

ALTERNATIVE APPROACHES TO FINANCING LIFELONG LEARNING

COUNTRY REPORT

KOREA

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TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION	4
1.1 Political context.....	4
1.2 Economic context.....	8
CHAPTER 2. ESTIMATION OF PUBLIC COST OF IMPLEMENTING LIFELONG LEARNING	12
2.1 Current enrolment patterns.....	12
2.2 Estimates of participation gaps	19
2.3 Estimate of costs of closing the participation gap.....	21
2.4 Non-public costs	22
2.5 Dynamic evaluation of the costs of lifelong learning	23
2.6 Characteristics of lifelong learning needs by worker type.....	25
CHAPTER 3. RAISING THE RETURN TO LIFELONG LEARNING	26
3.1 Costs and benefits of lifelong learning.....	26
CHAPTER 4. MOBILIZING RESOURCES FOR LIFELONG LEARNING.....	40
4.1 Introduction.....	40
4.2 Funding arrangement by sector.....	41
4.3 Additional sources of finance.....	44
CHAPTER 5. CASE STUDIES	46
5.1 Case I: KNOU Experience.....	46
5.2 Case II: PCER's New College Proposal.....	47

CHAPTER 1. INTRODUCTION

1. The foundation for lifelong vocational education in Korea is on the goal of the formation of an open lifelong learning society essential in the age of information and knowledge.
2. The Korean government recently initiated a comprehensive review of lifelong learning policies as part of a general examination of human resource development policies by a high-level Presidential Commission on Educational Reform(PCER).
3. The reform in Korea shows a unique character reflecting her own political, economic, as well as social and cultural contexts in which lifelong learning is developing as a system.

1.1 Political context

i) How is the term lifelong learning definition?

4. While a culture of life-long learning has long been valued philosophically in Korean context, in practice it has been viewed as a luxury. This situation is now changing in Korea, because of sudden economic crisis and rise of massive unemployment.
5. The government has played an important role in expanding activities related to lifelong learning in Korea. As discussed earlier, substantial portion of the comprehensive package of education reform being implemented are related to lifelong learning. One of the outcome has been recent enactment of Lifelong Learning Act. Especially expanded, and being implemented, are job-related education and training activities for employed worker and the unemployed.
6. Lifelong learning system in Korea is comprised of private and public sector institutions, and by private firms, and is mostly overseen by ministries of education and labor.
7. More than 2 million persons were trained or educated in Korea's education and training programs between 1987 and 1994. In-plant training accounted for about 57 percent of these, public training institutions for about 27 percent, and authorized training centers for about 16 percent. Public vocational training is conducted by the Korea Manpower Agency(KOMA), a branch of the Ministry of Labor, and by local bodies. In 1994, there were 41 training centers under KOMA, and 8 under local governments.
8. KOMA was founded with the purpose of sound vocational training, R&D and operation of National Technical Qualification Test. The main activities of this agency include the integration and operation of Korea Technical Qualification Corporation and 24 public vocational training institutes.

Korea's Educational Training System

	Vocational Education	Vocational Training
Implementing Institutions	Vocational High Schools Junior Technical Colleges	Public Vocational Institutes In-plant Vocational Institutes
Ministries	Open Colleges Ministry of Education	Authorized Vocational Institutes Ministry of labor
Duration	2 to 3 years	1 month to 3 years
Curriculum	Major field and knowledge and skill related to major 70 percent theory; 30 percent practice.	Knowledge and skill related directly to major 30 percent theory; 70 percent practice.

Source : Vocational Training in Korea, Ministry of Labor. 1995.

ii) What Political commitments have been made in connection with lifelong learning(e.g. to expand to prescribed levels, to transfer a greater proportion than at present of the financial burden onto the main beneficiaries)?

9. The commitment to lifelong learning proposal is well reflected in the recent comprehensive reform package being implemented in Korea.

10. PCER commission emphasized that new system be provided with alternatives that would diversify student choice and make vocational education more attractive to "consumers." The entire life span must now provide the context for policy thinking. And, rigid distinctions between academic and vocational learning should be broken down.

11. PCER also endorses the central tenet of open learning-that learning opportunities should be accessible at any time, at any place, and through a variety of means and media.

12. It recognises the need of a national framework of policies and infrastructures that provide access, diverse forms of educational provision, support services of various kinds, arrangements for the cross crediting of educational and vocational awards and qualifications, and appropriate forms of academic recognition for people who complete certificate, diploma and degree programmes by whatever route.

13. The new reform plan also notes the ineffectiveness of the present way of conceptualizing and providing lifelong learning. In the recent past, the priority was mostly on formal schooling, and the educational needs of adults are largely ignored. The new reform focus on making the system be more responsive to the life-long education and training needs of adults population.

iii) What are the country's main goals and policy priorities in connection with the implementation of lifelong learning for all? Which sectors of lifelong learning are receiving most attention in the political debate, and what are the reasons for this focus?

14. The reform being carried out stresses the guarantee of the right to study throughout the individual's career and by expanding the opportunities for education through the combination of work and

study. Both emphasize the full participation and responsibility of the individuals as well as the business sectors.

15. The reform is being promoted in the following four directions.

1. From a blocked path to an open hope - graduates of vocational high schools will be given opportunities to continue with their studies through the open university, junior college, industrial university, New University and even up to graduate school while they keep working. To achieve this, the government will increase the budget for vocational education.
2. The education system will be based on competition and cooperation; the foundation will be laid for the realization of cooperation between schools and industries. At the same time, schools will be encouraged to compete with each other.
3. Vocational education will be "useful" for industries; it will open the way for industries to participate in the evaluation and management of vocational education. Reorganization of the system will allow the active exchange of human and material resources between schools and companies.
4. It will move from an "inefficient" educational system to an "efficient" one; the government's role here will be to revise the qualification system to link schools with businesses and thereby integrate education and training; promote effective use of the latest multi-media and telecommunications technology to provide learners with low-cost but high-quality vocational education; increase the autonomy of each school; and strengthen the role and finances of the local autonomous entities.(PCER)

16. Changes proposed by PCER imply major shift from rigid and uniform government control policy to a less coercive set of policies for creating a more "open" lifelong learning system.

17. Notable are several innovative proposals for more deliberate use of education technology and new media in education to be discussed later. Quality over quantity and diversification of programs were consistent themes and such spirits were well reflected in PCER's specific recommendations.

Program diversification

18. PCER recommendations emphasized quality instead of quantity in the provision and management of vocational programs, instead of mere emphasis of expanding the ratio of students in vocational and general high schools tracks. One way of doing this by diversifying vocational programs and institutions to better accommodate the changing needs of the industry and students.

De-regulation

19. Rigid and uniform regulations and criteria for school charter will also be greatly relaxed, to allow the flexibility in management and utilization of new and innovative types of vocational programs and new schools. Building, facilities, and land requirements will be eased and simplified. Facilities and equipment requirements will be strengthened instead. Also, distance learning technology will be expanded for area vocational schools to utilize for learning processes.

Specialized high schools

20. The specialized high schools will be built to allow students to consider their interests and talents in deciding their future early on in their lives and to help them become develop marketable and useful

competence in specialized skill area(e.g. electronic communications, design, popular music, etc.). Specialized vocational schools will also be given various privileges in program design, student selection, and freed from various regulation imposed on other schools.

21. Proposed is to relax the external conditions of the school building, playground and minimum land area, etc., (e.g. allowing the charter of highly specialized vocational school in an intelligent building).

Integration of vocational and academic education

22. Another proposal is integrating vocational education and academic streams. Schools that wish to do so can integrate and operate the curriculum of both vocational and general high schools, to enable students to choose from the wide selection of courses irrespective of their fields of study. This is to enable students to satisfy prerequisites for further education while at the same time acquiring work-related knowledge and skills in high school to enter the workforce directly.

23. Students graduating from integrated high school programmes may decide to go directly to work or to university. Integrated courses of study can be organised around broad industries or occupational clusters, such as health occupations, engineering and manufacturing, business and finance, or communications technology.

Emphasis on open learning and the use of new media

24. Reform designers acknowledges the radically changing contexts in which Koreans will live and work in the 21st century. New reform proposal directly addresses the application of information and communications technologies to innovate conventional concepts of teaching methods, curricula, and structure of education. Schools will be encouraged to explore new possibilities in vocational education and distance learning.

iv) What are the views on lifelong learning of the main employer organisations, trade unions, non-governmental organisations, other social partners?

25. To attract students into secondary level vocational programs, opportunities for further and continuing education will be expanded and restrictions lifted for vocational completers.

New Colleges

26. Among innovative programs specifically proposed in this regard is introduction of "New College" system which will be built in the actual work sites(to be elaborated in chapter 5). A business or a consortium of employers may establish a college program. The new colleges will allow employees to earn college level degree while employed. Lectures for basic courses and theory will be offered through distance learning technology and on-site duty will count as lab credits.

Credit Bank Proposal

27. The proposal for a national credit bank is key to developing an open education and lifelong learning system. It would guarantee individual and society the continuous opportunities to upgrade job skills of the individual and occupation development of the workforce.

28. The proposal for a national (credit bank), now in pilot testing stage, is will be a key to developing an open and lifelong learning system. The proposal signifies the awareness of the changing requirements of job world, requiring workers to regularly refurbish their qualifications. It acknowledges that, in the course

of a lifetime, many people will set out to study for new qualifications, and their previous qualifications, or the expertise they have built up during their career, can be credited towards new qualifications.

v) How is the political context developing over time? Is the demand (from government, employers and unions) for lifelong learning increasing, decreasing, or constant? What are the implications for future resource requirement, for the financing of such requirements?

29. At present, the government ministries related to lifelong learning are Ministries of Education, Labor, Public Health and Welfare, and Commerce. Recent policy direction has been to improve the policy coordination to improve the effectiveness and efficiency of delivering their service. Proposed is integration of policy efforts for better coordination among different sectors of lifelong learning, currently loosely administered by different ministries.

30. In this light, the establishment of an inter-ministry R+D body, KOVET can be noted. The aim of the institute is to increase the level of specialization and independence of vocational education and training policy; to maintain the consistency of related policies; and to bring into effect the government's continuous reliance on its policy. The institute is established and managed jointly by the Ministry of Education and Ministry of Labor. Its board of directors will comprise officials of related ministries, industries, labor and education sectors. Its affiliated organizations will be made up of government officials and specialists from the private sector.

31. Another issue of coordination is that there are increasing concerns that vocational training institutes run by the Ministry of Labor, are not adequately performing the role they are built for.

32. PCER had suggested the possibility of linking vocational schools and training institutes under different ministries (e.g., of education and labor, respectively) for efficiency and cost-saving. Some of the concerns have been that increasingly the training institutes under the Ministry of Labor has been emphasizing more of vocational education, rather than retraining and upgrading of skills they were built for.

1.2 Economic context

33. Korea has been noted for being one of the most rapidly industrialized economies in the world. The contribution of education and training to this process of national development has been widely noted. The development of the modern system of education and training in Korea has mirrored the development of the Korean economy.

