

Korea's War on Private Tutoring

Bong Gun Chung, Ed.D.
The Korea National University of Education
bchung@kedi.re.kr

Introductory Remarks

The problem of private tutoring lies at the core of the education reform efforts in Korea. Private tutoring is accused of distorting school curriculum and normal activities, as well as laying a heavy financial burden on household economy. Moreover, expensive private tutoring is likely to reproduce educational inequality, as it is related to student's socioeconomic background. What makes things worse is that private tutoring has been escalating, ever since the MOE took the ambitious education reform initiative more than a decade ago. In this respect, some critics argue that the increase in private tutoring is an indisputable evidence of the failure of the government-led education reform.¹ Due to the growing financial burden of private tutoring, many parents do not think that the government is successfully implementing the educational reform.

There are some achievements in the education reform. Nevertheless, the aggravation in private tutoring sector seems to override the significance of them. Without reducing the size and influence of the private tutoring sector, the education reform in Korea cannot be judged as truly successful. As such, it is 'politically correct' in Korea to denounce the private tutoring as the enemy of the public school system. The public resentment to private tutoring is so strong that it requires a gut for any educational policy makers to try an objective judgement on the merits and demerits of it. Actually, two education ministers who mentioned somewhat favorably on private tutoring were cross-fired by parents, teachers, and news media that eventually led to their resignation.

This paper tries to review the nature and characteristics of the private tutoring problem in Korea and the methods and rationale of the government's attempt to solve the problems. Firstly, some of the numerical facts about the

¹ Such a critique is widely shared by those in the economic sector including the Ministry of Finance and Economy.

size of expenditure and the categories of private tutoring are introduced. Then, the theoretical explanations about the reasons of the increasing private tutoring and the governmental prescriptions based on such diagnoses are briefly reviewed. Lastly, the reasons of the unsuccessful outcomes of the anti-tutoring policy measures are investigated in order to shed some light on what Korean educational policy makers should do for now and future. After all, this is not to say that the MOE is neither accountable for the problems of private tutoring, nor unable to solve the problem. Rather, the point is that the approach by the Ministry of Education to the private tutoring has some cognitive and practical problems as a policy making process that contribute to the unsuccessful outcomes.

The Problems of Private Tutoring in Korea

In Korea, private tutoring means the learning of curriculum subjects, knowledge, and skills such as music, painting, athletics, and so on outside of the school. Peculiarly, it is illegal for the in-service teachers to engage in private tutoring, or moonlighting. On the contrary, authorized private learning centers, cram schools, college students, and registered professional private tutors render the tutoring to students during after school hours often very late till mid night.

There are several types of private tutoring that attract a number of students as shown in Table 1 and Table 2. Table 3 shows that the primary students show the largest expenditure for private tutoring. It is because they are usually enrolled in several learning centers at a same time throughout the six-year school period. The cram schools for university entrance are huge in size with hundreds of enrollments. Also, there are numerous small learning centers lodged in the buildings nearby students' homes for learning of math, English, art subjects, and so on. A large number of college students regularly pay visits to student's home as tutors to teach the subjects. Some publishers who develop the materials for learning with the itinerant tutors to students' homes have grown into multi-million dollar businesses. Moreover, recently there appear numerous commercial websites for tutoring on the internet.

Table 1. expenditure for private tutoring by types (in Korean won, year 1999)

types of private tutoring	expenditure in billion won*	r a t i o (%)
cram schools & learning centers	2,780	41.1
individual or group tutoring	1,422	21.0
learning centers for skill and specialty	1,375	20.3
in-school tutoring after class	280	4.2
hour	831	12.3
work sheets & correspondence tutoring for employment	76	1.1
total	6,764	

Source: Ministry of Education (2000), Report on Private Tutoring

* one dollar was 1,145 Korean won in 1999

As mentioned above, private tutoring is usually blamed in three aspects: the first one is its negative impact on schools particularly at secondary education, the second one is the financial burden on household expenditure which is regarded as an excessive and inefficient spending of monetary resources, and the third one is the educational inequality caused by private tutoring that will reproduce socioeconomic inequality.²

Originally, private tutoring is supposed to help students in keeping up with the school curriculum. In this respect, private tutoring is auxiliary to the learning in schools. However, things have been reversed in Korea. There is a tendency to rely more on private tutors than teachers at school, particularly, in order to prepare for the entrance exams. It is presumed either because the level of learning for the tests is too much high or the level of teaching at schools is mediocre, or both. Consequently, schools are losing the trust of parents and students who find the alternative in private tutoring.

