Popular Demand and Education in South Korea: An Historical Overview

Michael J. Seth James Madison University

South Korea has underwent a remarkable transformation after 1945 from a nation in which the majority of the adult population had no formal schooling, and where no more the five percent had a secondary or higher education degree to one of the most literate and well-schooled nations in the world. From 1945 to 1960, enrollment in primary schools rose three times, in secondary schools more than eight-fold and higher education ten times. In 1945, only 40 percent of school age students were in grades 1 through 6, fifteen years later 96 percent were. Enrollments continued to grow; almost all students were attending middle school becoming in the 1970s and the high school graduation rate reached 90 percent by the early 1990s. Today literacy is virtually universal, almost all young people complete secondary school. A recent report records that among the OECD nations South Korean students were the most likely to receive a basic education and ranked third in the percentage that go on for higher education.¹ The quality of secondary education is high as well, at least judging by international tests of comparisons where South Korean students consistently score at or near the top in math, science and creativity.²

It is important to note that this educational revolution began and continued during postliberation years of political instability, poverty, and the highly destructive Korean War. And it is also important to note that it preceded South Korea's much praised economic development. Education had already expanded rapidly at all levels and primary education became almost universal by the time of the nation's economic take-off began the early 1960s. Furthermore, educational development as measured in enrollment levels and in teaching training continued to keep peace with its much-praised economic growth. In fact, at every point in its development from 1950s through the 1980s South Korea education was at the extreme end among developing countries, that is, South Korea had higher levels of school enrollment than any other developing nation in its per capita GNP range.³

The social demand for schooling has been a critical factor in accounting for this remarkable educational expansion. It enabled the state, at a time when its resources were limited to transfer much of the financial burden to students and their families. Various school fees at all levels including nominally free primary education, and the fact that half of all high schools and most colleges and universities were private enabled the state devote only a modest portion of its resources on educational development in the first several decades after 1945. Parents, even poor ones were willing to make enormous personal sacrifices to put their children through school. The broad-based nature of the public demand for schooling facilitated the state in its goals of establishing a universal basic education, avoided the problems of school dropouts and lessened regional disparities in education development.

South Koreans' zeal for education, often referred to as "education fever"(kyoyukyŏl) is among that society's most striking features. Education is important in every modern society but in few does it seem to have been such a preoccupation. It has been the subject of increasing research by educational specialists who are concern about its benefits and problems for educational development.⁴ As a historian I have been fascinated by the origins of education fever, what it tells us about Korean culture, and how it has shaped the nation's political as well as its social and economic development. Education fever has had an enormous impact on South Korea's historical evolution, and poses challenges both for educational reformers and for scholars trying to understand Korean society.

Origins of Social Demand

Although most Koreans attribute the zeal for education, or more precisely with prestige degrees, to the nation's "Confucian" cultural heritage, the origins of education fever, are complex.⁵ These origins are found in premodern values that equated learning with moral perfection and social prestige; in the Western, especially American ideas of progressive education; in the Japanese colonial experience that created a pent-up demand for education before 1945; in the fluidity of Korean society from the 1930s; and in South Korean educational policies that promoted open access to all levels of schooling.

Korea had a centuries-old tradition in which formal learning and scholarship played a central role in society. This tradition, usually associated with Confucianism, entered Korea from China more than fifteen centuries ago. Education in traditional Korea was valued both as a means of personal self-cultivation and as a way of achieving status and power. An individual could become virtuous through the study of ethically-oriented Confucian classics. He could then play an informal role as a moral exemplar and as a teacher and advisor to others, thus enhancing his status and influence in society. As in other East Asian societies, Koreans highly esteemed the written word and the prodigious efforts to master the accumulated body of literary and scholarly works. While education was recognized as an end in itself, in practice, it was generally seen as a means of social mobility and status selection. Under the Choson dynasty (1392-1910) a series of highly competitive examinations served as the means of selection for prestigious government positions. Historians disagree over how open the civil exams were to those of commoner status and to whether exams served only to allocate official positions among members of the yangban aristocratic elite.⁶ All agree, however, that the examination system acted as the main selection device for the limited number of government posts and that consequently formal education was largely organized around preparation for the exams. Elite families, at least, devoted a great deal of energy and expense on education and examination preparation. In this way they behaved much like modern South Korean families.

