Understanding Korean Education

Vol. 4 Higher Education and Lifelong Learning in Korea



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Korea has achieved remarkable economic development from the 1960s- known as the "Miracle on the Han River"- through the implementation of growth-oriented economic policy. As illustrated by the 2006 World Bank statistics which showed Korea's GDP to be the 13th largest in the world, the growth has been spectacular.

With few natural resources at its disposal, Korea's achievement in joining the ranks of the high-tech nations of the 21st Century was due to its human resources. The driving force behind the astounding growth of Korea is education.

For this reason, many nations have taken an active interest in sharing in Korea's experience in educational development, resulting in many foreign nationals visiting Korea for this purpose with demand for study tours to Korea's education-related organizations growing every year. The experience of Korea's education that has played an integral part in the nation's rapid economic progress has indeed become a benchmark for many developing nations.

To satisfy this demand, the Korean Education Development Institute(KEDI) has, with the backing of the Ministry of Education and Human Resources Development, published the series "Understanding Korean Education". This series of volumes was published to effectively provide visiting education policy advisors, educations experts, and other education professionals interested in gaining an understanding of Korean education, with a summary and information on the process of Korean educational development.

This series consists of 5 volumes. The first volume is 'School Curriculum in Korea' and presents current school curriculum in Korea, the development process of national curriculum, and the process of textbook certification.

The second volume is entitled 'ICT in Korean Education'. It describes important aspects of ICT in Korean education and discusses further development of ICT in Korean education.

The third volume entitled 'School Education in Korea', deals with childhood education, primary and secondary education, teacher policy, special education.

The fourth volume, 'Higher Education and Lifelong Learning in Korea', deals with reform in Korean higher education, and lifelong learning systems such as air and correspondence high schools and the academic credit bank system. In addition, it covers social capital and HRD, which are currently prominent issues internationally.

Finally the fifth volume, 'Education and Korea's Development', examines the role education has played in the economic development of Korea. Volumes 3 to 5 consist of literature used for study tours and international seminars that have been edited for the purposes of this series.

As far as possible, I hope this series can go some way into aiding foreign nationals seeking understanding of Korean education. My thanks go to the authors and members of the International Cooperation Team at KEDI, whom in the process of planning, editing and publishing this series, have spared no effort.

Koh Hyung-yeal

Hyung Yeel Koh President Korean Educational Development Institute

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Chapter 1

The Development of Higher Education in Korea*

The increase in trade between countries as promoted by the WTO and the FTA is the main driving force of cross-country exchange for higher education and, in the education service sector, higher education is the main negotiation target (Lee et al., 2002; Yoo et al., 2004).

Korea is seen as an attractive international education market due to people's passion for better education and, in fact, some foreign universities are attempting to establish branch schools in Korea (Kim et al., 2005). In response to such demands, the local universities are attempting to achieve overseas expansion by collaborating in programs branch schools with countries like China or Vietnam who have a comparatively greater interest in Korea (Lee et al., 2005).

^{*} This paper was introduced in Yoo et al. (2006). Strategies for International Education Cooperation. Seoul: Korean Education Development Institute.

Main policies for higher education in Korea

Korea has managed to achieve the 'generalization stage' in a period of 50 years, even with the lack of Western universities' influence during the Korean War. This paper explores in the following sections, key policies that have contributed to the growth of Korea's current higher education.

In Korea, higher education developed under the influence of government policies, unlike the American or European universities that developed on the basis of autonomy. Therefore it is necessary to put an emphasis on what initiatives the government displayed in the development of higher education.

The 1st stage: Before the 1980s

The main task of the higher education policy, starting from the Korean War (1950-53) to the 1960s before President Park Jung-Hee came to power, was to make a model for Korean universities that would be different from the model implemented during the Japanese colonial rule. During that time, aid for higher education was mainly achieved through assistance from the U.S. The establishment of Seoul National University as well as other regional public universities (7) contributed to higher education of distinguished students through inexpensive tuition.

From the 1960s to the 1980s, higher education was developed with a close link to economic growth. The government, led by President Park Jung Hee, planned and managed the number of university students in order to produce labor that would fulfill the "5-year economic development plan." This can be evaluated as the road map for the modernization of Korea's economy.

In particular, according to the Fourth 5-year Economic Plan ('77~'81), there was an average increase of 2,300 university students

every year (Ministry of Education and Human Resources Development, 2005). Also, the foundation for the specialization of engineering colleges was created by promoting 'National Enterprise for Engineering Colleges ('77-'80)' and investing a massive 20.3 billion won in regional public universities (Ministry of Education and Human Resources Development, 2005c).

The 2nd stage: 1980s to the mid-1990s

Whereas the former period was the period of establishing higher education policies based on manpower planning, the 1980s through mid-1990s was the period actively reflecting the social demand for higher education (Chae et al., 2006).

By the early 1980s, the number of students entering university had increased sharply inducing a "limitation on the number of graduates," granting graduation to only 70% of entering students to manage the quality of education. This was to solve the problems of excessive extra-curricular learning in preparation for college entrance exams as well as the accumulation of students retaking the exams. The extra-curricular learning was a result of the equality policy, which gave all students, regardless of school, equal opportunities to be accepted. However, the graduation exams were soon abolished because of fierce resistance by students who had failed them.

Since then, with reference to policy failures of the past, the government carefully chose different strategies such as the establishment of new universities opposed to increasing the number of students, upgrading the status of schools (Korea National Open University, University of Education, and other colleges), the establishment of regional branch schools, and the establishment of novel types of universities (open university and Korea National University of Education). 12 Higher Education and Lifelong Learning in Korea

In this context, Korea National Open University and the self-study bachelor systems were introduced for people who had missed education opportunities due to economic hardship.

The 3rd stage: After the mid-1990s and prior to the present government

During the period between the mid-1990s to 2003, prior to the establishment of the current government, the expansion of higher education opportunities and an autonomous and open higher education system were made with a vision for lifetime education. Policy direction was well-described in the "5.31 Education Reform" announced on May 1995 by the Presidential Council of the "Education Reform Committee."

The plan included a consolidation of higher education and lifelong education by initiating the lifelong study period, increasing the autonomy of universities, and providing distinctive governmental support according to the results of competition between universities. Hence the "Credit Bank System" was introduced to subsidize a bachelor's education degree, by approving credits not only from universities but also from various educational training institutions. Also, a "standard policy for the establishment of universities" was proposed to authorize the establishments of universities that fulfilled the necessarv requirements. In addition, policies suggesting the diversification of universities and specialization as well as a policy for special graduate schools were proposed. These can be summarized in Table 1-1 (Ban, 2003).

The 4th stage: The present government (2003 to present)

Ever since the present government has come to power, it has concentrated in taking counter measures to address drastic changes within and outside the higher education system that started to appear since the foreign exchange crisis in 1997. In particular, one of the agendas that the current government has to solve in higher education development is the decrease in the potential number of students caused by the rapid decrease in birth rates. Other agendas include a higher education system that does not correspond to the demands for national competitiveness and the widening gap between the metropolitan and local universities.

In order to prevent the decrease of student resources, structural reform projects targeting both national and private universities are being promoted.

| Classification | Main challenges | Challenges in detail | | | |
|---|--|---|--|--|--|
| 1st Report by the Education Reform Committee (95.5.31) | Construction of institutional foundations for open education systems | Introduction of academic bank credit system Execution of flextime student registration system Introduction of minimum major acknowledgement systems Establishment of national multimedia education support centers | | | |
| | Diversification and specialization of universities | Diversification and specialization of university models Establishment of specialized graduate schools Autonomy in the establishment of | | | |

Table 1-1. Action Plan for the Preparation of Higher Education Policies as Recommended by the Education Reform Committee

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| | | universities, number of entering students, and school operating systems Prestige in scientific research (Consolidation of university evaluation and financial support) Globalization of university education |
|------------------------|---|--|
| | University entrance system to alleviate the financial burden | Inducement of expansion reflecting the ratio of school records in entrance examinations Use of questions/material from the standard curriculum for the National college entrance exam |
| 2nd Report (96.2.9) | Construction of education systems for new job opportunities | Revitalization of vocational education in colleges, open universities, and technical universities Introduction of new universities Introduction of bachelor degree system for specialized vocational training |

Also, in order to improve the suitability of research in higher education, the key to national competitiveness, the 2nd Brain Korea, 21st Century program (2006~2012) is being put into effect. For the development of regional balance, a plan called the New University for Regional Innovation (NURI) is being implemented nationwide.

Analysis of current Korean higher education

The qualitative standards of education in Korea are generally improving. The quality of research is improving as a result of the BK 21 program, and it shows in some areas such as life science. However, there are many cases where people with Ph.D.s from the local universities are advancing to overseas universities for admittance into research institutions. Also, there is an increase in the number of Korean universities, according to a global university evaluation conducted by foreign journals such as The Times, showing excellent results (http://www.thes.co.uk).

Furthermore, the 'globalization of higher education' programs that have substantially influenced the ODA in the higher education field are improving, due to the government support of overseas students as well as the autonomous efforts by universities. As a result, the number of foreign students and professors attending Korean universities as well as English lectures are remarkably increasing. Such facts show that Korean universities are gradually gaining global competitiveness.

Moreover, masses of elementary education projects which are being promoted by the Korean government to enhance the balance and convenience of higher education are obtaining comparatively good results. The 'BK 21 Program' can be represented as a business intended for convenience, and 'NURI' can be represented as a typical higher level business aimed at promoting balance.

Whereas the 'BK 21' puts an emphasis on the cultivation of research labor for higher education, the latter is an uplift of the education capability of the local universities to support business, with the aim to balance the regional development. Both businesses encourage autonomous participation of the universities through financial aid and are being greatly appreciated by universities nationwide (Kim et al., 2005; Yoo et al., 2006).

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Along with the above-mentioned projects, the Credit Bank System, a higher education system currently being operated, has gained the interest of developing countries. The Credit Bank System is a systematical foundation for the implementation of the lifelong study system. It fairly and institutionally acknowledges the outcomes of study, not only from formal education but also through informal education outside of school.

Globally there are many countries that have implemented the Credit Bank System, but Korea is being evaluated to have been operating it efficiently. In addition, the 'Korea National Open University Model' or 'Self-Study System' which provide higher education opportunities to the low-income and low educational background class could work as valid models for developing countries that are looking to expand higher education opportunities for low costs in a short time period.

However, Koreas higher education still has some aspects to be improved. First of all, although the international level of the research has been improving, very few domestic universities are included in the top 100 universities worldwide. Also, in terms of attracting foreign students, the base for globalization of local universities is still weak. Also, compared to the West as well as nearby countries like Japan or China, Korea is less attractive as an international labor market. There have been many complaints from industrial personnel and the Federation of Korean Industries due to the low quality evaluation of higher education in Korea. Furthermore, due to the inconsistency of the supply of higher education graduates and the national labor supply, juvenile unemployment problems and labor shortages result. Specialized university education is hard to be developed because of the establishment of indistinctive and uniform college departments (Kim, 2005). In particular, the recent decrease in birth rates has led to a rapid decrease in university entrants, threatening the stable

management of universities, which is the basis for the university's competitiveness.

In order to overcome such weaknesses, the universities should put, before everything else, multiple efforts in obtaining domestic competitiveness. If graduates from college are being neglected even by local firms, it would be hard to attract foreign students. Furthermore, it would become impossible to expand the Korean model of higher education to developing countries. Therefore, it is necessary to promote global competitiveness based on the competitiveness of domestic universities.

Example of an outstanding higher education policy

In relation to ODA, the potential for the export of Korea's higher education policies into developing countries can be classified into two segments. The first is composed of the Credit Bank System and Korea's National Open University model, which are the key elements of an open higher education system that aims to build a community of lifelong study. Second, the BK 21, NURI, and industry-academic cooperation business are national governmental projects promoted towards universities. The main contents of each are described below.

Credit bank system

The Credit Bank System, introduced in 1998, is an institutional base for the establishment of a lifelong study system. It evaluates and acknowledges the outcomes of informal study outside of school as well as that of formal education in school. The operational process of the Credit Bank System can be divided into three parts. 18 Higher Education and Lifelong Learning in Korea

First, the student must receive acknowledgement for all the credits he or she has earned in an educational institution that had previously approved the student's course of study. Secondly, as part of the acknowledgement of schooling, more than 140 credits need to be approved for a bachelor's degree and over 80 credits for a college graduate degree. Lastly, is the awarding of the degree. For a college graduate degree, one must have a schooling history of college graduation and must have completed all liberal arts and major courses that vary according to major. For a bachelor's degree, one needs to additionally hand in either a thesis or pass a practical test.

The Credit Bank System was first executed in March 1998 and has grown in terms of number of educational institutions, number of learners, number of curriculum, and the number of people who received degrees. Its current status is as follows.

| Classification | 1998 | 2004 |
|---|--|--|
| Approved educational institutions and the number of curriculums | 181 institutions, 1,294 curriculums | 440 institutions, 13,092 curriculums |
| Development and notification of standard education courses | 41 Majors | 300 majors (General majors 181,key intangible cultural assets 119) |
| Development and notification of syllabi | 167 curriculums | 7,899 curriculums (General majors 3,153, key intangible cultural assets 4,746) |
| Number of enrolled learners | 11,489(1999) | 97,813 |
| Number of awarded degrees | 34(1999) | 21,979 |

Table 1-2. Mid and Long - Term Development Plan for Credit Bank System

Source: Baik et al., Mid and long-term development plan for Credit Bank System", 2004

Korea national open university

Korea's National Open University was established by the government in 1972 to provide opportunities of higher education through a remote educational method. It was established for people who were unable to receive university education for various reasons such as economy, geography, and age. By 2006, it had grown to be a Mega University having 330,000 graduates and 200,000 enrolled students. More than 20% of the graduates are continuing their studies at graduate schools. More than 70% of currently enrolled students are employed and because they can study at any time and place, it is possible to bring study materials to the job. Students attend about 3 classes per semester, during weekends or in the evenings. The Credit Bank System has an individual study system through television lectures and a LOD (Learning-On- Demand) system, which are broadcast lectures.

BK 21 program

The Brain Korea 21 program, introduced in 1999, aims to promote universities' research competence by creating outstanding global graduate schools and by constructing a superior labor cultivation system. In order to achieve this goal, it has invested an annual budget of 200 billion KRW for the last 7 years, amounting to a total of 1,400 billion KRW. It also focuses on creating stable research conditions suitable for studying, of which include the candidates for Ph.D. and Master's Degrees, post-Ph.D. students, temporary professors, etc. The government carries out an annual evaluation of the BK 21 to improve the efficiency of the business promotion. According to the integrated evaluations done at the end of the business year in 2005, the BK 21 Program had contributed to the expansion of universities' research competence 20 Higher Education and Lifelong Learning in Korea

by applying "selection and concentration principles" for the first time in higher education (Ministry of Education and Human Resources Development, 2005d).

For example, the number of SCI-level thesis ranked 18th in 1998, but in 2004 rose to 18th, and the SCI-level thesis of a professor who participated in the BK 21 of scientific technology area had almost doubled during the business year (3,765 in 1998, 7,477 in 2003). Also, through BK 21 Enterprise support towards human resources for research purposes the ratio between professor, including temporary professor and Post-docs, and students was improved. From 1999 to 2004, aid for 3,598 temporary professors and 6,159 Post-docs was provided.

Based on these business achievements, the government will promote the 2nd BK Program from 2006 to 2012 and approximately 2,030 billion KRW will be invested. In April 2006, 74 universities, 243 large business agencies, and 325 small-sized business groups were chosen as supporters and are promoting the BK 21 Program (Ministry of Education and Human Resources Development, 2006e).

The NURI

The NURI (New University for Regional Innovation) is a government-funded program aimed at promoting the strength of regional universities as central institutions for regional renovations. The NURI program supports the building of connections between regional universities and local autonomous entities, enterprises, and research institutes, in order to implement diversification and specialization planning, increase the competitiveness of students in labor markets, and activate the role of local universities.

The program can be classified into two areas: human resources development, which was intended to develop local strategic

industries, and programs related to cultural science, sociology, natural science, and engineering, which are necessary for regional development. The central government will invest a total amount of 1,360 billion KRW over a period of 5 years from 2004 to 2008, and the budget will be allocated to 13 cities and provinces, based on the population, number of students, and number of schools. For the period ending in 2006, a total of 128 business groups were selected to fund this program.