² *The Educational Policy of Korea: A Background Report for OECD* (Korean version), KEDI, 1996, CR 96-40; *Illumination of the Problems of Private Tutoring* (in Korean), KEDI, 2001, RM 2001-22; *Solutions for Private Expenditure for Education* (in Korean), KEDI, 2001, CR 2001-15; *Private Tutoring and Private Expenditure for Education* (in Korean), Korean Society for Educational Finance and Economics Study, 1997.

Table 2. ratio of the students in private tutoring

year	ratio (%)	sample surveyed (nationwide)
1980	14.9	Primary & secondary students
1991	21.8	secondary students
1997	53.8	primary & secondary students
1999	55.1	primary & secondary students, parents,
2000	58.2	teachers primary & secondary students, parents, teachers

Source : Young Chul Kim, etc. (2001), *Sa Kyo Kyuk Be Hae So Bang An* (Solutions for Private Tutoring), Korean Educational Development Institute, CR 2001-15, p. 40.

Table 3. expenditure for private tutoring by school level (in Korean billion won, 1999)

p r i m a r y school	m i d d l e school	high school	v o c a t i o n a l school	Total
3,144	1,908	1,491	227	6,770

Source: Ministry of Education (2000), Report on the Private Tutoring

As shown in Table 4, the private expenditure for education has been increasing continuously. Now it is estimated that the total private expenditure for education including the fees for private tutoring exceeds the total public expenditure for education by the central government.³ On the one hand, it means that the government does not spend enough money for schools. On the other hand, it implies that the public education does not win the competition with private tutoring. Among the categories of the private expenditure for education, it is the fees for tutoring that is most controversial. It is because not only the private tutoring is believed to exert a significant influence on the entrance competition, but also the financial burden on household is almost galloping.

³ *Private Tutoring and Private Expenditure for Education*, p. 148.

Table 4. expenditure for private tutoring (in billion Korean won)

year	private tutoring expenditure	ratio to GNP
1977	280	.36
1980	328	.96
1982	470	.47
1985	670	.51
1990	3,075	1.39
1994	5,845	1.86
1999	6,772	1.40 (GDP)
2000	7,127	1.37 (GDP)

source: Young Chul Kim, etc. (2001), p.41; Ministry of Education (2001)

Educational inequality, particularly in relation to university admission, has become exacerbated, despite of the strong egalitarianism prevalent in the primary and secondary education, such as the leveling policy which restricts the school choice and equalizes the tuition level. Students with affluent family background can hire private tutors to enter prestigious universities, so that they will have a better chance for social success. Although it is controversial whether the private tutoring actually pushes the test score up or not, a large number of students resort to it as shown in Table 5 in order to prepare for the exams for admission. Needless to say, students with poor family background are relatively deprived of the chances for private tutoring.

Table 5. students' opinion on the effectiveness of private tutoring

greatly helpful	helpful	hardly helpful	don't know
21.9 %	74.7 %	3.2 %	.2 %

Source: Young Chul Kim, etc. (2001), p. 57.

Politicians do not miss the chance to respond to the complaints of parents. They promise to solve the problems of private tutoring in order to garner the support in elections. Rhetorically, they even declared a war on private tutoring. Thus, the political pressure to solve the problems of private tutoring makes the officials of the Ministry of Education to invent various policy measures. Unfortunately, most of them are proved not so much effective. Moreover, in April 27, 2000 the Supreme Court judged that the law prohibiting the private tutoring is unconstitutional. It seems to be that the failure of the Ministry of Education to control the rampant private tutoring

undermines the authority of the government and even brings in a skepticism on the competency of the MOE officials as policy makers.

The Reasons Behind The Burgeoning Private Tutoring

Some economists try to explain the growth of private tutoring sector in relation to the unbalance between demand and supply of quality education. According to Sunwoong Kim and Ju-Ho Lee, the government keeps strong control on schools, as exemplified in the leveling or equalization policy, in terms of student selection, parental choice, and tuition level.⁴ As result, the schools have become mediocre and high quality education is lost. Private tutoring has emerged to meet the gap between what government provides and the best quality education that is possible if it were not for the bureaucratic control.

