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AN ANALYSIS OF THE EMPLOYMENT OF SECONDARY VOCATIONAL EDUCATION GRADUATES IN URBAN CHINA

Abstract

Using the data from the *Chinese Urban Household Education and Employment Survey – 2004*, this article studies the performances of graduates of secondary vocational education compared with the graduates of secondary general education in urban China from the perspectives of social stratification, job-searching spell and the quality of employment. The analysis reveals that students from lower socio-economic background are more likely to self-select into vocational secondary education compared to those enrolled in general secondary education. This difference disappears when they are compared to the secondary general graduates who do not make it to the tertiary education and enter the labor market instead. Furthermore, we do not find statistically significant difference between the two groups of graduates in terms of their income and occupational stratified level. However, the secondary vocational school graduates have a shorter job-searching spell. We suspect it is due to their better preparedness for the labor market. This study intends to respond to the debate in China surrounding the relative merits of general and vocational secondary education.

Key words: secondary vocational education, social stratification, job searching, quality of employment, China

Introduction

Following the change in economic policy direction after 1985, secondary vocational education became, albeit gradually, a strategic focus of educational development in China. The Chinese government proposed that China would meet the target that the proportion of enrolled students in secondary vocational education and in the general high school would be approximately the same. However, although the Chinese government made secondary vocational education a focus since the 1990s, the development of strategic of secondary vocational education has been controversial (Wang & Zhou, 2010). In the course of development of secondary vocational education, disputes about its value and economic return compared with that of general high school education have continued.

Using data obtained from the *Chinese Urban Household Education and Employment Survey – 2004*, this article studies secondary vocational education in urban China from the perspectives of social stratification, the time spent in job-search and the quality of eventual employment. Also the study tries to respond to the controversies and challenges that secondary vocational education has faced.

The author argues that the role that secondary vocational education has played in social stratification in two stages. The first is that of “first streaming”, that is, through comparing enrolled students of secondary vocational school with those of the general high school, it is able to identify who chooses secondary vocational education. The second stage is that of “second streaming”. Here, the author sampled

graduates in the labour market who have completed secondary education rather than enrolled students. This enables to compare the household socio-economic background of graduates from secondary vocational schools with those of the general high school. Through the comparison and analysis of the two “streams”, a more comprehensive and objective understanding of the participants in the two types of secondary education may be obtained. The paper next analyzes the different lengths of job-searching spell for the two types of graduates when they leave school for work. Finally, the paper compares the employment status of graduates from secondary vocational school with those from the general high school from the point of view of quality of employment. This part of the paper is in two sections of which compare income and levels of employment. Finally, the paper will attempt to deepen the awareness of China’s secondary vocational education sector from the above perspectives, and provide evidence for the reform of policy.

Introduction of Vocational Education in China

The system of vocational education in China consists of vocational schools education and non-formal vocational training. China’s vocational education system is provided at three levels: junior secondary, senior secondary and post secondary. Junior vocational schools refer to the vocational education in junior high school stage. The students in junior vocational school should be primary school graduates or the youth with equivalent cultural knowledge and its schooling lasts 3 to 4 years. The secondary level mainly refers to the vocational education in senior high school stage. As the mainstay of vocational education in China, institutions providing secondary vocational education are divided into three categories. The first is the specialized secondary school, the basic tasks of which are to train secondary-level specialized technical skills. The second is the technical school which aims are to train secondary-level generally skilled workers. The third is the vocational high school with the emphasis on training secondary-level practice-oriented or skilled workers at the forefront of production. The three types of vocational schools enroll mainly junior high school graduates for a period of three years (Ou, et al, 2008). With China’s reform of vocational education and the development of social economy, the difference among the three types of second vocational schools has gradually become smaller. At present, to foster students to be the skilled workers in the forefront of labor market is their common tasks. With the schooling lasting two to three years, post secondary education mainly enrolls graduates from general high schools and secondary vocational schools. The tasks of this level of vocational education are to train secondary and high-level specialized technical and management labors needed for China’s economic development. Non-formal vocational training institutions are almost always located outside the formal education system. Although the output of such institutions generally enters the labor market on terms similar to those of graduates of secondary vocational schools, such training institutions do not provide diplomas.

At present, vocational education is mainly conducted and managed by the Ministries of Education and Labor, but enterprises are also encouraged to provide vocational training for its own employees. During the thirty years since economic reform and opening to the outside world, much attention has been paid to the quality and level of vocation education as well as to the efficiency of schooling.

Composed of specialized secondary schools, skill workers schools and vocational high schools, and as the mainstay of vocational education in China, secondary vocational education plays a guiding role in training manpower with practical skills at primary and secondary levels of various types. Developing on the basis of the structural reform of secondary education after China adopted the policy of reform and opening to the outside world and directly coming from the reorganization of regular high schools, vocational high school enrolls junior high school graduates and its schooling lasts 3 years. Its main task is to train secondary-level practice-oriented talents with comprehensive professional abilities and all-round qualities directly engaged in the forefront of production, service, technology and management. Take the year of 2012 as an example, there were altogether 12,663 secondary vocational schools (including vocational high schools, specialized secondary schools and skill workers school), with the enrollment of 21,136,900 students and the recruitment of 7,541,300 students¹.

Vocation education is an important component of the Chinese education system that has been given more attention in the past years due to the scale and crucial impact it has on enhancing national employment and on training a qualified labor force that necessary to boost the Chinese economy.

