



VIETNAMESE HIGHER EDUCATION AND THE KNOWLEDGE-BASED ECONOMY

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I. MAIN FEATURES OF THE KNOWLEDGE-BASED ECONOMY LOOKED FROM EDUCATION ASPECT

The knowledge-based economy is flourishing in developed countries. In the globalization trend, modernizing the economy and building the knowledge-based one have become a must to developing countries. Each country chooses its own way. Vietnam considers accessing to and integrating into the knowledge-based economy by the shortest cut as both a challenge and an opportunity. To work out ways of accessing the knowledge-based economy, especially for persons working in the education service, it's necessary to understand its main features and contents.

As everybody knows, various concepts and definitions of the knowledge-based economy have been introduced along with different approaches to the problem. We want to limit to main features of the knowledge-based economy in order to set the view on, and approach to,

Vietnam's integration into it and relations between these features and the formation of education philosophy suitable to the new economy.

- The knowledge-based economy is the post-industrial economy reaching a high level of development and directed by knowledge. It produces intellectual products (inventions, skills, creative works, etc.) based on high technologies and has profound impact on the economic growth and the whole economy as well.

- Knowledge has become a main resource of the economy that determines the development of productive forces. In other words, science has become a productive force with great impact on the socioeconomic development process.

- Knowledge is considered as both capital (or capital good) and dynamic of economic growth and like capital, it needs to be accumulated and plays the role as a precondition, basis and dynamic of all economic activities as the capital does in industrial economy.

- Making a product of knowledge available, from invention to application or commercialization stages,

takes a shorter time than what was needed in the industrial economy and that product usually has a greater effect than other products have. Moreover, form of knowledge-based products changes rapidly and their life cycle tends to be shorter.

- In the knowledge-based economy, products tend to be information-intensive. Knowledge becomes a "special and most wanted commodity" because the IT and knowledge transfer account for the best part of market shares.

- Knowledge directly controls most economic activities, therefore it changes the structure of labor in which the "direct production" industries lose their shares to such "non-material" businesses as software, banking, finance, communications, insurance and other professional services.

- Educated labor is a basic feature of the knowledge-based economy, so the development of this economy is also the process of making laborers more skilled and educated, and a knowledge-based economy is really a learning society. This affirms the decisive role of the education service.

From the above analyses we can come to the conclusion that the human knowledge, in the knowledge-based economy, penetrates and affects directly all activities in the society. Therefore investment in human resources is very important and it is also investment in development and the future. This idea poses a great burden on the education service. In other words, the education plays a pivotal role in the knowledge-based economy, and the economic development depends a lot on the education service, especially the higher education.

II. INEVITABILITY OF VIETNAM'S INTEGRATION INTO THE KNOWLEDGE-BASED ECONOMY

There is a division of opinion when talking of the knowledge-based economy in Vietnam. Some thought it's too early to mention the knowledge-based economy to such an underdeveloped country as Vietnam (one of the world's ten poorest countries where there is no technology-intensive industry, intellectuals represent only a small percentage and 80% of the population live on agriculture). This opinion is undeniable. The globalization, however, has posed a matter of life and death for Vietnam and forced us to work out our own way to development because Vietnam is no exception.

Thinking through, the present economic reform in Vietnam is an effort to take a short cut to integrate into the world economy. To do it successfully, Vietnam has to carry out its modernization and industrialization program at two rates: a gradual and a rapid ones, that is, Vietnam has to combine industrial development with the building of the knowledge-based economy by applying the newest advances in technology. Thus, to avoid lagging farther behind other countries and integrate into the world economy, we should think of the building of the knowledge-based economy right away with a view to setting preconditions and directions for the new economy. To miss this chance means a wider gap between Vietnam and the modern world.

These preconditions and directions should be connected to the organic relationship between the open economic policy adopted jointly by the Government and VCP with the fast development of technologies and a new policy giving top priority to the education service.

