



The Development of Vocational Education in the Process of Industrialization of South Korea

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Abstract

South Korea took only 30 years to industrialise and transformed from a poor agricultural economy to a rapidly developing industrial economy. This achievement based on the education policy which regulated vocational education to accumulate human capital according to the development of industrialization. During such a rapid process of industrialization, the government of South Korea played an important role in coordinating the market labor needs and vocational education. When emerging industries need different levels of human resources, the government can organize national education systems to accommodate the needs. The vocational education system in Korea has been regarded to supply skilled human capital needed for rapid economic development at the right time at the right place. However, the real status of vocational education in South Korea is undervalued. The factors influence vocational education development are variety, this essay will analyze from three aspects: economic impact, political factor and cultural influences with human capital theory applied into analyzation.

Keywords

Vocational education, industrialization, South Korea

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1. Introduction

Hong Kong, Taiwan, South Korea and Singapore have been called ‘Four Asian Tigers’ since 1960s because of their rapidly growing economies in the last century. South Korea was established in 1948 after the civil wars and has transformed from a poor agricultural economy to a rapidly developing industrial economy based on sufficient and high-quality human capital since 1960s to 1990s (Jeong, 1999). It took South Korea only 30 years to industrialise while Britain and Japan have been industrialised for about 200 years and more than 100 years respectively. Therefore, the Korean industrialization can be regarded as a world miracle and the reasons for this success of South Korea are worth exploring. One of the most striking characteristics of South Korean vocational education is its synchronous development with the process of industrialization (Jeong, 1999). In addition, the investment in human capital has always been a top priority for South Korea, which was reflected in the attitudes toward education (Lee, 2001). Therefore, the human capital theory is applied into this essay to explain South Korean industrialization miracle.

In this essay, how the education policy of South Korea regulated vocational education to accumulate human capital according to the development of industrialization will be demonstrated. Specifically, how the government of South Korea to coordinate the market labor needs and vocational education in the process of industrialization will be examined.

2. Human capital as the theoretical framework

2.1 Human capital and education

Human capital theory can be broadly defined that individuals and society achieve economic benefits from investment in people. Additionally, human capital is more about education rather than economic benefits (Schultz, 1961). The investment in people has returns which individuals and society could enhance their economic productivity when the human capital is effectively utilized. It is difficult to separate human capital theory from economic development and education (Sweetland, 1996).

As for the miracle of 'Four Asian Tigers', the development of education and the priority of human capital could explain the rapidly growing economies. Human capital is the most precious asset of the Korean economy growth (Jeong, 1995). Therefore, the role of vocational education in the process of industrialization of South Korea discussed in this essay is mainly based on the human capital theory.

2.2 Human capital and vocational education

It is not surprising to find that vocational education and the theory of human capital both aim to educate individuals with productivity. Schooling and training increase one's productivity and thus one's chances in a free market to obtain higher wages and certainly increase the contribution to the social product. It seems that the increased educational levels in the workforce can contribute to economic growth. As for vocational education, vocational education imparts new skills to the workers, thereby raising the productivity of them (Stevens, 1999). So the aim of vocational education is to cultivate workable labor force by providing knowledge and skills inevitable in the workplaces. Stevens (1999) examines the problems of vocational training policy of the UK by the explanations provided by human capital theory. Therefore, the human capital theory has often been applied to analyse vocational education.

3. The development of Vocational Education in the process of industrialization of South Korea

According to the data from the website of South Korean MOE, vocational education in South Korea is implemented under the formal education system administered by the MOE. The formal education system of South Korea is 6-3-3 system, which the 6 years of primary school education and the 3 years of middle school education are compulsory. The stage of 3 years high school education can be divided into two types, which one kind is general high school and the other is vocational high school. After the high school stage, students could go to 2-3 years vocational college or 2 years polytech college to receive vocational education. Therefore, South Korea's vocational education can be divided into two stages: high school stage and higher education stage.

