Korean Experience and Achievement in Higher Education

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Abstract

The purpose of this paper is to introduce the transition of Korean higher education reform and to weigh Korean experience and achievement in contemporary higher education. The paper first of all illustrates a historical perspective on higher education in light of educational reform. Secondly, this study reviews the achievements of Korean higher education linking to economic growth. Thirdly, the author examines educational zeal as a main factor for the development of Korean higher education. Finally, the current national policy of Korean higher education is discussed. The author evaluates that between the 1960s and the 1970s a modernization doctrine and a human capital theory, as a link of policy for manpower demand and supply, were accepted by policy makers of the government and brought about the national economic development as well as individual's income. In addition, from the early 1980s until the present time, Korean higher education has been drastically increased in the aspects of manpower requirement and social demand due to the diversity of industrial and social structure as well as Koreans' educational zeal. Although Korea has already achieved universal higher education, the quality still lags behind its international competitors'.

Key words: higher education, Korean higher education, higher education reform, educational zeal, educational policy

I. Introduction

Within a half-century, the Republic of Korea [Korea] has experienced a transition from elite to universal higher education. With the universalization of higher education and the development of a national economy, Korea has achieved the fastest economic growth in the world from the mid-1960s to the mid-1990s. During the last three decades, the average annual growth rate of the Gross National Product reached 8.4 percentage (The Bank of Korea, 1996). In 1996, Korea became a member country of the

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Organization for Economic Co-operation and Development [OECD]. How Korea achieved these remarkable results becomes a significant matter of concern to developed and developing countries. In this vein, to understand Korean experience and achievement in higher education is of importance and will also provide Western and Eastern educators with valuable ideas.

Since the end of the nineteenth century, the development of modern higher education in Korea has been influenced by both spiritual and practical factors: educational activities of Western Christian missionaries, Japanese and American colonial heritages, traditional and adopted religious and philosophical thoughts, domestic and international socio-political situations, governmental policies for national economic development through industrialization, and recent demand of highly qualitative human power for the establishment of a knowledge-based or an information-oriented society (Lee, 2000b). In the development of Korean higher education, the relationship between government and higher education has been inseparable: the former has activated higher education to produce human capital and scientific technology, whereas the latter has supplied human resources to work for the development of national economy.

The purpose of this paper is to introduce the transition of Korean higher education reform and to weigh Korean experience and achievement in contemporary higher education. In order to address these issues, using a literature-review approach, the paper first of all describes a historical perspective on higher education in light of experience of educational reform. Secondly, this study illustrates the achievements of Korean higher education linking to economic growth. Thirdly, the author reviews educational zeal as a main factor for the development of Korean higher education. Finally, the current national policy of Korean higher education will be discussed.

II. A Historical Synopsis: Experience of Educational Reform

The liberation of Korea from Japanese occupation (1910-1945) on August 15, 1945 was a turning point in the history of Korean education. Under the U.S. Military rule (1945-1948), the Military Government made radical reforms to democratic higher education and eradicated the remnants of Japanese colonial education. By introducing American education systems, higher education reformed democratic reorganization and expansion for the Korean people. After the establishment of the Republic of Korea in 1948, the newborn Korean Government promulgated a basic Education Law on December 31, 1949 in order to set up a new educational system. Even throughout the Korean War (1950-1953), higher education continued in shelter tents or outdoors. Indeed, between 1945 and 1960 the main policy for higher education was to expand democratic education. During this period, higher education flourished from 19 schools and 7,819 students to 85 schools and 101,041 students (Ministry of
Education [MOE, 1976].

After the Military Coup d'etat in 1961, the military-based Korean government recognized the necessity for educational reform in order to industrialize the country as well as to promote national identity. In response to the strong need for educational reform, the government strengthened legal and administrative systems of higher education under its uniform control. On the other hand, the government upgraded teacher education: normal high schools to teachers' junior colleges in 1962, and institutions training secondary school teachers were abolished (MOE, 1998a, pp. 30-32).

On December 5, 1968, the Charter of National Education was promulgated to recover national spirit and educational reform (MOE, 1998a, p. 31).

During the 1970s, the Korean government attempted to reform higher education to innovate academic management and structure. Consequently, the national policy for higher education has been diversified to meet the rapid process of socioeconomic change. As a result of the government policy for educational reform, Air and Correspondence College was opened to promote adult education in 1972, and two to three year junior colleges began to take a large share of higher education during this decade, fitting with manpower demand for the national economic development.

