China Daily, June 26.

Hu, Yinan, and Yu Wang. 2010. "Foxconn Mulls Move Northward," China Daily, June 29.

Hung, Ho-Fung. 2009. *China and the Transformation of Global Capitalism*. Baltimore: Johns Hopkins University Press.

Jaeger, Richard. 1997. Complementary Research Methods for Research in Education, 2nd ed. Washington, DC: American Educational Research Association.

Jiang, Miaoyi, and Chau-kiu Cheung. 2009. "Burdens from Educational Expenses on Chinese Children Living in Poverty." *International Journal of Adolescence and Youth* 15: 175–92.

Kipnis, Andrew. 2011. Governing Educational Desire. London: University of Chicago Press.

Knight, John, Lina Song, and Huaibin Jia. 1999. "Chinese Rural Migrants in Urban Enterprises: Three Perspectives." *Journal of Development Studies* 35 (3): 73–104.

Koo, Anita. 2012. "Is there any chance to get ahead? Education aspiration and expectations of migrant families in China.' *British Journal of Sociology of Education* 33 (4): 547–564.

Lin, Jing, and Yu Zhang. 2006. "Educational Expansion and Shortages in Secondary Schools in China: The Bottle Neck Syndrome." *Journal of Contemporary China* 13: 255–74.

Maurer-Fazio, Margaret. 2006. "In Books One Finds a House of Gold: Education and Labour Market Outcomes in Urban China." *Journal of Contemporary China* 15: 215–31.

Ming, Holly. 2013. *The Education of Migrant Children and China's Future: The Urban Left Behind*. London: Routledge.

Ministry of Education. 1999. *Action Plan for Revitalizing Education for the 21st Century*. Beijing: Ministry of Education.

Ministry of Education. 2001. Vocational Education in China. Beijing: Ministry of Education.

Ministry of Education. 2006. *Opinions on the Trial Model of School-Business Cooperation and Work-Study Integration for Vocational Schools*. Beijing: Ministry of Education.

Mok, K. H., and Y. W. Lo. 2007. "The Impacts of Neo-liberalism on China's Higher Education." *Journal for Critical Education Policy Studies* 5 (1): 316–48.

Mok, K. H., Y. C. Wong, and X. Zhang. 2009. "When Marketisation and Privatisation Clash with Socialist Ideals: Educational Inequality in Urban China." *International Journal of Educational Development* 29 (5): 505–12.

Pun, Ngai, and Jenny Chan. 2012. "Global Capital, the State and Chinese Workers: The Foxconn Experience." *Modern China* 38 (4): 383–410.

Pun, Ngai, and Anita Koo. 2015. "A 'World-Class' (Labor) Camp/us: Foxconn and China's new generation of labor migrants." *positions*

Schulte, Barbara. 2003. "Social Hierarchy and Group Solidarity: The Meanings of Work and Vocation/Profession in the Chinese Context and Their Implications for Vocational Education." *International Review of Education* 49 (1–2): 213–39.

Schulte, Barbara. 2013. "Unwelcome Stranger to the System: Vocational Education in Early Twentieth-century China." *Comparative Education* 49 (2): 226–41.

Solinger, Dorothy J. 2009. *States' Gains, Labour's Losses: China, France, and Mexico Choose Global Liaisons, 1980-2000.* Ithaca: Cornell University Press.

State Council of People Republic of China. 2002. Decision of the State Council on Vigorously Promoting the Reform and Development of Vocational Education.

State Council of People Republic of China. 2007. Views on the Establishment of a Sound Student Financial Assistance Policy System for Students in Vocational Education with Economic Hardship.

Thøgensen, Stig. 1990. Secondary Education in China after Mao: Reform and Social Conflict.

Denmark: Aarhus University Press.

Thøgensen, Stig. 2002. A County of Culture: Twentieth-century China Seen from the Village Schools of Zouping, Shangdong. Ann Arbor: University of Michigan Press.

Walder, Andrew, Bobai Li, and Donald Treiman. 2000. "Politics and Life Chances in a State Socialist Regime: Dual Career Paths into the Urban Chinese Elite, 1949-1996." *American Sociological Review* 65: 191–209.

Wang, Li. 2011. "Exploring the Potential Rationale for the Privatization of Higher Education in China." *Asia Pacific Journal of Education* 31: 421–38.

Woronov, Terry E. 2011. "Learning to Serve: Urban Youth, Vocational Schools and New Class Formations in China." *China Journal* 66: 77–99.

Woronov, Terry E. 2012. "Doing Time: Mimetic Labour and Human Capital Accumulation in Chinese Vocational Schools." *South Atlantic Quarterly* 111: 701–19.

Xinhua News. 2011. "Turning Students into Peasant-Workers to Solve the Problem of Labour Shortage?" *Xinhua Net*, Feb 16.

Table 1 Student background in three vocational schools

	School A	School B	School C
	(Urban)	(Sub-urban)	(Rural)
Number of cases	164	313	343
Have rural hukou	74%	82%	92%
Father with middle school or lower educational level	79%	84%	91%
educational level			
Mother with middle school or lower	82%	91%	96%
educational level			
Parent(s) work in manufacturing sector	36%	27%	33%
raichu(s) work in manufacturing sector	3070	2/70	33%
Parent(s) work in construction sector	33%	35%	44%