South Korea's social demand for education was also shaped by the four decades of Japanese rule. The colonial regime developed a modern educational system that was sequential in nature with a concentration on basic education followed by a slow growth in secondary and tertiary levels of schooling. While emphasizing the importance of education at home and creating what would become a comprehensive system of public education in the peninsula, the colonial officials limited the access of Koreans to upper levels of schooling and assigned them to inferior schools. From the start the purpose was to create a system that was regarded as more "appropriate" for Korea's level of development. The dominant view among Japanese policy makers was that Korea was a backward society, and that this backward society should occupy a

subordinate position in the empire. Japanese wartime policies after 1938 further limited the number of schools of higher education, and redirected the curriculum away for literary to less prestigious technical education and vocational training. These educational restrictions were highly frustrating to middle class families because they limited economic advancement and because education was equated with rank and status. This unmet demand for educational advancement is a key factor in explaining the "education fever" of South Korea since the end of the Second World War.

But this desire for schooling was not limited just to the few. The wartime mobilization of society in the 1930s, World War II, the collapse of the colonial regime and postwar chaos and the Korean War uprooted millions of Korean, broke down the old yangban dominated social order and removed the barriers that had limited higher education to an hereditary elite. Millions of ordinary Koreans saw the possibility of improving their lives through their children' education. Meanwhile, American progressive education reinforced and reinterpreted traditional beliefs in the transformational value of schooling, and American and socialist ideas of egalitarianism and democracy contributed to growth of educational aspirations among Korean families of all backgrounds. The result was a general population impatient with any restrictions on their pursuit of degrees. After liberation from Japan in 1945 the pent-up demand for education was immediately felt. Hundreds of new schools at all levels were opened and yet these were unable to accommodate the sudden increase in enrollments. South Koreans poured into the schools after 1945 at a rate equaled by few other developing countries. This despite the extreme poverty of the late 1940s and 1950s, the dislocation caused by the horribly destructive Korean War, the political the corruption of the Rhee regime and the political instability of the early republic.

Public policy makers also contributed to the education fever in two crucial years ways just after liberation. One was decision to end the strict tracking system created by the Japanese. While secondary schools were divided into academic and vocational neither were terminal but both could lead to higher education. There was no structural winnowing of students, all could and soon most did seek to advance to higher levels resulting in fierce competition. A second policy was the early commitment by the state to universal and uniform basic education. This eliminated the sharp disparities between regions and social classes that often characterized developing nations. While this contributed to social cohesion and provided a literate workforce with the skills needed for a newly industrializing economy, it also generated strains between the demand for higher levels of education and the state's efforts to prevent an oversupply of advanced degree holders. And it made competition for the restricted entry into higher educational tiers fiercer, adding to the intensity of South Korea's "education fever." Taking advantage of the social demand for education the state transferred the burden of financial support to the students and their families. Thus the problems associated with South Korean education today quickly emerged.

The Impact of Social Demand on Educational Development

The popular demand for educational access has been the driving force behind educational expansion but it has also led to a number of problems. For example, soon after 1945, the social demand for education led to what the Korean press referred to as "examination mania" the

preoccupation with entrance examinations. The test-taking ordeal for South Korean students began with the middle-school entry examination that twelve-year olds took, and continued with the high school entrance exam and culminated in the university entrance test. Criticism of the emphasis on entrance exams among educators and in the press, appeared shortly after liberation from Japan. As early as 1949, the Ministry of Education (MOE) in response ordered that the entrance exams be replaced by intellectual and physical tests, and that admittance to higher level schooling be also based on naesin, reports by the teacher of a child's achievement and character.⁷ This proved difficult to implement. Criteria for intellectual tests could not be agreed upon, and the teachers' reports seemed arbitrary and confusing. There was further experimentation with the use of naesin, but in general, entrance into secondary schools in the late 1940s and 1950s was determined by written subject tests prepared by the school's staff or the provincial education board.⁸ At the university-level written entrance exams based on subject areas were given by each university. As in the case of the secondary schools a brief experiment with a national exam in 1954 proved so unpopular it was discontinued the following year.⁹ Criticisms of the pressure the exams placed on students, and its reduction of schooling to exam preparation was a staple of public discourse on education. Some schools offered special classes held in the evenings or weekends and collected tuition for them. This was especially common in Seoul and Pusan which had the greatest concentration of students, money, and socially ambitious parents.¹⁰