In short, economic integration and knowledge-based economy is an

inevitable trend for all developing countries, including Vietnam, in which the education plays a decisive role.

III. DIRECTIONS AND IMPORTANT TASKS FOR THE EDUCATION SERVICE IN THE DEVELOPMENT OF KNOWLEDGE-BASED ECONOMY

What are mentioned in part II reflect great burdens on the education service when Vietnam accesses and integrates into the world knowledge-based economy. From this reality, we could set forth some overall directions and tasks for the education service in this process.

1. Overall directions for the education service

Because of the close and organic relationship between education and training, we should think of overall directions for the education service before working out tasks for the higher education sector. These overall directions are:

- Beefing up the public education, raising the public intellectual level by making it compulsory for citizens to complete the primary, and then secondary, education according to local conditions.

- Combining universal education with human resource training and development of talented persons in a strategy suitable to steps taken by Vietnam in the process of international integration.

- Forming a reasonable structure of education authorities (vocational training, higher education, post-graduate education, etc.) and a structure of education methods appropriate to the revolution in technology and economic management.

2. Directions for the higher education system

Based on these directions, we can work out appropriate directions for the higher education system. This system, in the process of accessing the knowledge-based economy, should aim at the following targets.

- Keeping on reforming the structure, objectives, curricula and methods of higher education with a view to approaching international education system.

- Combining optimally development of human resource for industrialization and modernization with creation of highly skilled labor for the process of approaching and integrating into the knowledge-based economy.

- Taking all possible measures and education forms to produce the highly skilled human resource for taking a short cut to the knowledge-based economy.

To achieve these targets, the higher education service should concentrate on the following directions.

- a. Reorganizing the higher education service:

- Developing national and community universities in provinces ensuring necessary and sufficient conditions.

- Building multidisciplinary and community colleges, or advanced schools, in provinces in order to meet local demand for trained laborers.

- Developing the system of national universities specializing in training highly skilled human resource, especially in high technologies: This measure requires appropriate investment in campuses and facilities for study. In addition, the education authorities had better ensure some autonomy for universities in order to encourage creativity and activeness in both teaching staff and students.

- b. Establishing a reasonable relationship between basic training and technological application and development:

In this system, the basic training sector will produce researchers. This means that the entrance examination should be organized strictly and preferential treatment should be offered to learners, and after training, learners should be provided with jobs appropriate to their ability. The process of training basic researchers aims at helping them grasp and keep abreast of latest advances in science and technology, know how to work out a techno-scientific strategy suitable to the industrialization and modernization program and get access to the knowledge-based economy.

As for the training of experts in technological application and development, full attention should be paid to the most important fields, such as information technology, biotechnology, new materials and energy, and automation. At present, we have enough bachelors but we are badly in need of real experts, especially those who can work in the above-mentioned fields. Training the army of experts in technological application and development is the shortest way to the industrialization and modernization, and the knowledge-based economy as well. Besides these experts, we also need managers who can control and direct economic ac-

tivities at both macro- and micro-economic levels. The training of experts in the above-mentioned fields is central to the strategy to build the knowledge-based economy under present conditions in Vietnam.

c. Cooperation with foreign education institutes:

This cooperation aims at approaching and absorbing new knowledge, and training highly skilled labor force for Vietnam. The cooperation program provides both graduate and postgraduate education for learners and is divided into two phases: phase 1 in Vietnam and phase 2 in foreign countries. This measure helps absorb new knowledge and methods from foreign universities and introduce them to local economic activities.

d. Grants-in-aid for overseas studies:

Many educators have mentioned this for years because of its great importance but it was only carried out in 1999. To develop skilled labor force by overseas studies is the best way to access and penetrate into the world of human knowledge. However, education authorities should find out the most effective ways to carry out this measure by paying full attention to the following factors:

- Selecting foreign countries with leading positions in fields Vietnam wants to study.