34. Public support for education and training in Korea has been important in providing skills for rapid growth in output and exports. After concentrating on expanding primary education in the 1950s, Korea rapidly expanded enrolment in vocational senior secondary schools during the 1960s. In the late 1960s and 1970s, Korea stepped up efforts to develop skilled and technical workers outside the formal education system: vocational training centers were established. In the mid-1970s, the government encouraged in-service training in firms, with mixed success. During the 1980s, enrolment in vocational senior secondary schools and the number of in-service trainees began to decline, though enrolment in junior vocational colleges rose.

i) Is there a high level of concern with present or future skills shortages on the labour market? For which groups in the labour force (unskilled, highly qualified, e.g.), and why (increase in temporary employment, e.g.)?

35. In Korean labor market, employment and productions in manufacturing industries are reducing in numbers and amounts. This tendency is predicted to continue and grow stronger.

36. The statistical prediction is that by the year 2000, the workforce in manufacturing industries will be reduced to 22.8% of the total workforce from 23.3% in 1995. Even within the manufacturing itself, high-tech and knowledge-based industries will be emphasized, causing a new demand for a specialized and highly educated workforce instead of a simple skilled workforce.

37. In 1996, the number of workers engaged in agriculture fishery, and mining industries were reduced to 136,000 and 98,000, respectively, compared to previous years. In area of SOC (Social Overhead Capital) and service industries, there was a large increase of 620,000 workers, 65.8% of the total workforce.

ii) Is there concern that, in the absence of active lifelong learning policies, future labour market-such as unemployment or a concentration of low-skill work - will result?

38. Korea has maintained a stable employment with 2% of unemployment rates in past with high economic growth which create more employment opportunity. However, since the second half of 1996, the growth rate has been on declining trend and economy seems to head toward the process of restructuring. There has been increasing concerns for unemployment in Korea.

39. Sudden economic crisis, brought with Korean won crash, and subsequent relief loans from IMF, is forcing employment restructuring, greatly raising the level of unemployment. In this context, the provision and expansion of retraining programs for the newly unemployed and existing workforce are becoming especially important.

iii) Is there concern about the availability of public resources - now or in the future - to pay for lifelong learning, or about insufficient incentives and mechanisms to allow individuals or employers to pay for it?

40. Over the last 30 years, economic growth and social transformation have been taking place at a breathtaking pace in Korea. Investment in education, however, has been dismally slow in increasing. Schools and educational facilities are in adverse conditions.

41. Mean while, parents are heavily burdened by paying for private tuition in preparation for coveted college admission race. According to a recent survey done by the Korean Educational Development Institute(KEDI), the amount of money parents spend on their children's education other than that for school education has been on the rise and it exceeds the total public spending on education. The 1994 government budget for education was 11,559.5 billion Won, 3.8 percent of GNP. In the same year, parents spent an estimated 17,464 billion Won, 5.8 percent of GNP, on their children's education, which did not include expenses for school.

1.3 Social and cultural context

i) What are the social and cultural goals of lifelong learning in the country context (eg. social cohesion, citizenship, personal development)?

42. Korea has a long history of education. Confucianism, as the social, cultural and educational institution, has exerted a strong influence on the cultivation of people since the dawn of Korean history around 100 B.C.. Under the influence of Confucianism, Korean people high value on education and respect the educated. The tradition of valuing education has been a major driving force behind Korea's successful nation building and economic development over the last several decades.

43. Since the World War II, education in Korea has showed a remarkable expansion. The rate and scale of the expansion finds no match in other countries of similar conditions. The student population is about one fourth of the total population, and the national average of the years of schooling is now over 12 years. This picture contrasts sharply with the state in 1944, a year before the liberation, when the Japanese colonial policy had left 86% of the whole Korean population officially uneducated. Behind this unprecedented quantitative growth has not been only Korean people's enthusiasm for education but also the realization of the nation that education could be the primary, if not the sole, means to economic development, considering the lack of natural resources.

44. The government has undertaken various measures to de-emphasize the entrance examination and to encourage more students to pursue vocational education. Not only were these expected to reduce the pressure and inefficiencies of the intense college race, but also to help meet the needs of the economy.

ii) What developments(ageing, increases in female labour force participation, e.g.) are likely to have the most important impacts on lifelong learning needs?

(This will be discussed in latter section of this report)

iii) How well does formal education system dovetail with non-formal provides (labour market programmes, for-profit trainers, enterprises) in providing lifelong learning; how well do they dovetail with other social institutions (eg. religious organisations, social partners, the family) in the provision of lifelong learning?

45. Lifelong education for adults of various strata has been treated lightly as compared with weight given to school education in the past. The demand for lifelong learning for the handicapped and under privileged, the aged and married women are expected to rise most rapidly.

Employment Promotion for the Handicapped

46. As for the handicapped, numerous social welfare facilities are already providing assistance for rehabilitation through skill acquisition and employment. Thus in this light, the greater input and increased participation in lifelong learning has been emphasized of late. The employment promotion for the handicapped aims to provide rehabilitation and occupational stability by finding adequate jobs and to respect basic human right and dignity of the handicapped. The Act for Employment Promotion for the Mentally and Physically Disabled was promulgated in 1990.

47. According to the survey conducted by the Korea Institute for Health and Social Affairs (KIHSA) in 1995, the total number of the disabled nationwide is estimated to be 1,053,000 and the ratio of the handicapped over 100 persons currently stands at 2.35%.

48. The vocational trainees imply all handicapped persons over 14 who have finished up to the second year of the curriculum provided at special high schools according to the Education Act. The training period varies from 3 months to 3 years.

49. Cost of training can be supplemented from the Employment Promotion Fund for the Handicapped. Financial aid may be granted to trainees in order to cover costs in preparing for the training. Training allowance shall also be paid to the trainees.

Employment Promotion for the Aged

50. The proportion of aged people above 55 years of age rose from 9.8% in 1985 to 11.4% in 1990, and to 13.7% in 1996(MOL). This trend is expected to continue into the next century. To this end, the number of economically active population among the aged also shows a steady increase, which makes the inevitable enforcement of all measures concerning job security and utilization of human resources for old people.

51. The Employment Promotion System for the Aged is to solve manpower shortage problem in the labor market and promote social welfare for the aged by making the most of their abundant knowledge and experience. This includes selecting and widening ranges of jobs suitable for them, providing short-term adaptation training and employment promotion subsidies, accelerating employment for the aged by providing employment service through job banks. For this purpose, the Employment Act for the Aged was promulgated in 1991.(MOL)

Employment Promotion Training

52. Since 1993, vocational training, which were originally conducted at individual department level, has been combined as «Employment Promotion Training» and carried out under the supervision of the Ministry of Labor. This training aims at enlarging job opportunity by providing the recipients of public assistance, poor income farmers and fishermen with wider opportunities of vocational training. Kinds of training are determined by trainee's will. Trainees are supposed to receive full payment of training fee and some amount of fringe benefits. In 1996, 37,536 trainees participated in this program.

53. (Employment Insurance System) was introduced to secure a systematic device to deal with the difficulties concerning the imbalance between the demand and supply of workforce, employment adjustment support, livelihood of the unemployed and vocational training.

54. Employment Insurance System is a comprehensive labor market policy and a social security system which includes not only its traditional function as an unemployment benefit but also the promotion of structural adjustment of industries and unemployment prevention, employment security activities for employment promotion, and vocational ability development activities for workers. Employment Insurance Act was enacted on July 1, 1995.

55. Workplace subject to the application of the insurance in 1998 includes the workplace with 10 or more workers in case of unemployment benefits and the workplace with 50 or more workers in case of employment security activities and vocational ability development activities.

CHAPTER 2. ESTIMATION OF PUBLIC COST OF IMPLEMENTING LIFELONG LEARNING

56. In this chapter the public expenditure for lifelong learning in Korea is examined. The rate of the participation in lifelong learning is presented, and the target of the expansion of lifelong learning in the future is proposed. On the basis of the gap between the current participation rate and future target, then, the the cost in the future is estimated.

2.1 Current enrolment patterns

57. Lifelong learning system can be divided into three sectors: foundation education, higher education, and adult education. Demographic characteristics are key elements in making and implementing a lifelong learning policy. The children and adolescent population is not only a criterion in determining the demand and provision of educational opportunities but also has effects on the distribution of educational resources to be used.

2.1.1 Foundation Education

i) Information on age-participation rates for upper secondary education.

58. The types of upper-secondary education include general high schools and technical high schools. The former schools are supposed to prepare students for higher education, whereas the latter ones for employment. Other institutions, general high school and technical high schools occupy 91.1% in the total enrollment of post-secondary education.

59. Total number of students enrolled in upper-secondly education is 2,157,880 as of 1995. <Table 2-1> provides the enrollment and proportion for the specific age group. The proportions of high school students amount to 37.3%, 95.3%, 91.2%, and 57.5% for the age group 15, 16, 17, and 18, respectively. For 15 year olds, 61.1% are in junior high schools; and for 18 year olds, 27.9% students are in higher educational institutions.

<Table 2-1> Number of students at upper-secondary level by age

age	total population	number of students in high school
15	835,129	311,734(37.3)
16	793,256	755,676(95.3%)
17	739,711	674,576(91.2)
18	747,849	430,306(57.5%)
19	747,546	28,152(3.8)
20	821,930	5,307(0.6)
21	865,749	2,738(0.3%)
22	860,715	1,881(3.8%)
23	874,514	1,410(0.6%)
24	881,470	940(0.3%)

Note: In parentheses are proportions of students to the age population.

Source: National Statistical office. "Population and Housing Census". 1995.

ii) Comment upon any changes which might be anticipated in the demand for and supply of foundation learning over the next decade.

60. In Korea, a drastic change of demand for foundation learning is expected in the future; Drastic decline is expected of the population of school-aged children.

61. It is predicted that as shown in <Table 2-2>, the enrollment for high schools was 804,929 in 1996. It is projected to reach 724,168 by 2001. This indicates a rapid declining trend, due to natural decrease in population. By the year 2002, the number of junior high school graduates is expected to drastically reduce to around 600,000.

<Table 2-2> Estimated number of high school students

year	number of junior high school graduates	high school students	entrance percentage
1996	817,002	804,929	98.5
1997	811,062	799,707	98.6
1998	763,578	753,651	98.7
1999	756,363	747,286	98.8
2000	743,904	735,721	98.9
2001	731,483	724,168	99.0

Source: Ministry of Education. "Major Affair Statistics". 1996.

2.1.2 Higher Education

i) Provide information about the age distribution of students in university, and non-university tertiary education.

62. Institutions of higher education can be divided into four types: colleges and universities, teacher colleges and colleges of education, junior colleges and others such as theological colleges and seminaries. All of these institutions are under the authority of the Ministry of Education. The Presidents of private universities are elected by their respective university board but their appointment is subject to approval by the Minister of Education. The period of study is from four to six years. Entrance depends on high school achievement marks, the scores on the government-administered scholastic achievement test or the universities' own entrance examination. In 1995, there were 1,187,735 students in colleges and universities, 19,650 in teacher colleges, 569,820 in junior colleges and 112,728 in graduate schools.

63. <Table 2-3> shows a trend of enrollment in higher education institutions. The age of 18 is a focal point shifting from secondary education to higher education. 57.5% of 18 year population still belong to high schools.