Ju-Ho Lee tries to suggest a solution by applying market principles to secondary education. With the abolition of government control, schools will compete to improve the quality of education they provide. Consequently, the money and resources spent for the private tutoring will decrease being absorbed by schools. However, his suggestion is criticized that the inequality in secondary schools will be aggravated to undermine the goals of public secondary education. In other words, the inequality in secondary education is likely to jeopardize the social integration.

Sociologists point out the status attainment competition as the prime reason of private tutoring.⁵ Education is almost identified with social upward mobility in Korea. Therefore, the competition to get an opportunity for better and higher schooling becomes intense. Moreover, as the Korean economic growth continues, families have more income to invest in their children's education. Table 6 shows a bi-polarization of private tutoring. In this regard, the so called "social reproduction of classes through education" became tangible as revealed in the socioeconomic composition of students in prestigious universities.⁶ Recently, the competition for better secondary education has extended to going abroad to attend U.S. and other English

⁴ Sunwoong Kim and Ju-Ho Lee, "Private Tutoring and Demand for Education in South Korea," paper presented at a World Bank seminar, March 2002.

⁵ Jong-gak Lee, *Sociology of Education*, 1999

⁶ The father's job of the freshmen of 2000 of the Seoul National University shows that 23.2 percent is professional, 26.6 is managerial, 16.9 is clerical. The survey of the freshmen of the year 2000, Seoul National University, p. 11.

speaking schools. For those middle and upper classes who are seeking for better education for their children the emigration of entire family or sending the children to foreign countries for schooling is not uncommon now.

Table 6. private tutoring by income level (in thousand Korean won)

Income level (monthly)	1997	2000
Below 1,000	37.5 (%)	28.6 (%)
1,000 – 2,000	48.9	56.7
2,000 – 3,000	63.8	64.8
3,000 – 4,000	64.5	75.0
4,000 – 5,000	85.9	75.0
5,000 – 10,000	80.3	77.8
above 10,000	80.3	92.7

Source: Young Chul Kim, etc. (2001), p. 47.

The strong academic credentialism in Korean society is the backdrop of the rising private tutoring. Even social campaigns to expel the diploma disease are organized. Last month, the newly elected president of Seoul National University proposed to introduce an affirmative quota in the admission to his university in order to reduce the overheated competition and growing socioeconomic inequality. In fact, the income gap between the rich and the poor has been widening after the economic crisis of 1997. However, the problem is that such manipulative attempts to curb the inequality are doubtful whether they can be successful or not. Not only because there are strong supporters who are benefited from the status quo, but also it is at odds with meritocracy and market principles. Further, they are likely to be unconstitutional. In this respect, private tutoring is more than a problem in the education sector, rather it is a problem deeply rooted in the socioeconomic structure of contemporary Korea.

Anthropologists find the pathological level of the enthusiasm of Koreans for education as the cultural background of the competition for education and the burgeoning private tutoring.⁷ Certainly, the strong commitment as well as the support from parents to their children's schooling

⁷ Young Wha Kim, *The Study of Educational Fever of Koreans* (in Korean), KEDI.

is motivated not merely by socioeconomic considerations, but also a cultural behavior shared by Koreans as a norm of life. The educational zeal of Koreans is also deeply rooted in the thousand years of Confucian culture that puts much emphasis on the virtue of learning. Some people argue that the strong educational zeal is not entirely harmful, but valuable to social and economic development if it is properly managed.⁸

In a similar vein, the private tutoring is said to be not entirely harmful, but conducive to regular schools. Some people seek to find a way to cooperate with private learning institutions in order to supplement school learning. But such an attempt is too idealistic to be accepted by the public sentiment, as the parental burden of private tutoring is too much high and the relationship between schools and private tutoring sector is a sort of zero-sum game or even adversarial. Also, the view that emphasizes the positive aspects of the educational zeal and the private tutoring is unrealistic, in the sense that there should be a social agreement on how much is the optimal level of educational zeal and the reasonably bearable amount of the cost for private tutoring. Needless to say, such a political agreement is likely to be unfeasible and fragile in the vortex of Korean society.

