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Projection of School Enrolment Population for Korea: 1985-2000

I. INTRODUCTION

The progress of a nation in the modern world is largely dependent upon the quality of education and a high level of educational attainments among the people. Since last two decades, Korea showed a remarkable progress in the economic development and rapid expansion in industries which created ample employment opportunities in various spheres. It continued to show a positive trend in both economic and in industrial spheres.

Thus, there is a greater need for higher and appropriate level of educational attainment among the people in order to meet the demand for more skilled manpower. Keeping this in view, it is needless to emphasize the importance of future school enrolment population estimates of the country and also necessary for planning the required numbers of schools, classrooms and teachers etc.

The present educational system of the Republic of Korea was introduced in 1949 by an Education Law.[1] The regular school system consists of six years of primary schooling, three years of middle school, three years of high school, two years of junior college and four to six years of college or university education. Primary education was instituted as a compulsory education. Government of Korea planned to enlarge the scope of compulsory education from the present six years of schooling to nine years, which includes middle school level. Their plan is to cover initially in the selected regions of the country by 1985 and the rest of the country by 1991. A policy of

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1) UN ESCAP, "Population of the Republic of Korea", *Country monograph series No. 2.*, 1975.

automatic promotion in primary and secondary grades of education was introduced from 1972.[2]

In this paper, an attempt has been made — (1) to study the trends in the school enrolment rates for the years 1966-80, and (2) to project the age-sex school enrolment population of the Republic of Korea from 1985 to 2000.

II. SOURCES OF DATA AND LIMITATION

The 1966, 1970, 1975 and 1980 population and housing census reports were used to compute the age-sex specific enrolment rates.[3],[4]

One of the limitations of this paper is that the school enrolment rates prior to 1966 is not available, therefore, the observation period from 1966 to 1980 with respect to school enrolment is somewhat insufficient for new entry and dropout etc. to understand the past trends. In addition, age-sex grade-wise data was also not available, so, it may be noted that the enrolment rates of each age group did not represent the grade at which the pupils were enrolled and indicate the proportion of the population of a given age group who were enrolled at regular school, regardless of the class at which they were enrolled.

III. TRENDS OF SCHOOL ENROLMENT RATES

1. Trends in the Educational Attainments 1966-80

It can be seen from the table 1, that the number of pupils who were attending school had increased by 1.38 times for males and 1.39 times for females during the period 1966-80 and those who completed schooling were increased almost by one and half times for males and 1.63 times for females for the same period. The number of females completing secondary education had increased by four-fold, whereas, the number of women completing higher education had increased almost four and half times between 1966 and 1980. These increments were responsible for drastically reducing the proportion of women who never attended school from 34.4 percent in 1966 to 16.6 percent in 1980.

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2) UNESCO, *Statistical Year Book*, 1982, Unesco.
3) EPB, *1966, 1970, 1975 and 1980 Population and Housing Census Report*, the Republic of Korea.
4) EPB, *Statistical Yearbook, 1980*, the Republic of Korea.

Table 1. Numerical and Percentage Distribution of the Population Aged 6 Years and Over by Educational Status and Sex and Index of Change in Educational Status, 1966-1980

Educational Status	Number ('000)				Percentage				Index of Change (1966=100)			
	1966*	1970*	1975*	1980**	1966	1970	1975	1980	1966	1970	1975	1980
Males	11,867	13,108	14,786	16,373	100.0	100.0	100.0	100.0	100	110	125	138
Attending School	3,636	4,352	4,950	5,514	30.6	33.2	33.5	33.7	100	120	136	152
Completed School	5,887	6,820	8,193	9,485	49.6	52.0	55.4	57.9	100	116	139	161
Elementary	3,303	3,379	3,596	2,956	27.8	25.8	24.2	18.1	100	102	108	89
Secondary	2,104	2,795	3,820	5,259	17.7	21.3	25.8	32.1	100	133	182	250
Higher	480	646	797	1,270	4.0	4.9	5.4	7.8	100	135	166	265
Never Attended	2,344	1,936	1,643	1,374	19.8	14.8	11.1	8.4	100	83	70	59
Females	11,844	13,153	14,754	16,439	100.0	100.0	100.0	100.0	100	111	125	139
Attending School	2,926	3,594	4,093	4,776	24.7	27.3	27.7	29.1	100	123	140	163
Completed School	4,845	6,034	7,704	8,931	40.9	45.9	52.2	54.3	100	125	159	184
Elementary	3,693	4,244	4,709	4,197	31.2	32.3	31.9	25.5	100	115	128	144
Secondary	1,061	1,632	2,752	4,308	9.0	12.4	18.7	26.2	100	154	259	406
Higher	91	158	243	426	0.8	1.2	1.6	2.6	100	174	267	468
Never Attended	4,073	3,525	2,957	2,732	34.4	26.8	20.0	16.6	100	87	73	67