When the when the military government under Park Chung Hee (1961-1979) came to power, it sought to control school entry exams by restricting applicants to middle schools and high schools in their resident city or province, but these efforts failed. The most significant reform of the examination system under Park Chung Hee was the abolition of the middle school and high school entrance examination carried out in stages between 1969 and 1975. The abolition of the middle school and the high school examination a few years later did not significantly reduce the pressure on examinations, however, but shifted the entire focus of education to the college entrance examination. Consequently, there was no abatement in the heated competition for college entrance and its attendant evils; rather, competition only became more intense. The greatest evil was the varying reputation of school districts. For in spite of all the efforts at equalization, the reputation of certain school districts for producing the greatest number of college entrance passers grew. Students often illegally transferred into schools from a less reputable school district. Residency could be faked, and regular crackdowns had to be held. The removal of illegal transfers could occasionally result in noisy protests such as in the spring of 1974, when a number of pupils refused to move back to their own districts.¹¹ In the same year in Pusan in the summer of 1974 500 pupils from rural areas protested their ordered transfer.¹² Families continued to find ways to circumvent regulations.

When Chun Du Hwan came to power in 1980 his administration sought to gain legitimacy by carrying out what was called July 30 Education Reform introduced a new College Entrance Achievement Test.¹³ Naesin was given greater weight and colleges could admit up to 30 percent of students over their quota, but they had to graduate only their allotted quota. This "admission over quota, graduation by quota" policy, as it was labeled, meant that institutions of higher learning had to "flunk out" a substantial number of students by their senior year in college. This was a new practice, since in South Korea few students dropped out of college, and fewer flunked out. But universities unwilling to lose tuition revenue or to angry parents saw to it that few students actually had to withdraw. More ineffective reforms were carried out in the 1990s but brought no fundamental change in the use of entrance examinations as the main mechanism for deciding who entered higher units of schooling and prestige institutions.

Parental drive to seek prestige degrees for their children created the issue of private lessons, a problem that has plagued education since the 1950s. From 1945 South Korean education was largely paid for by students and their parents for one of the most pronounced features of the Korean educational system was the weak fiscal support given to it by the state. A variety of school fees, compulsory PTA dues, fees for exam papers, and informal gifts to teachers made schooling at all levels a financial burden for the those with modest incomes. Gradually the state increased its share of spending on public education but growth in private lessons meant the financial burden of schooling for most Korean families did not diminish. The greatest single factor in the escalating price of schooling was private tutoring and out-of-school lessons known as *kwaoe*. Kwaoe not only placed an enormous burden on Korean families, but accentuated the differences in economic income among sectors of society, undermining the policy of egalitarian access to education. Furthermore, it represented a drain of resources that economic planners would rather have seen in savings and used for capital investment. As early as November 1955, President Rhee issued a public statement ordering all schools to end these extra classes. In the same statement he urged all schools and officials to "make a maximum effort to combat the evil practice."¹⁴ This began a pattern of periodically banning extra classes and then lifting the bans after admitting the ban's ineffectiveness that continued for the next four decades. An official ban on private tutoring in 1980, for example, proved to be ineffective, was moderated and eventually abandoned.

The Korean Educational Development Institute in early 1995 estimated that families paid 17 trillion w4n (US\$ 21 billion) on direct educational expenditure such as tuition, mandatory fees, extracurricular activities sponsored by schools, transportation, and textbooks. By contrast, total government public expenditure on education in 1994 amounted to 16.7 trillion w4n. That is, the public paid 51 percent of the total direct cost of education. In addition, an estimated six trillion w4n was spent on private tutoring. According to the KEDI study, when tutoring was included, parents and students absorbed 69 percent of the costs of education.¹⁵

Expenses has only risen it recent years. Wealthier parents began sending children abroad when the restrictions on overseas travel eased after the 1988 Seoul Olympics. Thousands of families sent children to U.S. high schools where they would pay a Korean family in America an average of two or three thousand U.S. dollars a month to watch over their child. A 1999 study found that costs of education rose 2.5 times from 1988 and 1998, outstripping the increase in cost of food, housing, health, transportation, utilities or any other major category of expenses.¹⁶ According to a report of the National Statistical Office in 1997, urban workers spent 9.8 percent of their income on education up from 6.7 percent in 1987, while rural families devoted a smaller proportion of their income to education. South Korea, in 1997, was 85 percent urban. The magnitude of this expenditure can perhaps be understood by comparing it with Japan, where a similar obsession with educational achievement had created the same reliance on expenditures on private lessons and tutoring. In Japan, urban workers spent 5.4 percent of their income on education up from 4.7 percent in 1987.¹⁷ The financial crisis of 1997-1998 may have slowed

spending a bit but after 2000 spending on private tutoring and cram schools grew at an alarming rate. An OECD report in 2005 found Koreans spent a far higher percentage of their personal income on education than citizens of any other OECD member.¹⁸