Industrial academic cooperation

The Industrial Academic Cooperation is a key strategy of the Korean government in order to achieve a knowledge-based economy and continuous growth. The goal of the Industrial Academic Cooperation is to maximize the synergy effect for development through the collaboration between universities and private enterprises. The synergy is achieved the following conditions: universities must concentrate on educating human resources that the companies require, companies must reinvest in research development the increased profits gained as a result of hiring employees highly adaptive to jobs, and the introduction of advanced technology (Chang, 2006).

In this context, the present government has completed in 2003 Vision and Strategies for the New Industrial Academic Cooperation and presented the standards for the business policies. The main contents include:

- 1) Construction of a user-oriented, customized, and labor-oriented system
- 2) Promotion of technological innovation and research commercialization
- 3) Distribution of technology and promotion of its utilization through comprehensive technique transfers

4) Support for the establishment of private enterprises using technical innovation based on universities, conglomerates, and research institutes.

The goals of the government are reflected in "The 2nd Basic National Plan for Human Resources Development (2006~2010)," and the main contents are as follows:

- 1) Promotion of specialized universities to meet economic and social needs
- 2) Promotion of industrial academic cooperation to raise suitability of university education in workplaces
- 3) Utilization of the industrial academic group as the central axis of industrial academic business
- 4) Construction of support systems for the revitalization of industrial academic business

The Industrial Academic Cooperation is being promoted under the cooperation of several departments such as the Ministry of Commerce, Industry and Energy, and not to mention the Ministry of Education and HRD. The key factors that the Ministry of Education and HRD promotes are raising industrial academic cooperation- centered universities, supporting programs for school enterprises, supporting programs for overseas internship opportunities for college graduates, and the Connect Korea Program. The details of each program are elaborated as follows.

First of all, programs that nurture industrial academic cooperation-centered universities select such universities from 8 regions nationwide. The goal is to train the required human resources in the regions and to construct an autonomous regional renovation system by support and guidance of technological development, joint usage of constructed equipments for nearby industrial complexes, and operations of curriculum in connection with the companies. This program is expected to be implemented within the next 5 years (colleges for 4 years from '05~'08) in 13 universities nationwide (8 universities, 5 technological universities) and 10 specialized colleges.

The program support for school enterprises, working in related curriculum, aims to commercialize the technology that a university possesses and train human resources so they will be suitable for the workplace. This will be done through the operation of school enterprises, which manufacture and sell goods as well as providing services. It currently has a total of 50 school enterprises in universities, colleges, and technical high schools nationwide.

By providing internship opportunities at overseas companies for college graduates, the global competitiveness of college graduates can be strengthened, which would lead to an expansion of job opportunities for Korean students in foreign companies or overseas. The national internship program is being conducted in 8 countries including the U.S., Japan, and China.

Finally, the Connect Korea Program activates the organization of technology transfer groups (TLO) in universities and research institutes, which promote to the public, the transfer and commercialization of technology. Diversified efforts in the industrial academic cooperation business are being shown by the government.

References

- Ban, Sang Jin. (2003). Higher Education Reformation Tasks for the New Government. *Educational Administration*. 21(1): 169-191. (in Korean)
- Chae, Jae Eun et al. (2006). *Analysis and Future Directions of Korea's Higher Education Regulations*. Seoul: Korean Educational Development Institute. (in Korean)
- Chang, Hyun, Shik (2006). The Meaning and Future Directions of Korean International Development Cooperation. KOICA-Kangwon University Symposium on Korea's ODA and the Role of Universities.(in Korean)
- Kim, Byung Ju, Na, Min Ju, Cho, Kyu Rak (2005). *Evaluation on the BK Project Outcome*. Seoul: Korea Research Foundation. (in Korean)
- Kim, Kwang Jo (2005). Change of Circumstances in Policy-Making and Tasks for Human Resource Development. *Vocation and Human Resource Development*. 8(1):14-21. (in Korean)
- Kim, Young Chul et al. (2005). A Foundation Study on Building Multinational University Campuses in Jeju Island: in the case of United States' "A" University. Seoul: Korean Educational Development Institute. (in Korean)
- Lee, Byung Shik et al. (2005). Evaluation and Future Directions of Korea's Higher Education System. Seoul: Korean Educational Development Institute. (in Korean)
- Lee, Man Hee et al. (2003). A Study on WTO's Education Service Negotiation. Seoul: Korean Educational Development Institute. (in Korean)
- Ministry of Education and Human Resources Development, (2005a). University's Reformation for Specialization. Internal

Material. (in Korean)

- Ministry of Education and Human Resources Development (2005b). Analysis and Evaluation on 1st Level BK 21 Project Outcome. Internal Material. (in Korean)
- Ministry of Education and Human Resources Development (2006). Announcement of the 2st Level BK 21 Projects. Internal Material. (in Korean)
- Yoo, Hyun Sook et al. (2004). A Study on FTA Education Service Negotiation Policy- Focusing on Singapore and Japan. Seoul: Korean Educational Development Institute. (in Korean)

Chapter 2

The Trend of Higher Education Reform in Korea* -Structural Reform of Universities and Colleges-

Overview of Korea's higher education

To take a brief look at the current situation of Korea's higher education, there were approximately 1.7 million students enrolled in 221 higher education institutions, including 155 junior colleges in the year 2006 (see Table 1 and Table 2). The rate of high-school graduates advancing to higher education institutions, which was mere 5.4% in 1970, surged up to 11.4 % in 1980, 23.6% in 1990, 52.5% in 2000, and 67.8% in 2006. These statistics indicate that the opportunity for higher education has already been generalized in Korea (KEDI, 2006). During the 1980s, due to the government's active measures allowing the establishment of regional campuses of the existing universities, new universities (teacher's colleges, junior colleges, etc.) and other tertiary educational institutions of new type (open university and others), the population in higher education increased dramatically. Moreover, the normative system

^{*} Kim, Meeran. Korean Educational Development Institute.

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for establishing universities, one of the reform measures initiated on May 31, 1995, facilitated the founding of new universities and the pursuit of university autonomy on the issues of evaluation, freshmen quota, and academic administration and accelerated the quantitative expansion of higher education in the 1990s. Since tertiary educational institutions are moving toward an open system, anyone can have access to higher education to build up their capacities for life long education.

| | Universities and Colleges (4 year course) | | | | | | | | | |
|------|---|-------|-----------------------|---------------------|----------------------|---------------------------|--------------------|-------------------|--------------------|-------------------|
| Year | Total | Univ. | Univ. of Education | Industrial Univ. | Technical College | National Open Univ. | Misce- Ilaneous | Distance Univ. | College of company | Junior College |
| 1970 | 103 | 71 | 16 | - | - | - | 16 | - | - | 65 |
| 1980 | 109 | 85 | 11 | - | - | 1 | 12 | - | - | 128 |
| 1990 | 148 | 107 | 11 | 6 | - | 1 | 23 | - | - | 117 |
| 2000 | 196 | 161 | 11 | 19 | 1 | 1 | 3 | - | - | 159(1) |
| 2001 | 197 | 162 | 11 | 19 | 1 | 1 | 3 | - | - | 159((1) |
| 2002 | 198 | 163 | 11 | 19 | 1 | 1 | 3 | - | - | 160(1) |
| 2003 | 218 | 169 | 11 | 19 | 1 | 1 | 3 | 14 | - | 162(1) |
| 2004 | 221 | 171 | 11 | 18 | 1 | 1 | 3 | 15 | - | 162(1/2) |
| 2005 | 224 | 173 | 11 | 18 | 1 | 1 | 4 | 15 | 1 | 161(1/2) |
| 2006 | 221 | 175 | 11 | 14 | 1 | 1 | 4 | 15 | 1 | 155(1/2 |

| Table 2-1. Higher Educational Institutions in Role | Table | 2-1. | Higher | Educational | Institutions | in | Korea |
|--|-------|------|--------|-------------|--------------|----|-------|
|--|-------|------|--------|-------------|--------------|----|-------|

Note: The numbers within parentheses at the junior college column are for the distance colleges/company colleges.

Source: MOE &HRD & KEDI (2006a), Analysis of Educational Statistics

In the open system, universities run academic credit banks, university extension programs, or part-time course application

| | ٦ | Fotal | Universities | | Junic | or College |
|------|-----------|-------------|--------------|-------------|----------|-------------|
| Year | Enrolled | Advancement | Enrolled | Advancement | Enrolled | Advancement |
| | Students | Rate (%) | Students | Rate (%) | Students | Rate (%) |
| 2000 | 1,719,975 | 52.5 | 977,005 | 29.8 | 636,810 | 19.4 |
| 2001 | 1,809,362 | 55.3 | 1,021,240 | 31.2 | 672,221 | 20.6 |
| 2002 | 1,794,890 | 56.6 | 1,017,049 | 32.1 | 663,060 | 20.9 |
| 2003 | 1,751,325 | 58.7 | 1,016,794 | 34.1 | 611,902 | 20.5 |
| 2004 | 1,719,317 | 61.7 | 1,040,512 | 37.3 | 571,124 | 20.5 |
| 2005 | 1,706,060 | 65.2 | 1,082,937 | 41.4 | 520,559 | 19.9 |
| 2006 | 1,695,582 | 67.8 | 1,104,263 | 44.2 | 493,154 | 19.7 |

Table 2-2. Students Enrolled in Higher Educational Institutions

schemes.

Note: Advancement rate = Enrolled Students / High-schoolGraduates or equivalents x 100. The age of high-school graduate or equivalent ranges from 18 to 21.

Source: KEDI (2006), Indicators for Korean Education and Human Resources

Problems of Korean higher education

Though Korean higher education showed a rapid growth in a relatively short time span, qualitatively speaking, it is unable to effectively respond to social changes. Several international comparative evaluations have reported that the competitiveness of Korean universities remains at a low level. This fact simply proves that the contradictory problems of universities being unable to respond to social changes is true (MOE & HRD & KEDI, 2006b). According to the assessment by IMD, as of 2007, higher education completion rate of those between ages 25 to 34 in Korea ranks the fourth; however, educational competitiveness is 29th, and the responsiveness of university education to competing society falls in the 40th place.

| Evaluated Areas | 2004 | 2005 | 2006 | 2007 |
|---|------|------|------|------|
| Educational Competitiveness | 44 | 40 | 42 | 29 |
| Public Spending on Education as a share of GDP | 52 | 46 | 34 | 29 |
| Higher education completion rate of the 25-34 year olds | 5 | 4 | 4 | 4 |
| Responsiveness of university education to the competing society | 59 | 52 | 50 | 40 |
| Supply of quality engineers | 52 | 54 | 54 | 13 |
| Knowledge transfer among universities and companies | 42 | 21 | 32 | 21 |

Table 2-3. IMD Evaluation Ranks of Korean Higher Education

Source: MOEHRD (2007), An Outline of Korean Educational Policies to Build a (tentatively named) Long-term Vision for Higher Education

It can be said that the Korean higher education system has expanded educational opportunities; however, it fails to respond to the increased number of students in the era of universalized education and to meet the needs arising from the socio-economic changes. One of the most serious problems faced by Korean higher education is the degradation of the students' basic academic ability (Kim, 2003). Although there have been many discussions regarding the root of the problem, but the major cause seems to be the secondary education driven by the college entrance exam. Some critics point out that the educational reform measures devised by Hae Chan Lee, the former Minister of Education, spawned many students who believed they could go to college without bothering to study hard from middle school as long as they had special talents. Others blame the secondary education system as a whole for putting all its efforts into the college entrance exam and neglecting the development of the students' minds and their basic scholastic abilities (Lee, 2003).

Secondly, there is an academic hierarchy among universities and the fields of study, while the functions of most universities are hardly differentiated or diversified. The paths of progress that many different colleges have taken are more or less the same. They all have aimed at becoming a big research-oriented university, thus failing to differentiate themselves from others, leading to a uniform selection of entrants and similar curriculums. This resulted in an academic hierarchy based on form, time and location of establishment (Moon, 1998).

Thirdly, deteriorating educational conditions and student shortages are also troubling the higher education. As most of the universities hire part-time instructors, the ratio between the number of full-time staff and that of students is 1:30 on average (KEDI, 2006). However, many universities outside the Seoul Metropolitan area are being challenged by student shortage due to the low birth rate (KEDI, 2006). In fact, because of the funding structure where private colleges are heavily dependent on student tuition, some colleges have faced bankruptcy following an insufficient recruiting of students.

The last problem is the imbalanced supply and demand of highly educated people in the labor market. As larger number of people complete higher educational courses, more and more college graduates are unemployed, taking unsatisfying jobs which do not require higher education degrees or working in the fields unrelated to their majors. Companies' preference for the experienced and the high expectations for salary and working conditions of college graduates are worsening the unemployment problem among young adults. Ironically, the '6T' strategic industries such as bio-technology and nano-technology are suffering from an insufficient supply of qualified workers (Yu et al., 2005). When the academic content and training acquired by students are not relevant to their job descriptions, production efficiency would drop and cause damage not only to the individuals concerned but to the nation as well.

Despite the rapid expansion of Korean higher education, it does not fulfill its highest potential in national competitiveness because the purposes, functions, curriculums, and governance of universities are not in step with the social changes.

The trend of higher education reform

Well aware of the importance of enhanced higher educational institutions in improving international competitiveness of Korea's post-secondary education in today's knowledge-based society, the government has given much effort to that end.

To revamp higher education, the current government has set an targeting decentralized balanced development agenda and educational reform for building Korea as a knowledge power (Chae, 2006). To achieve the first goal, the government will endeavor to foster specialized universities for the betterment of the regions where they belong and will seek to provide a healthy nurturing ground for those institutions outside the Seoul Metropolitan area. For the second goal, it will advocate for greater autonomy of the universities, breaking down the academic cliques and hierarchy and upgrading the quality of science & technology education. In line with the reform agenda, the government has been proceeding with NURI (New University for Regional Innovation) and BK21 (Brain Korea 21) projects. NURI is aimed at building the capacity of regional universities to promote innovation and development of human resources at the regional level, while BK21 seeks to develop world class post-graduate schools and strengthen industry-academia partnerships by fostering professional workforce.

In 2004, the government presented the 2nd Basic Plan for

National Human Resources Development and is gradually planning to restructure the higher education system that is not meeting the needs of the Korean society. The higher education section of the plan has three major columns - educational innovation, enhancing post-secondary education's field relevance, and university quality assurance system all of which seek to cultivate competitive core workforce (MOE & HRD et al., 2005).