<Table 2-3> Enrollment in higher education by age group (1995)

age	total population	junior college(%)	university(%)	graduate school(%)
17	739,711	2,051(0.3)	76,074(10.3)	23(0.003)
18	747,849	28,706(3.8)	108,027(14.4)	198(0.03)
19	747,546	76,031(10.2)	275,679(36.8)	460(0.06)
20	821,930	85,790(10.4)	288,519(35.1)	564(0.07)
21	865,749	63,844(7.4)	263,173(30.4)	813(0.09)
22	860,715	40,307(4.7)	211,975(24.6)	3,068(0.36)
23	874,514	25,603(2.9)	158,304(18.1)	7,613(0.87)
24	881,470	15,024(1.7)	124,090(14.1)	10,179(1.15)

Source: National Statistical office. "Population and Housing Census". 1995.

64. The enrollment status by educational institutions is given in <Table 2-4>. As for 1996 breakdown, enrollments in junior colleges between age 18 and 21 are 467,262, teachers' colleges 15,093, universities 779,096, and other schools 7,092. For the age group between 22 and 25, enrollments in junior college are 150,529, teachers' college 3,788, universities 427,680, and other schools 5,373. For the age group above 26, enrollments in junior colleges are 24,906, teachers' colleges 1,561, universities 60,100, and other schools 2,333. The analysis of the Table 2-4 reveals that the percentages of each age group participating in college level programs are 41.5% for 18-21 age population, 16.8% for 22-25 age population, and 0.3% for above 26 age population.

65. Among those participating in higher education, women are younger than men. The proportion of men is higher than those of women in all educational institutions, except for teachers' college.

<Table 2-4> Enrollment in higher education by institution (1996)

age	junior college		teachers' college		university		other schools			
	total	women	total	women	total	women	(junior college)		(university)	
							total	women	total	women
18-21	467,262	207,438 (44.4)	15,093	11,932 (79.1)	779,096	324,502 (41.7)	2,537	1,247 (49.2)	4,555	2,440 (52.6)
22-25	150,529	37,394 (24.8)	3,788	2,678 (70.7)	427,680	84,245 (19.7)	435	107 (25.0)	4,938	1,428 (29.0)
26-	24,906	6,434 (25.8)	1,561	1,166 (75.0)	60,100	6,605 (11.0)	81	32 (40.0)	2,252	504 (22.4)

66. As in the case for foundation learning, number of school age population is currently declining. The change in demand and supply for higher education has a linear relationship with that of school age children in foundation education. Therefore, a drastic change in supply is expected after the year 2003, since children under age 11 are not more than 600,000 as of 1995.

ii) What, if any, changes are expected to take place in the demand for and provision of higher education over the next decade?

67. It is from the year 1999 that an anticipated change in supply and demand for higher education will take place. This is the year when those students who entered high school in 1996 will advance into higher education institutions. Some 30,000 to 80,000 students are decreasing annually, while college spaces are likely to be maintained. This decline in enrollments will pose difficulty to colleges. This is because most higher education institutions in Korea are privately founded and considerable amount of their expenditures are dependent upon students' tuition fees.

<Table 2-5> Entrance quota for higher educational institutions

year	total	university	teachers' college	open college	correspondence college	junior college
1996	614,015	266,015	4,465	39,260	70,000	234,275

Source: Ministry of Education. Education Statistics Annual. 1996.

2.1.3 Adult Education

68. The adult education sector features a variety of programs, including those sponsored by the private sector as well as by formal educational institutions. Adult education can be divided into basic literacy education, retraining for the unemployed, and job-related training programs for the employed. The data presented below are greatly limited, because of difficulties in securing data at this time.

i) Provide information on composition of adult population, with respect to educational attainment and/or literacy level, and the proportion of adults participating in basic literacy programmes.

69. It can be seen that educational attainment level of Koreans below completion of primary schooling is decreasing, while those of high school and college level are rising. In 1980, 55.3% of those who are 25 years or older received less than primary level schooling. In 1995, this was reduced to 26.6% level. Meanwhile, people with more than college level educational attainment had risen to 19.7% in 1995, as compared with mere 7.7% in 1980.

70. While the educational attainment level of Koreans are rising in general, those of increase rate for higher levels of education was higher for males than for females.

<Table 2-6> Educational attainment level of Koreans
(Unit: Persons, %)

year	25year or olds	below primary school			below middle school			below high school			adove college		
		total	male	femal e	total	male	fema le	total	Male	femal e	total	male	femal e
1980	16,457,667	55.3	42.8	67.0	18.1	19.8	16.5	18.9	25.4	12.9	7.7	12.0	3.6
1985	19,762,988	43.4	31.9	54.4	20.5	20.5	20.5	25.9	32.1	20.2	10.2	15.5	5.2
1990	23,410,752	33.4	23.3	43.0	19.0	17.6	20.3	33.5	38.9	28.4	14.1	20.1	8.3
1995	26,149,928	26.6	17.8	35.0	15.7	14.2	17.1	38.0	41.4	34.8	19.7	26.6	13.1

Source: The Bureau of Statistical, Household Census, respective years.

71. The number of illiterates among the adult population beyond the age of 15 years was 1,185,000 in 1990. This is 3.7% illiteracy level. It can be seen that the illiteracy rate is higher for females than for males.

<Table 2-7> Illiteracy rate for 15 years old and over
(unit: persons, %)

year	number of Illiteracy	Illiteracy rate		
		Total	male	female
1990	1,185,000	3.7	0.9	6.5

Source: KEDI. "Educational Indicators of Korea". 1993.

72. The labor force status and charateristics of adults with low level of schooling attainment is summarized in <Table 2-8>. Among the economically active population of 25 years or older, adults with less than primary school attainment are 3,046,000 persons as of 1995. Among them, 25,000 were unemployed. Among those who are 25 years or older, there were 1,087,000 people not economically active. Among the population of 25 years or older, the proportion with less than primary level schooling is 15.8%. By age level, those with less than primary school attinment was the largest, accounting for 38.27% of the 45-54 year age bracket. The ratio of this group among the 25-34 year bracket was lowest at 3.12%.

<Table 2-8> Characteristics and employment status of adults with education less than ISCED 3 (1995)
(unit: thousand, %)

			In the labour force			Not in labour force (number)
			Total (number)	Employed (percent)	Unemployed (percent)	
Population with less than ISCED 3 or low literacy	Total (number)	As percent of total population	Total (number)	Employed (percent)	Unemployed (percent)	Total (number)
Total	4,133	15.81	3,046	3,021(99.2)	25(0.8)	1,087
25-34 year	261	3.12	178	175(98.3)	3(1.7)	83
35-44 year	1,000	13.88	816	807(98.9)	9(1.1)	184
45-54 year	1,733	38.27	1,287	1,279(99.4)	8(0.6)	446
55 and over	1,139	18.83	765	760(99.3)	5(0.7)	374

Source: The Bureau of Statistics, "Economically Active Population Survey Data". 1995.

ii) Information on participation of poorly qualified adults in various adult learning programmes, by labour force status.

73. The data on labor status and participation level of literacy program or retraining programs for lower level schooling attainment were not available, because of weak data base in Korea.

74. However, the participation on adult learning programs provided by formal schools or public vocational training centers(except those of in service programs) are presented in <Table 2-9>. The programs covered here are those being operated by institutions established by Social Education Act.

75. The number of lifelong learning institutions established and operated under the framework of Social Education Act is 289 as of 1997. The number of those enrolled in these programs is 448,739. Among these, 36 are school-type social education facilities, with enrolment of 25,043. Among the participants, 68.1% are middle school or high school dropouts, 14.8% working youths, 7.6% adults and 1.4% are discharged from prisons.

76. The number of extension centers attached to colleges/universities, which were established for the purpose of securing the base of lifelong learning, as well as to promote local social education programs, was 125. Some 131,577 persons were enrolled in these extension schools.

77. Korea Air and Correspondance High School and Korea National Open University, which are implementing lifelong learning systems through distance learning technologies enroll 13,417 and 208,935, respectively, for the total of 222,352 persons.

<Table 2-9> Status of Social Education Programs under Social Education Act (1997)

Type	number of schools(programs)	number of students(persons)
school type social education	36	25,043
general social ed. facilities	77	68,767
extension programs of colleges and junior colleges	125	131,577
civic schools	1	195
higher civic schools	7	445
air and correspondance night school	42	13,417
KNOU	1	208,935
total	289	448,739

Source: Ministry of Education, Lifelong Education Bureau Current Status Data, 1997.

iii) Provide information about the extent of participation in job-related continuing education and training. Differentiate, if possible, by duration of training.

78. In principle, the continuing education and training programs for adults are provided either by government authorities or by enterprises directly.

79. The level of participation in occupation and career development related continuing education and training programs is usually higher for those employed than the unemployed. <Table 2-10> shows participation levels by program types.

80. Among those compleing the program were 217,660 craftsman, multiple skill technican 3,004, master craftsman 417 and 2,854 training center instructors. When examined by duration of training, 116,923 received more than 3 days, 15,764 more than one week, 2,654 more than 4 weeks of training. Those receiving relatively longer period of training were 28,044 persons, receiving more than 3 months, 18,147 more than 6 months, and 13,490 more than two year programs.

<Table 2-10> Participation in vocational training (1995)
(unit: person)

classif	total	initial training					
		subtotal	3 months	6 months	1 year	2 year	
total	223,935	89,673	28,044	18,147	29,992	13,490	
Cr	subtotal	217,660	84,477	26,269	18,147	27,573	12,488
	public	30,508	20,228	133	3,857	13,506	2,732
	private	160,413	37,722	22,363	9,,311	5,454	594
	ÀÁÀ	26,739	26,527	3,773	4,979	8,613	9,162
multiple	skill	3,004	3,004	-	-	2,082	922
master craftsman	417	417	-	-	337	80	
training teacher	2,854	1,775	1,775	-	-	-	

classif	retraining			retraining	transfer	
	subtotal	certification	skill development			
total	118,160	2,185	115,975	15,764	338	
cr	subtotal	118,029	2,185	115,844	14,816	338
	public	10,280	1,745	8,535	-	-
	private	107,535	252	107,285	14,816	338
	ÀÁÀ	212	188	24		
multiple	skill	-	-	-		
master craftsman	-	-	-			
training teacher	131	-	131	948		

Note: *trainees participating in initial training programs were classified as unemployed and others were currently employed workers.

Source: KEDI. "Educational Indicators of Korea". 1993.8.

2.2 Estimates of participation gaps

Foundation Education

81. The percentage of 18 year olds completing at least high school level of education were 35% (261,881 among total of 747,849) in 1995. The reason why the ratio of high school attainment level is low is because the proportion of those enrolled in institutions of higher education upon completion of high school is as high as 57%. The fact that the advancement ratio to Korean high schools was 98.5% shows that only very few do not advance to high schools. It is also true that very few are dropouts as advancement ratio to higher grades reach 98%.

<Table 2-11> Enrollment status of 18 year olds
(unit: persons, %)

	total 18 year population	middle school attendance	high school	junior colleges	university	graduate school	Not enrolled
1995	747,849	1,406 (0.18)	430,306 (57.5)	28,703 (3.84)	108,027 (14.4)	198 (0.03)	11917 (1.59)

Source: The Bureau of Statistics. Household Census. 1995.

Higher Education

82. The percentage of 30 year olds completing some form of higher education programs in 1995 can be seen <Table 2-12>. It can be seen that those completing junior college level are 6.9%, while those for college level reach 27.2%.