Source: Economic Planning Board, *1966, 1970, 1975, 1980 Population and Housing Census Report*, the Republic of Korea, Each Year.
Note: * based on Oct. 1
** based on Nov. 1

2. Trends of Changes in School Enrolment Rates

It is observed from Table 2, that the school enrolment rates for the age group 6-11 was 91.1 percent for males and for the females it was 87.7 percent in 1966. By 1980, the gap between the male and the female enrolment rates had narrowed down and it was around 95 percent of the children enrolled in the school. A significant difference between male and female enrolment rates were observed among the pupil who were in the age groups 12-14 and 15-17 respectively. For instance, the enrolment rates for the males in the age groups 12-14 and 15-17 in the year 1966 were 66.2 percent and 34.6 percent respectively and the corresponding figure for females were 47.2 percent and 20.6 percent respectively. The males as well as females had shown an improvement in the school enrolment rates during the period 1966-80, and interestingly the gap between male and female rates showed a declining trend during this period. Also, school age population for the age group 6-17 were increased about 1 million for male and female respectively, whereas school enrolments were increased about 1.6 million for males and 1.7 million for females for the same period.

The annual percentage growth rates for school enrolments at each age group is shown in Table 3. It is evident that there was a rapid increase in the school enrolment rates in the age groups 15-17 and 12-14, and slow increase in the age group 6-11 during the period 1966 to 1980. Also it is clear from the same table that the growth rates of female enrolments were much higher than that of males at all age groups, although the enrolment rates for females in all the age group were lower than that of males. We can find that the growth rate of female enrolments for the age group 15-17 to be recorded as the highest among all age group during this period. For this reason, sex differentials at each age group showed an improvement over a period of time and is shown in Table 4. A significant improvement was particularly observed in the age group 15-17 but at the same time in the above age group the gap of the sex ratio between the school age population and school enrolments were still prevalent.

Table 2. School Age Population, School Enrolments and School Enrolment Rates of the Population aged 6-17 Years by Age Groups

Age Group	School Age Population				School Enrolments				School Enrolment Rates (%)			
	1966	1970	1975	1980	1966	1970	1975	1980	1966	1970	1975	1980
Male												
6～11	2,646,684	2,906,850	2,740,373	2,841,894	2,410,833	2,702,612	2,587,742	2,721,311	91.1	93.0	94.4	95.8
12～14	969,460	1,257,257	1,445,759	1,320,633	621,768	910,614	1,147,412	1,242,051	66.2	72.4	79.4	94.0
15～17	847,195	970,463	1,325,106	1,324,541	293,199	414,134	701,421	942,078	34.6	42.7	52.9	71.1
12～17	1,816,655	2,227,720	2,770,865	2,645,174	934,967	1,324,748	1,848,833	2,184,129	51.5	59.5	66.7	82.6
6～17	4,463,339	5,134,570	5,511,238	5,487,068	3,345,800	4,027,360	4,436,575	4,905,440	75.0	78.4	80.5	89.4
Female												
6～11	2,455,988	2,696,720	2,549,494	2,662,263	2,152,969	2,450,512	2,382,151	2,539,553	87.7	90.9	93.4	95.4
12～14	907,357	1,181,772	1,344,087	1,234,466	428,534	696,205	955,449	1,118,155	47.2	58.9	71.1	90.6
15～17	791,456	927,542	1,252,442	1,234,451	162,705	268,708	492,331	762,052	20.6	29.0	39.3	61.7
12～17	1,698,813	2,109,314	2,596,529	2,468,917	591,239	964,913	1,447,780	1,880,207	34.8	45.7	55.8	76.2
6～17	4,154,801	4,806,034	5,146,013	5,131,180	2,744,108	3,415,425	3,829,931	4,419,760	66.0	71.1	74.4	86.1

Source: same as table 1.
Note: School age population and school enrolments were adjusted to the date on March 1.