On July 30, 1980, the newly military-based Administration made a radical reform to normalize school education which was distorted. This was due to a severely competitive examination system for college or university entrance, as well as the chronic problem of overheated out-of-school private tutoring or study. The Ministry of Education abolished individual college and university examinations, emphasized high school achievement in determining eligibility for college/university entrance, readjusted curricula in terms of workload, established college graduation quotas, and initiated an education tax. In March 1985, more noteworthy was the establishment of the Presidential Commission on Educational Reform under the direct supervision of the President to reconsider educational competitiveness.

During the 1990s, Korean higher education met a new challenge. Although the great quantitative growth of higher education resulted from the Korean people's enthusiasm for educational reform as well as from the governmental education policy for economic development, the severe imbalance between quantity and quality in higher education was significantly insufficient to cope with a forthcoming information-technology society. So as not to lose the competitive edge in the world market, new education reform was inevitable. With the changes in higher education, in 1994 the Presidential Commission on Educational Reform [PCER] was organized in order to create the "New Korea". The PCER submitted a report to the President, which emphasized two important tasks in higher education: one was the strengthening of international competitiveness, and the other was the improvement of the college entrance examination system.

On May 31, 1995, the First Educational Reform Plan, including nine core tasks, was released as a new framework of open education in preparation for the twenty-first century. The nine core tasks were: establishment of an open etopian
[education-utopia] society, diversification and specialization of universities, creation of a
democratic and autonomous school community, emphasis on humanity and creativity in
curricula, innovation of a university entrance examination, development of diverse
educational programs, establishment of a new evaluation and a supporting system for
schooling, remodeling of teacher training programs, and increasing educational budget
up to five per cent on the Gross National Product [GNP] (PCER, 1998, p. 82-110). In the
First Reform Plan, two banners for higher education reform were carried: one was the
diversification and specialization of universities to promote educational quality; and the
other was the creation of a new university entrance system to escape "examination hell"
and to relieve the heavy burdens on parents' out-of-school expenditures. In 1994, the
portion of out-of-school expenditures in the direct educational expenditures was already
48.0% (Korean Educational Development Institute, 1994).

On the basis of the First Reform Plan, the 2nd Reform Plan in February 1996, the 3rd
Reform Plan in August 1996, and the 4th Reform Plan in June 1997 were established
and carried out. In spite of an unheard-of-event in November 1997 "Economic Crisis",
the present government has constantly pursued core educational reform tasks that were
planned by the former government, until the present. In order to dynamically perform
the reform tasks, the present government set up the Presidential Commission for the
New Education Committee in July 1998. The Ministry of Education devised a blueprint,
"A Five Year Plan for Educational Development", in 1999. The Plan generally adopted
the previous reform plans that focused on building an open educational system,
establishing student-centered or clientele-centered education, achieving the equal
educational access, strengthening vocational or social education, promoting the quality
of university, heightening information-oriented or high-technology education, and
increasing the school-based management (A Five Year Plan for Educational Development
[MOE], March 1999).

Synthesizing the educational reform plans, the main issues of current Korean higher
education are quality, diversity, autonomy, accountability, internationalization,
consumer-centered education, and information-technology [IT] access.

III. Educational Expansion and Economic Growth

In 1962, the military-based Korean government initiated the First Five-Year Economic
Development Plan for the promotion of national industrialization. Between the early
1960s and the early 1980s, the government launched the Five-Year Economic
Development Plan four times and adopted the national policies to accelerate
industrialization and export. In order to achieve these policies, the government
promoted the expansion of higher education that was regarded as an essential means.
According to the national education policy for manpower supply, between 1970 and
1980, the number of junior colleges increased roughly about twice (65 to 128 schools), and the number of junior college students able to contribute to the field of semi-skilled labor increased approximately 15 times (10,043 to 151,593 persons) (MOE, 1970, pp. 564-65; MOE, 1980, pp. 434-35). As the result of this expansion policy, between 1960 and 1980, the per capita GNP measuring the national economic growth increased from $79 to $1,605, and higher education expanded from 85 schools and 101,041 students to 357 schools (including graduate schools) and 601,494 students (National Statistical Office [NSO], 1981; MOE, 2000a, p. 34).