Some educational theorists argue that the thriving of private tutoring reflects the decline of the public education system as one of the pillars of modern state and industrialism.⁹ According to them, the modern school system that has been based on the mass schooling with standardized curriculum and large bureaucracy is inevitably lagged behind the rapid changes in society. For instance, Korean newspapers recently coined a term "classroom collapse" to describe the schools that fail to respond to the social changes. Moreover, the dazzling development of information technology spurs the changes in economy and social life. In a nutshell, while things are changing too fast and as schools are getting lost in confusion, private tutoring gets in to fill the holes and cracks of the allegedly dismantled classrooms.

Such an interpretation on the rise of private tutoring suggests the deregulation of educational system as a solution. Critics argue that schools should be freed from the government control so as to meet the demands of the

⁸ Jong-gak Lee, "A study on the educational fever of Koreans," June, unpublished memo.

⁹ Kioh Jeong, "School Failure : General Theory and Korean Context," in *Private Tutoring and Private Expenditure for Education*.

knowledge based society. They expect that a new paradigm of education for the future should emerge in the process. However, such an analysis is too much theoretical to provide policy makers with certain realistic solutions to the immanent ills of the thriving private tutoring. It will take a long time to establish a new paradigm of education replacing the old one. Meanwhile, more and more students will keep away from schools to rely on private tutors.

Educational Reform Policies against Private Tutoring

It is by no means an exaggeration to say that the struggle with private tutoring has been the prime concern of every education minister. In 1969, the Ministry of Education suspended the school choice for middle schools regardless of public and private by banning the entrance exams. It was the first governmental response to the burgeoning private tutoring that prevailed in the entrance competition. Five years later, the high school entrance exam was also abolished, starting from large cities. In 1980, the military government had made it illegal to render any private tutoring and punished the parents who violated the prohibition. This violent measure was sustained, although clandestine private tutoring was spreading underneath at remarkable black market prices, with some modifications until it was judged as unconstitutional in 2000.

Since the mid eighties the presidential education reform committees had proposed a plethora of education reform programs from childcare to IT manpower. Particularly, the suggestions to reform the university entrance system are focused at abolishing the private tutoring by making it unnecessary to prepare the admission process. For instance, the new university entrance from 2002 puts much emphasis on diversifying the selection criteria other than the entrance exam scores, such as, high school records, social services, individual's aptitude and talent, social and economic disadvantages, and even filial piety. The Ministry of Education advertised the new system as "multiple line up" instead of the simple lining up with test scores only to enter the university. The intent of such diversification is to nullify the importance of cramming through private tutoring.

While emphasizing the reform of the university entrance system, the Ministry of Education tries to strengthen the public education. The MOE has promised a large scale investment to reduce the class size, to improve the physical environment of schools, to attract qualified teachers in order to compete with private tutoring. The Ministry of Education also introduced free

televised tutoring programs, subsidies to the extracurricular activities in schools after the class hour, and the reduction of subjects and curriculum content to ease the burden of academic learning. All these measures aim at reinforcing schools against the intrusion of private tutoring.

Indeed, it seems to be that the Ministry of Education has exhausted all the possible policy measures in the arsenal to cope with private tutoring. It varies from the direct ban on private tutoring and the surgical strike on entrance competition, for instance, the reform of university entrance system, to the holistic approach to revitalize the educative power of schools. Nevertheless, the private tutoring in Korea is diehard, rather, it seems to be thriving all the more. Recently, the Educational Office of Seoul funded a massive research to prove the ineffectiveness of private tutoring to push up the academic achievement level.¹⁰ Although the result partly supports the education officials' wishful thinking, it is still dubious and controversial whether it truly is or not. It seems to be that the government is losing the battle with private tutoring both in theory and in practice.

Rethinking The Approach Of The Government To Private Tutoring

By now it is the time to review why all the measures of the Ministry of Education to diminish the private tutoring seem to be ineffective. There is no excuse that time has not passed long enough to evaluate the effects of the policy measures. Rather, in some aspect the policy making itself might contain some innate problems. In order to find out the reasons of the failure the policy process of the MOE regarding private tutoring needs to be scrutinized in terms of its policy problem, method, actors, policy environment, and ideology.¹¹

First of all, it seems to be that there are some problems in defining the private tutoring as a policy problem. The empirical evidence based on scientific or positivistic measurement is insufficient. Particularly, in regard to the harms to the schools the stories reported in the news media and the personal experiences and opinions of teachers are likely to be believed as an objective evidence of the pathologies of private tutoring. However, such stories need to be hypothesized and tested with scientific rigor, if the

¹⁰ *A Study on the Effect of the Prior Learning by Private Tutoring* (in Korean), KEDI, 2001.