Table 3. Annual Percentage Growth Rates of School Enrolment Rates of the Population by Sex and Age Group, 1966-1980

(Unit: percent)

Age Group	Male			Female		
	1966-70	1970-75	1975-80	1966-70	1970-75	1975-80
6 ~11	0.5	0.3	0.3	0.9	0.6	0.4
12 ~14	2.3	1.9	3.7	6.2	4.1	5.5
15 ~17	5.9	4.8	6.9	10.2	7.1	11.4
12 ~17	3.9	2.4	4.8	7.8	4.4	7.3
6 ~17	1.1	0.5	2.2	1.9	0.9	3.1

Table 4. Sex Ratio of School Age Population and School Enrolments by Age Group, 1966-1980

(Sex Ratio = $\frac{\text{Male}}{\text{Female}} \times 100$)

Age Group	1966	1970	1975	1980
School Age Population				
6 ~11	108	108	107	107
12 ~14	107	106	108	107
15 ~17	107	105	106	107
12 ~17	107	106	107	107
6 ~17	107	107	107	107
School Enrolments				
6 ~11	112	110	109	107
12 ~14	150	131	120	111
15 ~17	180	154	142	124
12 ~17	158	137	128	116
6 ~17	122	118	116	111

Source: Computed from table 2

The trend in improvement of enrolment rates may be due to the rapid improvement of the socio-economic conditions during this period.[5][6][7][8][9] Increasing investment by government on education, particularly, construction of new schools, recruitment of more teachers, and improvement of school facilities had attracted more pupil to enrol in schools. Along with the improvement in economic development, the progress of mechanization in agriculture and overall industrialization had paved the way for the reduction in child labour and thus increased the enrolments in schools. Economic development has also contributed enormously to the parents of the school going population, so parents have been financially equipped and could afford the educational expenditures for their children. The improvement in the status of women in all aspects i.e. with respect to law, employment opportunity etc., may significantly affect the increase in the enrolment rates particularly female enrolment rates. It is interesting to note that the effects of social change from traditional society to modern society, improvement in the social and economic status of the women, should not be overlooked since it does influence the attitude of people on education. Another important factor in improvement of the enrolment rates is traditionally high aspiration of the parents to their children on education.

IV. METHOD OF PROJECTION OF SCHOOL ENROLMENT POPULATION

1. Projection of School Age Population

The school age population for future years has been obtained from the medium population projections prepared by Chung[10] for the years 1980-2000. The projected population was given in quinquennial age groups. Several methods are available to split five-year age groups data into single year of age data. If only the magnitude of the potential primary and secondary groups are

5) UNESCO, "Dimensions of School Enrolment: A Study of Enrolment Ratios in the World, *CSR-E-16,* 1975.
6) K.B. Pathak, et al, "Projections of School Going Population of Maharashtra from 1971-2001", *IIPS,* Mimeographed.
7) T.B. IM and K.V. Ramachandran, "Future School Populations in the Republic of Korea, 1960-1975" *The Asian Economic Review,* Vol. IV, No. 3, 1962.
8) Rama Rao, G. "Some perspectives of child in India", *Demographic and Socio-Economic Aspects of the Child in India.* Ed. K. Srinivasan, P.C. Saxena, Tara Kanitkar, 1979.
9) UNESCO, "Trends and Projections of Enrolment by Level of Education and by Age," *CSR-E-21,* 1977.
10) Youngil, Chung "The Population Projections for the Republic of Korea: 1980-2000" *Journal of Population and Health Studies,* Vol. 2, No. 2, KIPH, 1982.

needed, we need not get single year values for all these groups.[11] For example, by using Karup King formula, we can get the age group data as follows;

$P_{6-11} = .735\ P_{5-9} + .568\ P_{10-14} - .104\ P_{15-19}$

$P_{12-14} = -.072\ P_{5-9} + .624\ P_{10-14} + .048\ P_{15-19}$

$P_{12-17} = -.128\ P_{5-9} + .856\ P_{10-14} + .472\ P_{15-19}$

So, $P_{15-17} = P_{12-17} - P_{12-14}$

where, P_{a-b} denotes population aged a to b

It is necessary to mention that some adjustment on the data are made since census data (in the case of 1966, 1970, 1975 census, it were Oct. 1 and in the case of 1980 census, it was November 1) and projected population (July 1) are not identical. And it is desirable to have a common base period such as March 1 which represent the same point of time as the begining of the academic year. The projected school age population by age group and sex which were adjusted as above were shown in Table 5.