Indeed, higher education was regarded as the driving force behind the development of the national economy, as well as the fulfillment of the strong desire of the Korean people who regarded tertiary education as a means to enhance socioeconomic position on the basis of Confucian social values (Lee, 2000a). The Korean people have had a respect for learning since early times. Confucianism traditionally provided a proper way of training gentlemen, which involved constant self-cultivation through education. This cultural influence made it difficult for Korea to modernize industrial organizations and to evolve a modern system of education that enhanced scientific inquiry and utilitarian methodology in a modern sense. Nonetheless, Korea has achieved a remarkable economic growth due to the successful execution of the national economic development plans and the peoples' educational zeal. Ironically, Confucianism was generally viewed as an obstacle to industrialization (Weber, 1962), but now, especially the positive social values such as the adoration of learning and sincerity, is considered as a powerful motivating force behind the Korean economy and higher education (deBary, 1996; Hart, 1993; Janelli, 1993; Psacharopoulos, 1984; Tu Wei-ming, 1996).

During the 1980s, with the expeditious growth of the Korean economy and the peoples educational thirst, the government, on the one hand, changed economic structure so as to accelerate industrialization, and on the other hand adopted the graduation enrollment quota system in order to fulfill the manpower demand for workplace, as well as to accept the social demand of the people. Between 1965 and 1985, the manufacturing sector increased its share of GNP from 20.0% to 30.5%, whereas the agricultural sector decreased from 38.0% to 12.5% (The Bank of Korea, 1986). With the change of industrial structure, the quantitative expansion of higher education, especially the fields of engineering and natural science, was necessary because the state required a great deal of manpower to produce largely high-skilled products. In practice, between 1980 and 1990 twenty-two universities (85 to 107 institutions) were newly established, and university students who were able to produce highly skilled labor increased about 2.5 times (402,979 to 1,040,166 persons) (MOE, 1980, pp. 434-35; MOE & NIEE, 1990, pp. 554-55). Due to the expansion policy of higher education, during the mid-1980s the enrollment rate of higher education exceeded the world average level, and higher education achieved mass education. In 1985, per capita GNP was $2,194, while the advancement rate of high school graduates was approximately 37% (NSO, 1986; MOE & KEDI, 2000a).
During the 1990s, Korean higher education has evolved into authentic universal education. From 1990 to 2000, tertiary education expanded from 258 schools, 41,920 teachers, and 1,490,809 students to 372 schools, 56,903 teachers, and 3,363,549 students (MOE & NIEE, 1990, pp. 554-55; MOE & KEDI, 2000b, pp. 584-85). In addition, the number of graduate schools increased about three times (298 to 829 schools), and the number of graduate students increased nearly 3 times (86,911 to 229,437 persons) (MOE & NIEE, 1990, pp. 554-55; MOE & KEDI, 2000b, pp. 584-85). However, almost all graduate schools in Korea have instructional foci in their initial degree programs rather than research foci in their professional degree programs. With the expansion of higher education, per capita GNP increased from $5,883 in 1990 to $11,380 in 1996, but it reduced to $6,823 in 1998 because of the Economic Crisis in 1997 (The Bank of Korea, 1999). In spite of the reduction of per capita GNP, the average monthly income of university graduates increased from 812,168 Won in 1990 to 1,550,241 Won in 1998 (The Ministry of Labor, 1999).

Despite the stagnant atmosphere of current Korean economy, in 2000 the advancement rates of general and vocational high school graduates show 83.9% and 41.9% (MOE & KEDI, 2000a, pp. 28-29). According to the Condition of Education (U.S. National Center for Education Statistics, 1999), the percentage of the 25-34 year old population that completed higher education in Korea showed 30.1 in 1996 (p. 280). In addition, Education at a Glance OECD Indicators (OECD, 2000) shows that the proportion of Korean younger adults (25-34 years olds) who have attained at least higher education is 34 percentage of the same population, and the ratio of the older adults (55-64) is 8 percentage. The difference (26 percentage) in attainment between generations represents the remarkably rapid expansion of tertiary education for three decades. Between 1960 and 2000, student enrollments increased 34 times; per capita GNP increased approximately 100 times; and the average monthly income of university graduates increased about 40 times.
IV. Educational Zeal and Korean Higher Education

As briefly described in the previous section, the educational zeal of the Korean people was a main factor by which to achieve not only the remarkable development of the national economy but also the rapid expansion of higher education on the positive side. On the negative side, however, the educational zeal brought about many problems: elitism on the basis of academic factionalism, a principle of instrumental education values, egoistic familism, an excessively competitive education system, excessive education expenditures and social disharmony owing to the increase of out-of-school tutoring, and mass-production of unemployed workers who graduated from colleges or universities.