Research Questions

Enrollment characteristics and outcomes of graduates in secondary vocational education have been a concern of researchers and policy makers in recent years. Over the past decade years, varying projects and investigations have sought to ensure that adolescents who are economically disadvantaged are provided opportunities to participate in secondary vocational programs in China. Students experiencing social and economic disadvantage have been targeted for special assistance in vocational education because they constitute a large part of the Chinese school population. There is a growing consensus that disadvantages in SES can have a tremendous impact on the opportunities of education as well as of labor markets.

A number of benefits can result from involvement in secondary vocational education including increased participation rates of education, enhanced attitudes toward and about work, and less unemployment and better paying jobs for adults who successfully complete secondary vocational programs. However, few empirical investigations have been completed in China to focus on the impact of vocational education programs on the lives of participants after the completion of school.

More empirical studies are needed about the involvement of adolescents in vocational programs in China. This study tries to explore the questions as followings: Does participation in secondary vocational education have an impact on adolescents' work experiences? Comparing their peers involved in general education programs, do adolescents involved in vocational programs have some competitive strengths in labor market after graduation? Answers to these questions would provide policy makers and educational practitioners guidance as they shape the relevant policies and reforms in education of China.

¹ 2012 National Educational Development Statistics Bulletin.

In this study, the secondary vocational school refers to the senior secondary level of vocational education system, which includes specialized secondary schools, technical schools and vocational high schools.

Data

In the study, the survey data, *Chinese Urban Household Education and Employment Survey – 2004* has been used. On April 2005, the Institute of Economic education of Peking University cooperated with the National Bureau of Statistics to carry out an investigation (IEE, 2005). The survey selected 10,000 urban residents from China's twelve provinces including Beijing, Shanxi, Liaoning, Heilongjiang, Zhejiang, Anhui, Hubei, Guangdong, Sichuan, Guizhou, Shaanxi and Gansu, to gather the information about education and employment.

Although each part of the study according to its specific target has its separate sample, the total samples' choices show a common characteristic. That is we selected from senior high school graduates only those who first entered the labor market since the 1990s. China is a transition economy and its market environment was formed formally and stabilized in the 1990s. The purpose of taking the period after the 1990s as the context is to allow us to analyze China's current policy towards vocational secondary education in a more targeted and timely way.

Method

The methods which have been used in different parts of this study are as follows: the social stratification study used the socio-economic status index (SEI), as well as a logistic regression method; the analysis of the period of job search used survival analysis methods; the analysis of income difference and of quality of employment used a Mincer income equation; and the analysis of the level of the quality of employment used a socio-economic status index and correlation analysis.

(In view of the length, this paper omits all models, formulas and charts.)

Empirical Results

1. Types of Secondary Education and Social Stratification

The study considered first enrolled students. Who opts for secondary vocational education in China? Do secondary vocational students come from disadvantaged families? And then, the study explores: Who ended their education at the secondary level? Do graduates in the labour market coming from different types of secondary school have different family backgrounds?

The empirical findings show that in the first "streaming" from junior high school to senior high school, vocational school students mainly come from disadvantaged family. That is family background has an important impact on whether the children enter vocational secondary education. This means that in the first "streaming", such vocational secondary school students have disadvantaged family backgrounds.

And, the data show that after the second "streaming" of college entrance examination, in the labor market graduates with different types of secondary education have no significant differences of family backgrounds. That is, secondary vocational education itself plays an important role in the social stratification, but it is

not the same pattern when the whole graduates entering the labor market is considered. It seems that the type of secondary vocational education didn't play the role as people had expected in the social stratification.

2. A Survival Analysis of the Period Spent in Job-Search

Survival analysis is a branch of statistics, which deals with analysis of time duration to until one or more events happen. With the Survival analysis, this study attempts to answer the question: what is the duration of the different types of education population that will find a job after graduation a certain time?

The data shows that the median time spent by general high school graduates is two and half years, while it is only one and a half years for vocational education graduates. That means the job searching time of vocational education graduates was significantly shorter than that of general education graduates.

3. Analysis of the quality of employment

The study used an earning equation set based on traditional Mincer function. And the data shows that the meaning of the coefficients of years of schooling, experience and experience square are similar to that of the traditional Mincer function, however, the type of education affects graduates' income slightly. And graduates from different types of secondary education have no statistically significant difference in the occupational stratified level. In summary, the above analysis for the quality of employment reveals that in the labour market the income and occupational stratified level for graduates with different types of secondary education have no significant difference.

Conclusion

This study considered secondary vocational education in urban China from the perspectives of social stratification, period of job-search and the quality of employment. First, the study finds that students in vocational education school are mainly from relatively lower socio-economic status families, while graduates who entering the labor market with secondary education level have a similar family background. In other words, students from lower socio-economic background are more likely to self-select into vocational secondary education compared to those enrolled in general secondary education. This difference disappears when they are compared to the secondary general graduates who do not make it to the tertiary education and enter the labor market instead.

Secondly, the data revealed that secondary vocational education graduates experienced a shorter job-searching spell. And the type of education is an important factor affecting job-searching spell.

Thirdly, the study found that in the labor market the income and occupational stratified level for different types of secondary education graduates have no significant difference. That is the study does not find statistically significant difference between the two groups of graduates in terms of their income and occupational stratified level.

From the above conclusions the paper argues that although secondary vocational education students come mainly from relatively disadvantaged families, when considering the whole labour market, the role of type of secondary vocational education plays in social stratification is not as significant as people believed in

China. Therefore, we suspect that it could be the *level* of education rather than the type of secondary education which plays a more important role in social stratification. Secondly, vocational school graduates experienced a shorter gap between school and work. This may illustrate that vocational education graduates have a more realistic psychological preparation and skills adapted for the needs of labour market. Thirdly, the type of education, including income and occupational stratified level, affects the quality of employment slightly; that is, secondary vocational education does not significantly affect the quality of employment.

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