In March 2007, the government presented The Outline for Higher Education Policies. Korea's its vision for future post-secondary education, which envisioned 1) the improvement of university education, (2) expansion of university funding, (3) promotion of globalization of universities, ④ facilitation of university's social functions, (5) enhancement of university's autonomy in governance and social responsibilities. Firstly, to improve the university education, the government plans to support and promote a public evaluation system of the academic knowledge and skills of university graduates. This system will make it easier for students to enter college but difficult to graduate, as it will require students to meet certain criteria by passing graduation exams. University curriculums also should be designed so that students' basic working abilities needed in the field can be measured. The opportunities will increase for professionals equipped with hand-on experience in the field to be hired as members of university faculty. Also, government projects such as BK21 and NURI will lead universities to be more specialized in their areas of expertise. Secondly, for the purpose of increasing university funding, the government proposes the enactment of Technology Transfer Law and the establishment of University Venture Fund to encourage universities to transfer their technologies to other institutions and stimulate university venture start-ups. Thirdly, to promote globalization, it encourages English lectures in universities by attracting foreign students and
| Core Tasks | Strategies | What to be done |
|-------------|------------------|---|
| 1. The | (1) Develop new | Foster core talents for product and |
| development | core workforce | technology development |
| of a core | in a high | Enhance the efficiency of financial |
| workforce | technology area | investments and create synergy |
| that is | (2) Find focused | · Selective and focused support through |
| globally | R&D areas and | post-BK 21 |
| competitive | foster research | Develop regional research-oriented |
| | manpower for | universities to support R&D efforts in the |
| | innovative | regional fields of expertise |
| | technologies | |
| | (3) Foster basic | · Develop research assistance programs for |
| | studies and | advancement of basic studies |
| | strengthen basic | • Emphasize goal-driven research |
| | research | |
| | (4) Build | Increase investment involving industry, |
| | industry-acade | university, and research institutes to |
| | mia partnership | develop areas of expertise at universities |
| | and leverage | - Multi-disciplinary development of |
| | highly qualified | practical education programs |
| | workforce | - Develop manpower through field-oriented education |
| | | • Foster human resources in science and |
| | | engineering |
| | | - Basic plan to support science & |
| | | - Offer training programs to IT experts |
| | | • Build support infrastructure to enhance |
| | | research capabilities of universities |
| | | - Star Faculty |
| | | - Reward system for researches |
| | | • Secure high-quality science & engineering |
| | | personnel |
| | | - Increase student grants for science & |
| | | 0 |

Table 2-4. The 2nd Basic Plan for National Human Resources Development

| | | | engineering majors |
|---|-----|---|---|
| 2. Foster professionals specialized in knowledge services | (1) | Establish a system to train and develop professionals specialized in knowledge services areas | Establish and increase support for professional graduate schools Establish law schools by 2008 Settle the graduate school system for medicine & dentistry by 2010 Foster world class MBA schools Support finance-special graduate schools Develop professional workforce in culture, planning, technologies, and etc. |
| | (2) | Diversify and specialize education and training programs | Design programs for basic vocational skills Develop workforce for service areas Increase retraining opportunities for professional workers |
| | (3) | Reinforce specialists development with the appropriate support system | Support world class professional graduate schools Set up an inter-ministerial network Monitor and research the demand of industries Develop personnel according to the demands of the industry field. Control the quality of graduate schools through assessment. Introduce accreditation system for education programs. Introduce a new licensing system Instate a program accreditation system |
| 3. Align university education with the industry more closely | (1) | Encourage universities to develop distinctive strengths or specialties in line with | Adjust the enrollment quota Seek restructuring for specialization Financial support for restructure Give national universities status of a special juridical person Support NURI project Set a cooperative system to facilitate the |

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| socioeconomic needs | specialization process and to manage their achievements Develop and apply indicators for specialization Prepare a legal ground for managing achievements in specialization Set up an evaluation system |
|--|--|
| (2) Facilitate business-univer sity cooperation to enable university education to be more responsive to the needs of the industry | Restructure the university education and industry-academia cooperation system Promote business-university cooperation networks Enhance the educational quality of science & engineering colleges Emphasize multi-disciplinary education, diversify curriculums, and activate customized education Revamp the curriculums for science & engineering |
| (3) Use of industry-acade mia cooperation foundations | Create a cooperative network of industry, university, research institute, and government. Nurture and provide support for university enterprises Make institutional improvements for university enterprises |
| (4) Create infrastructure to support industry-univer sity collaboration | Hire faculty members with industry experience Assist business-university cooperation through collaboration between the government and business associations Lay the legal ground for greater corporate investment in universities |

| 4. Internationali -zation of human resources | (3) Strengthen educational competitiveness through globalization | Allow tax favors for donations Develop legal grounds to give tax-cuts to industry-academia cooperation foundations Achieve global compatibility of Korea's education and training programs Facilitate the entrance of Korean education into foreign markets and internationalize higher education and research Allow the faculty of domestic universities to hold positions overseas Introduce high-quality foreign education programs |
|--|--|---|
| | (4) Attract and use international human resources | Create infrastructure to provide educational support for Koreans residing overseas and in turn utilize their skills Train and develop global specialists and facilitate Korean workers to seek international job opportunities Train and develop specialists who will aid Korean companies in the foreign markets |

Source: MOE & HRD (2005), The Second Basic Plan for National Human Resources Development (2006–2010)

universities and establishing campuses abroad. Fourthly, to facilitate university's social function, more emphasis will be placed on liberal arts courses, also to be applied to the leadership courses in the development of elite programs. Lastly, to enhance university's autonomy and social responsibilities, the government is entertaining the idea of converting universities to juridical persons for the purpose of its transparency and autonomy. It also seeks to refit the current faculty-hiring system and to support the development of a better teaching method.

Structural reform of colleges and universities

Among the many reform measures by the government, The Plan for Restructuring Colleges and Universities, proposed by the Ministry of Education and Human Resources Development (MOE & HRD) in December 2004, encompasses the most diverse areas. The plan purports to foster specialized and differentiated universities that have raised their governance effectiveness and radically improved their educational conditions so that the competitiveness of university education may be enhanced at the end of the day (MOE & HRD, 2004). In particular, the government is carrying out the restructuring plan in tandem with other higher education related projects such as BK 21, Post-BK 21, NURI, and the Plan for Business-University Collaboration Promotion in order to avoid redundant investment and to maximize the efficiency (Kang, 2005).

The strategies for proceeding with the university restructuring plan are as follows: ① Lead universities and colleges to reform their structures based on their own unique development strategies, ② Take a comprehensive approach through the cooperation of the industry, ③ Drive the reform in collaboration with research institutes, ④ Differentiate between public and private universities, and ⑤ Constantly promote the universities' autonomy. The specific tasks required are ① the structural reform of public universities, ② the structural reform of private universities, ③ the structural reform of graduate schools, ④ introduction of a system where universities' internal statistics are open to the public, and ⑤ establish a higher education assessment institute which will evaluate universities and decide financial support.

To improve educational conditions, the plan prescribes several things. It seeks to promote mergers among public universities, revamp their fiscal and operational systems, and organize a restructuring committee by regions. The government plans to cut the enrollment by 15% from 83,000 to 71,000 by 2009 (the current professor-student ratio of 1:29 is expected to fall to 1:21), and to merge university with university, university with junior college, university with industrial college, and university with educational college. Also it seeks to refurbish the administration in the areas of accounting, election, and faculty & council meetings.

Private universities will be required to cut enrollment by 10%. The percentage of full-time faculty members should be raised to 65% in research-centered universities, 61% in education-centered ones, and 50% in industrial and junior colleges by 2009. Universities with full-time staff to student ratio of more than 1:40 will be excluded from government's various financial supports until they comply. Merger and integration among the private universities and colleges will be also promoted, especially when the post-secondary institutions are located in the same region or belong to the same juridical foundation. Should an industrial college be integrated with a junior college, they can be promoted to university status after cutting junior college enrollment by 60% and increasing full-time faculty members up to the required level. To assist the university integration and dismissal system, a committee on university structural improvement will be established in order to review the merger and acquisition decisions voluntarily made by universities and colleges; and as a saving scheme for dismissed juridical bodies, professors and students will be part of the plan. The requirements to be met for the establishment of a new university will become more rigorous. For example, the number of registered students required to found a university is doubled (from 400 to 1,000 for a university, 100 to 200 for graduate school), and the university must have at least KRW 50 billion worth of assets to prevent many small and poorly funded universities.

| Table 2- | -5. Time | Table | for | University | Restructuring |
|----------|----------|-------|-----|------------|---------------|
|----------|----------|-------|-----|------------|---------------|

| Policy Tasks | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---------|------|------|------|------|
| 1. Restructure public universities | | | | | |
| • Improve educational conditions | | | | | |
| • Facilitate mergers | | | | | |
| • Revamp fiscal & operational systems | | | | | |
| 2. Help restructure private universities | | | | | |
| Induce the improvement of their educational conditions | | | | | |
| · Integrate and rearrange | | | | | |
| • Support the effective use of their assets | | | | | |
| · Aid their initiative restructuring efforts | | | | | |
| Enact a special law to complement a university dismissal system | | | | | |
| 3. Restructure graduate schools | | | | | |
| Build an evaluation system | | | | | |
| · Downsize to a reasonable scale | | | | | |
| 4. Complement the promotion system of re | structu | ring | | | |
| • A new information disclosure system | | | | | |
| • Establish an institute for assessing higher education | | | | | |
| · Grant financial support for restructuring | | | | | |
| • Continuous effort for strong funding for universities | | | | | |

The government will promote autonomous reform of graduate schools at a reasonable level by setting up an evaluation system, which will grant accreditation after assessing their academic achievements and give financial support based on the results. After considering the student registration for three years, the government will urge small scale graduate schools of similar fields or areas to be integrated with each other and cut their enrollment.

Lastly, to assist the restructuring system, four detailed tasks are proposed: (a) A new information disclosure system, (b) A special law for university restructuring, (c) A higher education assessment institute, and (d) Continuous efforts for a strong university funding. By having internal statistics e.g. the number of professors and freshmen enrollment, graduate employment rate, and other operational indicators open to the public, demanders of higher education will be able to make informed decisions. The enactment of the special law for university restructuring will provide a legal ground for university mergers and dismissals. The government also seeks to lay a legal basis for the financial support of the restructuring efforts. The tasks of Korea Research Foundation and Korean Council for University Education will be integrated and reorganized to establish the Higher Education Assessment Institute (alias), which will evaluate and determine the financial supports of higher education institutions and provide valuable information to the public. Every year, about KRW 100 billion would be set aside for restructuring. The money will be allocated to 10 to 15 exemplary universities pioneering the restructuring process and also will be used to support merger and integration among public universities.

Tasks for higher educational reform

We have examined the university restructuring plan reflecting the current trend of Korea's higher education reform. We can see the Korean government trying to strengthen Korea's global competitiveness in the knowledge based society by cutting down university enrollment and building up specialized universities that are equipped with solid curriculums responding to the social issues e.g. low birth rate, regional universities in shortage of students, imbalance between the supply and demand of manpower, etc. It also seeks to expand financial support to assist these efforts and to establish an assessment body to secure universities' responsibilities.

However, the following five factors should also be considered for the higher education system to be more active in promoting social changes rather than passively respond to them. To begin with, the concept of the role of a university or its competitiveness should be redefined. The government has been trying to meet the needs of the society and the industries by building administrative and financial infrastructures and nurturing highly qualified professionals. Unfortunately, Korean society does not have a clear definition of the role of the university except other than a monolithic concept that university degree equals employability (Kim, 2005). If the role of university is to educate the students so that they can have jobs, and that a high employment rate translates to high competitiveness, we are overly minimizing it. The role of university should be reestablished as helping students to sharpen their problem-solving skills and increase trans-employability.

Secondly, the function of higher education should be readjusted to meet the international standards. Currently the government seeks to differentiate the research-oriented and education-centered universities. However this differentiation is not detailed enough. More specific and distinctive specialization is required to enhance the compatibility of Korean universities in the international community, such as vocation-oriented versus academic-oriented teaching, undergraduate-centered versus postgraduate-centered universities, professor versus student centered institutions, in addition to the foundational values, conditions, teaching methods and level of universities and student needs. Also the accomplishments and limitations of the current specialization scheme should be clearly recognized, and the job descriptions of public and private universities should be written by the government through its restructuring policy.

Third, the curriculums also need to be renovated since fostering of basic academic skills and professional capacities are essential. They will allow students to respond actively and flexibly to the rapidly changing society. Policies that can enhance the quality of higher education should be forthcoming, with emphasis on internships, exchanges with universities abroad, multi-disciplinary programs, and liberal arts-oriented learning leveling up to the quality of student life.

Fourth, it is necessary to increase financial investment into higher education. Since it is a known fact that monetary supports to build educational and research capacities of universities are not substantial, the budget for higher education must be increased. The government has presented definite directions and standards of its monetary support policies based on the principle of selection and concentration. It is also phasing in competitiveness-strengthening measures such as the post-evaluation scheme to facilitate balanced development of various universities and studies. However, actualization of these plans requires as a prerequisite, a financial increasea big inducement to activating competitiveness.

Fifthly, universities should be open to those who want further education and involve higher number of adults into the courses they are offering by inventing new types of degree and license conferring programs. The government needs to promote an open university system to resolve the imbalance between the demand and supply of higher education, and to build a life-long learning infrastructure for vocational skill development in the knowledge based society. 44 Higher Education and Lifelong Learning in Korea

Lastly, all the reform policies are to be proceeded on the basis of autonomy. As has been observed in the restructuring policies of other areas, the basic principle of the government is to support and induce reform. However, universities do not have many options to choose from (Kim, 2004). Therefore the government is required to plan carefully so that universities will be able to independently proceed, with initiative, the practicable structural reform based on the consensus of the stake-holders in the long run.

References

- Chae, Jae Eun. et al. (2006). A Study on the Regulations on Korea's Higher Education and the Ways to Reform Them. Korean Educational Development Institute.
- Kang, Byung Woon. (2005). Direction and Tasks of University Restructuring to Strengthen Competitiveness in Higher Education. *Study of Educational Administration vol.* 23(1), 421-446.
- Kim, Anna. et al. (2003). The Current Situation and Tasks for Higher Education Quality Control to Support Forming Career Capacity in National Level. Korean Educational Development Institute.
- Kim, Anna. et al. (2004). The Plan to Enhance the Quality of Higher Education and Restructure Post-Secondary Institutions. Korean Educational Development Institute.
- Kim, Yong Il et al. (2005). *Study on Innovating Higher Educational System in Knowledge Based Society.* The Presidential Commission on Policy Planning.
- Lee, Byung Shik. et al. (2005). A Study to Diagnose and Improve Korea's Higher Education System. Korean Educational Development Institute
- Lee, Hyun Cheong. (2003). The Plan for National Scholastic Achievement Examination for the College Entrance: Does the Examination Consider Deteriorating Scholastic Ability in Universities?. Material for the Educational Policy Forum.
- MOE & HRD. (2004). The Plan for University Restructuring to Strengthen Competitiveness.
- MOE & HRD, & 20 Ministries and Governmental Agencies (2005). The Second Basic Plan for National Human Resources Development (2006 2010)

- MOE & HRD, & KEDI. (2006a). Analysis of Educational Statistics.
- MOE & HRD, & KEDI. (2006b). OECD Educational Indicators.
- MOE & HRD. (2007). An Outline of Korean Educational Policies to Build A (tentatively named) Long-term Vision for Higher Education.
- Moon, Yong Rin. (1998). An Idea for Research-oriented Universities to Strengthen Their Competitiveness, Restructuring Higher Education System to Strengthen Universities' Competitiveness. The 2nd Kwanak Forum on Educational Policies, 11-12.
- Shin, Hyun Seok. (2005). Issues and Tasks of the University Restructuring Plan. *Study of Educational Administration* 23, 187-221.
- Yu, Hyun Sook. et al. (2005). Advancement of Young Adults to the Labor Market: Employment of the University and College Graduates. Korean Educational Development Institute

Chapter 3

History and Social Role of Air and Correspondence High School*

In the beginning

Air and Correspondence High Schools (ACHS) were established in conjunction with 11 public high schools in the Seoul and Busan area on March 1974 and is having its 32nd anniversary this year. Founded in preparation for the development of science technology and rapid change of economic, social and cultural condition, ACHS has provided new opportunities to those who have not had the chance, due to economic or personal circumstances, by providing them with correspondence education at the high school level. The purpose of ACHS is to enhance the nationwide academic level and educate people that they may contribute to the development of their country. ACHS is an educational institution that fulfills lifelong education at the secondary education level.

In 1974, despite difficulties with short preparation time and the lack of experts in this area, KEDI overcame and opened 11 schools.

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By 1987, there were 50 schools and 48,067 students nationwide. Presently, there are 39 schools and 13,512 students nationwide.

In this paper, looking into the 30 year history of ACHS, how ACHS education has contributed to people and society will be a evaluated.

History of ACHS

ACHS was established by the Standard Ordinance for the Establishment of the ACHS (Presidential Decree No. 7008, 1974. 1. 4) and the Enforcement Regulations of the Standard Ordinance for the Establishment of ACHS (Ordinance No. 335 of the Ministry of Education, 1974. 2. 22). In those days, the government was promoting the industrialization policy and it brought many youths to the cities from the countryside. These young workers wished to make money not only to support their families but also to pay for their education. Therefore, the government established a new type of school where classes or schools were attached to corporate bodies. This enabled the workers to stay in the industrial field and receive their high school education at the same time. The ACHS and Korea National Open University were established at that time with similar rationales. Most of the ACHS students are young workers who missed the opportunity for schooling because of economic, personal, and other reasons. Later, ACHS become the secondary education institute for people such as housewives, the working-class population, people who were not able to attend school, and dropouts from regular schools.