The present Korean society takes a serious view of academic attainments and cliques when being recruited and promoted in public or private organizations. Also, academic attainment is a significant factor not merely to choose occupation but also to determine social position, income, and marriage. In other words, it is an essential means by which to obtain a socio-economic position in contemporary Korean society. Despite the abolishment of the traditional four social classes according to occupations, no matter how those who have lower academic attainments have powerful abilities, they cannot avoid limitations in choosing jobs. In addition, there is a tendency to be treated undesirably in human relations. According to a survey regarding the evil of an academic attainment-oriented doctrine on lower school level graduates, 41.7 percent of the graduates responded that "we do not receive a reasonable treatment in society" (KEDI, 1992). This research result proves the existence of the serious evil within an academic attainment oriented principle in contemporary Korean society.

Furthermore, elitism in current Korean society creates personal ties on the basis of academic attainments and cliques, resulting in their leading of a considerable part of contemporary Korean politics, economy, society, culture, and education. Especially, the elitism centering on school connections in the field of education acts upon an important factor for college teachers' recruitment, appointment, and promotion. It also creates factionalism. In addition, elitism promotes the over-competition within education, making the ranking of colleges and universities most important, fosters private tutoring, and promotes egoistic familism. Besides, elitism on the basis of literae humaniores still does not get rid of a doctrine of the job discrimination.

Moreover, an academic attainment doctrine and elitism have bolstered educational instrumentalism and human capitalization. Thus, university advancement has become a gateway of social success, while primary and secondary education have become preparatory courses for college entrance examinations which focus on a cramming method that emphasizes memorization learning. The system of college entrance examinations, urging a drastic competition between or among schools, parents, and students, leads to private tutoring and impedes the normalization of school education.
Now that the college entrance examinations are comprised of questions centering on Korean, English, and mathematics, obtaining satisfactory grades in these subjects have been a short cut for the college entrance. In particular, various problems were derived from college examination oriented education. First, school education became impoverished due to the practice of abnormal school teaching. Second, excessive competition among students was bolstered by a selective examination way of the relative standard. Third, unitary thinking was fostered owing to the objective evaluation of examination methods. Fourth, social disharmony between the classes was promoted on account of excessive private tutoring. Fifth, students' personalities were ignored because of the uniformity of school education. Finally, repeaters who take the college entrance examinations after one or more failures were mass-produced.

Furthermore, educational zeal had greatly influenced educational policies and systems, in particular quota policies for college entrants and college entrance examination systems. Since 1945, the demand for higher education has always exceeded the supply. In order to control and manage this phenomenon, the Korean government has controlled the number of college entrants and has continually improved the college entrance examinations. In spite of these efforts, the policies and systems did not adjust the demand and supply of higher education nor reduce the advancement of high school graduates. These situations were caused by a zeal for education that has been formed from the traditional practice of Confucian education and the socio-economic factors of modern society. Although the educational enthusiasm differs from the social classes, the Korean people still demonstrate an extremely high education zeal.

In the 1960s and 1970s, educational zeal was heated gradually under the national economic development plans, and was blown out with the rapid economic growth in the 1980s. This heated education zeal accelerated the demand for higher education, and the advancement rate of high school graduates was 66.6% in 1999 (Ministry of Education and KEDI, 1999). This rate was higher than those of France, England, and Germany (The World Bank, 2000).

In spite of the oversupply of higher education, both the Korean government and higher education institutions have but a weak hold on of the demand and supply for manpower. Also, they did not plan appropriately to put high-quality human resources in a right labor market. Korean higher education has already stepped in popular education, and the certificates of college graduates have no longer guaranteed a high income. Despite the fact that the demand for Korean higher education continually increases, individual education zeal is still hot. This is a fatal problem for Korean higher education to be resolved in the present and future.

V. The Current National Policy of Korean Higher Education
Despite the attainment of the universalization in higher education, the qualitative improvement in higher education has become a principal goal of national policy since 1990. The present Korean government recognizes that "the changes in the marketplace engendered by technological advance and globalization have rendered labor-intensive manufacturing obsolete and no longer dependable as an initiative factor in economic growth" [MOE, 1998b, p. 13]. In this vein, the government regards higher education as a prime motivator for the establishment of a high-quality manpower system as well as for the extension of national power. As an emphasis is placed on occupying a competitive edge in the international marketplace, the quality improvement of higher education is now considered as a viable option for the 21st century.

The Korean government has executed several national policies and tasks of higher education. The four major strategies are: innovating the college/university admissions policy, promoting research universities and the strengthening of regional universities, re-engineering the overall college/university education system, and constructing a sound vocational and technical education (MOE, 2000a).