Table 5. Projected School Age Population by Age Group and Sex, 1985-2000

Age Group	Male				Female			
	1985	1990	1995	2000	1985	1990	1995	2000
6～11	2,735,326	2,821,582	2,969,507	2,945,864	2,587,471	2,712,924	2,872,068	2,842,895
12～14	1,381,032	1,358,704	1,423,639	1,504,082	1,293,037	1,288,691	1,375,262	1,454,594
15～17	1,412,483	1,363,336	1,378,559	1,459,181	1,317,154	1,284,169	1,319,639	1,413,104
12～17	2,793,515	2,722,040	2,802,198	2,963,263	2,610,191	2,572,860	2,694,901	2,867,698
6～17	5,528,841	5,543,622	5,771,705	5,909,127	5,197,662	5,285,784	5,566,969	5,710,593

Source: Youngil Chung, "The Population Projections for the Republic of Korea 1980-2000", *Journal of Population and Health Studies,* Vol. 2, No. 2, 1982.

Note: Projected School Age Population were adjusted to the date on March 1.

11) K.V. Ramachandran, et al, "Estimation of Future Elementary and Middle School Enrolment in the Republic of Korea, 1965-1980", *Journal of Korean Statistical Association,* Vol. 2, 1971.

2. Projection of Future School Enrolment Rates

There are two sets of assumption adopted in this paper.

The first set of assumption is that the present trends will remain constant throughout the period of projection, i.e. upto 2000.

The second set of assumption is that the Korea would achieve the universal level in primary school by 1990, in middle school by 1995, and in the high school by 2000. Enrolment rates for the universal level are also assumed as 99 percent.

The purpose of the second assumption is to indicate the direction of achieving specific goals such as universal level in education of the primary and secondary level (which includes primary, middle and high school) of education to be in the each assumed year.

As the historical experiences of educational advanced countries like the United States of America, Australia and Japan indicated that the trend of school enrolment rates followed logistic curve. [12] So it is further assumed that the future school enrolment rates by age and sex for Korea would follow the logistic curve.

The procedure to get the future enrolment rate is as follows:

If we denote E_t as the enrolment rate at time t and 'a' and 'b' as parameters varying for a particular age, then the enrolment rate at time t may be estimated as:

$$E_t = \frac{1}{1+e^{a+b_t}} \quad \cdots\cdots (1)$$

$$\text{Let } \frac{1}{E_t} = 1 + e^{a+b_t} \quad \cdots\cdots (2)$$

$$\text{then, } \frac{1}{E_t} - 1 = e^{a+b_t} \quad \cdots\cdots (3)$$

By taking natural logarithm on both side of (3)

$$\text{then, } \ell n \left(\frac{1}{Et} - 1\right) = a + b^t \quad \cdots\cdots (4)$$

$$\text{Let } \hat{E}_t = \ell n \left(\frac{1}{Et} - 1\right)$$

$$\text{then, } \hat{E}_t = a + b_t \quad \cdots\cdots (5)$$

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12) Eduardo F. Lee, and Yun Kim, *School Population Projections by Age, Sex and Level of Education for the Philippines, 1970-2000,* 1979.

Now, (5) becomes a linear form, therefore, 'a' and 'b' can be estimated by the method of least squares. The value of 'a' and 'b' may be computed from the following formula,

$$b = \frac{n\Sigma t \cdot \ln(\overline{E}_t^{1} - 1) - \Sigma t \Sigma \ln(\overline{E}_t^{1} - 1)}{n\Sigma t^2 - (\Sigma t)^2}$$

$$a = \frac{\ln(\overline{E}^{1}t - 1) - b\Sigma t}{n}$$

where, n = number of observation points

t = time

E_t = enrolment rates at time t

For the first assumption, the trend observed in the age-sex specific enrolment rates for the year 1966, 1970, 1975 and 1980 are extrapolated logistically for the future year enrolment rates. Under assumption 2, age-sex specific enrolment rates for the years 1966, 1970, 1975 and 1980 and assumed enrolment rates of universal level were used in the above formula to obtain the age-sex specific enrolment rates for the projected years.

3. Projection of School Enrolment Population

The future age-sex school enrolment population is estimated by multiplying the age-sex enrolment rates obtained by two sets of assumption with the corresponding age-sex projected population.

V. RESULTS AND CONCLUSIONS

It can be seen from the table 6 that the male enrolment rate of the Republic of Korea by the year 2000 based on assumption 1 would be 98.6 percent, 99.5 percent and 95 percent for the age groups 6-11, 12-14 and 15-17 respectively, whereas, the corresponding rates for female would be 98.9 percent, 99.5 percent and 94.8 percent respectively. In addition, the enrolment rates for the age group 15-17 would increase at a faster rate than the other age groups.