<Table 2-12> Educational attainment of 30 years old and over
(unit: persons, %)

	total	completed junior college	college graduate	below high school(misc.)
1995	799,897	55,256 (6.9)	217,722 (27.2)	510,247 (63.8)

Note: Included among those below high school level are dropouts. Included in college completers are students, dropouts and graduates of graduate schools.

Source: The Bureau of Statistics. Household Census. 1995.

Adult Education

83. It is impossible at this time to provide accurate information and data on annual participation levels of literacy courses. This is because systematic assessment on programs for literacy education for adults are not available at this time. Also, data on long term unemployed, with more than one year period of unemployment, is also not available at this time. Therefore, data on total participants, regardless of duration of unemployed period, of retraining programs are presented here.

84. The labor market in Korea, until quite recently has been quite stable with very low levels of unemployment. Among the firms joining the unemployment insurance program in 1995, there were 115 people who were subject to retraining programs for the unemployed. This has increased to 923 in 1996. In the case of government-ran public vocational training centers, 89,673 persons were enrolled in the training programs mostly geared for unemployed persons.

85. Those participating in government-ran continuing education programs, while employed, reached 134,262 in 1995. Broken down, there were 122,351 craftsman and 131 vocational teachers participating in the programs. In addition, 9,888 persons participated in the training programs targeted for workers employed in firms under the unemployment insurance arrangement. As of 1995, the total official figure of

those participating in government-ran public training centers and programs under the unemployment insurance were 144,150.

86. The participation gaps on lifelong learning by sectors are in <Table 2-13>.

87. As of 1995, in terms of foundation education, the number of 18 year olds completing high school was 153,3000, while the total number of 18 year olds were 747,849. Thus, the proportion of those receiving high school education among the 18 year old group was 38.9%. This is not to say that groups other than those completing high school are not receiving school education. As seen in <Table 2-1>, 57.5% of 18 year olds are still attending high schools.

88. Thus, the target is to raise the enrollment level of those 11,917 children who are not receiving school education, because they either dropout or do not enroll in high school for one reason or another. They account for 1.59% of the 18 year old population. When the target is set at 4.0% level, the participation gap in numbers reaches 8,226.

89. In the case of higher education, the number of people(among 30 year population) in the gap is 88,788. For the training for unemployed the number is 119,834. And participation gap of those receiving job-related training employed were 1,895,061.

<Table 2-13> Enrolment gaps by sector (1995)

Sectors	Population (number)	Percent served	Target (percent)	Participation Gap(number)
Foundation	747,849	38.9	40	8,226
Tertiary	799,897	33.9	45	88,788
Adult(poorly qualified)				
basic literacy				
retraining for unemp	419,000	21.4	50	119,834
job-related training	20,377,000	0.7	10	1,895,061
Other adults				

Note: *in the case of retraining for unemployed and job-related training, the participation data are limited to those of government-ran training programs; thus, the figures presented are substantially underestimated.

Sources: The Bureau of Statistics. Household Census. 1995.

Ministry of Education. Statistics indicators of Education. 1995.

Ministry of Labour. Statues in vocational training. 1997.

2.3 Estimate of costs of closing the participation gap

i) Using enrolment gap data from Table 2-13 and unit cost data from chapter 3 (section 3.1, 3.4, and 3.7), estimate costs of closing the enrolment gaps in each sector.

90. The information on participation gaps by sector is presented in <Table 2-13>. The funds necessary to close the participation gap of each sector can be roughly estimated by applying unit cost per person, results of which are summarized in <Table 2-14>.

91. In the case of foundation education, the cost of closing the gap is estimated to be total of 14,686,000,000 won, based on unit cost person for high school at 1,785,300 won. This cost is currently 0.38% of public finance portion of education.

92. In the case of higher education, the unit cost per student is different for junior colleges, teachers colleges, and universities. The estimation of the cost to close the participation gap of each type of institutions should reflect this difference in unit cost. But, here, unit cost(public burden) of 4 year universities will be used as basis of estimating the cost. In this way, the total cost needed to close the participation gap is estimated to be total of 375,334,000,000 won, and this accounts for about 5.7% of public finance for higher education sector.

93. In the case of adult education, the lack of data makes it impossible for us to provide the estimate at this time.

<Table 2-14> Estimated costs to close participation gaps

Sectors	Participation Gap(number)	Unit costs	Cost of closing the gap	As a percent of current public expenditure
Foundation	8,226	1,785,300 Won	14,685,877,800 Won	0.38% (total public expenditure for high school in 1995)
Tertiary	88,788	4,227,300 Won (with the criteria of Univ.)	375,333,512,400 Won	5.7% (total public expenditure junior college, university in 1995)
Adult(poorly qualified)				
basic literacy				
retraining for unemp	119,834			
job-related training	1,895,061			
Other adults				

Sources: The Ministry of Education. Statistical Yearbook of Education, 1996.
The Ministry of Labor, Details of the Budget, 1995.

2.4 Non-public costs

94. <Table 2-15> provides data on private burden of educational cost.

95. In the case of foundation education, the tuition and other expenses for high school per person was 6,975,000,000 in 1994. The indirect private cost of foregone income in this case was 13,534,000, while other indirect private costs such as transportation to and from school and private tutoring costs were

estimated to be 1,759,000. The reason why the other indirect private cost was larger than the direct private cost is because of extra cost of supplementary tutoring children receives in preparation for college entrance examination.

96. In case of higher education, the direct private cost was estimated to be 20,048,000, while indirect private cost at 41,685,000. Other indirect private cost was 23,818,000. The reason why the indirect private cost --e.g., foregone income-- of high school is substantially lower than that of higher education is because the labor market status for middle school graduates is quite adverse, and to simple laborer. And, children under the age of 18 years are that they are compensated with wages equivalent legally not permitted for employment. Also, the fact that the ratio of advancement to high school from middle school is 98.5% leaves very small number of those under employment. These factors all make it difficult to estimate foregone earnings for these age groups.

97. For adult education, it is not easy to estimate private cost which individuals pay. The reason is that the duration of courses by program or course type varies. And in some cases, the costs of teaching materials or tuition fees are borne by the government or covered by the unemployment insurance. In other cases, these costs are borne entirely by individuals themselves, or private firms in which the trainees are employed pay full or part of the costss.

<Table 2-15> Other direct and indirect private costs of lifelong learning (1994)

Sectors	Direct private costs(tuition,course development)	Indirect private costs (foregonal income, etc.)	Other indirect private costs
Foundation	6,975,000	1,353,400	1,759,000
Tertiary	2,004,800	4,168,500	2,381,800
Adult(poorly qualified)			
basic literacy			
retraining for unemp	0	1,353,400	0
job-related training	0	0	0
Other adults			

Note: *tertiary is foregone income, among indirect private cost of higher education. Foundation is foregone earning among other indirect private cost of general high school.

2.5 Dynamic evaluation of the costs of lifelong learning

98. The focus of discussion in this section is on changes in future goals related to lifelong learning. The data on changes on costs will be presented in Chapter 3.

99. The concept of lifelong learning is changing also in Korea. The government has played an important role in expanding activities related to lifelong learning in Korea. As discussed earlier, substantial portion of the comprehensive package of education reform being implemented are related to lifelong learning. One of the outcome has been recent enactment of Lifelong Learning Act. Especially expanded, and being implemented, are job-related education and training activities for employed worker and the unemployed.

100. The policy goal by lifelong sectors are summarized in this report based on analysis of contents of the recent economic development plan, educational reform plan by PCER and the 1998 Ministry of Labor Report to the National Assembly on Unemployment.

1) Foundation education(upper secondary education)

101. The number of middle school graduates in 1996 was 817,002. Among these, 804,929 students entered high school, and the advancement ratio was 98.5%. It is estimated that the graduates of middle school by year 2001 will be 731,483. The number of students to enter high school is estimated to be 724,168. The advancement ratio in this case is 99%.

2) higher education

102. If some 69% of high school graduates are to enter institutions of higher education in the year 2001, it can be estimated that 47% of respective school age population is to receive higher education. This would imply that lifelong learning system will be firmly in place in Korea, with everyone given access to some form of continuing education and training programs, even if they do not enroll in higher education as a regular students.

3) adult education

a. literacy program

103. In the case of adults, literacy education is a sector to be emphasized from the perspective of lifelong learning. This is an area which has not been given attention in Korea. One reason is that the illiteracy level of Koreans are quite low. The number of illiterates among adult population of 15 year or older was 1,185,000, 3.7%, in 1990. Priority should be given to come up with systematic plan for literacy education.

104. Considering that numbers of those without formal schooling experience or of dropouts are relatively low in Korea, and that the enrollment rate of primary school was 99.7% in 1992, the illiteracy by age bracket falls mostly to the aged population. If education for this segment of population is to be provided more systematically the coming years, the number of those requiring the literacy programs will be substantially lowered. Thus, the proportion of finance for literacy education among total cost of lifelong learning is expected to be gradually diminished, after a brief rising trend in the next four or five years.

b. unemployed

105. Korean economy is experiencing a serious crisis(due to foreign currency crash) since December 1997. And, drastic move for restructuring is taking place, creating a massive unemployment. The statistics show that the unemployment rate was 3.1% as of December, 1997. The number of unemployed was 658,000, increase of 179,000 from the previous year. The unemployment figure is estimated to be 1.5million as of May, 1998.

106. Ministry of Labor has earlier announced plans to provide training programs for some 50,000 unemployed persons in 1998. This was revised to accommodate 162,000 to deal with the massive increase of the employment figure. And, public, in-plant and authorized training centers are to provide training programs for 100,000 persons. It is expected that the number of those to receive of government provided training programs for the unemployed is 262,000.

107. Because the high level of unemployment is expected to continue in the next 3 years, the level of training programs for the unemployed is expected to rise until the year 2,000, from the level of 1998.

c. Employed workers.

108. The number of training program, being planned by Ministry of Labor, for currently employed workers is about 600,000 for 1998. This includes new introduction of training programs(to help keep the job) and expansion of existing job-related training. Job-related training programs are expected to maintain the 1998 level.

109. The programs for the unemployed will be give priority at least until the year 2000. If the economy recovers, as curenly projected, by year 2001, it is expected that training programs for employed workers will increase.

110. Therefore, the future goals of policy on lifelong learning in Korea is closely related with the effort to overcome the current economic crisis. With substantially greater burden of provision for training, concerns for cost and accountability of programs provided will become more important. In this sense, policy effort will have to emphasize horizontal linkage among different sectors of lifelong learning, as well as cost-effectiveness concern of unit programs,

2.6 Characteristics of lifelong learning needs by worker type

(Data on this section need to be elaborated at a subsequence round of revision)

CHAPTER 3. RAISING THE RETURN TO LIFELONG LEARNING

3.1 Costs and benefits of lifelong learning

3.1.1 Foundation learning

(a) Unit costs

111. The public expenditure per student at the upper secondary level has shown a steady increase over the last decade in Korea. In absolute terms, the per-pupil expenditure in 1997 (₩ 2,324,800) is almost five times as much as that in 1987 (₩ 483,700).