The ACHS was entrusted the task regarding air and correspondence education from the Ministry of Education and Human Resource Development by the Standard Ordinance for the Establishment of the ACHS Article 4, KEDI has run ACHS since 1974. The brief history of ACHS is as follows:

Box. 3-1 Summary of ACHS History

- 1973. 2. 28: Announcement of the establishment of ACHS by the Ministry of Education and Admission System of High Schools in SeoulBusan Reformation- 1973. 3. 8 : Ministry of Education entrusts research for establishment of ACHS to KEDI
- 1974. 1. 4 : Enactment of Standard Ordinance for the Establishment of the ACHS(Presidential Decree No. 7008)
- ** Ordinance No. 10 : Matters related to class by broadcasting entrusted to KEDI
- 1974. 2. 22 : Enactment of Enforcement Regulations of the Standard Ordinance for the Establishment of ACHS(Ordinance No. 335 of the Ministry of Education)
- 1974. 3. 23 : Establishment of an affiliate ACHS in conjunction with 11 public schools in the Seoul and Busan area
- 1975. 9. 25 : Expansion of ACHS branches in 14 cities(Total 36 ACHS branches)
- 1984. 9. 23 : Seminar to celebrate the 10th Anniversary of ACHS
- 1987. 3. 1 : Establishment of ACHS branches in 26 cities and 1 country (50 ACHS nationwide)
- 1994. 4. 1 : Celebration of the 20th Anniversary and the publication of 20-Year-History of the Air and Correspondence High School
- 1999. 3. 1 : Establishment of ACHS branches in 27 cities and 1 country (40 ACHS nationwide)
- 2002. 3. 1 : Establishment of ACHS branches in 27 cities and 1 country (39 ACHS nationwide)
- 2004. 1 : Ministry of Education and Human Resource Development designated ACHS Cyber Educational System Model School Design (Total 3 Schools)
- 2004. 9. 22 : Seminar to celebrate the 30th anniversary of the ACHS
- 2006. 1 : Ministry of Education and Human Resource Development designation ACHS Cyber Educational System Model School Designation(Total 5 Schools)
- 2004. 9. 22 : Seminar to celebrate the 30th anniversary of the ACHS (continued)

- 2006. 1 : Ministry of Education and Human Resource Development designation ACHS Cyber Educational System Model School Designation (Total 5 Schools)
- 2006. 4 : ACHS conversion to a cyber educational system
- 2006. 3. 10 : Amendment of Standard Ordinance for the Establishment of the ACHS (Presidential Decree No. 19376)
- Amendment of the Enforcement Regulations of the Standard Ordinance for the Establishment of ACHS(Ordinance No. 876 of the Ministry of Education and HRD)

In 1974, the number of ACHS students stood at 5,794, which continuously increased to reach the climax of 48,067 in 1987. The number of students has started to decrease slowly and since 2000, ACHS has maintained about 13,000 students (Figure 3-1).

During the past 30 years, there was not only quantitative but also qualitative change among the students. As described in Table 3-1, recently the percentage of students in their 20s and 40s has been higher than teenagers, and students aged 50s and above have also increased. Therefore, the spread of students is no longer concentrated in the 20s and 30s, but is balancing out among all ages.

In 2006, 87.1% of students were employed and 12.9% of them were not. There is a varied job distribution among the students. As shown in Figure 3-2, among the students, 24.9% are housewives, 10.5% work at independent enterprises, 8.7% provide technical service, and 8.5% have service jobs. Therefore, the students have various vocational experiences.



Figure 3-1. Annual Change in the Number of ACHS Students

| Table 3-1 | . Change | of | the | Number | of | Students | by | Age | Groups |
|-----------|----------|----|-----|--------|----|----------|----|-----|--------|
|-----------|----------|----|-----|--------|----|----------|----|-----|--------|

(Unit: Person)

| Section | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 |
|------------|--------|--------|--------|----------------|----------------|--------|
| 10s | 7,727 | 22,990 | 17,536 | 3,944 | 3,180 | 1,363 |
| 20s | 12,603 | 19,750 | 14,366 | 6,434 | 4,704 | 3,619 |
| 30s | 7,022 | 2,114 | 2,993 | 3 <i>,</i> 585 | 3 <i>,</i> 875 | 2,549 |
| 40s | 1,821 | 135 | 317 | 930 | 2,136 | 3,847 |
| 50s, older | 206 | 3 | 0 | 105 | 366 | 1,781 |
| Total | 29,379 | 44,992 | 35,212 | 14,998 | 14,261 | 13,159 |

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Figure 3-2. Job Distribution of Students

In 2004, the graduates of ACHS numbered 181,061(and 185,715 in 2006). Those who went on to university numbered 51,397 students, roughly 28% out of all the graduates. Moreover, as described in Figure 3-3, the rate of entrance into university is rapidly increasing. The rate was 38.2% in 1995, 67.5% in 1998, and 71% in 2000 maintaining. This is a very high entrance rate. In the early years, ACHS was used as a way to get one's high school graduation, but since the late 1990s, it has been used as a step to enter university.

On the other hand, looking into the change of annual dropouts, more than 50% of the students dropped out in the beginning years. After that period, the rate maintained around 40% for a long time and was rapidly lowered to around 10% in the 2000s. From the results, one can conclude that ACHS was stable in the 2000s.



Figure 3-3. Change of ACHS Graduates and College Entrance

Then, how has the ACHS been run? There are summaries of changes by each period in the following table. At the beginning, ACHS mostly depended on radiobroadcast-based education. However, ACHS started to use information & communication technology, such as the computer communication education system from the late 1990s, to running an ACHS web site, and building a cyber education system in the 2000s. Finally since 2006, the first year students got to learn through the internet.

| Year | Freshman | Graduates | Dropouts | Rate | Year | Freshman | Graduates | Dropouts | Rate |
|------|----------|-----------|----------|-------|------|----------|-----------|----------|-------|
| 1974 | 5,794 | | | | 1989 | 16,748 | 11,805 | 8527 | 41.9% |
| 1975 | 12,091 | | | | 1990 | 13,271 | 10,846 | 9741 | 47.3% |
| 1976 | 7,938 | | | | 1991 | 10,514 | 10,067 | 8487 | 45.7% |
| 1977 | 9,753 | 2,680 | 3114 | 53.7% | 1992 | 8,734 | 8,824 | 7924 | 47.3% |
| 1978 | 10,396 | 5,335 | 6756 | 55.9% | 1993 | 7,596 | 7,257 | 6,014 | 45.3% |
| 1979 | 14,196 | 4,188 | 3750 | 47.2% | 1994 | 6,171 | 5,523 | 4,991 | 47.5% |
| 1980 | 13,633 | 5,166 | 4587 | 47.0% | 1995 | 5,386 | 4,911 | 3,823 | 43.8% |
| 1981 | 14,007 | 5,989 | 4407 | 42.4% | 1996 | 5,475 | 4,380 | 3,216 | 42.3% |
| 1982 | 16,567 | 7,420 | 6776 | 47.7% | 1997 | 5,314 | 3,764 | 2,407 | 39.0% |
| 1983 | 17,657 | 7,673 | 5960 | 43.7% | 1998 | 4,780 | 3,531 | 1,855 | 34.4% |
| 1984 | 19,590 | 8,280 | 5727 | 40.9% | 1999 | 4,903 | 3,798 | 1,677 | 30.6% |
| 1985 | 20,314 | 9,633 | 6934 | 41.9% | 2000 | 4,942 | 4,031 | 1,283 | 24.1% |
| 1986 | 20,332 | 10,319 | 7338 | 41.6% | 2001 | 5,209 | 4,071 | 709 | 14.8% |
| 1987 | 20,587 | 11,261 | 8329 | 42.5% | 2002 | 4,608 | 4,103 | 800 | 16.3% |
| 1988 | 18,554 | 12,222 | 8092 | 39.8% | 2003 | 4,316 | 3,984 | 958 | 19.4% |

Table 3-2. Change in Annual Dropouts

Source: Center for ACHS in KEDI

Social role of ACHS

First of all, the ACHS education simultaneously performs the functions of both lifelong education and school education. In the beginning, ACHS was used as a way to obtain the high school diploma, but from the late 1990s, it became a pathway to the

History and Social Role of Air and Correspondence High School 55



Figure 3-4. Social Contribution of ACHS

university. The average age is increasing and job distributions more varied, with occupations ranging from housewife, independent enterprise, technical service, and general service. Overall, we can conclude that the original lifelong education

function is being strengthened.

Second, ACHS contributes to the society directly and indirectly not only by improving the nationwide academic level but also increasing the quality of people, leading to positive and progressive attitudes, and increasing the productivity of industries. Another significant social contribution is the personal development of ACHS graduates in social and economic activities e.g. employment and promotion. A certificate of qualification is also an important asset for each graduate. A noteworthy contribution of ACHS is social development because most alumni have taken courses requiring the performance of a social role e.g. the head of local government, a representative of government organs, CEO or executive of a company, lawyer, professor, or expert. They faithfully carried out their social roles. 56 Higher Education and Lifelong Learning in Korea



Figure 3-5. Personal Effect of ACHS Source: Center for ACHS in KEDI(2004)

Third, the most important thing through which ACHS affected individuals was through 'positive and active self-awareness.' The students of ACHS were looked down on and given no opportunity to work because they had only graduated from middle school. Their negative self-consciousness from those experiences was changed to positive ones while attending high school at ACHS.

Conclusion

As described above, ACHS has developed both quantitatively and qualitatively. Now ACHS faces a turning point because of the trend moving away from radiobroadcast-based lectures to video clips on the web-based system.

The ACHS education system provides new opportunities of secondary education (especially at the high school level) to adults who could not complete their high school education. It can be said that the ACHS education has improved the academic level of our society by enabling individuals to get better jobs or by give them the chance to enter university.

| Conting | 10700 | 1980s | 1990s | 2000s |
|--------------|------------------|-------------------|-------------------|------------------|
| Section | 19705 | ('81~'90) | ('91~'02) | ('03~'08) |
| Back- | -ACHS | -KEDI Expenses: | -KEDI Expenses: | -Innovation of |
| ground | Establishment | National Treasury | 16 cities and | ACHS System |
| and | ('74) | Compilation and | provinces share | started (Declare |
| Specialty of | -Set system, | Support | according to | '04 First Year) |
| Operation | curriculum, | -Quantitative | Local | -ACHS Law, |
| | class, operation | Expansion and | Self-Governing | System, and |
| | system | System | System, | Operation System |
| | - Broadcasting | Establishment (50 | -EBS becomes | Reorganized for |
| | | schools, 50,000 | Public | Introduction of |
| | | students) | Corporation (late | E-Learning |
| | | -Development and | '90s) Separating | System |
| | | Support of ACHS | Air and | -Building Cyber |
| | | Academic | Producing | Education System |
| | | Operation | Broadcast | |
| | | Standards | -Quantitative | |
| | | -Development and | Decrease (39 | |
| | | Operation of | schools, 15,000 | |
| | | Professionalism | students) | |
| | | Development | -Reform Demand | |
| | | Program for | Rises for System | |
| | | ACHS Staff | and Operation of | |
| | | | ACHS | |
| | | | -Support ACHS | |
| | | | Teaching through | |
| | | | Information & | |
| | | | Communication | |
| Objectives | ①Public | ①Public | ①Public | ①Public |
| | Information | Information | Information | Information |
| | Law, | Law, Operation | Law, Operation | Law, Operation |
| | Operation | System | System | System |
| | System | ②Curriculum | ②Curriculum | ②Curriculum |
| | ②Curriculum | Organization | Organization | Organization |
| | Organization | and Revision | and Revision | and Revision |
| | and Revision | ③Distance | ③Distance | ③Distance |
| | ③Distance | Education | Education | Education |

Table 3-3. Transition of ACHS Enterprise Management

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| Education | System | System | System |
|---------------|------------------|------------------|------------------|
| System, | Development | Development | Development |
| Development | and Operations | and Operations | and Operations |
| and | ④Development | ④Development | ④Development |
| Operations | and Spread of | and Spread of | and Spread of |
| ④Development | Teaching | Teaching | Teaching |
| and Spread of | Materials | Materials | Materials |
| Teaching | (Textbooks, | (Textbooks, | (Textbooks, |
| Materials | Correspondence | Correspondence | Correspondence |
| (Textbooks, | Study Material) | Study Material) | Study Material) |
| Correspondenc | ⑤Development, | ⑤Development, | ⑤Academic |
| e Study | Spread and | Spread and | Management |
| Material) | Operation of | Operation of | and |
| ⑤Development, | Graduation & | Graduation & | Administrative |
| Spread and | Career | Career | Operation |
| Operation of | Recognition/ | Recognition/ | Support (Publish |
| Graduation & | Evaluation Tool | Evaluation Tool | and Distribute |
| Career | ⑥Academic | ⑥Academic | Management |
| Recognition/ | Management | Management | Manual) |
| Evaluation | and | and | ⑥ACHS Staff |
| Tool | Administrative | Administrative | Professionalism |
| | Operation | Operation | Development |
| | Support (Publish | Support (Publish | (Vocational |
| | and Distribute | and Distribute | Training and |
| | Management | Management | Overseas |
| | Manual) | Manual) | Research) |
| | ⑦ACHS Staff | ⑦ACHS Staff | ⑦Scholarship |
| | Professionalism | Professionalism | Business |
| | Development | Development | ⑧ACHS |
| | (Vocational | (Vocational | Nationwide |
| | Training and | Training and | Central |
| | Overseas | Overseas | Management |
| | Research) | Research) | Affairs as |
| | 8 Scholarship | Scholarship | Operation |
| | Business | Business | Organization |
| | | 9ACHS | Build and Run |
| | | Nationwide | ACHS Web Site |
| | | Central | OStrengthening |

| | | | Management | Student |
|--------|----------------|-------------------|-----------------------------|-------------------------------|
| | | | Affairs as | self-governing |
| | | | Operation | ^(III) Organization |
| | | | Organization | and Operation |
| | | | Build and Bun | Current for |
| | | | | Support for |
| | | | ACHS Web Site | ACHS |
| | | | 11Build | Management |
| | | | Correspondence | Meeting |
| | | | Learning System | ¹² Build and |
| | | | ¹² Strengthening | Operate Cyber |
| | | | Student | Education |
| | | | self-governing | System |
| Pro. | Around 15 | Around 20 | Around 25 | Around 30 |
| (Avg.) | | | | |
| People | Around 20 | Around 20 People | Around 20 People | Around 20 People |
| | People | | | |
| Budget | 27 million won | 1,200 million won | 707 million won | 4,560 million won |
| | (′74) | ('84) | ('93) | (′04) |

Source: Center for ACHS in KEDI

Individuals who are educated at ACHS positively perform social and economic activities, build up self-confidence by having positive self-awareness, and constantly try to develop themselves. ACHS has taken measures to satisfy the ideals of lifelong education.

Chapter 4

The Innovation for Faculty and Education Customized Cyber Education System in Air and Correspondence High School*

Air and Correspondence High School (ACHS) celebrated its 30th anniversary in 2004. With the support of the government and provincial offices of Education from 2004 to 2008, Korean Education Development Institute(KEDI) devised a '5-Year Plan for the Establishment of a Cyber Education System' to lay its foundation. Based on the results derived from 2-year model operation and its establishment following thereof, on-line lecture has been applied to the current freshmen instead of radio broadcast lecture (RBL). At the same time, the government and promulgated 'ACHS-related laws restructured and institutions', changing from 'Air and Correspondence Education' to 'Air and Communication Education' in March 10, 2006. For this ACHS was able to establish Korea's first 'cyber high school offering formal education.'

^{*} Jeong, Young Sik. Korean Educational Development Instrtute.

This paper was presented at the Educational Planning and Implementation for Mongolia Training Program, held by KEDI and KOICA from June 6 - 21, 2006 in Seoul.

Promotion background

There are limitations to RBL-centered management in ACHS. First, due to the limited air time and channels, ACHS students of varying ages could not study diverse curriculum. ACHS students' age varies as the chart below shows (See Figure 4-1).



Figure 4-1. The Numbers of Students by Age

Adults of 20 years and above account for 89.9%, and students who graduated middle school 10+ years ago account for more than 60%. So there is an inevitable scholastic gap among students. In spite of such conditions, RBL was not able to offer diversified educational contents due to the limited air time and channels. RBL had offered daily lectures for 20 minutes through EBS, considering ACHS students' average scholarship, but there was a limitation to understanding the lectures just using the radio broadcast. To complement these shortcomings, on-line lecture should be introduced to provide various contents suitable for individual education regardless of time and space.

Secondly, radio broadcast- centered lecture has its limits in content delivery, particularly so for subjects such as mathematics Innovation for Faculty and Education Customized Cyber Education System in ACHS 63

and science. Due to the fixed broadcasting time (midnight) and the fringe areas, the program listener rating was low. Indeed, according to a survey of ACHS students and faculties, Table 4-1 has found that many pointed out RLB limitations.