3.1 Vocational high school and vocational colleges in South Korea

Korean Education Development Institute (KEDI) 2012 defines that vocational high schools in South Korea aim to educate skilled workers equipped with sound vocational awareness and professional knowledge to enable them to cope with rapid changes in the information-oriented industrial society. Each vocational high school specializes in one of the following fields: technical, business/commerce, agriculture, marine, home economics, etc. Vocational colleges were established to deliver vocational education for higher level education. Vocational colleges aim to produce middle-level technicians equipped with a solid base in theories and skills. Specialized courses are offered in the following fields: technology, agriculture, nursing, fishery, health, commercial and business, home economics, arts, nurture, athletics, horticulture, cosmetology, etc.

3.2 Changes in vocational education

The vocational education started to attract the attention of government from the late 1960s because the Korean economy began to grow rapidly and skilled workers and technicians were needed. In the year of 1967, the Korean government established the framework of vocational education and training (VET) system in order to meet the rapidly increasing demand for skilled workers. During this period, Korea put its policy emphasis on vocational education at the secondary level after achieving universal primary education. The government of South Korea undertook fundamental structural change toward heavy and chemical industries such as petro-chemical, shipbuilding, automobile, electric and electronic industry with its third five-year economic development plan period (1972-1976). More vocational high schools and vocational colleges were built invested by the government because the technical manpower was critical to manufacturing industries. In the late 1970s and lasted to 1980s, the development of industrialization entered a new stage,

focusing on the development of heavy and chemical industries. Therefore, there was a high demand for high-skilled workers. As a result of the urgent need to improve the quality of skilled workers, the government of South Korea has carried out a great deal of investment of vocational education and endeavored to increase vocational high school enrollments. The South Korea shifted to technology-intensive industries from 1980s to early 1990s. From then on, the human capital development strategy in South Korea based on quality and there was a high demand for high-skilled workers in the labor market. Therefore, 2-year vocational colleges, polytechnic universities, and 4-year universities were expanded in order to cultivate of multi-skilled technicians.

Generally speaking, the process of vocational education in Korea parallels the industrialization development. The government decided the development of vocational education according to the demand of economic development. Therefore, when emerging industries need different levels of human resources, the government can organize national education systems to accommodate the needs. The vocational education system in Korea has been regarded to supply skilled human capital needed for rapid economic development at the right time at the right place.

4. Analysis

It can be concluded that educational emphases in South Korea gradually shifted from the elementary to secondary school level, and to tertiary education in the process of industrialization. However, it seems that vocational education has never been appreciated as the academic education in South Korea. The Koreans are zeal for education but mainly for the academic education. Although the vocational education played an important role in the process of Korean industrialization, vocational education has not been well accepted by citizens subjectively compared with academic education.

4.1 The real status of vocational education in South Korea

The rapid development of industrialization and economic growth in South Korea are generally acknowledged to be successful. The status and size of vocational education has changed during the period of industrialization as the economy has shifted from labor-intensive to capital-intensive, with a subsequent shift to more reliance on the development of commercial and financial services. In fact, the vocational education experienced many hardship during the industrialisation process. Despite the expansion of vocational high schools and post-secondary institutes, Korea experienced shortage of skilled workers. This raised the need for establishing a national vocational training system outside of formal education. There has been a shortage of skilled workers in Korea since 1980s (Liang, 1999). South Korea's vocational education system is hard to satisfy the demand for manpower (quantity and quality) according to industrial changes. The vocational high school graduates who are trained under the vocational education system are hard to achieve the standard of skilled workers. So it is necessary to explore why the South Korea experienced shortage of skilled workers in the process of industrialization even with the expansion of vocational education. It is helpful to answer this question with identifying the real status of vocational education in South Korea.

Vocational education in Korea has been paid much attention to in the process of industrialization, but has been neglected in recent years as a consequence of the unilateral increasing importance of higher education. The cultural environment in South Korea shows strong disrespect for manual jobs, and therefore the Korean production workers tend to be regarded as low social status regardless of their skill. Moreover, South Korea's vocational education has always been controlled by the state. So the vocational training was set by government planning rather than the actual needs of the firms. So I conclude that the undervalued status of South Korea's vocational education could be explained not only from the government but also the traditional values.