<Table 3-1> Public expenditure per student at the upper secondary level
(unit: 1,000 won, current price)

Source: MOE and KEDI, *The Change of Statistics in Korean Education*, 1997. p. 241.

year	Average	public school	Private school
1987	483.7	580.1	421.7
1988	524.7	623.0	462.8
1989	636.2	788.1	541.7
1990	786.9	1,604.7	632.6
1991	979.8	1,303.1	779.6
1992	1,209.1	1,655.6	934.6
1993	1,370.1	1,782.2	1,116.7
1994	1,571.6	2,060.2	1,257.1
1995	1,785.3	2,367.5	1,398.0
1996	2,021.7	2,675.2	1,580.8
1997	2,324.7	3,086.1	1,773.3

112. When the expenditure is calculated separately for public and private schools, the investment for the latter turns out to be relatively lower than that for the former. This investment gap between public and private schools has widened for the last ten years. In 1987, the ratio of the per-pupil expenditure for private schools to that for public schools was 72.7%, while the equivalent ratio in 1997 was 57.5%.

113. On the basis of this gap, however, we cannot conclude that students in public schools are in better learning condition than those in private schools. We should consider other factors that might have contributed to the rise of expenditure of public schools. The fact that the teachers in public schools have more teaching experience on the average than those in private schools requires more personnel expenses for public schools. Technical or vocational high schools which cost more than general high schools are usually public schools, and this might be another reason why the average expenditure per student for public schools appears to be higher. Given these factors, it might be safe to say that despite the investment gap between public and private schools the students in both categories of schools are virtually in similar schooling environments.

(b) Costs by category

114. If we look at the costs for the education at the upper secondary level by resource category, the relative proportion has changed little between 1985 and 1994. Current expenditure, mainly made up of personnel expenses and operational costs, constitute over 90% of the total expenditure. The proportion has stayed stable for the ten years. Capital expenditure has occupied for the most of the period less than 10%.

<Table 3-2> Public expenditure at upper secondary level: relative proportion
[by resource category (%)]

Year	current expenditure		capital
	Personnel exp.	operational exp.	expenditure
1985	73.2	18.9	7.9
1986	70.2	15.5	14.5
1987	72.8	18.9	8.3
1988	71.5	17.9	10.6
1989	76.9	19.0	5.9
1990	80.5	13.4	6.1
1991	80.5	12.6	6.9
1992	79.1	12.5	8.4
1993	81.0	13.5	5.4
1994	78.4	13.2	8.4

Source: KEDI, Education Indicators of Korea, 1994.

115. The change in the relative ratios is discernible, though not consistent, between 1980's and 1990's within the current expenditure. In 1990's the personnel expenditure has constituted approximately 80%, while in 1980's it had mostly been under 75%. This relative increase seemed to be achieved by the decrease of operation expenditure. In the 1990's, capital expenditure has also appeared to decline in relative terms.

116. These changes indicate that financial management has gotten more constrained due to the increase of earmarked costs, that is the personnel expenses. This situation came about mainly because the student enrollment has increased continuously for the last half century in Korea. major portion of schooling budget has had to be spent to accomodate the increasing number of incoming students.

117. Recruiting more teachers has been the first priority in the situation of rapid expansion. It costed less and inevitable to increase the number of teachers and class size than to build new schools. For the recent years, however, the capital expenditure has increased as the measures to decrease class size has been taken. Still the number of students per class is much higher than that in developed countries.

(c) teachers' salary

118. The salary for elementary and secondary teachers has steadily increased thus far. <Table 3-3> shows the increasing trend. However, the rate of increase has been lower than that of urban workers' average earning. To compare the teachers' salary in 1994 with that in 1985, the increase rate is about 245% for the starting class and 273% for the top class, whereas the rate for urban workers in general is 401%.

<Table 3-3> Teachers' monthly salary in public institutions at elementary and secondary level
(unit: won in current price)

year	starting salary	top salary	urban worker average earning
1985	192,500 (1.00)	482,000 (1.00)	423,788 (1.00)
1986	206,000 (1.07)	524,000 (1.09)	473,553 (1.12)
1987	211,000 (1.10)	535,000 (1.11)	553,099 (1.31)
1988	229,500 (1.19)	584,000 (1.21)	646,672 (1.53)
1989	249,500 (1.30)	637,500 (1.32)	804,938 (1.90)
1990	272,000 (1.41)	759,000 (1.57)	943,272 (2.23)
1991	296,500 (1.54)	827,000 (1.72)	1,158,608 (2.73)
1992	323,000 (1.68)	900,000 (1.87)	1,356,110 (3.20)
1993	331,500 (1.72)	926,000 (1.92)	1,477,828 (3.49)
1994	471,000 (2.45)	1,318,000 (2.73)	1,701,304 (4.01)

Notes: Allowances are not included in the amount of teachers' salary.

In parenthesis are increase rates compared with the salaries or earning in 1985.

Sources: The Korean Federation of Teachers' Associations, An International Comparison of Teachers' Wage, 1995. p. 176, 179.

119. In terms of absolute amount, teachers' earning has been higher than urban workers' on the average. Apparently <Table 3-3> indicates that teachers' salary is much lower than the workers' average earning. But the teachers' salary in Table 3.3 shows only basic wage. It does not include a variety of allowances. Usually the sum of allowances is bigger than the basic wage, making the total salary of teachers higher than the workers' average earning. However, in policy talk with regard to teachers' salary it has always been urged to raise the salary. Teachers are usually regarded as being under-paid.

(d) changes of schooling condition

120. As shown in <Table 3-1>, educational expenditure per student has increased steadily. This fact, however, cannot be interpreted as that schooling have costed more and more as it approaches to the present, or as that the efficiency of educational investment has been lower and lower. Rather, the increasing educational expenditure in Korea must be interpreted as a result from the fact that the Government has compensated for the under-investment in the past.

121. Korea is one of the developing countries where education has expanded in an unusual pace. Table 3.4 shows the rapidity and scale of educational expansion in Korea.

<Table 3-4> Enrollment rate at upper-secondary level

year	enrollment rate
1965	26.4%
1970	28.1
1975	41.0
1980	63.5
1985	79.5
1986	81.8
1987	80.4
1988	83.4
1989	85.9
1990	88.0
1991	89.1
1992	89.4
1993	89.5
1994	89.5
1995	91.8
1996	92.6

Source: MOE and KEDI, The Change of Statistics in Korean Education, 1997. p. 88.

122. Due to the rapid growth of enrollment, schools have been in very poor condition. Since the liberation from the Japanese colonial rule, the aspiration of Korean people for higher educational credential has soared. The Korean Government had to find ways to accomodate the increasing number of applicants. With the limited budget in the past, it was not a practical measure to build new schools. It was the only solution left for the Government to admit more students in the existing schools, leaving the learning conditions in a very poor state. <Table 3-5> shows the change in the conditions.

<Table 3-5> Number of students per class and teacher

year	students per class	students per teacher
1965	59.8	32.2
1970	60.1	32.0
1975	59.8	31.7
1980	59.9	33.9
1985	58.0	31.6
1986	57.4	31.5
1987	56.8	30.4
1988	56.4	29.2
1989	55.3	27.4
1990	53.6	25.4
1991	51.5	23.9
1992	49.6	22.9
1993	48.1	22.1
1994	47.4	21.7
1995	48.0	22.1
1996	48.9	22.6

Note: The statistics are for general high schools, but the equivalent statistics for vocational schools are virtually identical.

Source: MOE and KEDI, The Change of Statistics in Korean Education, 1997. p. 97.

123. The numbers are much higher than those in comparable countries. Until the mid-1980s, the conditions of schooling have changed little. As far as elementary and secondary education is concerned, most budget had been invested in recruiting more teachers and adding more classrooms. Even in 1990s, the situation has not improved much. The improvement in the statistical indicators, as seen in <Table 3-5>, has been achieved mainly by the decrease of the population at the age of school attendance, not by sufficient investment in education. That is, the decrease of number of students per class and per teacher in recent years may appear to be achieved by the increase of educational investment in the years, but the decrease is mainly thanks to the decrease of the number of potential students.

124. The schooling conditions in Korea suggest that investment should be expanded in the future. Though the participation rate at the upper secondary level is comparable to the most developed countries, the quality of education is far behind the countries. The tasks left are not to expand the scale of schooling but to make the schooling conditions better.

(e) measures to reduce costs

125. Cutting down the budget of education is not an acceptable alternative to raise the return to learning. It is inevitable to increase the budget until the educational conditions reach the level of developed countries. This fact is keenly appreciated by Korean people as well as the Government. That is why the Presidential Commission on Education Reform urged in 1996 the Government to reduce the number of

students per class so that no class in Korea has more than 35 students by the year of 2005. This goal requires an increase of budget at an unprecedented rate.

126. Because of the this situation, measures to reduce the costs of schooling are not sought in terms of absolute amount. Major concern is on how to improve the cost effectiveness. Measures in two directions are being taken in the current reform.

127. First, meritocratic approach is taken to encourage teachers and schools to compete with each other for quality education. Teachers and schools are evaluated periodically with certain standards and are paid or supported in accordance with the evaluation results.

128. Second, the system of block granting is introduced. It has often been pointed out that the central and bureaucratic control of how to use the budget allocated to local school districts and schools has lowered the cost effectiveness. The effectiveness can be secured only when the budget is spent to meet the specific needs of local schools and districts. Policies having been revised to allow individual schools and local school districts more autonomy in making decisions with regard to financing. 'School-based management' is another name of the policies currently being sought.

3.1.2 Tertiary sector

(a) unit cost

129. As in the case of secondary education, the public expenditure per student at the tertiary level has also increased in a steady manner. In absolute terms, the unit expenditure in 1997 is about four times as much as that in 1987. To compare with the increase at the upper-secondary level, the increase at the tertiary level is smaller.

<Table 3-6> Public expenditure per student for the colleges and universities
(unit: 1,000 won, current price)

year	average	public inst.	private inst.
1987	1,352.9	1,471.5	1,313.4
1988	1,502.9	1,629.9	1,461.9
1989	1,677.5	1,887.7	1,610.5
1990	1,905.6	2,105.2	1,840.9
1991	2,247.2	2,418.9	2,191.7
1992	2,709.1	2,836.7	2,667.9
1993	3,171.8	3,250.6	3,146.3
1994	3,653.8	3,508.1	3,702.8
1995	4,227.3	4,033.4	4,291.7
1996	4,862.5	4,679.2	4,921.5

Source: MOE and KEDI, *The Change of Statistics in Korean Education*, 1997. p. 243.

130. To calculate the public expenditure per student for public and private institutions separately, we found that there had been relatively low investment in private institutions, but the trend has been reversed for the last four years. Private universities have recently been investing more money than public universities.

(b) costs by resource category

131. If we look at the public expenditure by resource category, the biggest portion has been gone to personnel. The proportion of personnel expenses has constituted around 50%. These figures are much less to compare with the proportions at the secondary level. At this level, the figures have been mostly over 75% for the last decade.

132. Relative lower proportion of personnel expenses means that more proportion of the public expenditure have been used for operation, building and facilities. The proportion of operational costs has been close to 30%, and that of capital expenditure around 20%. Both of these proportions are higher than in the case of secondary level.

133. In recent years, the proportion of capital costs has shown a continuous increase, while that of personnel expenditure has changed in the opposite direction.

