2020 July Educational Issues in Korea

E-learning implementation in formal education

WHAT TYPE OF PEOPLE ARE USING THE E-LEARNING SERVICE?

National demand for e-learning and the introduction of formal education institutions

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For understanding the demand and introduction of e-learning for individuals

07 July

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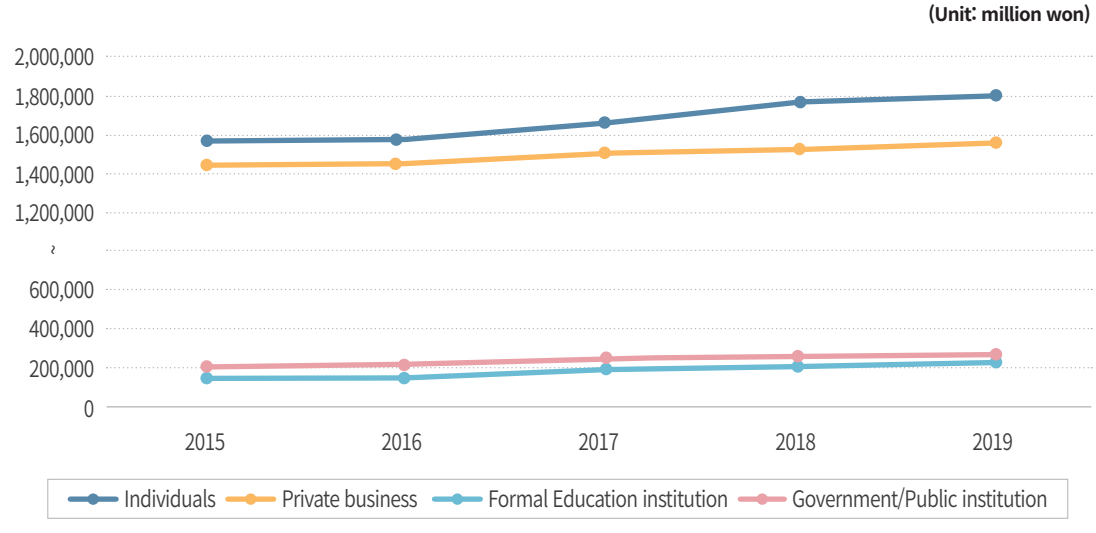
Survey of E-learning Industry

Ministry of Trade, Industry and Energy and National IT Industry Promotion Agency(NIPA) are jointly conducting 'E-learning industry survey' to provide reliable data for policy-making to promote related industries. In the survey, E-learning is defined as 'learning using electronic devices, ICT, or broadcasting technologies'. And E-Learning industry refers to 'business related to developing, producing and distributing contents, solutions, services, and hardware for E-learning'.

Demand for E-learning

Who is using e-learning services? In the survey, e-learning consumers are largely divided into individuals, businesses, formal education institutions, and government or public organizations. Sample surveys were conducted to identify the E-learning demand of individuals, and among the Internet users aged between 3 and 60, 2,000 people are selected proportionally by region, age and gender.

[Figure 1] E-learning market growth



As Figure 1 shows, Korea's e-learning market has gradually increased since 2015, accounting for about 3.8 trillion won in 2019. Among these, 47% is represented for individuals' demand, 40% for private businesses, and 13% for formal education institutions and government organizations.

[Table 1] E-learning participation rate, by sex and age group

(Unit: %)

	2015	2016	2017	2018	2019
Total	58.2	58.7	58.9	59.0	59.2
Sex	–	–	–	–	–
Men	58.8	59.4	59.3	59.6	59.9
Women	57.5	57.9	58.3	58.4	58.6
Age group	–	–	–	–	–
Aged 3~9	46.4	47.6	51.1	51.1	51.5
10s	80.8	81.7	83.5	83.5	83.7
20s	76.2	76.3	77.0	77.1	77.2
30s	58.8	58.9	59.3	59.5	59.6
40s	49.3	50.9	51.9	52.2	52.5
50s	35.0	37.0	38.2	38.2	39.2

About 60% of Internet users are participating in E-learning programs(see Table 1). There is no significant difference in rates between sexes, and about 80% of teenagers and 20s are using E-Learning. The participation has been gradually increased for all age groups, of which showed the greatest increase is for those 'Aged 3-9' and '50s'.

