

Research 2018

Direction and Strategy of Human Resource Development Policy in the Future Environment

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1. Overview

The purpose of this study is to explore the direction and strategy of human resource development in response to changes in future society. The major social change factors of the future are three: 1) technological progress by the 4th industrial revolution, 2) changes in population structure due to low fertility and aging, and 3) accelerated international division of labor and formation of a global value chain. We also examined the impact of these three factors on human resources development.

In order to characterize the formation of human resources in Korea, we first examined the institutionalization process of human resource formation in Korea. In order to clarify the characteristics of the human resource formation model, we first compared the process of human resource formation in the United States, Germany, and Japan.

In order to gain implications for human resource development direction and strategy formulation in Korea, we surveyed cases of foreign countries. In the case of foreign countries, we analyzed the following: 1) state-led human resources development strategy in Singapore; 2) US-Australia industrial-academic collaborative human resource development strategy; and 3) human resources development strategy in Japan.

In order to establish human resources development direction and strategy, Delphi survey was conducted for experts in each field. In order to validate the results of the Delphi survey, we conducted a questionnaire survey of 141 professors from academic and business professions.

2. Influence of future environmental change

The impact of the Fourth Industrial Revolution on human resource development can be divided into two major categories. One is the reduction of existing jobs, the creation of new jobs, the change of jobs of existing jobs, and the other is the innovation of the

education system to foster creative talents in the fourth industrial revolution era. 57% of all jobs in Korea belong to the high risk group, which is highly likely to be replaced by future technological progress. In order to cultivate future human resources, IT - based education environment and related subjects are designated and operated in school education and introduced the competency - oriented curriculum through 2015 revised curriculum.

The changes in the population structure due to low fertility and aging are due to the decline of the youth, the increase of the elderly, and the decrease of the productionable population. The increase in older people will account for 42.5% of the total population by 2065.

As a result of changes in the demographic structure, the service industries of the younger age group were reduced in number of jobs, the retirement age was extended in connection with pension issues, and the necessity of lifelong vocational education and training was provided for the elderly.

The impact of the global value chain is manifested by deepening the division of labor between countries. As a result of analyzing Korea's total exports and value-added exports, the total exports of transportation equipment, electrical machinery, and machinery industry, which are the three main industries, account for 75.5% of total exports by 2014, but their share of value added exports is 46.8% Only. On the other hand, the value added exports of the service industry, which account for 11.0% of total exports, account for 33.2%.

Looking at the share of employment by industry, the proportion of employed persons in agriculture, forestry, fishery, mining and manufacturing is steadily decreasing and the proportion of service industry is increasing. It is analyzed that the service industry has a larger proportion of value added exports than that of total exports. In addition, although the share of workers in production is decreasing, the share of white-collar workers is increasing, and the share of high-skilled office workers has increased significantly.

3. Characteristics of Human Resources Development in Korea

Based on high social trust as a typical high-skilled society, Germany is cultivating high-level human resources through apprenticeship system combined with on-site education and vocational education, and maintains high manufacturing competitiveness based on this. The United States is leading innovation around the world based on high scientific and technological level through industry-university cooperation with research-oriented universities. However, due to the high flexibility of the workforce, skilled manpower is falling, and scientific production management techniques that complement them are highly developed. Japan is cultivating enterprise-centered functional manpower through high educational level, general competence level and Japanese familistic corporate culture, and

investment in higher education is increasing recently. These three types of human resource formation models are formed on the unique socio - cultural background of each country.

The formation of human resources in Korea has fostered human resources with high education level due to high education heat, collapse of class structure due to the Korean War, trial-oriented fair entrance examination and bureaucratic selection system, and short-term explosive school expansion. In the process of training human resources in Korea, the supply of human resources with a high level of academic ability is considered to be a factor of competitiveness rather than the demand of human resources leading to the supply of human resources. The world's highest level of tertiary education enrollment has made it possible to supply human resources with a high level of general competence, and on this basis, OJT alone has been able to maintain its competitiveness. However, PIAAC analysis shows that over time, depreciation is significant, necessitating job training at the enterprise level.