Table 4-1. Demands for RBL

| Section | Question | Agreement(%) | |
|---------|-------------------------|--------------|---------|
| | | Faculty | Student |
| RBL | RBL is limited to study | 86.3 | 62.6 |

Source: KEDI(2005), 2005 Survey of ACHS Management

Due to these problems, only 6.2 percent of students took the RBL everyday and 35.5 percent of students never took the RBL. Since learning complicated or experimental contents only by RBL has limits, on-line lectures must be introduced to put variousmultimedia materials into active, practical use.Thirdly, current learning process applying formal education courses does not reflect the characteristics of adult learners. ACHS students take the subjects which are helpful to the social activity rather than subjects for university admissions, and cultural studies are elective course standards (See Table 4-2). Therefore, various courses related to real life andoccupation must be operated, reflecting adults' characteristics. Off-line educational system of ACHS, however, has limitations in its operation due to financial difficulty and the supply and demand of teachers.

Because of such problems, ACHC students have been decreasing constantly from 50,000 since the 1980's. The best way to solve this problem is tointroducecyber learning materials in ACHS. As cyber learning has no time or space restrictions, it is able to offer

| Section | General study | Admission to Univ. | Social Activity | ETC. |
|--------------------------|------------------|-----------------------|-----------------|------|
| Total number(persons) | 1663 | 650 | 2785 | 316 |
| Rate(%) | 30.7 | 12.0 | 51.4 | 5.8 |

Table 4-2. Elective Course Standard for ACHS Students

Source: KEDI (2005), 2005 Survey of ACHS Management

diversified education curriculum customed to the learner's individual level. For instance, various multimedia learning materials or simulations can easily aid the explanation of adifficult math formula orcomplicated scientific experiments. Small schools in rural areas also have been unable to offer diverse elective courses due to the lack of teachers. Through cyber learning, they can offer diversified elective courses regardless of the student number or age.

Promotion contents

To systematically promote a cyber educational system in ACHS, KEDI set out a 5-Year plan in 2004 (Figure 4-2). Cyber ACHS divided the progressive picture into three parts; operating stages of cyber learning, cyber degree, and cyber educational process.

First, as the foundational stage for establishing the change to on-line lecture, this stage applies pilot programs of on-line classroom and cyber educational counseling for first year students in 2006. Second, as a stage for operating diversified school activities such as admission, attendance, assessment, extracurricular activity and discretionary activity, this stage is applied after model operation from 2006 to 2007. Third, the cyber education process Innovation for Faculty and Education Customized Cyber Education System in ACHS 65

stage comes into effect the year of 2010, after model operation from 2008 to 2009, pursuing flexibility and diversity of educational processes, e.g. diversified elective courses, cooperative schools management operating specialized courses and home-schooling for those unable to attend class.



Figure 4-2. 5-Year Plan for the Establishment of a Cyber Education System

To put the plan in action, ACHS has developed a video-centered modular curriculum fit for individual academic levels and established its infrastructure to support stable school management through internet.

Offering a on-line lecture for modular curriculum

Last year, all lectures for first year students were produced on-line. Internet lectures integrate technology instead of the RBL that has been in operation for 30 years. The existing RBL had limitations particularly in mathematics and science due to its fixed time zone, absence of repeatable functions, and voice-only system. On-line lecture, however, was greatly helpful, providing videos or model experiments, detailed explanations through the use of blackboards, pictures, and movies, repeatable functions and, most importantly, freedom from time and space restrictions. Because there are scholastic gaps among ACHS students, offering customized curriculum is important. For that reason, ACHS organized on-line lectures into four requisites and three electives groups (Figure 4-3). Each course has one main lecture connected with other courses. The four requisites consist of guidance, learning, four required courses, and arrangement. The three electives consist of basic learning, supplementary learning, and in-depth learning. Before the actual lecture, students can select basic learning for review concepts already learned, and students also can select easier supplementary learning when hard to understand. When having a proper understanding of contents, students can choose in-depth learning. All these options open to the students, and traces are left on record.

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Figure 4-3. Image of an on-line Lecture

Developing learning management system for self-study

So far, the RBL had students submit a daily summary of lectures because it was impossible to trace their study. However, cyber education system has made this possible without having to submit summary as records. Each learning activity is offered by cyber educational system, and all information related to the learning results can betraced. That is, after analyzing the results, teachers can recommend the optimum educational activities to students.

With the results traced by cyber educational system, students can check the work progress and achievement by themselves. At the same time, teachers can give advice and encourage them with the assessment. Among the four requisites, the assessment subject is able to measure individual academic ability and understanding. With the analysis, teachers can offer individual educational counseling, analyzing weak subjects or topics.

Inaugurate informational extension movement for informationally limited groups

According to an ACHS survey in March 2004, the rate of students possessing a computer was 91.2 % with the Internet connection rate of 91.5%. The rate of 84.0% computer diffusion rate and 83.8% Internet usage, cyber education condition is certainly satisfactory. About 10~20% of students, however, still remain in the informationally limited groups and their access to cyber education could be limited reversely. So the informational extension movement was inaugurated according to students' computer using ability. This information support group consists of advanced students who educate their colleagues on how to use the system. Namseoul University and Cheonan Jungang High School, in particular, operated one-on-one mentoring system that helped students who lacked the necessary computer skills.

In addition, ACHS distributed the fundamental knowledge textbook titled "Learning the Computer Together, Step by Step" for teachers, and hosted contests such as information retrieval contest to enhance student's data processing ability. For students without computers, the three model schools established 24-hour Help Centers for ACHS students.

Counseling service for bilateral conversation

ACHS students attend school every other Sunday. As they have limited time to meet classmates and teachers, ACHS provides various cyber activities such as 'our class', 'our school', and Innovation for Faculty and Education Customized Cyber Education System in ACHS 69

'community blog', 'sharing teachers' and 'friends' news. As ACHS provides various communication functions, e.g.chatting, debate room, library, bulletin board, and memo pad, students can receive real-time counseling when taking lessons.

Cyber teachers are organized into groups with the model school faculty for the call center (for telephone counseling) and the help desk as shown in Figure 4-4. During the office hours, students can receive counseling through the help center or call center. During the closing hours, students can receive counseling using the help desk on the Web at their convenience.



Figure 4-4. 24 Hours Counseling Support System Establishment

Promotrm results

During the past 2 years, Suseong, Masan and Cheonan jungang high schools which were selected as model schools by the Ministry
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of Education and Human Resource Development, gave the following results.

High preference and satisfaction on contents revealed

The survey results of model schools in October 2005 is on Table 4-3.

| Ques | tion | RBL | Cyber Lecture | |
|--------------------------|----------------|----------------------------|-------------------------------|--|
| · Convenience | | 19(14.2%) | 115(85.8%) | |
| · Efficiency | | 8(6%) | 116(94%) | |
| | Response | | | |
| Question | High(everyday) | Medium(2-4times a week) | Low(less than once a week) | |
| Listening Ratio | 11(7.3%) | 61(40.7%) | 78(52%) | |
| Connecting Ratio 33(22%) | | 89(59.3%) | 28(18.7%) | |

Table 4-3. Preference for the RBL and Cyber Lecture

Source: KEDI(2005), 2005 Survey of model schools applying cyber lecture

According to the responses regarding convenience of lectures, the rate of RBL was 14.2% while cyber lecture was 85.8%, more than four times higher than that of RBL. Educational efficiency was rated at 6% for RBL and 94% for cyber lecture, a significantly higher figure. Furthermore, the number of connection to cyber lecture was three times higher than RBL.

The results of the survey on model school students showed a satisfaction rate of 34%, normal 65% and dissatisfaction at 1%, showing a general satisfaction with video clip contents (Table 4-4). To be more specific, satisfaction for the degree of difficulty is 57%, and satisfaction for the convenience of use is 50%, while

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satisfaction for substance is 56%.

| Questions | Result | | | | | |
|----------------------|-----------|--------|--------------|--|--|--|
| Questions | Satisfied | Normal | Dissatisfied | | | |
| Overall Contents | 34 | 65 | 1 | | | |
| Degree of Difficulty | 57 | 41 | 2 | | | |
| Convenience | 50 | 45 | 5 | | | |
| Substance ofContents | 56 | 42 | 2 | | | |

Table 4-4. Satisfaction for Contents

Data: KEDI(2005), 2005 Survey of model school for applying cyber lecture

Use of system increased greatly

Comparing system use as of March 2004 prior to the establishment of ACHS cyber education system and of March 2006 after system implementation, the conditions are as shown in Figure 4-5.

The number of accumulated members which increased 7.4 times from 2004 was 27, 570, information inquiry which increased 11.0 times from 2004 was 65 million on average, and the amount of downloading which increased 258.5 times from 2004 was 780 thousand MB on average.

The survey results show that 66.7% of the students connect more than 20 minutes on average when they connect to the system, much higher than that of RBL's. Moreover, the most frequently used menu on the homepage was 'classroom,' and the next were 'my class' and 'community.' It was noted that most students use 'classroom' to take internet lectures.



Figure 4-5. System Use Condition

Next issues

According to the news, the educational gap within the informationally limited groups could be covered by the information-oriented society and the government announced that they will devise methods to extend the educational opportunity through e-learning to resolve the maladjustment of formula education.

Extension of the number of beneficiaries for ACHS cyber education

To offer education opportunities to the informationally limited groups, the number of beneficiaries of ACHS cyber education must be extended. About 10% of ACHS students are teenagers, numbering more than 1,300 including 90% of alternative school students in 2004. Many of theme.g. students of special athletic Innovation for Faculty and Education Customized Cyber Education System in ACHS 73

skills or long-term overseas residents were maladjusted to the formula system of current high schools.

ACHS manages Cheonan prison classes for juvenile offenders and supports education through the ACHS admission for persons on probation where subtitles on videos have been helpful for those with hearing impairments. An ACHS branch in Youngdeungpo manages education for North Korean children. If ACHS establishes e-learning programs for informationally limited groups based on the experiences of 'Korea's first formal curriculum through the cyber education', trial and error would lessen.

Accepting e-learning not as complementary but as an alternative system

From now on, E-learning should be accepted not only as a complementary system, but also as an alternative system which can solve problems in school education. So far E-learning has only been used as a supplement or self-learning tools, e.g. instruction learning center, cyber home learning, or EBS Korean SAT lecture. However, formula curriculum operation through E-learning should be actively promoted.

VHS(Virtual High School) of USA is operating a system where several high schools organize consortium to open the classes that is either costly or inlack of students, making it possible for students to take courses they desire. Inter-High School in Japan allowed students receive high school diplomas through internet home schooling beginning September 2004. Moreover, it is striving for credit exchange with schools in USA that allows the students to receive graduation certificates from US high schools at the same time as long as they take particular subjects.

Last year, through the 'Business for Developing Remote-

educational Contents' ACHS selected highly taken 9 subjects that the number of students was less than 20% based on the 'Condition of General and Elective Subject Opening' of the educational system and developed web contents. Such contents would be applied to model schools in 2006 and the results applied to ACHS nationwide to offer various elective subjects could be operated by E-learning, targeting small rural schools which are not able to operate various elective subjects due to the lack of teachers. Furthermore, there are needs for AP(Advanced Placement) programs allowing advanced students to take the upper grade credits or BP(Bridging Programs)s allows students lacking prerequisite learning to retake classes. Innovation for Faculty and Education Customized Cyber Education System in ACHS 75

References

- Jeong, Young Sik et al. (2005). Model School Operation Applying Air and Correspondence High School Cyber Lecture. KEDI.
- Jeong, Young Sik et al. (2005). 2005 Air and Correspondence High SchoolCyber Educational System Establishment. KEDI.
- Choi, Sang Geun et al. (2001). Elementary and Secondary School CyberEducational System Development. KEDI.

Chapter 5

The Relationship between the Academic Credit Bank System and the Formal Higher Education System*

Introduction

The era of higher education as high class privilege has passed, yet there remain groups of people who still believe that higher education is for the higher class or for those with the competency to receive higher education. On the other hand, there are citizens who think that higher education is not only for a "special" group of people anymore and that it should be open to everyone.

The open higher education system established as a formal school system did not fulfill the social demand for higher education. This system is special as an alternative to the formal higher education system, targeting those who have been previously excluded from the formal higher education system. In spite of these differences, the open higher education has been recognized as a type of higher education.

^{*} Baik, Eun Soon. Korean Educational Development Institute.

This paper was presented at the KEDI-NCEDR Joint Seminar held from September 12 - 13, 2007 in Beijing, China.

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Although the open higher education system is supposed to operate at the higher education level, identical to formal system, it is placed in a different sector and because it was designed as an alternative to the formal system, the open higher education system was expected to maintain its unique characteristics and keep a certain distance from it. Indeed, one could say that the dynamic transfer of learners between the two higher education systems (open and formal) is rarely observed in many nations. In other words, the two systems seem to be isolated from each other.

The Academic Credit Bank System (ACBS) was established as an open higher education system in 1998; and from its inception, the ACBS has approved experience and qualifications not only from the formal school system, but also outside of it. For example, while the ACBS approves diverse learning coming from regular universities and non-formal institutions, it also recognizes qualifications such as vocational certificates and (Bachelor's Degree Examination Program for the Self-Educated) examination results.

Although the ACBS was not made to be dependent upon the formal higher education system and alternative ones, a growing number of students from the formal education system flow into the ACBS and many ACBS students choose to enter the formal system upon graduation. Consequently, ACBS has targeted those who graduated from 2-year colleges or dropped out of 4-year universities, rather than those who had never entered the formal education system. In other words, more learners today are moving back and forth between the formal education system and the ACBS open education system.

As the society grows more sophisticated, the demand for education becomes more diverse. Although the formal higher education system has end eavored to change from unit-based to program-based education in response to the growing social demand for higher education, there are still various needs to be met. Because the formal system alone is no longer able to fulfill the learners' diverse needs entangled with higher education, there is a clear need for both the formal and the alternative higher education systems to work closely together and dynamically interact in order to properly address the issue.

Therefore, this paper proposes a new relationship between the formal and the alternative higher education system by providing a clearer picture of the active interaction between the two.

The open and regular higher education system

The open higher education system in Korea is based on a distinct educational institution and system, differing from the regular higher education system. In contrast to the western society where private universities havethe autonomy to accommodate the increasing demands, the power to regulate enrollment quotas does not belong to the universities but to the government in Korea. Because universities do not control the quotas but must comply with predetermined quotas, they are primarily interested in selecting students of similar age groups rather than from a greater age span.

Due to the low birth rate in the past two decades, the total number of age groups in Korea has sharply declined. In addition, universities are still concentrating on securing only particular age groups and are thus, facing oversupply problems. They are not making proper efforts expand the narrow access to higher education for adult groups, who have missed the opportunity to enter university. In other words, because of the universities' conservative policies, it is not easy for adults, in reality, to enter universities after losing an opportunity to go to university in the past.

The Korean National Open University, established in the

mid-70s, and Dok-Hack-Sah, established in the early-90's, are open higher education systems established to fulfill the higher education demand. The target groups of these open higher education systems are learners who have lost the opportunity to enter the formal higher education system. In other words, the main targets are learners who wish to receive higher education but are not able to get an education from the existing system.

The open higher education system displays differences from the existing higher education. In the case of Korean National Open University, they implement distance education which allows students to learn on their own and be recognized by their test results, which different from the attendance favored in the regular higher education system. Because of the difference by which degrees are granted, the open higher education system is certainly different from the regular higher education system. As a result, these two systems have continued on their own paths without any exchange.

In sum, the formal higher education system and the open higher education system in our country were not established with the expectation of the two systems having any intersection. The open higher education system was developed to provide a second chance for learners who were not able to enter the higher education system. Originally, the open higher education system did not assume any interplay with the regular higher education system, nor a need for cooperation between them.

The Academic Credit Bank System and the recognition of learning results from the regular higher education system

The ACBS, established in 1998, tried to accept the educational outcomes of the formal education system which, different from past open systems, tried to construct completion systems. Open post-secondary education systems like the Korea National Open University and Dok-Hack-Sah partially approve the educational outcomes of the regular system although, unlike the ACBS, they do it at a marginal level.

The basic purpose of ACBS is to approve the outcomes of its affiliated institutions. The ACBS also approves diverse outcomes of the formal higher education institutions, although it was able to establish itself as an open higher education system without actually doing so. Because there are many educational institutions that practice post-secondary level education outside of the formal system, the ACBS already had the capacity to attract potential learners. However, the ACBS decided to accept the outcomes from the formal system as well as outside of it, instead of limiting itself to the open educational institutions.