One of the great contradictions of South Korean culture has been the concern for assigning rank and status in a society where egalitarian ideals were strong. There was an informal ranking system for secondary schools and universities that ran counter to the strong egalitarian strain in South Korea culture. In public policy this egalitarian tradition was expressed as "uniformity of education." It took two forms. One was the idea that educational opportunity should be open to all. As the debates over the Education Law illustrated, there was a strong belief in universal educational opportunity. This idea stemmed from the spread of egalitarian and democratic ideas that rejected the rigid and largely hereditary class structure that had characterized the country to the end of the nineteenth century. The American missionaries, Japanese rulers and Korean intellectuals exposed to modern ideas all preached a sort of democratic ideal of a society based on merit. The concept of equal opportunity had some basis in the nation's traditions as well. Confucianism had always stressed the idea of merit as the only valid criterion for judging an individual and awarding status to him. Within the Confucian school of thought was another powerful idea: that each person had the capability to be a moral exemplar to provide leadership in society. Since education was a key to moral perfection, education by implication was something that any person could utilize in order to manifest his virtue. In practice, access to higher educational institutions and to the civil examinations was restricted to members of elite lineages, but with the breakdown of the old order in Korea, a popular belief that this educational avenue should be open to all emerged. Millions of Koreans clung to this idea with great conviction and were intolerant of unfair access to schooling.

Another related but somewhat different concept: uniformity, that is, a sort of equality of condition also had a strong pull on South Koreans. It came in part from the socialist conceptions of a mass society that greatly influenced Korean intellectuals and writers in the 1920s and 1930s and from the ethnic-racial nationalism derived from Europe and Japan. It colored the concept of nationalism in Korea that emphasized a uniform, homogeneous nation. Korean nationalists of all political stripes were proud of the long unity and ethnic homogeneity of their nation that gave it a uniqueness and a clearly defined identity. Nationalist rhetoric and even textbooks proudly proclaimed Korea to be "united race/nation," a nation of "one-people," "a single blood" even a "single mind."¹⁹ The two concepts of a social-economic egalitarian society and the ultranationalist ideal for a national ethnic-racial and ideological unity together resulted in an intolerance of glaring social inequalities.

In the rhetoric on schooling, uniformity of education meant that the school system had to be more that just open to all, it had to be fairly open to all, and uniform in content and standard. Yet this conflicted with a rank conscious society quick to assign every school and school district a place in a hierarchy of status. This tension between education as status climbing and egalitarianism reflected a society assimilating new Western ideas while adhering to traditional Confucian cultural values. The modern ideals of democracy and equality had won broad acceptance among a citizenry that simultaneously still viewed the world in hierarchical conceptual categories. For post 1945 South Korea uniformity of education meant, at the very least, that the entrance examination system ought to be fair. In official policy this was often termed the "equalization of education." At the time of the debates over the Education Law in 1949-1951, the idea of early tracking was rejected. Only by making no level of education terminal could access to upper tiers of schooling be assured.²⁰ As a result even vocational high schools offered college preparatory courses.

The Korean public remained ever vigilant for any attempts to create an "elitist" school system. To prevent this, a rigidly uniform curriculum was introduced in the mid 1950s. In order to prevent low income students from being ghettoized in poor schools, the MOE created a lottery system in 1968 by which students were randomly assigned schools in large school districts that were designed to include both wealthier downtown areas and poor outskirts of cities. The lottery system, however, was not popular with many parent and teachers groups, and was criticized as creating a "gambling mentality."²¹ In 1973, a commission of officials and private educators drew up the High School Equalization Plan that eliminated the high school entry exam, used a lottery to admit students into high schools and sought to make sure that facilities and instruction was uniform in all schools. Uniformity and equality have also been challenged since the 1990s by the educational reforms intended to give greater autonomy to individual high schools and colleges in the admission process and to experiment with curriculum. But these changes brought protests from various civil groups including the Chŏnkyojo an active teachers union that was illegal to 1999. These groups argued that undermining the principle of equality of opportunity would give an unfair advantage to those that could afford the preparation and private tutors for their middle school children to get into the best schools. It was feared that the pattern of creating a more egalitarian education system was being threatened, even if only in a limited way.²² Yet the increasing private expenditures on education may in fact be leading to increasing social reproduction undermining the egalitarian principles that contributed to education fever.

