V&S Digest

The following are abstracts of papers appearing in this issue of ^rVision & Strategy L

Resolving the Education Crisis

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The Korean education system is currently in a crisis. Teacher morale is low and students are unmotivated, while spending on private education and tutoring have soared. Although universities have improved over the last decade, there are still many issues including the undergraduate system, salaries, and professor evaluation methods. In addition, an excessive student population has resulted in far more university graduates than the society needs. Korean universities operate with only 1/5th to 1/10th the budget of universities in advanced countries. There are several things that should be done to help resolve the crisis.

First, university admission should be liberalized. In the current system, every student has to take the same one-day multiple-choice exam to get into university, and universities are strictly ranked by the scores of their students. Korea is the only country where this is occurs. Each institution should be free to decide their own entrance criteria so they can choose their own students according to the institution 's character.

Second, rote learning, multiple-choice style education should be abolished in primary and middle school. Such education does not exist in advanced countries. Students should be able to learn different subjects depending on their ability, instead of the current system where all students study the same curriculum. The US system, which offers regular, honors, and AP courses for subjects depending on student ability, would be a good model. Such differentiation would allow advanced students to study in the same schools as slower students. In addition, education should include reading and writing and experimentation for the sciences.

Third, the quality of university education should be improved. Compared to other countries, Korea has an extremely high number of Ph.Ds and universities, while research output is relatively modest. To improve university education several measures are recommended.

Expanding the number of full-time professors is one of the most urgent tasks, because they currently have excessive workloads. Introducing online education for basic under graduate courses is also needed, and would be more efficient that crowded courses taught by underpaid lecturers. Government funding for universities should also be increased, because Korea 's university budgets are dwarfed by those of advanced countries. In addition, under graduate students should be strictly evaluated and not be allowed to graduate unless they are competent in their major. Finally, universities should focus on only one aspect such as research, or education at the doctorate, masters, or undergraduate level.

State, Market and Civil Society in the 21st Century: Second Generation of Reform

Se-II Park

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The first generation of reform tried to replace politics with the market system in society. The reforms included liberalization, privatization, deregulation, fair competition, transparency, and small government. Presently however, the first generation of reforms are seen as insufficient because they neglected that the state system included interdependent elements such as institutions and politics, history and tradition, and consciousness and culture in addition to the market economy. These elements did not develop separately, but had close and complex relationships.

Second generation reform refers to changes that are not merely technical, but that include the state, market, and civil society as well as their relationships. The first task of second generation reform is to raise state capacity, market maturity, and civic competence to their highest possible levels. The second task is to promote symbiotic, cooperative, and balanced relationships between these sectors. Currently, these three sectors have not been adequately developed in Korea.

State capacity consists of five elements, including institutional capacity, policy capacity, administrative capacity, crisis management capacity, and learning capacity. Market maturity can be divided into two elements, market institutions and market culture. Civic competence includes two types of institutions, citizens 'movements and independent think tanks.

To successfully improve the capacity of the three sectors and their relationships, several measures need to be taken. First, technopols or bureaucratic entrepreneurs need to gain influence. These may include reformist scholars, professional managers, and technocrats. Although there are many idealistic academics as well as conservative and authoritarian bureaucrats, there are few policy specialists who can harmonize ideals with reality. Graduate schools for national policy should be established to train such professionals, In addition, numerous independent think tanks for national policy research should be founded.

A policy-centered reform of the politics is also needed. Rather than an unprincipled reform to maintain political power, reform should focus on national goals or strategies for development.

Policy professionals and policy-centered reform should harmonize with civil society for successful reform. This would help form a public consensus for second-generation reform, which should be pursued in an orderly manner. Factors such as tradition, history, culture and consciousness should also be understood and harmonized into the reform efforts. In addition, reformers should try to persuade and accept the existing political and bureaucratic forces.

Society, and prosperity of the global community in addition to national gains. This is essential for Korea to be recognized by the international community as an advanced country.

Crisis of the Public Education System

Don-hee Lee (Former Minister of Education)

A brief look at Korea 's public education system would be enough to reveal major problems. Students attend school but do not learn what they need, want, or are able to learn. Violence and bullying are common, and for many students school is a place of suffering instead of learning. Although there are many factors that led to this situation, one cannot deny the existence of deep flaws in the public education system.

In addition to its internal problems, the public education system needs to adjust to external changes. First, postmodernism is posing a fundamental challenge to the validity of school education. Second, the contemplative tradition of liberal education is being challenged by the information society, which emphasizes interpersonal skills and pragmatism. Third, the advance of information technology may threaten the existence of conventional classrooms and teachers, and some argue that public education has become obsolete.

Besides the three external changes mentioned above, the public education system may be under its most severe trial ever, and needs to undergo painful restructuring to fulfill its beneficial role to society. The most urgent and important task for the education system is to increase flexibility and openness.