The ACBS's unique idea can be called the 'blanket network'. While other education systems aim for "openness" within their own systems, the ACBS, in its pursuit for openness, covers various systems of higher education and actively links or accepts different types of educational outcomes. In other words, the ACBS pursues openness within the open higher education sector, as well as between the formal sector and the current open sector by approving regular academic education but also out-of-school educational experiences.

The ACBS links multiple educational frameworks at the higher level including formal (traditional) colleges and universities,

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part-time course enrollments, distant/open learning universities, intensive/specialized programs at colleges, Bachelor's Degree Examination Program for the Self-Educated, trainings of Important Intangible Cultural Properties and national skill/qualification framework. Basically, this system enables people to obtain academic degrees by accumulating as credit points, the results of individual learning at various institutions other than regular colleges or universities. For example, part-time students can earn their degrees through the ACBS by having their part-time courses recognized. A self-educator's time and efforts can be recognized only through the ACBS, especially in situations where the learner successfully passes all but the last test for the bachelor's degree. The ACBS also offers an excellent opportunity for learners to have their intensive/specialized college study program recognized.



Figure 5-1. Programs, Institutions and Systems Linked with/Covered by ACBS

In this respect, the ACBS is not an open system with a narrow perspective, opening its gates only to those outside the traditional The Relationship between the ACBS & the Formal Higher Education System 83

school sector, but an open system with a broader perspective, which covers and links diverse learning outcomes from different educational systems. This open approach has distinctive characteristics compared to other open policies, for it promotes networking among diverse education systems –between the formal traditional higher education sector and the newly developed sector.

By recognizing credits completed in a previous university or college as the ACBS-approved credits, university dropouts can have an opportunity to acquire a degree through the ACBS rather than formal institutions. This creates a connection between the open higher education and the formal higher education. In other words, these two systems are no longer separate.

Increase of exchange between the ACBS and the formal higher education system

The ACBS is a system open to all holders of high school diploma including those who either could not begin university education or had to leave in mid-course, as well as those who acquired other qualifications. Because it was initially designed for such learners, the ACBS never expected the enrollment of those already in formal higher education systems.

Exclusion of the regular university students shows that the target groups of ACBS differ from those of the regular system, implying that learners already in the regular systems are not expected to participate in the ACBS. In other words, although the ACBS accepts those of the formal system, it does not assume any competition, thus placing itself in a sector different from that of the formal higher education system.

Since the ACBS began, exchange between learners from the ACBS and regular universities has strengthened. This is apparent

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in 1) the increase in ACBS by regular university dropouts and graduates, 2) the increase in ACBS degree awardees entering regular universities, and 3) the increase in the utilization of ACBS by regular university students including those in their military service.

Increase in the use of ACBS by dropouts and graduates of regular university

The dropouts of the regular universities using the ACBS

Many universities in Korea do not recognize education acquired in other universities, thus requiring students to complete all required credits in one university in order to receive a degree. If astudent drops out of the university, there is no way for them to utilize the acquired credits. In other words, the students are deprived of their right to select and/or transfer among institutions while the universities continue to further their interests rather than promoting the rights of the students.

The ACBS, however, recognizes as credits the results from various institutions when they demonstrate equivalence to formal university credits or courses. As result, the number of students transferring from the regular system to the ACBS has increased remarkably.

Table 5-1 is formulated to show the number of approved credits classified according to the credit sources. In this chart, 'completion of university approved credits' refers to the credits which students gained in regular universities or colleges. As you can see, the total number of credits transferred from formal higher education institutions to the ACBS increased from about 67,000 credits in the year 2000,to about 1,796,000 credits in the year 2006. In addition, the ratio of completion of the university-approved credits has

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| | Approved credits classified by the credit sources | | | | | | | |
|------|---|--|-----------------|---------------------------------------|------------------------------|---------------------------|-------------------------|-------------|
| Voor | ACBS affiliated | Acquisition of Dok-Hack-Sah qualifications (self-educated | | ack-Sah lucated) | Completion of university- | Significant intangible | Completion of part-time | Total |
| Tear | Institutions | | Passing test | Completi on of exempt course | credits | properties | courses | Total |
| 2000 | 209,501 | 46,927 | 1,230 | - | 67,818.5 | - | 21,542 | 347,019 |
| 2001 | 440,114 | 96,536 | 2,495 | 3,272 | 155,663.5 | - | 24,506 | 722,586.5 |
| 2002 | 721,427 | 141,461 | 2,742 | 17,093 | 239,477 | 1,680 | 31,257 | 1,155,137 |
| 2003 | 841,077 | 210,171 | 4,332 | 14,293 | 348,047 | 1,061 | 54,888 | 1,473,869 |
| 2004 | 805,434 | 305,951 | 14,481 | 10,659 | 498,527 | 676 | 138,802 | 1,774,530 |
| 2005 | 968,738 | 501,369 | 74,582 | 11,397 | 882,293 | 1,015 | 373,643 | 2,813,037.5 |
| 2006 | 1,104,114 (27%) | 619,025 | 52,280 | 6,462 | 1,796,442.5 (44%) | 487 | 524,492 | 4,103,302.5 |

Table 5-1. Number of Approved Credits Classified by the Credit Sources (2000-2006)

Source: Excerpt from KEDI internal data

increased 44% overall, remarkably larger than that of the ACBS-affiliated institutions (26%). The ACBS-affiliated institutions include non-regular educational institutions such as lifelong education centers, advanced technical training schools, and private institutions. In total, there are about 400 ACBS-affiliated institutions.

Originally, the ACBS was designed to facilitate non-regular educational institutions rather than formal and regular educational institutions like universities and colleges. However, the table shows that the largest number of approved credits comes from formal higher education. 86 Higher Education and Lifelong Learning in Korea

Regular school dropouts can be categorized into 2 groups: those prior to and those coming after the establishment of the ACBS. It is hard to assume that the "before the establishment" dropouts had any intention to enter the ACBS, yet they are the original targets of the ACBS because they are the ones who discovered a way to have their old credits approved through the ACBS after dropping out of university. On the other hand, many recent dropouts have intentionally quit school with the purpose of utilizing the ACBS by acquiring education from approved institutions in a relatively short time with less expense.

Currently, we do not have the statistics for those who intentionally drop out of university to enter the ACBS. However, according to the ACBS employees who conduct telephone and face-to-face consultations, the number of students considering dropping out or have already done so is increasing.

The increase of the dropouts using the ACBS has contributed to the interplay between the alternative higher education systems, specifically the ACBS and the formal higher education system, benefitting not only the dropouts but also the ACBS and the universities. First, universities prefer capable students regardless of whether he/she is from the ACBS or a regular university. Second, the ACBS organizers want to prove the quality of ACBS by making it equivalent to the regular universities. Finally, it is better for students to enter famous and reputable universities, saving time and money through the ACBS, rather than receiving degrees issued by unfavorable universities.

The data below shows the relevance between regular universities and the ACBS, in regards to the educational background of the ACBS learners. As we see in <Table 2>, the academic level of the ACBS-registered learners is getting higher. Although the high school graduates still constitute the majority, it has been declining sharply. Conversely, the number of students entering the ACBS after graduating from regular colleges or universities is increasing rapidly.

In the year 2001, the percentage of high school graduates among registered learners was 78.76%. This rate began dropping and in the year 2006, the rate dropped below 40%. On the other hand, the percentage of 2-year college graduates has increased from 11.26% in 2001 to 33.19% in 2006. University graduates also increased from 7.07% to 16.83% during the same period. Based on the year 2001, the percentage of two-year college graduates increased five times

| Classification | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| High school graduates (%) | 15,185 (78.76) | 15,673 (73.13) | 14,985 (60.16) | 13,858 (49.74) | 15,960 (37.92) | 12,225 (37.42) |
| Enrolled in | | 2 | | 2 | 0 | r. |
| 2-year college | - | 2 | 4 | 2 | 25 | 5 |
| 2-year college dropouts | 145 | 220 | 423 | 805 | 1,396 | 1,081 |
| 2-year college graduates (%) | 2,170 (11.26) | 2,935 (13.69) | 4,106 (16.48) | 6,352 (22.80) | 10,593 (25.17) | 10,893 (33.19) |
| Enrolled in university | 1 | 99 | 300 | 182(0.65) | 826 | 264 |
| University dropouts (%) | 416 | 620 | 1,045 | 2,225 (7.89) | 3,809 (9.05) | 2,668 (8.17) |
| University graduates (%) | 1,363(7.07) | 1,884(8.79) | 4,046(16.24) | 4,438(15.93) | 8,325(19,78) | 5,498(16,83) |

Table 5-2. The Educational Background of Learners when Registering for the ACBS (Percentages and number of learners)

Source: Excerpt from KEDI internal data

as much while university graduates increase four times as much in the past 6 years. In fact, the number of learners using the ACBS after college or university graduation is noticeably increasing. Thus, it is important to notice the dynamic student transfer from one educational institution to another, clearly indicating a tight interplay between the formal higher education system and the ACBS.

Increase in regular university graduates using the ACBS

Graduation from the university does not indicate an end to learning. Many people want to continue learning, even after graduation, which explains why the number of regular university graduates has dramatically increased. There were 1,363 bachelor's degree holders who registered with the ACBS in 2002, but in the year 2006, there were 9,643 learners.

This indicates that the ACBS provides a second chance, not only for those who missed the opportunity to enter university, but also to those who have already graduated. Every graduate has different reasons for utilizing the ACBS. Some want to develop competitive power to get a certificate or job; others simply want to learn more.

According to a research by Seoul National University, 61% of the freshmen were not satisfied with their majors in 2006. While the formal higher education system tends to put restrictions on the choice of majors, the ACBS learners are able to choose their majors freely. A number of graduates switched to a new major through the ACBS because they were dissatisfied with their former major or they needed to improve their competence for a better job.

More than 100 graduates have chosen from among the current 16 majors. More than 13,669 learners chose Social Welfare as their major, making it the most popular major, followed by Ground The Relationship between the ACBS & the Formal Higher Education System 89

Warfare (8,402 students), Accounting (4,980 students), Law (2,987 students) and Management (1,306 students).

The increase in the number of graduates using the ACBS means that the interplay between open higher education, the ACBS and formal higher education is based on the practical demands of learners. They are different from dropouts in that they are not interested in acquiring a good academic background from a reputable university. They consider the ACBS as equivalent to formal higher education and utilize it for practical purposes in the job market.

Students entering the regular higher education system from the ACBS

It is apparent that students entering the formal institutions after receiving associate and bachelor degrees through the ACBS have steadily increased. For example, the percentage of entry into university or graduate school among the ACBS graduates increased from 15% to 28% during the past 6 years (from 2001 to 2006). This is evidence to the firm link between the ACBS and the formal higher education system. The Table 5-3 is formulated to demonstrate the rate of entry into universities by the ACBS learners and graduates.

These figures hover around 25% to 28% after the year 2003, which means that about one forth of ACBS degree awardees entered formal universities or graduate schools. Note, however, these figures include only successful candidates. There are many more candidates who do not consider the ACBS as the end of their academic background but are interested in learning more.

The sentiment regarding the increase in the ACBS students' entry into the regular higher education system is expressed in two ways. Some say this transfer is very desirable because it is natural that people continue learning in a lifelong learning society. Others say it is not desirable and unfair for learners to enter reputable universities or graduate schools through the ACBS.

However, the ACBS learners' desire to continue learning should not be the target of criticism although a pure motivation of passion for learning cannot be inferred since they regard the ACBS as a passage to more reputable universities or graduate schools.

The transfer between universities enables natural university reconstruction by the market force. This reconstruction represents not a mere reorganization of the existing university order but a consolidation. In other words, because of the tendency to pursue

| Classification | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | Total |
|---|-------|-------|-------|-------|--------|--------|--------|
| Transfer to university | 17 | 114 | 495 | 775 | 1,781 | 2,517 | 5,699 |
| Transfer to university before completing ACBS | 236 | 517 | 1,156 | 1,083 | 634 | 840 | 4,466 |
| Graduate school | 111 | 242 | 566 | 807 | 1,097 | 1,302 | 4,125 |
| Total | 364 | 873 | 2,217 | 2,665 | 3,512 | 4,659 | 14,290 |
| The number of degree awardees | 2,479 | 4,588 | 8,243 | 9,520 | 13,894 | 17,763 | 57,814 |
| Advancement /transfer (%) | 15 | 19 | 27 | 28 | 25 | 28 | - |

Table 5-3. The Rate of Entry into University/Graduate School by the ACBS Learners

Source: Excerpt from KEDI internal data

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reputation and thus transfer into a more reputable university in Seoul, regional or less reputable universities find it more difficult to recruit students.

Increase in the number of formal university students concurrently using the ACBS

The use of the ACBS by formal university dropouts, graduates, as well as the ACBS degree recipient sentering formal universities shows that the learners are using both the formal system and the ACBS. However, while there is a time gap for ACBS learners who use both systems, statistics show that formal university students tend to use the two systems simultaneously. This is why the relationship between the formal higher education system and an open higher education system like the ACBS, should be examined because they should not be segregated any longer.

The request for simultaneous enrollment in the ACBS and formal universities began soon after the establishment of the ACBS. Some university students wanted to enroll in the ACBS and get the same benefits that non-university students receive from the ACBS, namely the credits from out-of-school experiences.

The Ministry of Education, The Human Resource Department, and KEDI, which operate the ACBS, created a clause in order to prevent students from being enrolled in the two systems at once. This was to prevent a conflict between the two systems, and more specifically, to protect the formal system. However, in 2002, the never ending requests and demands compelled the enrollment of a selected number of university students.

Presently, although university students are allowed to enroll in the ACBS and his/her own university at the same time, the ACBS approved credits cannot be recognized as university credits. Credits acquired from the ACBS can be used in different ways 92 Higher Education and Lifelong Learning in Korea

such as filing for the bar exam or a CPA exam, where candidates are required to have a certain number of credits in related subjects. Credits from the ACBS can be used to meet thes ere quirements. If more national examinations require these kinds of requirements, university students wanting to enroll in the ACBS will increase.

Students want their learning experiences from alternative and open education institutions to be recognized as occasion demands, even though they are already members of the formal higher education system. The increase in the number of formal university students concurrently using the ACBS widens the range of their choices in terms of majors and subjects. This can be considered as consumer rights in the market. Allowing university students to use the ACBS removes some obstacles and guarantees their rights. However, students still have a tendency to flow into a particular major, such as social welfare, law, accounting, etc. Of course, the educational system is no exception in an age of limitless competition.

Conclusion

The ACBS is a comprehensive open network system which recognizes educational experiences not only in formal schools but also outside school, namely in the open higher education area. Users of the ACBS have expanded – from the originally targeted high school graduates, university dropouts, and other certificate holders – to students in the formal school system.

The increasing number of learners who move back and forth between the ACBS and the formal system reflects their needs, which can be interpreted as a lack of need/desire to stay in one system. When they feel the need to study out of school, they choose alternate educational systems regardless of their formality. The university students' concurrent use of the ACBS show that it is not important which system students are in, as long as they can The Relationship between the ACBS & the Formal Higher Education System 93

have access to the learning they need, and have it recognized.

An increase of interchange between the formal and open higher education systems shows that the two systems can no longer exist without influencing each other. The responsibility of improving the quality of education is not restricted to a single system. If the quality of formal school outcomes is low, it brings down the quality of ACBS, eventually deteriorating the quality of formal higher education.

The promotion of mutual exchange between the ACBS and the formal higher education system most certainly brings stimulation and change to the entire higher education system. There will be more students who do not wish to stay with one particular institution. When they realize there are other options, they may choose the ACBS, and later return to another formal higher education institution.

The students' right of choice in educational institutions may bring enormous change to the higher education system. First, the open higher education may supplement the rigid and inflexible formal education by providing learners with the freedom of choice in terms of majors and subjects.

Second, the open higher education system would facilitate the transfer between and reconstruction of universities in a very natural way. Learners enrolled in lower-level universities would use the ACBS to enter higher-level universities, saving time and money.

Third, the expansion of the interaction between the formal and the open higher education systems would dissolve academic cliques by providing opportunities to obtain diverse academic backgrounds. In formal education, one's university and major are determined according to his/her academic records, not his/her own interests. However, the ACBS provides multiple chances to enter university whenever they want. Fourth, the right to education is protected and respected through the ACBS, which is conducive to the flexibility of higher education in the future. With the increase of different demands, the notion that best learning happens in a single institution is becoming out-of-date.