¹¹ Deborah A. Stone, *Policy Paradox : The Art of Political Decision Making*, New York : Norton, 1997.

journalistic sensationalism as well as bias is to be avoided. Also, the figures from the opinion surveys are not objective and precise enough to define the policy problem of such a magnitude. In this regard, more statistical data collection and measurement on the effects of private tutoring on behavior and learning are required.

In a similar vein, the accusation that private tutoring contributes to aggravating the educational inequality, or socioeconomic disparity, needs a careful investigation on its direction and the size of the causal relationship. The findings that students with affluent family background with experiences of private tutoring are more likely to enter universities do not necessarily prove that private tutoring exacerbates inequality. Or, the private tutoring may be the effect rather than the cause of socioeconomic inequality. Even if it is undeniable that private tutoring causes inequality, its sheer size and content need to be precisely described as much as possible in order to define what the educational policy problem exactly is.

The size of the expenditure for private tutoring tends to vary according to the surveyor. One of the reasons behind the fluctuation is that each surveyor uses different categories of private expenditure for education. Moreover, the methods to collect the numbers are somewhat unreliable, for example, self-reporting by students or parents. Although it seems to be true that the total expenditure for private tutoring is increasing, it is only a vague estimation of the tendency rather than a clear picture of what is happening. Nevertheless, those imprecise numbers are powerful enough to provoke public resentment to the ills of private tutoring. In such a way, it is possible that the problem definition is influenced by subjective biases.

Therefore, due to insufficient research, database, and perspectives, it can be assumed that the problematic aspect of private tutoring is exaggerated more than its actual magnitude and significance. Further, the public resentment and the politician's show-off to alleviate the parental burden readily intervene to emphasize the problematic aspects of private tutoring. As result, the MOE is unable to carefully examine the nature and the structures of the problems underlying the private tutoring. In a nutshell, the MOE cannot but help responding sensitively to the populism of the politics, so as to define the private tutoring as an evil to be eradicated immediately rather than maintaining a cautious approach to this complicated problem.

Once the policy is decided to fight the private tutoring, the MOE is expected to lead the struggle at the forefront. However, the private tutoring in Korea is not only an educational problem, but also a social problem rooted in the socioeconomic structure. Although the private tutoring is a matter of education, it requires a list of accompanying social and economic policies, for instance, tax, wage, and employment policies. It is difficult for the MOE to cope with the socioeconomic problems beyond its policy domain. The MOE has to rely on the limited measures within its jurisdiction, such as control of schools and teachers. As the policy instrument is insufficient to handle the complicated nature of the policy problem, it is inevitable that the effectiveness of the policy implementation decreases.

What makes things worse is that the MOE has lost its credibility by frequently changing its policy. Table 7 shows the changes of the policies. The ban on all types of private tutoring in 1980 became porous due to the exemptions for specific instances such as students with low academic records, music and fine arts students, and etc. For another example, the after-class cramming led by teachers within school perimeter was prohibited, on account that it makes worse the entrance competition. However, the prohibition by the MOE is violated frequently by those principles and parents who eagerly want their student to win in the entrance exam. After all, the MOE has been swinging between prohibition and permission until now, making mockery of its own administrative authority. It seems to be that the MOE is either too much ambitious or forced to fight a losing battle.

Table 7. changes in the anti-private tutoring policy

date, year	Changes in Policy
July 30, 1980	Total ban on all private tutoring
Aug 27, 1980	<u>Arts & athletic skills are allowed within school perimeter</u>
July 14, 1981	Arts, athletic skills are allowed in private learning centers
July 13, 1982	Language subjects are allowed in private learning centers
Aug 12, 1983	Poor achievement (bottom 5%) are allowed in-school tutoring
Jan 6, 1984	Poor achievement (bottom 20%) are allowed in-school tutoring in-school after class hour study are allowed
May 6, 1988	University students are allowed to do tutoring on non-profit bases
June 16, 1989	Principles are authorized to do the in-school after class hour study
July 22, 1991	Return to the ban on the in-school after class hour study
Aug 12, 1998	Ban on Private Tutoring is unconstitutional (Supreme Court)
April 27, 2000	

Source: Seung Shil Yang (2001), “Changes in Private Tutoring Policy and Rethinking of Public and Private Education” (in Korean), p. 39.