<Table 3-7> Public expenditure of colleges and universities: relative proportion by resource category (%)

year	current expenditure		capital expenditure
	personnel exp.	operational exp.	
1985	44.1	30.6	25.3
1986	30.1	46.9	23.0
1987	49.2	29.9	20.9
1988	52.1	28.1	19.8
1989	51.3	27.3	21.4
1990	53.4	28.3	18.3
1991	53.9	27.6	18.4
1992	52.7	29.3	18.0
1993	51.6	27.7	20.7
1994	49.9	27.3	22.8

Notes: The relative proportions are calculated for only colleges and universities. Such institutions as junior colleges and teachers' colleges are not taken into consideration.

Source: KEDI, *Educational Indicators of Korea*, 1994. p. 327.

134. The relative decrease of personnel expenditure, however, does not necessarily mean that the structure of expenditures approach to a desirable direction. The recent relative increase of capital costs may reflect the investment in new schools and buildings to admit more students. The investment in faculties and staffs may have been reserved in the situation of limited budget.

(c) expansion of tertiary education

135. Educational expansion at the tertiary level has been more rapid than at the secondary level. The number of students has increased almost two times for the last decade.

136. Unlike at the secondary level, the expansion has occurred largely in the private sector. The burden to bear the educational costs has thus been passed on to students and parents. For the last decade, over 50% of the public expenditure at the tertiary level has come from private sources.

<Table 3-8> Enrollment rate at tertiary level

year	enrollment rate
1970	8.8%
1975	9.5
1980	16.0
1985	35.6
1986	37.0
1987	36.7
1988	37.0
1989	37.3
1990	38.1
1991	39.7
1992	41.8
1993	44.8
1994	49.3
1995	55.1
1996	61.8

Note: The rates are calculated for all the kinds of institutions of higher education such as junior colleges, teachers' colleges, universities and so forth.

Source: KEDI, Educational Indicators of Korea, 1994, 1996, 1997

137. The rapid growth of higher education has been achieved in part by opening new colleges and universities. These newly established institutions were often not staffed sufficiently. Buildings and facilities were on the first priority in investment. This fact explains to some extent the relative high proportion of the operational and capital expenditure.

138. Relatively low investment in personnel aspect has left the problem of crowded classrooms. <Table 3-9> shows the student-teacher ratio in colleges and universities. The ratios are much higher than those in developed countries.

<Table 3-9> Number of students per teacher at colleges and universities

year	students per teacher
1965	19.9
1970	18.8
1975	20.7
1980	27.9
1985	35.8
1986	35.2
1987	34.5
1988	33.6
1989	32.2
1990	31.2
1991	29.9
1992	28.7
1993	27.6
1994	27.2
1995	26.3
1996	26.1

Note: The statistics are for the universities only. The other kinds of institutions are not taken into account.

Source: MOE and KEDI, The change of statistics in Korean education, 1997. p. 175.

139. <Table 3-9> indicates that the student-teacher ratio has decreased in recent years. This improvement appears to be contradictory to the relative decrease of personnel expenses as shown in Table 3.7. But the total amount of expenditure for colleges and universities has always been bigger than that for high schools for the last decade. Thus the relatively lower proportion in the former case does not necessarily mean that the absolute amount invested in personnel matters has been insufficient to reduce the student-teacher ratio. Though slow, the ratio has been reduced indeed.

140. In the case of junior colleges and teachers' colleges, however, the student-teacher ratio has increased (or stayed stable) for the last ten years. Since the early 1970s, the ratio in junior colleges has increased continuously from around 20(20.5 in 1970) to higher than 55 (58.1 in 1997). This increase suggests that more investment in personnel area may be needed in the future of tertiary education.

(d) measures to reduce the costs

141. It is not practical to predict a decrease in the budget for the education at tertiary level in near future. Like the education at secondary level, the education at tertiary level has also suffered under-investment for a long time. In order to compromise with the hyper-aspiration for higher education, which is a prevalent phenomenon in Korean society, the policy makers could not but increasing the number of slots in the institutions of higher education. As a consequence, the learning environment in the institutions has gotten worse, as indicated in <Table 3-9>. (As mentioned above, the case of junior colleges the situation is much worse.) In the future, it will be inevitable to increase investment to supplement the accumulated under-investment.

142. One of the policies to meet the increasing demand of higher education was to introduce a system of distance education. In 1972, the Korean National Open University was established to give a second chance to people who could not have the opportunity of higher education for some reasons. This university has been operated with the media of air and correspondence. The unit cost in this university is much lower than that in the other normal colleges and universities, and the Open University can admit much more applicants than other institutions do. As of 1997, about 370,000 students were attending the university.

143. The cost effectiveness of the Open University might be better than that of the other institutions. However, the problem of under-investment has affected all kinds of the educational institutions. It is not conceivable, thus, to seek ways to cut down the budget in order to raise the cost effectiveness of higher education. The focus should be on how to increase the budget and to yield more from the budget given by making the operation of educational institutions more efficient.

144. To ensure institutional efficiency, the current reform movement encourages competition among faculty members and among institutions. Introduction of a meritocratic pay system has been considered. The institutions are evaluated periodically, and the financial support from the Government is affected by the evaluation results.

3.1.3 Adult education and training

145. It is impossible to collect data of the costs/investment by the given categories of programmes. Official data on the basic literacy programmes and on the retraining programmes for the long term unemployed are not available, because those programmes are not officially managed under the guidance of government policy. Available are the data of investment for vocational training in general. In the case of the job-related training for employed workers, we can refer to the data of investment by private industries. Due to these data problems, the report regarding adult education and training here is constrained to the general vocational training and job-related training in industries.

3.1.3.1 Basic literacy programmes

146. The problem of illiteracy has virtually been ignored since 1970s. Even though the illiterate population is estimated as close to 10% of the total population, the apparent full enrollment in lower-secondary schools dilutes the seriousness of the problem. A very few private institutions and some voluntary programmes in public offices are running the programmes, and information on these activities is not well documented.

3.1.3.2 Retraining programmes for the long term unemployed

147. The Korean Government has not run retraining programmes for the unemployed until the last year, when the IMF-guided management of the economy was put in action. Thus the discussion of the programmes is not possible yet.

3.1.3.3 Job-related training

(a) Vocational training in general

148. The investment at the national level has increased in absolute terms, but the rate of increase relative to the previous year had decreased in the early 80's. From 1982 to 1984, the rates were negative. These fluctuation is largely explained by the change of government policy.

149. In 90's, the increase in the investment has been dramatic. Especially investment by private industries has led the increase. Since 1991 the investment from private sector exceeded that from the public sector.

<Table 3-10> Investment in vocational training
(unit: million won, %)

year	total	public sector	private sector
1977	20,909	9,793	11,116
1978	29,553(41.3)	13,838(41.3)	15,715(41.4)
1979	57,274(93.8)	22,246(60.8)	35,028(122.9)
1980	65,261(13.9)	29,417(32.2)	35,844(2.3)
1981	68,476(4.9)	28,601(-2.8)	39,875(11.2)
1982	59,415(-13.2)	35,677(24.7)	23,738(-40.5)
1983	57,273(-3.6)	38,860(8.9)	18,413(-22.4)
1984	55,339(-3.3)	36,517(-6.0)	18,882(2.5)
1985	58,907(6.3)	36,594(0.2)	22,313(18.2)
1986	62,570(6.2)	39,412(7.7)	23,158(3.8)
1987	64,959(3.8)	48,601(25.3)	16,358(-29.4)
1988	85,163(31.1)	60,861(25.2)	24,302(48.6)
1989	97,338(14.3)	67,377(10.7)	29,961(23.3)
1990	122,945(26.3)	64,339(-4.5)	58,606(95.6)
1991	183,521(49.4)	70,108(9.0)	113,413(93.5)
1992	266,916(45.4)	77,367(10.4)	189,549(67.1)

Note: In parentheses are the increase rates(%) relative to the investment in the previous year.

Source: Yoon, S.C. and Y.S. Nah, The optimal distribution and management of the investment in vocational training, 1995. p. 19.

(b) Job-related training for employed workers

150. Investment by private company in training of workers has increased steadily. Notable increase is found in 1988 and 1991. In those years, the wage increase was dramatic and the Government policy required private companies to allot a certain proportion of budget as for worker training.

<Table 3-11> Investment per company in worker training
(unit: 1,000 won)

year	average	car service	electric	fishery	mining
1985	39,189	40,283	52,319	0	16,551
1986	43,078	63,528	53,362	192	21,103
1987	56,724	85,100	76,534	5,119	13,979
1988	95,853	188,073	126,291	20,231	32,678
1989	110,084	253,489	182,386	31,038	6,688
1990	149,846	529,440	262,199	69,335	36,744
1991	214,602	759,845	304,343	18,896	36,402
1992	227,073	993,544	345,366	20,454	30,957

Note: The business types of company included in the table do not exhaust all the companies surveyed. Included are those which deserve specific comments. The 'average' here is the mean of the investment by the companies included in the original table.

Source: Lee, J.S. et al., An economic analysis of the investment in worker training and policy recommendations, 1994. p. 123.

151. The scale of investment varies with the types of industry. It has been bigger in the business types of car sale and service, electric and electronics, etc., while it has been modest in the types of fishery, mining, etc..

152. If we calculate the investment per employee, the difference between business types is not so eminent as in the investment per company. The absolute amount has increased on the average from 24,200 won (in 1985) to 132,700 won (in 1992). These figures indicate that investment in worker education and training has been nominal thus far.

<Table 3-12> Expenditure per employee for workers' education and training
(unit: won)

year	average expenditure per employee
1985	24,200
1986	25,600
1987	31,700
1988	51,400
1989	58,800
1990	81,800
1991	118,500

Source: Lee, J.S. et al., An economic analysis of the investment in worker training and policy recommendations, 1994. p. 124.

(c) Cost by resource category

153. The costs for adult education and training in Korea are decided in reality not by the amount needed for programmes but by the expenditure paid. The training and education is constrained by the budget allotted. The expenditure has usually been insufficient.

154. Under this circumstances, thus, it can be misleading to discuss the costs on the basis of the amount of money paid by the employers for workers' training. Discussion can be done only in terms of the amount borne by the parties concerned. However, in the case of vocational training in Korea, virtually all the expenditures are borne by employers or by the public institutions. Thus the categories of the expenditure are two: expenditure paid and opportunity cost.

155. <Table 3-13> shows the expenditure by the categories. Opportunity cost is approximately two times as much as publicly defrayed cost.

<Table 3-13> Expenditure by category of programmes and cost bearers
(unit: won)

program	expenditure borne publicly	opportunity cost
pub. institution	2,654,260	9,022,837
private company	872,542	2,508,992
registered inst.	963,425	6,102,632

Note: Opportunity costs are calculated for men with high school diploma.

Source: Lee, J.S. et al., An economic analysis of the investment in worker training and policy recommendations, 1994. p. 173.

(d) Measures to reduce costs

156. As in the formal schooling, it is not a practical measure to reduce the payment for training and education to increase the benefits of adult learning. The expenditure allocated has usually been insufficient for quality training or education. It is imperative to increase the expenditure for now. Then the task remained is to make it efficient to utilize the money obtained.

157. There have been some movement to launch joint projects by industry and university to develop programmes and train/educate employees of the companies joined. Especially the distance training/education program of the Open University allied with industries has recently attracted the interest of concerned parties.

158. To offer incentives for the workers, policies to provide educational credentials as marks of training completion have been considered. The Presidential Commission on Education Reform proposed a hierarchical system of vocational training. The hierarchy was proposed to parallel with the hierarchy of formal schooling, and at each level diploma of vocational equivalency were proposed to be given to completing workers. In Korea educational credentials are conceived as very valuable assets.