Finally, the increase of exchange between the formal and the open education system accelerates the development of quality control as well as policies to generalize and organize the two systems together. All organizations related to higher education should cooperate with one another.

Chapter 6

Current Status and Challenges of the Lifelong Learning City Policies in South Korea*

The need for Lifelong Learning City(LLC) project

The concept "learning cities" (The term learning cities here is closer in meaning to learning communities which encompasses cities, towns, and regions) is one of the most important developments in the movement for the realization of a "learning society" (Longworth, 2001). This is because it encompasses the policy or strategy for its realization at the local level. This learning cities movement seeks to regenerate the local into a socially, economically, and culturally dynamic city through the restoration of collective awareness. In other words, the learning city project is a union of lifelong learning & community-building movement that seeks to realize local policy goals. At the root of learning cities in European nations such as the Great Britain or the Japanese

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community-building, lies the community-building movement.

In 1979, the city of Kakegawa, Japan was declared the first Lifelong Learning City (LLC); and the project was carried out by the local government. This was possible only because the governor realized the political importance of being a lifelong learning city.

In Europe, on the other hand, learning cities became a political interest in the late 1990s. This was due to the formation of International Association of Educating Cities (IAEC) in Barcelona (1990) and the OECD conference regarding learning cities in Gothenburg (1992). The OECD conference in 1992, in particular, helped many nations take interest in learning cities; and as a result, 100 learning cities participated in the Towards a European Learning Society (TELS), Project of the European Commission in 2000. Majority of European learning cities emphasizes partnership and is usually promoted through cooperation at the lowest levels.

Since the OECD Learning City Conference in 1992, Great Britain constructed a Learning Cities Network of approximately 50 cities which is still presently active. In 1998, the network helped conduct a research on these learning cities to produce a theoretical analysis report under the Department for Education & Employment (DfEE). In the same year, a guidebook for the development of learning cities, based on the experiences of the Network was published also under the name of DfEE (Learning City Network, 1998). With the help of such publications, the movement for learning cities is unfolding more systematically.

As can be seen from above, political interest in learning cities in Europe began in the 1990s a time in which lifelong learning was being emphasized as the main policy in other countries. Therefore, in order to understand the full political meaning, it is necessary to take a deeper look at the relationship between lifelong learning and the political, economic, and social changes brought forth by globalization and the development of a knowledge-based economy Current Status and Challenges of the Lifelong Learning City Policies in South Korea 97

in the 1990s.

The report, Lifelong Learning for All, published by the OECD in 1996, has greatly influenced policy-makers around the world. It emphasizes the effects of globalization and the development of the knowledge-based economy on the economic and social environment on which education and training policies have been drafted and passed. Since the 1980s, globalization has gained speed due to the mutual interactions of deregulation of the market, rapid development of telecommunications technology, and globalization of the financial market (OECD, 1996). As competition is fierce, many nations, including the developed nations, began to actively promote the transformation into a knowledge-based society to strengthen national economic competitiveness.

Castells, the author of *The Rise of the Network Society*, explains the characteristics of a knowledge-based society in terms of the information technology paradigm. He states that in a society driven by the information technology paradigm, the generation, processing, and transmission of information and knowledge have become the fundamental sources of productivity and power.

As shown above, globalization and the challenges of a knowledge-based economy were the factors that caused policymakers to take interest in lifelong learning and learning cities. Already, European welfare states are facing serious challenges in employment stability and social welfare systems due to the flexibility of the labor market and the reduction of the welfare budget. (Ramesh Mishra, 2002).

Also, as the lifespan of knowledge and the lifecycle of products grow shorter with the fast developing technology, being equipped with a system that continually updates knowledge and technology is becoming essential in maintaining a nations' or business' competitiveness as well as personal potential for employment.

Yet the challenges of globalization do not have the same

influence on different countries, and the countermeasures for them differ respectively as well. Thus the focus for policies of lifelong learning or lifelong learning cities will differ according to the challenges faced by the nation, locals, and their countermeasures. For example, the reason for promoting lifelong learning in the city of Kakegawa the first declared lifelong learning city was to escape the reality of an underdeveloped agricultural city, located in the country, and to aim for reform as a city equal to its neighboring capital Tokyo. (Yang, 2004). The learning city project was led by an administrative system centered on the mayor's leadership in connection with the local government and learning.

Great Britain, on the other hand, can be seen as promoting lifelong learning based on cooperation with local partners, thus striving for a local development strategy based on ① personal growth based on confidence and competence ② economic development ③ social cohesiveness (Yarnit, 2000). As for its method, it emphasized partnership, participation, and performance.

The concept of lifelong learning was used since the 1990s, and its comparison with the previously used concept, contain the following:

First, lifelong learning emphasizes informal and nonformal learning, and particularly emphasizes the importance of continued learning at the workplace and the actual living world. This is because there is a limitation to formal education in responding to today's rapidly changing knowledge and technology.

Second, in the provision of learning opportunities and participation, lifelong learning emphasizes the responsibility of the individual, civil sector, and employment world rather than that of the state (Tuijnman & Bostrm, 2002). Therefore, an emphasis is placed on civil participation and partnership among the parties, and on the students' part, the selection of and active learning.

Third, the improvement of employability through lifelong learning

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becomes an important issue in relation to social cohesion. This is because the primary responsibility for employment moves from the government to the individual as the labor market becomes deregulated and the social welfare system is phased down. Therefore the liaison of education, training and employment, become one of the core policies for lifelong learning (Choi, 2003).

Current status of Lifelong Learning Cities in S. Korea

Current status of Lifelong Learning Cities

Lifelong Learning City (LLC) initiative

In Korea, the LLC Foster Project became a government policy when the Ministry of Education and Human Resources Development began the LLC selection process in 2001, but the movement for LLC occurred at the local government level.

The fact that the city of Changwon had instituted an ordinance related to a lifelong education center in 1995 the year when local governments had first resurrected after 30 years seemed to have foretold the connection between the two. The declaration of Gwangmyeong as an LLC in 1999 opened a new door to the development of LLC. However, the determinative factor was the 2001 LLC selection process, begun by the Ministry of Education and Human Resources Development that caused local governments to take interest.

LLC selection by state is distinctive to Korea and unprecedented by any other countries. In other nations, including Japan and Europe, local governments or local partnerships declare LLC's by themselves and carry on the project on the basis of the local initiative.

In 2001, the number of LLC's began at 3 but grew to the current 33 in 2005 as shown in the Table 6-1.

Table 6-1. Number of Annual LLC Selection

| 2001 | 2002 | 2003 | 2004 | 2005 | Total |
|------|------|------|------|------|-------|
| 3 | 3 | 5 | 8 | 14 | 33 |

LLC can be categorized into three types: urban, urban/rural mixture, and rural. The urban type composes the majority of LLC, while the other two are similar in percentage.

As it is shown in Table 6-2, the financial independence of the LLC's is below the national average. This shows that the volition of the local government head is more important than the financial independence in the LLC selection.

Table 6-2. Comparison of the Financial Independence of LLC

| | City | County | District |
|------------------|------|--------|----------|
| LLC Average | 37.8 | 14.7 | 39.0 |
| National Average | 40.6 | 16.5 | 44.3 |

Among the existing LLC's, it is apparent that cities with higher financial independence are much more active in the projects. Good examples are Gwangmyeong (50.3%), Bucheon (64.4%), Icheon (48.8%), Changwon (67.7%), and Chilgok (30.2%). However, there are cities with lower financial independence that are just as active in promoting the project e.g. Suncheon (26.4%), and Geumsan (18.6%).

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Policy decision & executive system for the LLC initiative

According to the present Lifelong Education Law, the promotion structure of is as follows: National Center for Lifelong Education \rightarrow Provincial Information Center for Lifelong Education \rightarrow City/County/District Lifelong Learning Center. On the other hand, the LLC promotion structure in practice is as follows: Ministry of Education & Human Resources Development (National Center for Lifelong Education) \rightarrow local government (local Lifelong Learning Center). With the separation of the education office and administrative government, the current structure of the Lifelong Education Law centers on the Ministry of Education-Office of Education system while LLC is operated by local government's general administrative system.

Currently, the plan and execution of the LLC selection process falls under the responsibility of the Ministry. The National Center for Lifelong Education supports the necessary research and operations for the execution of its policies. Accordingly, the Ministry and the Center can be seen as being in partnership. Although such relationship is not clearly established, the Ministry focuses on policy decision, budget execution, and performance evaluation, while the Center strives to enhance the durability and professionalism of the LLC Foster Project through experiences in project execution as well as the building of partnerships.

In the selection process of LLC, the cooperative relationships between the local government and the Office of Education is strongly urged, even requiring the submission of a mutual proposal; however, problems still remain. These problems include the passive participation and the need for cooperative systems between local governments and the Office of Education. This clearly shows that there is still a lack of school participation in the

LLC project.

The network support among local governments is not yet effectively taking place. For example, there are no departments or officials in charge of the LLC project in metropolitan cities, which results in very little or no liaisons or cooperation among the local governing bodies. Therefore, there is a demand for support of the LLC network at the metropolitan or provincial government level.

LLC related projects and programs

National level

Projects related to the LLC that are unfolding at the national level can be categorized into the following:

First is the annual Lifelong Learning Festival held in one of the selected Lifelong Learning Cities. The Ministry of Education and Human Resources Development grants financial support, while the Lifelong Education Center assists the planning and execution based on its past experiences. Some criticize it as a one-time event, but it certainly rouses interest not only of the Ministry and the local governments but also of the general public regarding lifelong learning.

Second is the annual Award Ceremony awarding outstanding LLC among the local governments fostering competition.

Third is the promotion of the program development that provides aid for outstanding programs make, making full use of the LLC's local characteristics. This is because in spite of the numerical increase of LLC programs, there have been requests for programs recognizing the local characteristics or reflecting the people's demands. In 2005, 750 million won was provided in support for 27 programs.

Fourth is the LLC Consulting being planned beginning in 2006. Consulting project is aimed for LLC to develop both in quantity Current Status and Challenges of the Lifelong Learning City Policies in South Korea 103

and quality. This is the starting point for Learning City experts (local university experts included, if possible) in liaison with local LLC officials to develop models fit for each locale, which can take place in connection with the LLC long-term Research & Development Plans or business/program development

Local government level

Main projects and programs developed by the LLC can be as follows:

First, hold a Declaration Ceremony and a Lifelong Learning Festival or various programs to increase participation of the local people. In the early stages, many programs and events are planned to rouse interest. Then there needs to be development of programs that will promote continued participation.

Second, institute rules and regulations and establish a department in charge, along with a professional work force, to build the LLC structure. This process is strongly influenced by political volition and interest of the local government head. The construction of the promotion structure in the early stages usually happens according to the leadership. Once the structure is secured, the capacity of the responsible administrative department and executive organizations including local lifelong learning center will generate the difference in performance. The greatest challenge in the construction lies in the participation of various fields that will maximize the capacity and resources of the society.

Third, formulate a policy execution plan that will effectively connect other projects promoted by the state or local governments. If promoted in cooperation with local innovation policies or balanced local development plans, it will contribute to maximizing the effect and performance of the LLC.

Lastly, propose specific annual performance goals based on

long-term development and execute evaluations. Up to the present, specific goals for lifelong learning participation or adult literacy have not been set and their achievements have not been systematically evaluated. Therefore, local partnership must be strengthened through sharing of performance results.

Requisites for the success of LLC

Through the analysis of relatively successful cases of LLC's, the following six requisites were revealed as the core factors of success: (1) local government head's leadership and recognition of the importance of LLC, (2) the construction of the structure in charge of lifelong learning, (3) posting of professional workforce (Lifelong Educator) and their adequate fulfillment of roles, (4) budget secured for the Lifelong Learning project, (5) various programs developed and run, and (6) programs suitable for the local developed and executed.

In the early stages, the leadership of the local government head plays an important role because he is responsible for other factors constructing the driving structure for LLC, hiring professional workforce, and securing the project budget. Once the structure is relatively secure, however, the role of the professional workforce becomes critical. The development of programs and projects will be possible according to their capacity; and the response and support of the residents to the programs will greatly influence continued development. When such results are evident, the government an elected position will naturally take active interest and seek to successfully promote the LLC.

Therefore, securing a professional workforce generating the desired results and ensuring the smooth operation of the structure is just as important as being equipped with the structure itself. Equally important is the job organization and positioning that will

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allow them to maximize their potential. Thus needed are consulting and continued monitoring for the above areas.

The LLC Project Performance

A brief summary of the LLC Project performance analysis is as follows:

First, the most outstanding result of the LLC selection project is that it triggered greater interest in lifelong learning among the local governments. For example, over 60 local government officials attended the 2006 LLC Fair, proving that many local governments as well as the Office of Education were taking interest in applying for theLLC selection.

Second, majority of the LLC's are forming a lifelong learning system within the local government's administrative system. Many LLC's have instituted ordinances regarding lifelong learning (32 in 2005) and are organizing teams or departments in charge.

Third, human and financial investments are increasing according to the interest and volition of the local government head. Although financial independence is important in expanding the budget, the head's volition for lifelong learning has proven rather influential.

Fourth, the increase in the quantity of lifelong education programs is contributing to improved participation of the residents. The average number of LLC programs has grown from 231 in 2001 to 405 in 2004. According to a study done by KEDI, lifelong learning participation of the LLC residents in 2005 was 24.2%, significantly higher average than the national average of 21.6% as recorded by the National Statistical Office in 2004. (Byun & Hong 2005).

Fifth, it is significant that LLC selection project has built the foundation for liaison between the Office of Education and the
local governments. To be more specific, LLC project as initiated by the local government has expanded the boundaries of Lifelong education (or lifelong learning) past that of the Education Office-School to the level of the local government itself. In addition to the liaison, it is providing the opportunity for coordination of general administration and lifelong education within the local government.

Challenges for LLC Development

The cause for the limitations or problems of the LLC Foster Project as pointed out in many studies and researches can be summarized as follows:

First, the programs are not only similar in form but also unable to utilize the distinctive regional features or reflect the requests of the residents. It is most likely that such projects or programs are lacking professionals who would conduct in-depth analysis of the problem before planning and executing them.

Second, formation of partnerships have been impaired whether it is between the Office of Education and the local government or the people and the officials. Such impairment signifies a lack of understanding among the relevant institutes and the party concerned regarding the LLC. This is likely to happen when driven in a top-down method as initiated by the administration, and therefore requires a reexamination of the LLC driving structure.

Third, a number of cities selected as LLC are failing to maintain the excitement and passion for the program as it had in its earlier stages. This is an apprehensive situation that can occur should the head seek to make a one-time use of it in order to strengthen his political stand. If the promotion structure and system is not constructed during the earlier stages of LLC, feeble dynamics and Current Status and Challenges of the Lifelong Learning City Policies in South Korea 107

autogenesis of the foundation cannot guarantee durability when the head's interest weakens.

Fourth, tools for evaluation are feeble, resulting in ineffectiveness and petty circulation of performance results. Without clearly set method and guidelines for evaluation, it is difficult to attain viable results and therefore difficult to persuade participation and support of the residents and relevant institutions.

Though there has been great quantitative progress in the LLC project, the above problems show that many qualitative limitations still remain.

Brief directions for future policies in order to overcome such limitations are as follows:

Direction of policy for LLC development

- 1. Construction of Integrated Lifelong Learning System
- 2. Formation of a Virtuous Circle System of Individual Development, localeconomic Development, and Social Cohesion
- 3. Lifelong Learning Policy aimed at Partnership, Participation, and Performance
- 4. LLC Liaison with Relevant local Innovation Projects
- 5. Development of Models Incorporating local Characteristics and Vision
- 6. Improvement & Expansion of the LLC Driving Structure
- 7. Construction of LLC Monitoring & Evaluation System

Conclusion

During the last five years since the start of the LLC Initiative, there has been much progress. Accordingly, this paper has proposed the direction for future policies and challenges in 7 ways for qualitative improvement based on the analysis of such performances.

The LLC Project can be largely divided into 4 parts: establishment of vision, policy decision & project proposal, project execution, and evaluation. Establishment of vision, in particular, plays the role of a compass, and LLC project can be seen as being controlled by it. However, vision establishment in many of the Korean LLC's today are deficient in detailed analysis of the locale and a systematic liaison with the overall local development strategy, naturally resulting in a lack of connection between the policy and project proposals; and vague executions will face much difficulty in producing the desired prominent results compared to the efforts. Thus, a systematic evaluation from the standpoint of the official in charge is not only difficult but also burdening. Without a public display of the results through evaluation, however, partnership and network formation will not happen, much less the continued participation of the residents.