4. Foreign Case Analysis

Singapore's 21st Century Competency and Student Performance Outcomes transformed schooling into competency-based education as a representative achievement of Singapore's efforts for 21st century competency education. The Skills Future Movement, which began in late 2014, focuses on the development of skills related to the future and emphasizes the development of lifelong learning and skills. In order to prepare for the 4th Industrial Revolution, the Research, Innovation and Enterprise 2020 Plan was established.

The human resource development model of industry-academia cooperation in which companies participate directly as a subject of human resource training attracts attention. A typical example is P-TECH, an IT professional school founded in September 2011 by New York City, New York City University and information technology (IT) company IBM, which cooperates with high school and college education. It is a model to nurture professional manpower. This model is being tested in 14 schools in Australia.

Japan entered an aged society more than ten years earlier than we are. Japan can find an alternative to the low fertility and aging of Korea through a strategy for aged society. The Government of Japan requires the employer to carry out one of the retirement age, the introduction of the continuous employment system and the abolition of the retirement age in order to secure stable employment until the age of 65 through the amended Employment Security Measures for the Elderly. , Subsidies for securing the employment of senior citizens, and subsidies for the creation of joint employment opportunities for the elderly

5. Direction and Strategy of Human Resource Development

Based on the results of this analysis, it is suggested that the direction of human resource development should include: 1) securing the efficiency of human resource development, 2) expanding social capital, 3) establishing human resources development strategies linked to the industry, 4) And the consideration of the inertia of the existing system.

Human resources development strategies are as follows.

Strategy 1: Expansion of social capital for social integration

- Activation of information disclosure in human resources development process
- Secure labor-management dialogue channels
- Strengthen civic education for social capital expansion

Strategy 2: Establish human resources development system by lifetime

- Admission system reform to respect diversity
- Improve teaching and learning methods that respect practical learning experiences
- Reorganization of curriculum focused on future competency
- Revision of vocational education in preparation for future technology change
- Universities specialize in securing higher education competitiveness
- Establishment of lifelong vocational ability development system for social change (fourth industrial revolution and demographic change)

Strategy 3: Training future talents based on industry-university cooperation

- Industry-Academia Collaborative Vocational Education Composition
- Activation of industry-university cooperation between companies and universities
- Industry by Region - Education - Innovation Cluster of Enterprises
- Establishment of business-university-affiliated entrepreneur support system

Strategy 4: Develop inclusive skills

- Job turnover and career development for former employees
- Elderly skill development
- Vocational Skills Development

Strategy 5: Establishing state-led human resource development infrastructure

- Establish legal and institutional grounds such as Human Resources Development Basic Law
- Expansion of Human Resources R & D Infrastructure

- Expansion of Statistics Infrastructure for Human Resources Related Information
- Central - Regional Human Resources Development Committee established

6. Conclusion

We will suggest the following through the analysis results so far.

First, it is the establishment and implementation of a strong country-led human resources development strategy. It is possible to grow autonomously based on the market economy in a country with a lot of resources such as the United States and a rich capital, but in countries where resources are lacking like Korea, it is necessary to develop and manage human resources led by the state for efficient management and utilization of resources.

Second, the importance of expanding social capital as part of human resource development. The reason for the success of the apprenticeship system in Germany is not the excellence of the apprenticeship system itself but the trust of stakeholders who support and support it. Third, it is strengthening the vertical and horizontal connection of human resource development. Vertical linkage is the link between the processes leading from elementary school to middle school, high school, university, and job to maximize performance. Horizontal linkage is the linkage between industry, job, education, and training. Between the school and the labor market, linkages between human resource development stages, including mismatch issues, are prerequisites for more efficient human resource development.

Fourth, expansion and utilization of information statistics infrastructure. Compared to the past, various information and statistical data related to human resource development have been utilized, but there is no organization that manages and integrates them, and data are not available.