- Giving top priority to the above-mentioned subjects and fields really needed for Vietnam in its process of accessing the knowledge-based economy and integrating into the world market.

- Ensuring a balance between the output of postgraduate and of graduate learners (or experts in technological application and development): At present, most grants-in-aid are used for financing postgraduate courses and only a small proportion is used for graduate ones. We should remember that under current conditions in Vietnam, the shortest cut to the modern world is to develop the army of experts in technological application and development. Up to now, Vietnam still suffers a shortage of skilled laborers and a surplus of officials. So all opinions should be considered with a view to using the grant-in-aid economically, optimally and reasonably.

e. Self-help overseas studies: This could be considered as investment from the private sector and the Government should take action to orient this investment towards planned targets and provide some support for learners who make self-help studies abroad. In addition, the Government

should accept that some of these learners would work for foreign companies after graduation. This is a double-edged problem. To persuade them into returning home and helping with the national development, the Government should adopt open and progressive policies on equal and preferential treatment. These overseas students could be seen as potentials for modernization and international integration.

f. Reforms in university training methods:

Training methods used by most universities in Vietnam are obsolete. Some of their shortcomings are:

- Knowledge and skills supplied aren't suitable to realities and many graduates couldn't take important positions or do complex jobs.

- The teaching methods fail to encourage creativity and discussion among students because of the one-way relationship between teachers and learners.

- Examinations focus on test of student's knowledge of theories, not their practical abilities, with the result that most graduates didn't know how to solve problems when they were in work.

- Management of training programs fails to pay attention to research work by both teachers and students.

These shortcomings, if not soon overcome, will hinder our integration into the international education system and make the shortage of experts more serious.

g. Use of intellectuals of all backgrounds:

Besides policies on education, the Government should work out policies to employ trained laborers and experts. Right policies on the employ of intellectuals and experts could help prevent the brain drain Asian countries have faced for decades and suffered great losses from it.

IV. POLICIES AFFECTING THE HIGHER EDUCATION SERVICE ON ITS WAY TO THE KNOWLEDGE-BASED ECONOMY

Many policies could affect greatly the development of education service. We want to mention here the most important ones only.

1. Giving top priority to the education development: When considering the education as one of matters of top priority, the Government should adopt corresponding strategies and policies (training strategy, public investment in education, international cooperation in education, etc.) and measures to carry out these strate-

gies and policies. This effort will be a basis for, and dynamic of, the development of the education service and its integration into the world education community.

2. Pursuing the open economic policy based on principles of multilateralization and diversification: The international cooperation on large scale requires a internationalized labor force that could be achieved only by developing the higher education service to high levels. This is the only way to ensure principles of equality and mutual benefit in international cooperation. The development of the open economic policy will be a stimulus to develop the higher education and force this system to meet international standards.

3. Orienting the techno-scientific policy towards the globalization and knowledge-based economy: In the economic globalization, sciences and technology plays the leading role when exchange or transfer of technology become an inevitable need and a factor determining the modernization process of all countries. When the technology and science develops faster and faster, Vietnam and other developing countries should develop and perfect their labor forces. That is why the education emerges as the most urgent problem.

In short, a good techno-scientific policy will be a strong dynamic that orients the education service towards the task of developing the army of highly skilled laborers and talented experts needed for the integration process and knowledge-based economy.

4. Preferential treatment for the talent: To employ the talent effectively is also an important policy because this army plays a decisive role in the modernization and the building of the knowledge-based economy by helping with the training of their understudies and accelerating techno-scientific advances.

In its industrialization and modernization process, Vietnam should prepare necessary preconditions for the new economy and work out a program to take a short cut to the target. This requirement becomes a challenge to the education service, especially the higher education sector. Therefore, this sector should, for the time being, keep on reforming its objectives, structure, curricula and teaching methods, expanding international cooperation and developing the high-quality human resources to fulfil its role in the building of the knowledge-based economy. ■