As mentioned in earlier, LLC is an essential development for the realization of lifelong learning and a learning community. The heart of it lies in the economic development and social cohesion founded upon changes of individual lives by community-building through lifelong learning. In order to concentrate the community's capacity as the driving force for LLC, there needs to be partnership, widespread participation, and performance.

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References (in Korean)

- Kim, S. I. et al. (2003). Study of Lifelong Learning Support Structure Construction Plan. CR 2003-43. KEDI.
- Byun, J. I. et al. (2005a). Research Analysis of the LLC Operational Realities for Local Development. RR 2005-11. KEDI.
- Byun, J. I. et al. (2005b). *Study of Future LLC Promotion Strategy.* CR 2005-62. KEDI.
- Yang, B. C. (2002). Implementation Strategy for the Creation of Lifelong Learning Town/City. *The Road to a Lifelong Learning City.* RM 2002-33. KEDI Lifelong Education Center.
- Lee, J. S. (2004). *Pioneer for Local Innovation: American Silicon Valley and Route 128*. World's Local Innovation System, Presidential Committee on Balanced National Development. Hanwoul Academy.
- Lee, H. S. et al. (2001). Investigative Research on OECD International Comparison of Korean Adults' Literacy, CR 2001-47. KEDI.
- Jeong, B. G. (2004). Current Political Status & Issues of National Human Resources Development: Primary Issues of Educational Policies. The Korean Society for Educational Policies Academic Fair Source Book.
- Choi, D. M. (2004). Municipal & Provincial Lifelong Education Promotion Reality and Challenges: Elevation of local Learning, Lifelong Education is the Key. The Third Lifelong Education Forum Source book, KEDI National Center for Lifelong Education.
- Han, S. H. (2004). The Theory of Lifelong Education: Study of Education in a Lifelong Learning Society. Seoul: Hakji Publishers.
- Ramesh Mishra. Trans. by Lee, H. G. & Park, S. J. (2003).

Globalization and Welfare State. Sungkyunkwan University Publishers.

- Peter Drucker. Trans. by Lee, J. K. (1993). *Next Society*. The Korea Economic Daily.
- Jeremy Rifkin. Trans. by Lee, Y. H. (1996). *The End of Work.* Mineum Publishers.

References (in English)

- Candy. J. (2003). Planning Learning Cities: Addressing Globalisation Locally. 39th ISoCaRP Congress.
- Castells, M. (1996). The Rise of the Network Society (Vol. 1). Oxford: Blackwell.
- CERI/OECD (1993). *City Strategies for Lifelong Learning*. Gothenburg: Education Committee.
- Choi, S. D. (2003). *Changing Skills Formation and Lifelong Learning in South Korea.* University of London. Ph.D Thesis.
- Coffield, F. (2000 II). The three stages of lifelong learning: romance, evidence and implementation. In Coffield, F (ed). *Differing visions of a Learning Society: Research findings Volume 2.* Bristol: The Policy Press.
- Huchins, R. M. (1968). *The Learning Society*. Harmondsworth: Penguin Books.
- Learning and Skills Council (2004). Learning Partnerships Operational Guidance for Local Learning and Skills Councils 2004-05. p.4. http://www.lifelonglearning.co.uk/llp/index.htm
- Learning City Network(1998). Learning Towns, Learning Cities. http://www.lifelonglearning.co.uk/learningcities/ Longworth, N. & Davies W. K.(1996). Lifelong Learning. London: Kogan Page.

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- Longworth, N. (1999). Making Lifelong Learning Work: Learning Cities for a Learning Century. London: Kogan Page.
- Longworth, N. (2001). Learning Communities for a Learning Century, in Aspin, D. et al. (ed) *International Handbook of Lifelong Learning*. Dordrecht: Kluwer Academic Publishers.
- Lundvall, B. (1995). National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning. London: Pinter
- OECD (1996). Lifelong Learning for All. Paris: OECD:
- QAA (2004). Guidelines on the Accreditation of Prior Learning. Mansfield: Quality Assurance Agency for Higher Education
- Ranson, S. (1998). Lineages of the Learning Society. In S. Ranson (ed.), *Inside the Learning Society*. London: Cassell.
- Yarnit, M. (2000). *Towns, Cities and Regions in the Learning Age: A Survey of Learning Communities.* London: LGA Publications for the DfEE.

Chapter 7

Forming Social Capital and National Human Resources Development Policy*

The Background

Growing importance of social capital

Attention on the social capital and the importance of its formation is increasing amidst a sense of crisis stemming from deepening social polarization and conflict, low birthrate, and population aging.

Social capital implies both society and capital. It exists among social relations rather than individual ones, representing that social capital helps individuals and groups cooperate together.

In the 21st century, harmony and unity among the members of a nation are the foundations which enable stable growth and sustainable development.

 ^{*} Hong, Young-Ran. Korean Educational Development Institute. This paper was presented in the KEDI-NCEDR Joint Seminar held from September 12 - 13, 2007 in Beijing, China.

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Social capital, the core of economic growth and social development at micro and macro levels, is symbolized by trust, network and social norm; and today, it receives more attention as a critical factor to resolve societal malfunctions e.g. inequality, conflict and crises.

Difficulty of discussion on social capital

Although studies on the significance and the influence of social capital are accumulating, there are controversies over its true meaning, application and specific formation plan. That is, the discussion on the social capital has restrictions due to its diversity, irregularity, and multidimensionality of the social capital.

- It is difficult to define a single concept of social capital because it is found in various units and levels.
- Social capital, an output of complex interaction between historical backgrounds and cultural factors, is strongly context-dependent, which means it should be studied in the context of the relationship between nation and society. Besides, it is difficult to apply the concept of input and output to social capital.
- Social capital is difficult to measure, not only because it is multidimensional, complex and relational, but because a lot of related factors have covert and uncalculable features. Measuring economic and social influence of social capital causes more controversy than human capital.

National attention to social capital

To enhance national competitiveness in the knowledge-based society, development and utilization of human resources targeting all members of the society is now a top priority of the nations, as they brainstorm policies and reform plans for efficient development of human resources.

"National Human Resources Development Plan," in cooperation with Korea's human resources development policy, is aiming to enhance national competitiveness and social cohesion. Social capital refers to the growing cooperation, as well as the social and cultural cohesion among the members of society. Therefore, social capital and social cohesion are closely interrelated, as the social capital is the source and the outcome of establishing the foundation of social cohesion.

In regards to the improvement of the citizens' living standard, human resources development policy for enhancing national competitiveness and sustainable growth can achieve its own goal by playing a supplementary role and pursuing a balanced development between social and human capital.

Therefore, it is necessary to deepen and develop social capital as balanced and future-oriented HR development policy including social cohesion and economic growth by examining it in the Korean society and searching for strategies. Also, the expansion of social capital, in relation to social cohesion, is very important to develop trust and enhance transparency across our society on the basis of reasonable and trustworthy public system and rule.

"Enhancing social cohesion, education, culture and welfare" is one of the four major policy areas of "The 2nd National Human Resources Development Plan" which was established in January 116 Higher Education and Lifelong Learning in Korea

2006. Moreover, "Vision 2030" presents the expansion of social capital as one of the five strategic tasks for joint growth.

Social capital and national human resources development Policy

Human resources, the foundation of social development, is formed by two major elements; human and social capital.

In the HR development framework, social capital has unique elements distinct from human or identity capital and operates comprehensively to make members of the society maintain vitality in the society.

Analysis on social capital and national human resources development plan

Analysis on The 1st National Human Resources Development Plan

In Korea, national human resources development policy was specified through the National Human Resource Development Plan in 2001 and 2006.

The 1st National Human Resources Development Plan was established in December 2001, based on the understanding that national competitiveness is determined by the level of human resources. It was the first plan at national level for comprehensive development and deployment of human resources, the essential driving force of national development. Also, the tasks included in this plan to promote until 2005 were education, vocational training, research and development, employment, welfare, industry, and



Figure 7-1. Sustainable National Growth and Social Cohesion

other relevent areas.

The first basic plan sought three policy goals: to strengthen individual capacity; to establish social trust and enhance social cohesion; and to create a new driving force for growth under the vision of nurturing competitive citizens and building a mutually reliable society.

As for the national human resources development policy, social cohesion obtained through forging social capital was as important as economic growth for sustainable development.

Efficient improvement of the quality of life for all citizens is possible to achieve through playing a supplementary role and pursuing balanced development with social capital as well as human resources.

Analysis on The 2nd National Human Resources Development Plan

"The 2nd National Human Resources Development Plan" was established based on the fundamental law on human resources development, by the cabinet council in January 2006 jointly with over 20 ministries, offices, and agencies including the Ministry of Education and Human Resources Development, the Ministry of Finance and Economy, and the Ministry of Science and Technology. It contained basic direction and policy tasks that will be implemented for next five years at the national level.

The 2nd plan aimed at establishing a learning society and human resource powerhouse, as well as achieving the world's top-10 status in terms of national competitiveness of human resources. This was to be achieved by adopting people and knowledge-driven strategy based on establishment of social trust to overcome limitation of labor- and capital-oriented growth, slowdown in growth caused by low birthrate and aging population, and widening societal polarization.

The 2nd plan was to promote 200 tasks including 67 major policy tasks in 20 sectors and four policy areas e.g. fostering core global professionals, expanding life-learning opportunities for all, enhancing social cohesion, education, culture, and welfare, and establishing infrastructure for human resources development.

There are policy tasks related to social capital in the 2nd plan. The specific descriptions are as follows:

- II. Improvement of life-learning ability for all
 - 2-2. Improvement of fundamental abilities "Improvement of the basic scholastic abilities and cultivating value education"
- III. Establishment of social cohesion, education, culture, and welfare
 - 3-4. Creating social trust and cooperation network
 - "Establishment of volunteer infrastructures for utilizing various human resources"
 - "Establishment of cooperation network for education, culture, welfare, and environment support program and utilizing volunteer work"
 - "Multicultural program and support for youth capacity development"

Social capital and national human resources development strategy and challenge

Recently, social capital has been regarded as a significant source for improving national competitiveness. It draws a keen interest of policy makers and scholars in various fields such as economics, public administration, sociology, and pedagogy. Social capital is being discussed scientifically as well as receiving much attention in terms of national policy.

Although it receives more attention, and the result of the study on the significance and influence of social capital are being accumulated, there is still controversy regarding the true meaning and application of the social capital, as well as its specific formation plan. Considering the policy for national human resource development as a means to develop the political community in particular, there is little discussion on specific policy goals or measures for implementation. It is largely due to various restrictions caused by the characteristics of the social capital including diversity, changeability, and multidimensionality. In other words, confusion in definition, context-dependent attributes, and difficulty in calculating the output of investment make it difficult to establish a clear policy goal.

Korea, aspiring to be a developed country, has faced many critical challenges in areas of growth and distribution, social cohesion, and social security. Moreover, economic interests as well as ideological conflicts among individuals and social groups are compounding to threaten the foundation for stable growth and social cohesion.

Economic approach has limitations in resolving these problems. To cope with these challenges, it is vital to enlarge the collective capacity of maintaining social cohesion, accepting various social desires and values.

The social capital contributes to social growth by enhancing the efficiency of human and material resources. It also improves legitimacy of the social system and norm by enhancing trust and cooperation among members of the community. Furthermore, it contributes to the improvement of social welfare since it enhances social stability and integration by helping the members resolve conflicts and have clearer identity.

In this light, it is necessary to see social capital as an intangible asset which promotes productive interaction among its members for common interests because it plays a critical role in improving economic and social dynamism and stability. In addition, understanding social problems from a broadened economic and social viewpoint, based on the concept of social capital, and seeking more fundamental and comprehensive solutions are essential.

At the national level, it is important to establish the direction and goals of national HR development for social cohesion and sustainable development. Specifically, there are significant national challenges e.g. spreading the merit-based assessment system, easing social polarization and conflicts among groups and social classes, establishing social capital by sharing social norm and values among community members, creating the right environment for social cohesion, etc.

Immature social system and law, low credibility of the government, and low participation rate in local activities are current problems in the Korean society.

By recognizing these problems, in relation to strengthening the social capital, Vision 2020 presented the following five key objectives aimed at establishing a mature society where common interests are created on the basis of participation, cooperation, and trust.

First, establishing conflict control system: By establishing a rational conflict control system (e.g., amendment of the law on conflict control, conflict specialist training, etc.) and by converting social conflict into the productive energy, the social cost can be minimized and social cohesion enhanced.

Second, reforming the judicial system: The credibility of the judicial system should be improved by restructuring the judicial service system.

Third, improving the governance of public institutions: It is important to enhance the credibility of the public institutions through improving the public system e.g. increasing government workers in public service areas, preventing moral hazards of public institutions, and reforming the operating system to establish a management system with a strong self-responsibility focus.

Fourth, reorganizing local administration system: The measures of downsizing local-government structure, separating functional role between upper and lower level governments, and unifying city/county districts should be examined.

Fifth, complementing public welfare system by constructing voluntary systems: It is necessary to complement public welfare support system by restoring the functions of the family and communities. For example, finding and supporting good examples of civil community and connecting local government with local community.

Likewise, the Korean government advocates the policy goals related to the formation of social capital and social trust in the National Human resources Development Plan, as well as suggested key tasks in relation to its strengthening on the basis of advanced understanding in Vision 2030. However, the specific, practical and various policy tasks have not been formed yet.

Goal and Strategy of National Human Resources Policy to Form Social Capital

It is necessary to ensure the achievement of policy goals and to establish a control system by dividing the goals into detailed levels.

To achieve these goals: classify social capital in particular dimensions with firm understanding and belief and put high priorities on them as policy goals. Also, it is needed to estimate and access social capital in terms of its management, propertize social capital in a manageable form, establish a legislative policy goal to decide whether social capital will be made private or public and systemize it.

On the other hand, utilizing social capital is essential to link the accumulation of social capital with social, economic, and political outcome. It is important to determine priorities and expectations,

and reflect them to policy goal and strategy such as social, economic and cultural policy.

Measures and challenges of national social capital resources policy to form social capital

The need is great for measures to strengthen structure, management, and utilization of social capital.

- Civil society and agents in the market construct and manage social capital directly.
- The players vary widely: families, churches, schools, professional groups, business people in market, and credit system managers.
- It is necessary to find these players and nurture them with strategic priority.
- It is also necessary to expand and develop understanding about social capital and actively operate government projects to nurture private agents.

From the perspective of social capital, it is essential to find regulations that impede the creation of social trust and reform them to promote it.

One of the most significant tasks is to seek a theoretical framework and practical tools for understanding the backgrounds, process and outcome of the formation of social capital. The process is necessary to foster an in-depth discussion about Korean social capital rather than a general one. By drawing up various policy decisions and challenges in a quantifiable, micro dimension, design and implementation of practical strategy is possible to form social capital.

To facilitate the establishment of social capital in the Korean society, specific strategies must be formulated in accordance with the problems impeding its establishment. The role of education is the most important factor to form social capital. The curriculum and the teaching/learning method ought to be restructured from the traditional lecture-oriented to experience-oriented class with practical role playing, discussion, and field study to vitalize various educational programs where essential democratic principles e.g. concern and respect for the minority, communication skill especially with the opponents, sound cyber ethics, cooperation for co-prosperity, and acquiring volunteer experience, can be upheld.

References

- Jeong, Gi-oh. (2006). National Human Resources Development Policy and Social Capital. Materials for Seminar on Educational Forming Strategy of Social Capital. Seoul: Korean Educational Development Institute.
- Hong, Young-ran. (2002). Direction of Social Capital and Social Cohesion Human Resources Development Policy. *Human Resources Development* 4(1). Korean Human Resources Development Society.
- Hong, Young-ran et al. (2003). Strategy and Task of Social Cohesion for Sustainable National Development. Seoul: Korean Educational Development Institute.
- Korean Government. (2001). National Human Resources Development Plan.
- Korean Government. (2006). The 2nd National Human Resources Development Plan.
- Ministry of Planning and Budget. (2006). Vision 2030.
- Schuller, T. (2000). Human and Social Capital: The search for appropriate technomethodology. *Policy Studies* 21(1).
- Schuller, T. (2002). Integrating Human/Knowledge Capital and Social Capital. OECD. Paris: OECD.
- Yoo Chun-sik. (2006). *Economic Effect of Social Capital*. Yonsei University Institute of Social Development, Materials for Colloquium.