[Table 2] Fields of E-learning

(Unit: %)

	Foreign language	Regular curriculum	CSAT	Pre-school education	Qualification	Job training	ICT skills	Industry skills	leisure/ culture	etc
2015	26.9	10.6	7.4	1.9	13.2	18.6	10.2	6.0	4.3	1.0
2017	29.0	11.8	6.3	3.1	17.8	12.6	9.8	4.6	4.2	0.6
2019	20.3	10.8	6.6	6.3	15.8	13.6	10.6	8.1	7.5	0.4

The most popular field of E-learning is foreign language education (see Table 2) even the proportion decreased significantly in 2019. Instead, there has been a significant increase in the field of preschool

education and leisure and cultural activities. Qualification-related learning and job-training activities are also popular constantly. The result shows a large demand for preparing entrance exam for higher education compared to the age distribution of the survey sample.

[Table 3] Expenditure per capita

(Unit: 10 thousand won)

	2015	2017	2019
Total	29.1	28.7	29.7
Sex	-	-	-
Men	27.7	27.8	29.3
Women	28.9	29.6	30.5
Age group	-	-	-
Aged 3~9	18.1	18.4	23.7
10s	28.4	28.0	29.3
20s	37.5	25.0	30.2
30s	26.3	22.7	28.6
40s	25.6	23.5	25.3
50s	16.1	20.7	18.1

Individuals using E-learning spend an average of 300,000 won per year on E-Learning (see Table 3). There is no significant difference in rates between sexes, nor among age groups. It is notable that there was a large increase between 2017 and 2019 under the age of 10.

E-learning demand in formal education institutions

The 'E-learning industry survey' examines the E-learning demand and the implementation of E-learning system among about 600-800 schools.

[Table 4] E-leaning in formal education institutions

(Unit: %)

	2015	2016	2017	2018	2019
Total	87.9	88.0	88.3	88.4	89.0
Primary	93.2	93.9	94.2	94.3	94.7
Lower secondary	86.9	87.2	87.5	87.6	88.2

(Unit: %)

	2015	2016	2017	2018	2019
Upper secondary	73.4	75.7	75.9	75.7	76.4
college	73.7	75.2	75.2	75.6	78.5
University	83.2	84.0	84.0	84.2	85.3

As shown in Table 4, about 90% of formal education institutions have implemented E-learning programs as of 2019. Among these, primary schools had the highest rate of implementation, while upper secondary schools and colleges had the lowest.

[Table 5] Number of E-learning courses in formal education institutions(2019)

Number of course		Full-online		Combined Online and in-person		Partial Online(as supplementary class)	
		Number of course	%	Number of course	%	Number of course	%
Total	11.1	1.2	10.8	2.8	25.2	7.1	64.0
Primary	9.1	0.8	8.8	1.7	18.7	6.6	72.5
Lower secondary	9.4	0.6	6.4	2.6	27.7	6.2	66.0
Upper secondary	10.4	0.7	6.7	3.0	28.8	6.7	64.4
College	57.5	10.1	17.6	23.5	40.9	23.9	41.6
University	84.8	26.7	31.5	26.4	31.1	31.7	37.4

On average, higher education institutions offer more online programs than primary and secondary schools (see Table 5). In primary and secondary school, e-learning programs are mostly considered as supplemental material for regular curriculum, but higher education institutions utilize e-learning programs as full-online courses or hybrid models.

[Table 6] Objectives of E-learning (2019)

(Unit: %)

	Regular curriculum supple-ment	Education Quality improve-ment	Reform of Classroom-based program	Extracurri-culum activities	Obtain Qualifi-cation	Etc
Total	45.2	34.6	14.4	4.1	1.5	0.2
Primary	45.1	36.4	13.3	3.7	1.6	0
Lower secondary	45.5	31.9	16.2	4.6	1.3	0.5

(Unit: %)

	Regular curriculum supple-ment	Education Quality improve-ment	Reform of Classroom-based program	Extracurri-culum activities	Obtain Qualifi-cation	Etc
Upper secondary	48.2	32.6	12.0	5.2	1.4	0.5
College	40.5	27.2	27.7	0.7	3.3	0.7
University	21.5	40.5	35.6	1.1	0.0	1.4

As shown in Table 6, the main goals of online courses are to complement regular courses and improve the quality of education. At the college, response rates to “quality improvement in education”and “curriculum reform in the classroom”were equally significant. In four-year universities, these two objectives are considered as the main purposes of E-learning programs.

There has not been much change in the e-learning industry demand in size and method over the past five years, but the proportion of early childhood education for those under 10 has increased noticeably. Also, most formal education institutions have already implemented E-learning programs in their curriculum. The reasons why introduced E-learning programs are to supplement in-person classes and improve the education quality in primary and secondary education. In higher education, however, the reform of classroom-based courses is also an important objective of E-learning.

We need to monitor the situation for the next years, given that COVID-19 has led to a rapid increase in demand for E-learning this year. Also, it is thought that data collection about the E-learning programs by subjects and types(e.g., AR/VR, real-time interactive tools) will be required to meet the needs of consumers beyond supplementing offline education.

References

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