One of the reasonable assumptions in the anti-tutoring policy of the MOE is that high quality public education will absorb the demand for private tutoring. It is correct in theory, but almost infeasible due to the budgetary limit in the public education sector. On the other hand, the huge public institution such as schools is likely to lag behind in competing with the small profiteering learning organizations. Although recently the MOE has been successful in increasing the educational budget to a considerable extent, for instance, reducing the class size to 35 average per classroom at all school levels, it is still far short of the level to beat the private tutoring.

The commitment of the MOE to the losing battle with private tutoring is also attributed to the centralized administration system of the MOE. The strong government interventionism in Korea since the developmental era of the 60s is considerably reduced now, as the private sector economy and the local autonomy have made a significant progress. However, the MOE still

maintains much of the direct control of secondary education with uniform guidelines and recommendations for school management. The MOE's rationale of such paternalistic control is to keep normalizing the schools by supporting the management with policy directions and resources. As the public opinion has made the private tutoring as a national priority, the MOE should have to make a direct involvement to it at national level, rather than let the local educational offices handle it.

The dilemma of the MOE is that deregulation, including the university entrance system, is likely to worsen the problems of the already excessive competition, since other related variables such as educational and social inequality are not improved yet. For instance, the prime reason to retain the controversial high school leveling policy is to curb the revival of the entrance competition. Although the movement toward deregulation, decentralization, and autonomy is unavoidable, the MOE seems to choose to remain regulative at least in the matter of entrance competition, that is, the distribution of educational opportunities. Unfortunately, as long as the MOE keeps its hand on the entrance system, it has to face the problems of private tutoring with little chance of successful resolution.

Concluding Remarks

In some aspect, the unsatisfactory result of the war on private tutoring is anticipatory. It seems to be that the MOE policy makers themselves are not so much confident about the success of their own policies against private tutoring, considering its deep-rooted socioeconomic origin, the limited methods and resources for policy implementation, and the emerging ineffectiveness of the state interventionism in private sector. Nevertheless, it is unable as well as pessimistic for the administration to evade the problem that is pledged by the politicians of ruling and opposition parties alike to suggest a solution. Such a policy making in captivity is likely to fail. At any rate, the MOE is not exempt from the blame for the poor outcome.

The MOE might have to make it clear that they cannot solve the problems of the private tutoring. At least, the MOE should either resist to or refrain from making a false expectation that all the problems can be solved. Hardly anyone is likely to believe it. At best, it seems to be that the problem of the private tutoring can be managed rather than solved. Instead, the MOE should emphasize that educational problems are not merely educational, but also social, political, cultural, and economic. Certainly, it is almost a

humiliation as a government authority to admit its incompetence. However, in an aspect, its incapacity to solve the problem has been already proved by

the growing private tutoring sector. What should be done at this point of time is to seek for a way to sleep with the strange bedfellow until the morning comes.

References

Deborah A. Stone, *Policy Paradox : The Art of Political Decision Making*, New York : Norton, 1997.

Jong-gak Lee, *Sociology of Education*, 1999

_____, “A study on the educational fever of Koreans,” June, 2002, unpublished.

Kioh Jeong, “School Failure : General Theory and Korean Context,” in *Private Tutoring and Private Expenditure for Education*.

The Korean Educational Development Institute, *The Educational Policy of Korea: A background Report for OECD* (Korean version), 1996, CR 96-40

The Korean Educational Development Institute, *Solutions for Private Expenditure for Education* (in Korean), KEDI, 2001, CR 2001-15

The Korean Educational Development Institute, *Illumination of the Problems of Private Tutoring* (in Korean), KEDI, 2001, RM 2001-22

The Korean Educational Development Institute, *A Study on the Effect of the Prior Learning by Private Tutoring* (in Korean), 2001.

Korean Society for Educational Finance and Economics Study, *Private Tutoring and Private Expenditure for Education* (in Korean), 1997.

Sunwoong Kim and Ju-Ho Lee, “Private Tutoring and Demand for Education in South Korea,” paper presented at a World Bank seminar, March 2002.

Seoul National University, *The Survey on the Freshmen of the Year 2000* (in Korean),

Young Wha Kim, *The Study of Educational Fever of Koreans* (in Korean), KEDI.