4.2 The economic influences on vocational education in the process of South Korean industrialization

The development of vocational education in South Korea in the process of industrialization is mainly influenced by the industrial demand of labor force. When emerging industries need human resources, the government can organize national education systems to meet the need of industries. For example, when manual labor is needed, basic and secondary education will be expanded; vocational and technical schools are established when technical labor is needed; and the expansion of high technology industries requires an increase of the investment in higher education, especially in the field of science and technology.

When the economic development needs skilled personnel, the vocational education has been expanded in order to supply enough qualified labor force for economic development. These trained talents devote themselves to economic construction to promote further economic development after graduating from vocational education. Economic development can also provide financial support for the development of vocational education, generally speaking, it is a virtuous circle. However, the vocational education is only a tool of industrialization rather than a part of education system.

South Korean vocational education has been developed just because they need skilled labors to achieve the five-year plans. Although Koreans attach great importance to education, academic education has always been the focus of education. At the beginning of the founding of the Republic of Korea, basic education has been developed with recognizing the importance of national citizen quality. When the industrialization achieved the goals and started facing the trend of globalization and fierce competition from other countries, higher education began to be developed.

4.3 The political influences on vocational education in the process of South Korean industrialization

The South Korea government plays a centralized role of planning and management in education. Therefore, the development of vocational education in the process of South Korea is influenced by the economic development but decided by the government. At the central government level, the MOE has primary responsibility over policies and administration for general, vocational, and technical education. The MOE regulates school operations, such as enrollment, fees, curriculum, teacher recruitment, and school facilities.

The government has worked hard to develop the vocational education sector. Efforts include establishing a school-industry linkage, curriculum development based on real labor market needs, restructuring of VET institutions, diversifying pathways to higher education as a stepping stone to a further education system, and fostering a more favorable perception of the VET learners are all critical efforts that are under way. Although the development of vocational and technical schools has been improved because of the support from the government, the rigid central government control is also a major weakness of the vocational education. Even the national policy aiming to engage employers, the educational policies regulated by the government have weak connections with companies. State-dominated vocational training model in Korea results in the lack of effective communication between policy-builders and actual demanders. There is a mismatch between vocational education training provision and labor market needs.

4.4 The cultural factors influence vocational education in the process of industrialization

Confucianism has been widely disseminated in East Asia, and it is an important part of Korean traditional culture. One major feature of the Confucianism is to attach great importance to education. The education in South Korea is influenced by traditional values especially Confucian notions (Sorensen, 1994). Although Confucianism has promoted the education in Korea, it also set obstacles for the development of vocational education to some extent. In Korean traditional ideas, academic education is the mainstream. The parents even push the vocational high schools to improve the proportion of academic courses in the curriculum in order to ensure their children to succeed in college entrance examination. The Koreans believe that vocational schools are less desirable than academic schools. In fact, the employability of vocational high school graduates in Seoul and Pusan has been better than it has been for academic high school graduates. However, general academic schools are still the first choice for most Koreans. Normally, a person with a greater amount of education will be paid more for the same work. Moreover, only those with college education can get the management position in workplaces. These positions can earn more than the best-paid workers. The problems in ideology are not easy to change through policy and financial support, and hard to change in a short time. It is hard to make Korean citizens realize that vocational education as important as academic education. The efforts from the whole society are needed to change the prejudice of vocational education little by little.

5. Conclusion

South Korea attaches importance to the accumulation of human capital. When the economy develops to a certain extent, vocational education should take up a larger proportion, because modernization needs the professional labor force. Vocational education has become the key factors for people to work and promote the development of productive forces. This kind of human capital investment in vocational education is playing a more and more important role in economic development.

The rapid development of South Korea's economy and its industrialization are closely related to the development of education. "Training Koreans with the ability to lead the future" is the goal of vocational education in South Korea. To achieve this goal, South Korea has taken a series of measures and made a lot of efforts for the implementation of these measures. However, the government ignored the demand of the market for manpower. It violated the relationship between supply and demand, and therefore, the quality and quantity of labor force cannot meet the pace of economic development. The government has to harmonize the relationship of market and education and pay attention to the supply and demand of labor force in the market. Moreover, the government should encourage enterprises to participate in the vocational education. In addition, it will take a long time to eliminate the prejudice against vocational education.

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