First, the Ministry of Education proposed a new college/university entrance system to change the paradigm of school education. Since the establishment of the Republic of Korea in 1948, the college entrance system has been changed more than ten times. Until 1997, students who applied for college entrance were evaluated based on their test scores and grade point averages. The system had put immense pressure on students and provided parents with the economic burden of private tutoring. In order to cultivate the individual talents and characteristics as well as to get rid of these problems, the new entrance system allows each college and university to develop its own criteria to select students. It provides university with diversification and autonomy and promotes a more flexible elementary and secondary education.

Second, the Korean government launched a project, which is called Brain Korea 21 [BK 21], to promote the creative and advanced knowledge necessary for the 21st century as well as to re-engineer the higher education system to meet the new IT epoch. The government has investigated 200 billion Won for 7 years from 1999 until 2005. On December 1, 1999, 1 U.S. dollar was estimated at 1,179 Won. The fields of science and engineering are annually supported 140 billion Won, humanities and social sciences 10 billion Won, and facilities 50 billion Won (Lee, 2000b). The project supports professors and graduate students in order to concentrate on research activities.

Third, re-structuring the college and university system is also an important strategy. The government has been focusing on building an institutional base that will promote the individual university's autonomy, decentralization, diversification, and specialization of universities. The centralized closed educational systems have to be changed into decentralized and open systems, which are line with the parallel development of democracy and globalization.

Finally, the construction of a sound vocational and technical education is one of major strategy. This policy not only encourages a high quality of life for individuals who
missed out on their regular educational opportunities, but also promotes national competitiveness and continuous development of information technology in the knowledge-based society. The government has introduced an Educational Credit Banking System, which enables persons to obtain academic degrees by accumulating the result of individually acquired learning at various institutes as credit points, and a new qualification system that allows qualifications other than academic credentials to be recognized by companies in their recruitment (MOE, 2000a). These systems provide every person with an opportunity to study anytime and anywhere.

VI. Concluding Remarks

As reviewed in this paper, in the period of economic development plans between the 1960s and the 1970s, a modernization doctrine and a human capital theory, as a link of policy for manpower demand and supply, were accepted by policy makers of the government and brought about the national economic development as well as individual's income. In light of a human capital approach, investment in education brought about higher productivity of workers that in return caused higher earnings with economic development during the process of industrialization in Korea. From the early 1960s until the present time, Korean higher education was drastically increased in the aspects of manpower requirement and social demand due to the diversity of industrial and social structure as well as Koreans' educational zeal. Without the correct understanding of educational zeal, it is meaningless to discuss the miraculous economic development and the rapid expansion of higher education in contemporary Korea. Although Korea has already achieved universal higher education, the quality still lags behind its international competitors'.

The future society will accord greater importance to intellectual assets such as knowledge, information, and advanced-technology. For this reason, the future higher education should be emphasized on quality improvement coping with the rapid change of knowledge and information technology. In addition, in order to receive the various social demand for higher education, clientele-centered institutions, such as virtual or cyber universities, vocational or technical colleges, and air or correspondence colleges, should be strengthened. Finally, this paper may offer valuable ideas concerning the linkage between the expansion of higher education and the national economic development, but both merits and demerits should be carefully considered.

Acknowledgments

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References


Appendixes

A. Per Capita GNP & Higher Education Enrollments

![Per Capita GNP Graph](image1)

![Higher Education Enrollments Graph](image2)
B. GDP & Number of Junior Colleges and Universities

![Graph showing GDP and Number of Junior Colleges and Universities over years]

<table>
<thead>
<tr>
<th>Year</th>
<th>Junior College</th>
<th>University</th>
<th>GDP ($ billion)</th>
</tr>
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<tr>
<td>1970</td>
<td>85</td>
<td>71</td>
<td>11.1</td>
</tr>
<tr>
<td>1975</td>
<td>104</td>
<td>72</td>
<td>21.3</td>
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<tr>
<td>1980</td>
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</tr>
<tr>
<td>2000</td>
<td>156</td>
<td>161</td>
<td>488.4</td>
</tr>
</tbody>
</table>

Sources
*The data of GDP of the year 2000 in Appendix B indicate the statistical figures of the year 1999.
C. Per Capita GNP & Advancement/Employment Rate of High School Graduates

Sources

*The data of GNP of the year 2000 in Appendix C indicate the statistical figures of the year 1999.