It is indicated from the table 7, that, under the assumption 1, the enrolments of males for the age group 6-17 would increase from 4.9 million in 1980 to 5.8 million by 2000, while the corresponding figure under the assumption 2 would be 5.9 million. In the case of females for the

same age group, the enrolment would increase from 4.4 million in 1980 to 5.6 million under assumption 1, and 5.7 million under assumption 2 by 2000. In order to achieve the universal level by the year 2000 at primary and secondary level in education, it is necessary that around 945 thousand additional male children and 1,234 thousand additional female children are required to be enrolled.

Future school enrolments would be affected by the following factors, such as, population growth, increase in the school enrolment rates and interaction effect of population growth and rising school enrolment rates. The effect of these factors on changes in school enrolment figures between the year 1980 and 2000 can be measured by using the standardization technique. Effects due to demographic changes are measured by applying the 1980 school enrolment rates to the projected population in the year 2000, while the projected school enrolment rates in the year 2000 are applied to the 1980 population to measure the effects of the changes in enrolment rates. The difference between total changes in the school population between the year 1980 and 2000 and

Table 6. Projected School Enrolment Rates of the Population Aged 6-17 Years by Age Group and Sex and by Different Assumptions, 1985-2000

(Unit: percent)

Age Group	Male				Female			
	1985	1990	1995	2000	1985	1990	1995	2000
Assumption 1								
6～11	96.8	97.5	98.1	98.6	96.8	97.8	98.5	98.9
12～14	96.0	98.0	99.0	99.5	94.6	97.5	98.9	99.5
15～17	79.2	86.7	91.7	95.0	73.2	83.7	90.6	94.8
12～17	87.5	92.3	95.4	97.3	83.8	90.6	94.8	97.2
6～17	92.1	95.0	96.8	97.9	90.3	94.3	96.7	98.0
Assumption 2								
6～11	98.0	99.0	99.0	99.0	97.9	99.0	99.0	99.0
12～14	96.0	98.0	99.0	99.0	94.8	97.7	99.0	99.0
15～17	88.2	94.3	97.3	99.0	84.5	88.8	94.6	99.0
12～17	92.1	96.1	98.2	99.0	89.6	93.3	96.8	99.0
6～17	95.0	97.6	98.6	99.0	93.7	96.2	98.0	99.0

Table 7. Projected Number of Enrolments by Age Group and Sex and by Different Assumption, 1985-2000

Age Group	Male				Female			
	1985	1990	1995	2000	1985	1990	1995	2000
Assumption 1								
6～11	2,647,796	2,751,042	2,913,086	2,904,622	2,504,672	2,653,240	2,828,987	2,811,623
12～14	1,325,791	1,331,530	1,409,403	1,496,562	1,223,213	1,256,474	1,360,134	1,447,321
15～17	1,118,687	1,182,012	1,264,139	1,386,222	964,157	1,074,849	1,195,593	1,339,623
12～17	2,444,478	2,513,542	2,673,542	2,882,784	2,187,370	2,331,323	2,555,727	2,786,944
6～17	5,092,274	5,264,584	5,586,628	5,787,406	4,692,042	4,984,563	5,384,714	5,598,567
Assumption 2								
6～11	2,680,619	2,793,366	2,939,812	2,916,405	2,533,134	2,685,795	2,843,347	2,814,466
12～14	1,325,791	1,331,530	1,409,403	1,489,041	1,224,799	1,259,051	1,361,509	1,440,048
15～17	1,245,810	1,285,626	1,341,338	1,444,589	1,112,995	1,140,342	1,248,378	1,398,973
12～17	2,571,601	2,617,156	2,750,741	2,933,630	2,338,794	2,399,393	2,609,887	2,839,021
6～17	5,252,220	5,410,522	5,690,553	5,850,035	4,871,928	5,085,188	5,453,234	5,653,487

the sum of the effect due to demographic changes and the changes in enrolment rates are attributed to the interaction effects.

As can be seen from the table 8, the most important factors in the age group 6-11 and 12-14 affecting the school enrolments between the year 1980 and 2000 are due to demographic changes which was observed in different assumption. This can be partly explained by the fact that enrolment rates of the year 1980 for the above age group were already high and it has little room to increase more. Also this can be explained by the baby boom which was experienced after Korean war. But in the case 15-17 age groups, the effect due to increase in the enrolment rates would be more significant than the effect due to demographic changes, and would be pronounced more for females than for males particularly for the same age group.