The pursuit of status enhancing degrees and has led to great sacrifices by Korean families to seek an advance degree abroad to the detriment of domestic institutes of higher learning. A foreign, especially a U.S. university degree generally held more prestige in South Korea than a degree from a local institution. In recent years the state has attempted to improve the quality of research facilities with such programs as Brain 2000 in which government funds are channels into universities specializing in areas of research and development.²³ Indeed, by many measures the standards at South Korea' major graduate programs have improved although they still lag behind the top universities in the U.S. and western Europe. An increasing number of young South Koreans skipping local colleges and universities altogether and seeking admission to foreign, usually a U.S. undergraduate programs. Instead of schools such as Seoul National, Yonsei and Korea University, students are seeking degrees from elite schools such as Harvard, Stanford, Princeton and Yale. This only creates another educational expense associated with English lessons and U.S. test preparation companies such as Kaplan and Princeton Review. States the Director of Overseas Education at Kaplan, "If you are smart and you are rich, you have to have a U.S. diploma, simple as that. "²⁴ As a result South Korean had by far the greatest educational deficit of any OECD member the period 2002-2004.²⁵

Challenges

South Korea's "education fever" has been an enormous asset for its educational

development. It is not too much to say that is has been a major and perhaps the primary engine of the nation's transformation into a modern, prosperous, highly literate society. This zeal for schooling may still be South Korea's greatest single asset as its faces the future. But it presents numerous challenges for South Korean society. For the past fifty years the educators, parents, and government officials have complained about the overemphasis on preparation for entrance examinations, the enormous expenditures on private tutoring and cram schools, the threat to educational opportunity private lessons pose, and the seemingly inadequate state of higher education that results in so many to seek advance degrees at foreign universities. The rising cost of education threatens to undermine the efforts at promoting an equitable society by avoiding sharp disparities in income and opportunity. It is an enormous drag on the South Korean economy as much of the educational cost is so inefficiently spent, and the stream of students heading overseas is a drain on foreign reserves and robs South Korean universities of many of their best students. Education fever hinders efforts at needed reforms to make the educational system more flexible and pedagogy more creative. None of the attempts to deal with these issues have met with more than very limited success because they have not addressed their fundamental cause: the drive by students and their families to enhance or maintain social status by earning prestige degrees. Only by better understanding this zeal can it be modified and directing it useful wavs.

Education Fever also creates challenges for scholars of South Korean society. Despite my effort in Education Fever in which I have argued that public demand rather than state initiative was the critical factor in educational development this is still a topic open to debate. The decision by the Rhee and then by the Park regime and its successors to provide universal and open to access to education was extremely important in encouraging social demand. Nor do policy makers operate autonomously from the social context in which they live. Clearly there has been an interplay between the pressure of parents and the actions of policy makers that needs better elucidation. More also needs to be done to clarify just what "education fever" is. What exactly were the substance and origins of the aspirations of students and their families? And how can we account for their universality? How has social instability contributed to social mobility or to education aspirations? How can the interaction of demographic, occupational and educational mobility be assessed? What might this tell us of attitudinal development? How did the goals of equal opportunity and the general emphasis on homogeneity in the schools, in government propaganda and in the popular culture contribute to the universality of education demand? How can the concern for equality of opportunity and the strong egalitarian streak of South Korea be reconciled with the pursuit of status and the continual influence of Confucian ideas of status? I do not claim to have come up with the definitive answers to any of these complex questions.

Furthermore, the links between South Korea impressive educational achievements, its economic transformation and it democratization need further study. Educational development needs to examined by political scientists, sociologists, historians and economists, as well as by educational specialists to gain an integrated understanding of social, economic, political and cultural changes. For example, we need to examine the long tradition of student political activism and its impact on its political development. Especially important is the need for comparative studies. How distinctive is "education fever?" How does South Korea's

educational experience compare with that of other nations? A comparison with North Korea would be fascinating but at present difficult due to the lack of reliable data. Comparisons with other developing nations and with its fellow OECD members, however, would also be extremely useful.²⁶ The insights of such comparative studies would be useful to those in other areas since South Korea's transition to a democratic society with a first world economy has global significance.