Korea is trying to pursue a neoliberalist education policy. Liberalism emphasizes freedom, as well as competition under the market mechanism when resources are scarce. Currently, liberal values have not been fully achieved in the educational sector in any country. Korea 's education reforms are thought to be neoliberalist in that they pursue an open, and demand-focused education system, a flexible and responsible organization, and government evaluation of education offices and universities.

Despite the reform efforts, the education system is currently seen as extremely inefficient and wasteful. Because it is bureaucratic and run by the state, it is unable to quickly respond to the demands of students and their parents. Although some argue that a market-based educational system would improve quality, such a system may result in problems such as excessive competition, wasteful advertisement, or price cartels.

Korea 's education system is currently run by the central government and is under numerous laws and regulations. Schools depend on the central government for funding. In addition, the national education curriculum restricts the freedom of schools to create their own programs, and teachers are evaluated by government standards. For liberalism to hold in the active sense, education should be meaningful to each individual.

Korean Economy 's Growth Potential

Bong-kyun Kang

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According to a report by the OECD, there are several factors needed to increase a country 's long-term economic growth. In addition to a stable macroeconomy, dynamic growth requires investment in information and communications technology (ICT), improvement of human resources, technological innovation, and active venture startups. These factors are highly interdependent and a different policy mix is needed for each country. Since the factors also apply for the Korean economy 's potential growth rate, Korea 's policymakers should give them high priority.

Information and communications technology will be the greatest factor in improving Korea 's growth potential. Korea currently has telecom networks, an ICT production base, ICT exports, and Internet use that are at the level of advanced countries. This advantage needs to be used to overcome Korea 's bottlenecks in other areas.Deregulation, liberalization, and increased competition are needed to expand and promote ICT investment. However, some regulation is needed to protect consumer rights and security.

R&D for technological innovation needs to be promoted through protection of intellectual property rights, but excessive protection would actually hinder the expansion of knowledge. In addition, the government should promote research and development in basic sciences which are the groundwork for future innovation.

Lifetime education is one of the best strategies for developing human resources. Basic education should be reinforced, the educational system should be streamlined, and more investment should be made in early schooling. The linkage between school and job activity should also be strengthened to spread new technology that arises in either area.

Technological advances such as ICT and biotechnology promote business startups, and new businesses contribute to multifactor productivity. Business startups have been more frequent in countries such as the US where venture capital is highly developed. To increase funding to venture businesses, venture capital should be actively promoted, the tax structure should be reformed, and markets for the sale of assets should be developed.

In addition to the above factors, overall economic conditions need to be sound for sustained long-term growth. Intelligent macroeconomic policy, continued opening, and an appropriate mix of the market mechanism and policy are needed. Most importantly, economic restructuring should be consistent in the long term, although flexibility will be needed to maintain short term macroeconomic stability.

Korea can achieve a strong rate of long term economic growth if it adopts the five policies recommended by the OECD in a thoughtful policy mix.

Era of Fusion Technology: Development Strategy and Acquiring Competitiveness

Ho-kun Park (President, Korea Institute of Science and Technology)

One of the key characteristics of the present technological environment is the fusion of different technologies. The boundaries between different technologies are disappearing, as well as the barriers between pure and applied science. Today 's new growth industries, such as biomaterials, mechatronics, and DNA chips, rely on the systematization and fusion of existing technologies. Competitiveness in the future will be determined by how well one innovates in such fusion technologies.

Fusion technologies can be classified into three categories depending on whether they combine two emerging technologies, an emerging technology and an existing technology, or two existing technologies.

In which category of this fusion technology trend should Korea try to gain competitiveness? Korea should not neglect any of the three categories, and should try to fuse its key industries such as autos, shipbuilding, and steel with new industries such as information technology and biotechnology. Korea should also explore the fusion of new technologies because they will have an enormous effect through the entire industrial spectrum. In addition, even the advanced countries have not done much research in these new fusion industries.

It will be difficult for Korea to become a technologically advanced country if it focuses exclusively on one field such as information technology, biotechnology, or nanotechnology. In light of the fusion technology trend, it will be impossible by definition to become the best in one industry at the cost of the others.

To effectively develop fusion technology, new approaches and research methods are needed. First, R&D capacity should be concentrated at the national level. Since fusion technology is a new trend, a concerted effort between government, academia, and research could result in next generation industrial competitiveness. Secondly, R&D should make a transition to a networked and open system that may include acquire-and-develop or connect-and-develop schemes.

Third, a scientific and systematic management system for R&D should be introduced. New concepts in R&D management include technology roadmaps and technology portfolios. Finally, considering that market performance is affected by marketing as well as research, businesses should take a strategic approach to fusion technology. Companies should try to acquire related technologies in addition to their core technology.

Although Korea achieved rapid economic growth over the last fifty years by adopting mature technologies, it needs the capacity to innovate technologically to enter the ranks of advanced countries.

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