CHAPTER 4. MOBILIZING RESOURCES FOR LIFELONG LEARNING

159. To achieve the goal of lifelong learning it is essential to secure budget needed. Also important is to eliminate the possibility of waste. The system of lifelong learning should be efficient. In this chapter the flow of finance for lifelong learning is reviewed and ways to mobilize resources are sought for.

4.1 Introduction

160. Financial responsibilities for lifelong learning are shared by several ministries. The discussion here is focused on the budget for formal schooling from the Ministry of Education and on that for vocational training for workers from the Ministry of Labor.

4.1.1 Finance for lifelong learning

161. As of 1993, the budget of the Ministry of Education accounted for 3.8% of GNP. It has been an important goal of the Korean Government to increase the share of educational budget to 5% of GNP. The proportion of MOE budget to the Government budget had steadily increased from 17.8% in 1980 to 24% in 1996. This increase reflects continuous educational expansion.

162. Of the MOE budget, expenditure for adult education occupied only 0.11% in 1993. The proportion increased to 0.15% in 1997. If we exclude the expenditure from special account, the ratio of the budget for adult and continuing education turns out to be 0.007% and 0.039%, in 1993 and 1997 respectively.

163. Vocational education and training is financed from the two Ministries. The Ministry of Education manage vocational education programs and the Ministry of Labor support training programs. It is very hard, however, to discern the budget for vocational education from that for general education. Thus, here the review is done with specific reference to the financing for vocational training and related projects from the Ministry of Labor.

164. In 1994 the budget for vocational training was 9,390 million won, which was 47.8% of the total budget of the Ministry. The proportion was 62.0% in 1987. This decrease can be explained in two points. First, the relative ration decreased because of the increase of the total budget of the Ministry. Second, the Government investment has decreased as the investment from private sector has increased.

4.1.2 Lack of incentives for vocational training

165. Individuals are reluctant to invest in vocational training. Vocational education in formal schools is regarded as enough to guarantee employability. It is also not easy to raise money for training, when the benefits from the training are not so certain.

166. Industries also show reservation in investing in human capital. The return to the investment appears uncertain due to its invisibility. When they need trained workers, they found it more efficient to recruit those from the other companies by paying a little more.

167. The fact that training is usually provided for general skills is another factor which makes industries reluctant to invest in workers' training. What industries want is workers equipped with firm-specific skills.

4.1.3 Barriers in the way to vocational training

168. Social perception of vocational training program tends to put young people away from the programs. The program is often thought of as a provision for people of second rank, who are lack of educational credentials.

169. Age limitation is another barrier to free access to training opportunity. On-the-job training is usually provided for young workers. Older workers are alienated from the opportunity.

170. In Korea, vocational training virtually means initial training. This situation keeps employers from investing in the training. They cannot assure themselves that the people for whom they provided the training opportunity become their employee after the training.

4.1.4 Financing mechanism to encourage investment in lifelong learning

171. Because of the keen competition for college admission in Korea, private tutoring is prevalent at the secondary level. The costs of private tutoring erode the financial share for lifelong learning. The financing mechanism that could reduce the costs of private tutoring may contribute to the increase of investment in lifelong learning.

172. For the adults who lack of financial resources, and for the companies which are reluctant to invest, the Government need to provide loan and incentives.

4.2 Funding arrangement by sector

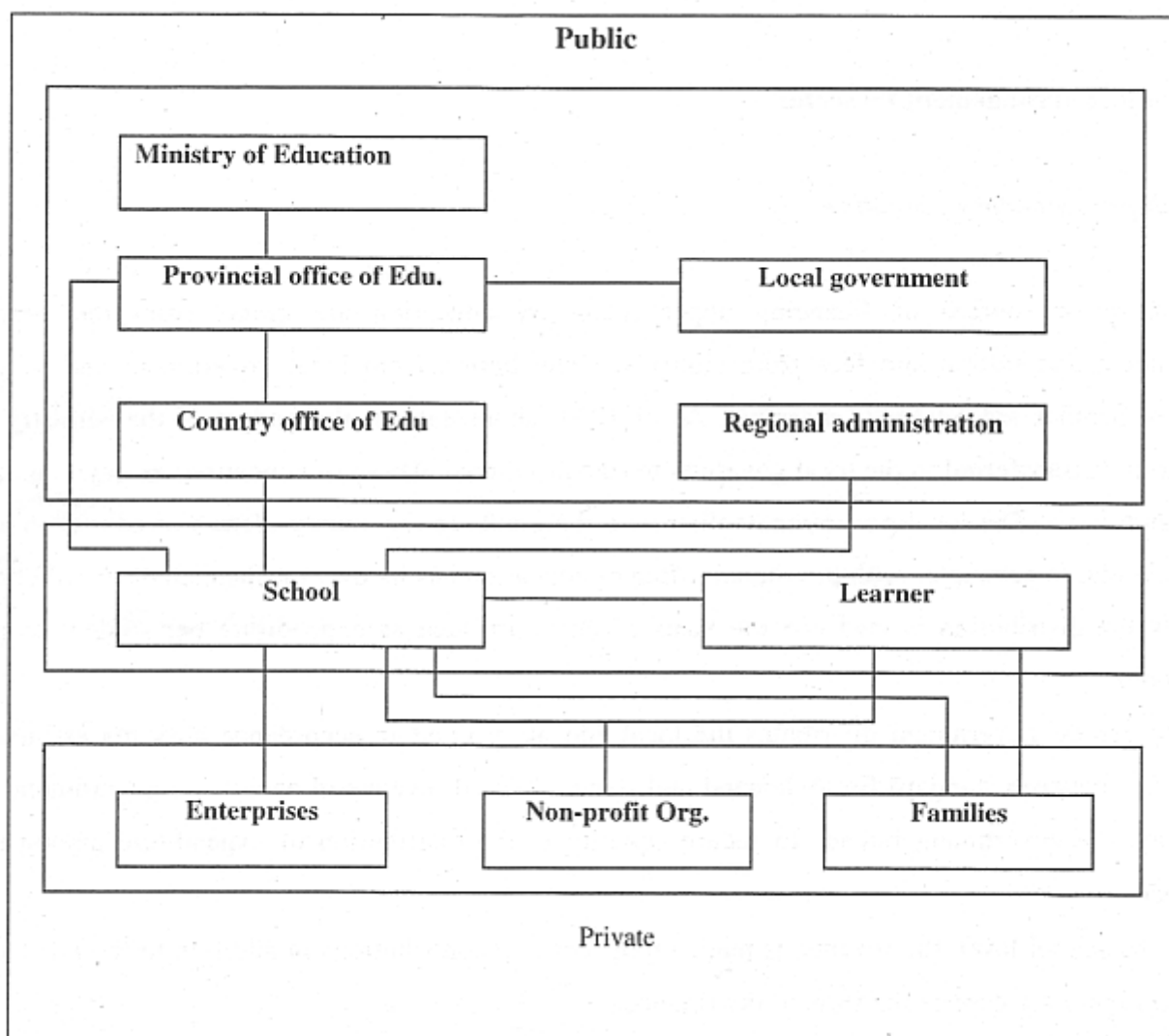
4.2.1 Upper secondary education

173. The major sources of financing upper secondary education are grants from the central government and tuition and fees from students. Contribution from local government and school juridical persons are relatively marginal. As of 1994, about 83% of the budget of the Ministry of Education is transferred to the local government (the provincial offices of education) as grants on the lump-sum basis. The local governments distribute the grants to the county offices of education and high schools. In principle, each provincial office of education has its own mechanism of distribution. Usually the distribution is mad eon the basis of unit cost such as expenditure per student or per classroom.

174. The central government distributes the local education grant in accordance with the estimated difference between standard fiscal demand and standard fiscal revenue of each local government. In this way, the government intends to secure equality in the distribution of expenditure among the provinces.

175. At the school level, the revenue is made up of fees and contributions in addition to the allocated budget. Figure 4.1 depicts the flow of the finance.

Figure 4.1 Flow of finance for upper-secondary education



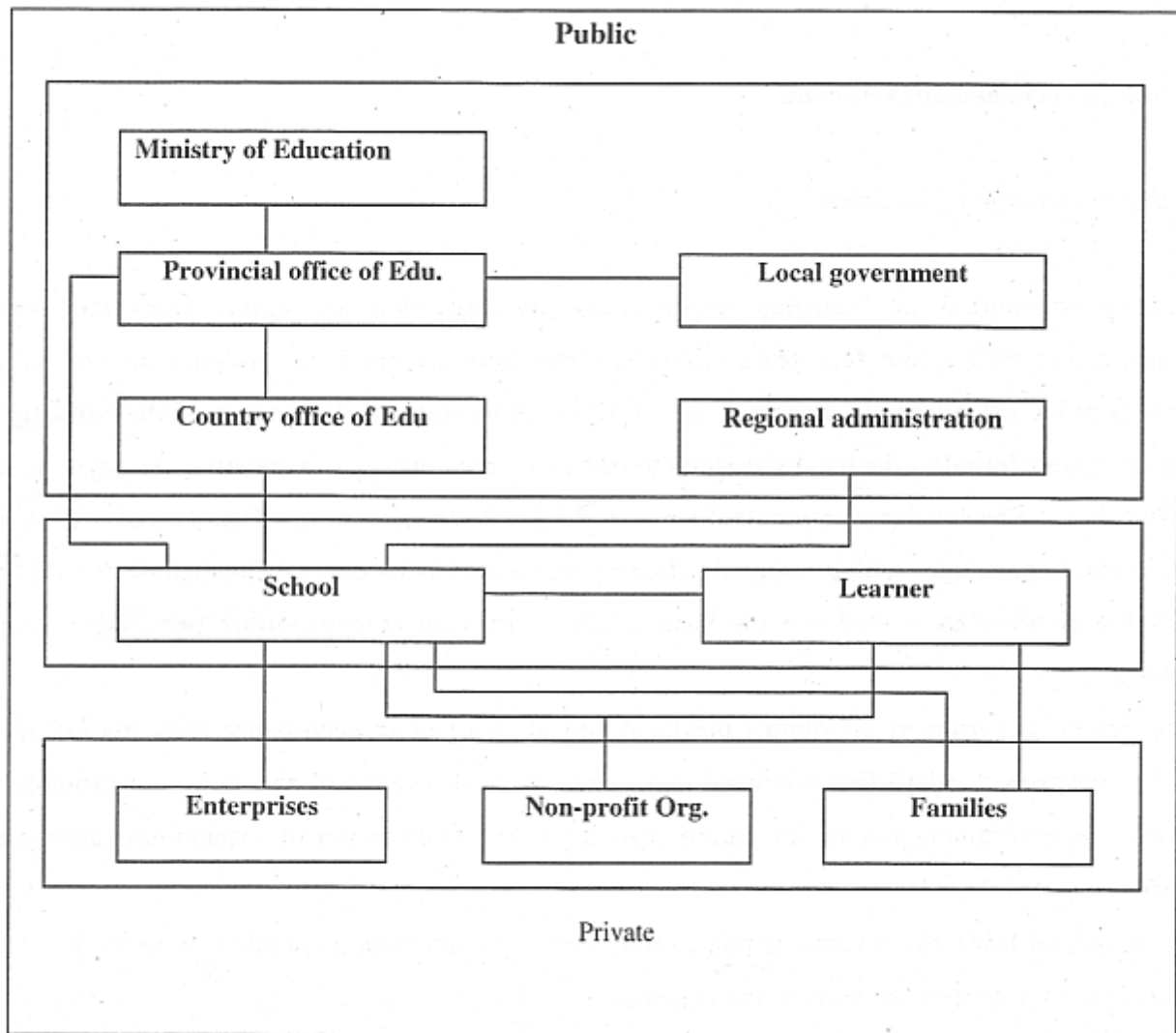
4.2.2 Tertiary education

176. Financing mechanism for higher education differs with the types of institution. For the public institutions, the finance comes from three sources: allocation of current budget from the Ministry of education, financial support from the government, and tuition and fees from students. In addition, there are contributions from enterprises, individuals, and organizations.