Table 8. The Percentage of the Effect of Changes in School Enrolments by Age Group and Sex and by Each Factors and Different Assumptions for the Year 1980 and 2000

(Unit: percent)

Age Group	Assumption 1				Assumption 2			
	TE (N)	ED	EE	IE	TE (N)	ED	EE	IE
Male								
6 ~ 11	100.0 (183311)	55.0	44.1	0.9	100.0 (195094)	51.7	47.2	1.1
12 ~ 14	100.0 (254511)	67.5	28.3	4.2	100.0 (246990)	69.5	26.5	4.0
15 ~ 17	100.0 (444144)	21.5	71.2	7.3	100.0 (502511)	19.0	73.5	7.5
12 ~ 17	100.0 (698655)	38.2	55.6	6.2	100.0 (749501)	35.6	58.0	6.4
5 ~ 17	100.0 (881966)	41.7	53.2	5.1	100.0 (944595)	39.0	55.7	5.3
Female								
6 ~ 11	100.0 (272020)	63.4	34.3	2.2	100.0 (274913)	62.8	35.0	2.3
12 ~ 14	100.0 (329166)	60.7	33.5	5.9	100.0 (321893)	62.0	32.3	5.7
15 ~ 17	100.0 (577571)	19.0	70.7	10.3	100.0 (636921)	17.2	72.2	10.6
12 ~ 17	100.0 (906737)	34.1	57.2	8.7	100.0 (958814)	32.3	58.8	8.9
6 ~ 17	100.0 (1178757)	40.9	51.9	7.2	100.0 (1233727)	39.1	53.5	7.4

Note: TE = Total Effect, N = Number of School Enrolments Increased
ED = Effect of Demographic Changes
EE = Effect of Changes in Enrolment Rates
IE = Interaction Effect

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1) UN ESCAP, Population of the Republic of Korea, *Country monograph series No. 2,* 1975.

2) UNESCO, *Statistical Year Book,* 1982, Unesco.

3) EPB, *1966, 1970, 1975 and 1980 Population and Housing Census Report,* the Republic of Korea.

4) EPB, *Statistical Yearbook, 1980,* the Republic of Korea

5) UNESCO, "Dimensions of School Enrolment: A Study of Enrolment Ratios in the World," *CSR-E-16,* 1975.

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〈國 文 抄 錄〉

韓國의 年齡別 就學人口의 推計 : 1985～2000

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本 硏究는 人口 및 住宅센서스報告資料를 土臺로 2000年까지의 우리나라 6～17歲 年齡群別 學生數를 5年間隔으로 推計한 것이다.

推計方法은 1966年부터 1980年까지의 센서스資料에서 年齡群別 就學率을 計算한 뒤 將來에도 同期間에서의 就學率增加傾向이 계속 維持되리라는 仮定과 2000年까지는 6～17歲 年齡群에 있어서 거의 完全就學이 實現되리라는 仮定下에 로지스틱曲線(Logistic Curve)을 適用하여 將來의 年齡群別 就學率을 推計하였으며, 이를 旣推計된 人口에 適用함으로써 將來의 學生數를 求하는 것이다.

推計結果는 다음과 같다.

1. 첫번째 仮定의 경우, 2000年에는 6～17歲 年齡群에서 男學生이 580萬名, 女學生이 560萬名정도가 各級學校에 就學할 것으로 豫想되어지며, 이는 1980年과 比較하여 男學生이 88萬名, 女學生이 118萬名 增加한 것이다.

2. 男學生에 있어서 2000年度의 就學學生이 1980年보다 6～11歲 年齡群에는 18萬名정도가 많은데 비하여, 12～14歲 年齡群에서는 25萬名, 15～17歲 年齡群에서는 44萬名정도가 늘어날 것이 豫想되며, 女學生의 경우 各 年齡群에서 追加就學學生이 男學生보다 많을 것으로 展望된다.

3. 2000年에 있어서 1980年度보다 늘어날 學生을 그 增加要因에 따라 人口增加에 의한 要因과 就學率上昇에 의한 要因 및 混合要因으로 區分해 볼 때 男女 모두 6～14歲 年齡群에서는 人口增加에 의한 要因이, 15～17歲 年齡群에서는 就學率上昇에 의한 要因이 보다 크게 作用할 것으로 보인다.

4. 두번째 仮定에서도 첫번째 [illegible]과 類似한 結果를 얻을 수 있었다.

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