Understanding education fever is essential to understanding the recent history of Korea as well as South Korean society today. It is not simply an educational issue but a product of the dynamic mix of social, political economic, and cultural factors that have shaped this rapidly changing society. The experience of South Korea's educational development has broader implications as well. South Korea has been among the few developing nations that has made the transition to an advanced industrial society with a democratic government and high standard of living. For all its problems, its educational transformation has been a key factor in that transition, an education transformation driven in good measure by social demand.

1 Organization for Economic Cooperation and Development, Education at a Glance 2005, (Geneva, OECD, 2005).

2. In the second test of OECD Program for International Student Assessment in given to upper level secondary students in 2003 South Korea ranked first out of 41 in problem solving, second in reading, third in math and fourth in science. Dropped to fourth from first place in science in 2001. Given in near end secondary school. Barry McGraw, "OECD Perspectives on Korean Educational Achievements" in OECD/World Bank/ KEDI, International Conference on 60 Years of Korean Education: Achievements and Challenges, Seoul, June 2005.

3. Most of this is drawn from my book Education Fever: Politics, Society and the Pursuit of Schooling in South Korea. (Honolulu: University of Hawaii Press, 2002).

4. A recent example is Jong-gak Lee, Taking the Right View of Koreans' Education Fever, (Seoul: Wonmisa, 2003); another is the recent issue of the KEDI Journal of Educational Policy 2:1 (2005) which was entirely devoted to the topic of education fever.

5. For a recent example, Sin-bok Kim, "Korean Pattern of Education Growth and Development, unpublished paper, Seoul National University, 2005.

6. See Yong-ho Choe, The Civil Examinations and the Social Structure in the Yi Dynasty Korea, 1392-1600 (Seoul: Korean Research Society, 1987); Choe Yong-ho, "Commoners in the Yi Dynasty Civil Examinations As Aspect of Social Structure," Journal of Asian Studies 33.4 (August 1974):611-32; Watanabe Manabu, Kinsei chōsen kyōiku kenkyū (History of Modern Korean Education) (Tokyo: Yuzonkaku, 1969).

7. Kim, Jongchol [Kim Chong-ch'ŏl]. Education and Development: Some Essays and Thoughts On Korean Education, (Seoul: Seoul National University Press, 1985), 70.

- 8. Kim Jongchol, 71.
- 9. Kyŏnghyang sinmun, 27 December 1954.
- 10. Tonga ilbo, 20 November 1949.
- 11. Korea Times, 29 March 1974.
- 12. Korea Times, 28 June 1974.

13. Kwak Byong-sun, "Examination Hell In Korea Revisited: An External Malady in Education?" Koreana 5.2 (1991),45-55.

14. The Korean Republic, 14 November 1955.

15. Korea Newsreview, 4 February 1995, 12; Korea Herald 24 January 1995.

16. Korea Times, 19 January 1999.

17. Korea Times, 6 August 1997.

18. McGraw, "OECD Perspectives on Korean Educational Achievements."

19. For examples of the influence of nationalism on education thinking see Hong Ung-sŏn, Kwangbok hu e sin kyoyuk undong 1946-1949, Chosŏn kyoyuk yŏn'guhoe rŭl chungsim ŭro (The New Education Movement after Liberation, 1946-1949, Centered on the Chosŏn Educational Research Society) (Seoul: Taehan Kyogwas4, 1991), 45-63.

20. See Michael J. Seth, "Creating A Korean Educational system, 145-1951," The Korean Academy of Korean Studies, Proceeding of the 1st World Congress of Korean Studies: Embracing the Other: The Interaction of Korean and Foreign Cultures, (Seoul: July 2002), 866-877.

21. Korea Times, 6 June 1966.

22. Yu Sang-duk, Vice-President of the Chŏnkyojo, interview by author, Seoul, June 1996.

23. Research facilities at leading South Korean universities have improved greatly in recent years, enough to draw some international attention. See "Asia's New High-Tech Tiger" Chronicle of Higher Education, (23 July, 2004), 34.

24. Korea Herald, 27 December, 2003.

25. Korea Times, 7 February 2005.

26. Some recent efforts at comparisons have been made such as the studies of private tutoring in Mark Bray, Adverse Effects of Private Supplementary Tutoring (Paris: International Institute for Educational Planning, 2003), and between education fever in Korea and Japan Takaysu Nakamura, "Education System and Parental Educational Fever in Contemporary Japan: Comparison with the Case of South Korea," KEDI Journal of Educational Policy, 2:1 (2005): 35-51. More comprehensive systematic studies need to be done.