177. For the private institutions, the major source of finance is tuition and fees from students. As of 1995, the tuition and fees comprised 73.4% of the total budget. In the case of public institutions, the proportion was 34.8%

178. Figure 4.2 shows how the finance for higher education flows.

Figure 4.2 Flow of finance for tertiary education



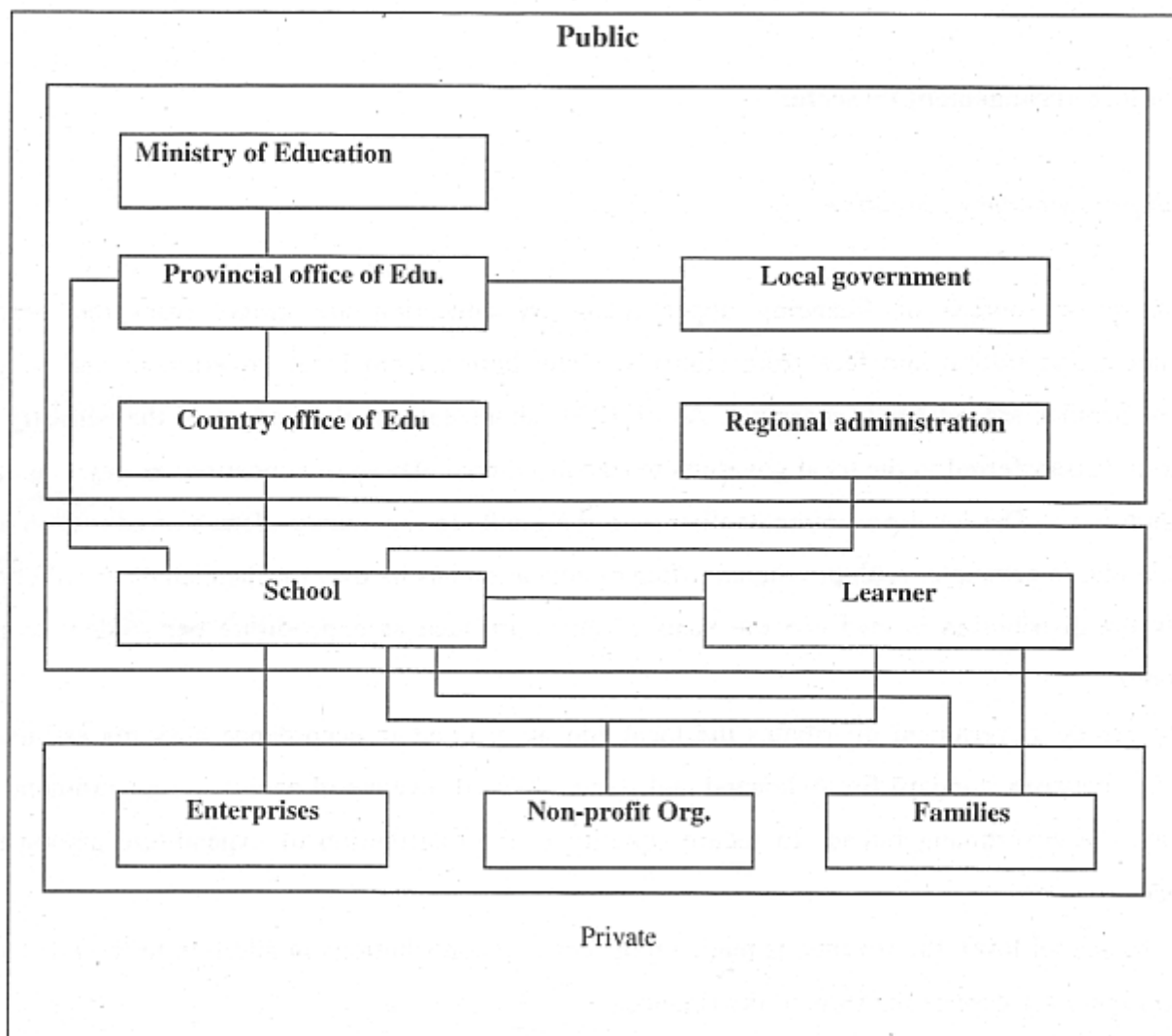
4.2.3 Adult education

179. Fund for adult education (education and training for workers and the unemployed) comes from public and private sources. In the public side, there is a part of the budget of the Ministry of Labor allocated to the vocational training. Local governments also contribute to the operation of vocational training centers.

180. In the private side, there are three sources: the investment of employers in training, which is required by the Basic Labor Law, the Fund to promote vocational training, and the Fund of Employment Insurance.

181. Figure 4.3 shows the flow of finance for adult vocational training.

Figure 4.3 Flow of finance for the training of workers and the unemployed



4.3 Additional sources of finance

182. In order to solve the problem of financial constraints, the measures can be sought in following ways.

183. First, Public educational expenditure from both central and local governments should be increased. Two ways of increase are plausible: 1) to increase government revenue by increasing tax rate or tax bases, or 2) to simply increase the proportion of educational budget in the government budget. For the finance of adult education, the increase of government budget is also recommended.

184. Second, transfer from school juridical persons should be increased. To encourage the transfer, laws on school juridical persons need to be changed.

185. Third, gifts and endowment from private sector need to be solicited. School and program managers should put more energy into fund raising.

186. Fourth, Establishment of solid and systematic relationships between schools and industries are recommended. By sharing the limited human and physical resources with industries, schools can enhance their efficiency and productivity. Under the cooperational circumstances, financial contributions from industries can easily be induced.

187. Finally, more efficient use of the budget given should be encouraged. In this direction, institution-based management and systematic monitoring of finance can be considered as future measures.

188. With specific reference to adult education, further measures can be examined in the following direction.

189. First, to secure stable finance it is desirable to firmly establish the system of employment insurance. A constant portion of the insurance fund can be allocated to vocational training.

190. Second, the contribution from local government need to be expanded. Considering the benefits the local communities get from the vocational training, the responsibilities of the local governments should be extended.

191. Third, to encourage companies to invest more in education and training, it is essential to give the benefits such as tax reduction in return to their investment.

192. Finally, the private business of vocational training need to be promoted. Market mechanism will enhance the quality and efficiency of training programs.

CHAPTER 5. CASE STUDIES

193. In this section, two cases will be presented: namely, the provision of distance education by Korean National Open University(KNOU) and recent proposal for New Colleges to provide additional lifelong learning opportunities for working adults at the worksite. Both of these cases are intended to provide further lifelong learning opportunities for working adults through cost-effective means of distance learning and/or new technologies.

5.1 Case I: KNOU Experience

194. KNOU has greatly expanded its capacity to deliver additional learning opportunities to adults since 1972, when it was first established. Enrollment to KNOU is open to a diversity of adults as well as to high school graduates. KNOU offers flexible educational programs satisfying learners' diversified objectives. Its primary mission is to provide lifelong education function by departing from restrictions of conventional methods of instruction.

195. KNOU takes a different route to course organization, methods of instruction, and organization of the academic faculty. KNOU offers wide range of courses and programs and educational materials. Advanced distance education systems such as cable TV, Video-conferencing system, VOD system satellite network, as well as the academic faculty system suitable for distance education are being secured for their applications in courses.

196. KNOU is recognized for its contribution in partially fulfilling excessiv social demand for higher education for working adults. It also pursues efficiency and cost-effective approach to program delivery and management. But, the most important role of KNOU is in its mission of offering additional lifelong learning opportunities for disadvantaged adults. KNOU's effort in the use of new technologies and media through its distance education framework has also shown the potentials of application of new educational media in teaching-learning processess of tertiary education.

197. The demand for higher education in Korea rose drastically since 1970s, while the spaces were limited for tertiary education. In this context, KNOU programs became a vehicle for extending tertiary opportunities for many adults, especially those working adults who have missed formal higher education opportunities.

198. Completers/graduates of KNOU have reached the total of 177,000 as of 1998. As can be seen in <Table 5-1> below, the number of adults enrolled in KNOU programs has risen to 208,935 in 1998, as compared with 36,334 in 1980. Thus, the figure shows that KNOU enrolls the largest number of students among all Korean higher education institutions.

<Table 5-1> Total number enrolled by year
(unit:persons)

year	1981	1985	1990	1991	1992	1993	1994	1995
Number enrolled	36,334	13,417	124,434	138,341	152,176	172,310	172,746	166,654

Source: KNOU, 1997.

199. The age distribution pattern of KNOU enrollees, as well as of graduates, are quite different than regular colleges and universities. In most regular universities, 90% of enrollees are students in the age range of 17 and 25 years. It can be seen in <Table 5-2>, more than 80% of those enrolled in KNOU's national branches are more than 25 years old.

<Table 5-2> Enrollment by age level(1998)
(unit: persons, %)

age	total	Below 20	21-24 years	25-29	30-35	36-39	40-45	Over46
Number Enrolled	208,935	2,969 (1.4)	35,946 (17.2)	79,516 (38.1)	44,691 (21.4)	22,484 (10.8)	17,042 (8.1)	6,287 (3.0)

Source: KNOU, 1998.

5.2 Case II: PCER's New College Proposal

200. Opportunities of on-site degree program for employed workers was examined as an innovative feature of the PCER reform package. PCER had proposed "New College System" for working people to pursue college and university degrees.

201. The System introduced is to raise the overall educational standard of the adult population engaged in economic activities; which is comparatively lower than that of developed countries. This system is expected to enable a cost effective way of providing workers with lifelong learning to further their qualification, without leaving their place of work.

202. The New colleges, to be managed through the use of the Program Network System, will be different from the existing vocational education institutions in the following ways:

- Those eligible for the program are employed workers;
- The work place will become the site of practical training; and
- Multi-media information technology and the distance educational system will be used.

203. Those eligible for establishing and managing the New Colleges are junior colleges, industrial universities, Korea National Open University, general universities and business organizations (e.g., state and private companies, industrial unions, economic organizations, etc.).

204. The New Colleges may be established and managed through a legally recognized consortium formed by several junior colleges in concert with industrial firms. Another type of New College program may be set up and managed by a legally recognized consortium formed jointly by several companies which are in the position to provide for such a venture.

205. New colleges will run as 2-4 year lifelong learning institutes of higher learning. The Colleges, as virtual colleges, will take the form of an open education system, linked to the Credit Bank system. There will be a central administrative center but the educational centers will be located at the work sites (for example, industrial or manufacturing zones) to provide more effective on-site training in conjunction with practical work experience.