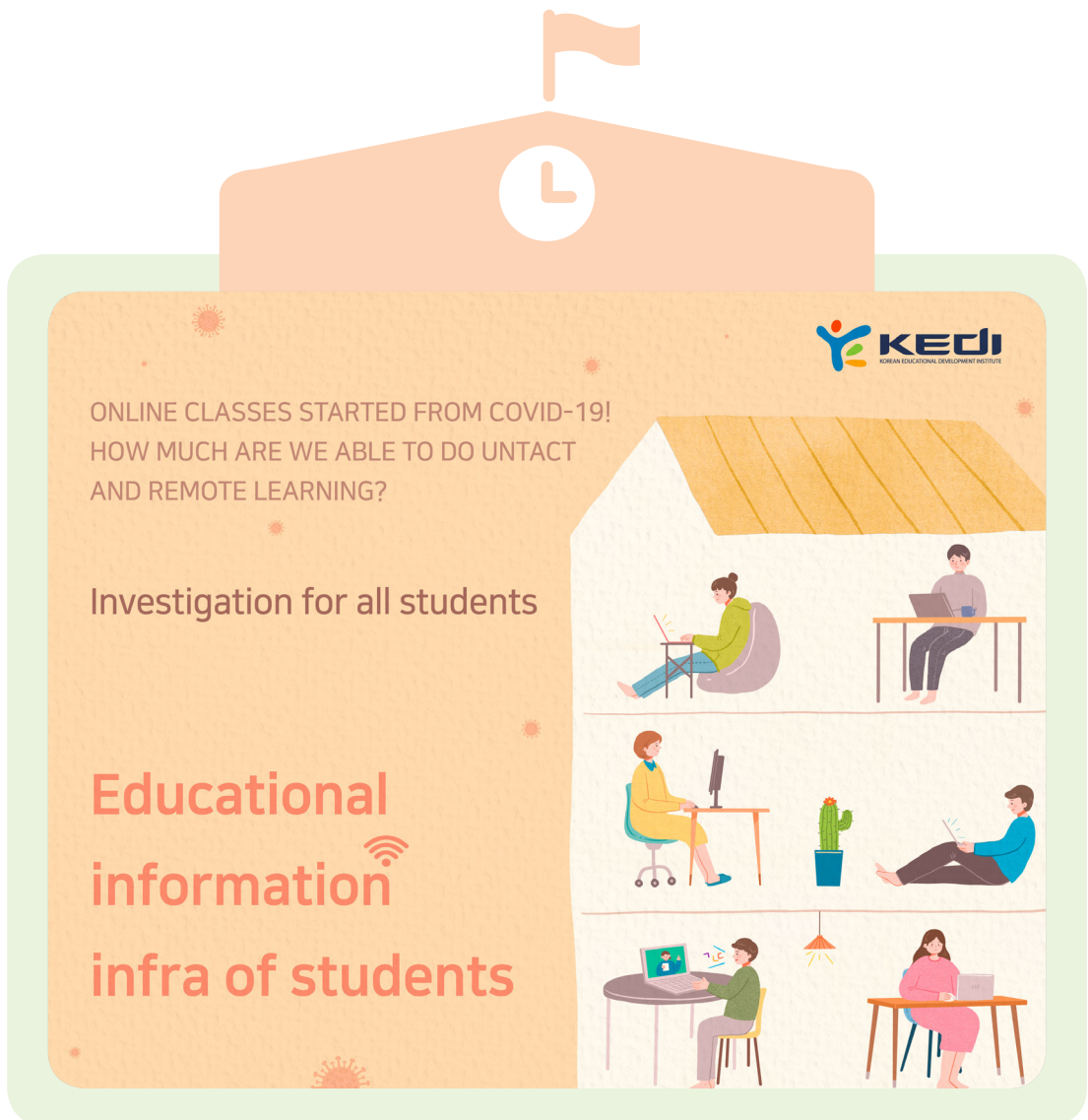


# 2020 September Educational Issues in Korea I

## ICT infrastructure in education



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In May 2020, “Online School” was implemented for the first time due to the spread of COVID-19. Online classes are taught remotely without in-person meetings between teachers and students, where teaching-learning activities take place at different times or places. In response, the Ministry of Education decided to investigate whether all students can take part in online classes properly and provide support for ICT device and Internet costs to students. In this regard, this article presents the data on educational ICT infrastructure for Korean students.

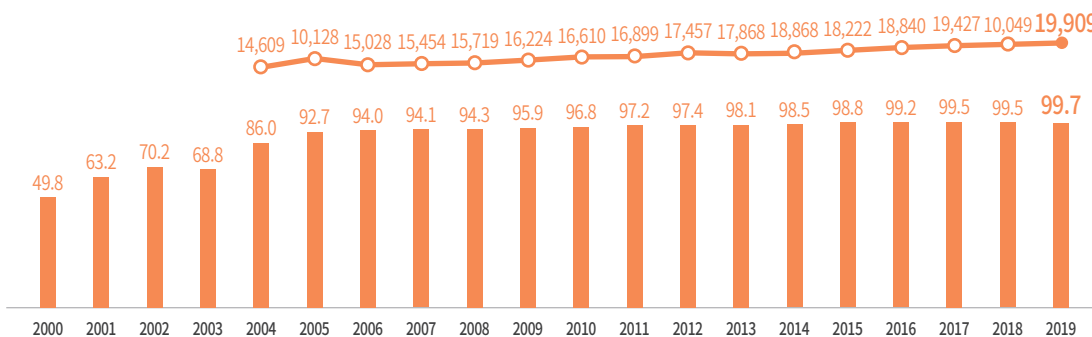
### Survey on the Internet use

The survey on the Internet use collects data on the Internet environment of households, and the types of Internet use, based on Article 52 of the ‘ACT ON PROMOTION OF INFORMATION AND COMMUNICATIONS NETWORK UTILIZATION AND INFORMATION PROTECTION’. It provides base data for related policy-making and international indicators.

According to survey results for 2019, household Internet access was 99.7% (1,971,000 households out of the total) in July 2019.

**[Figure 1] Household Internet access rate and the number of households with internet access**

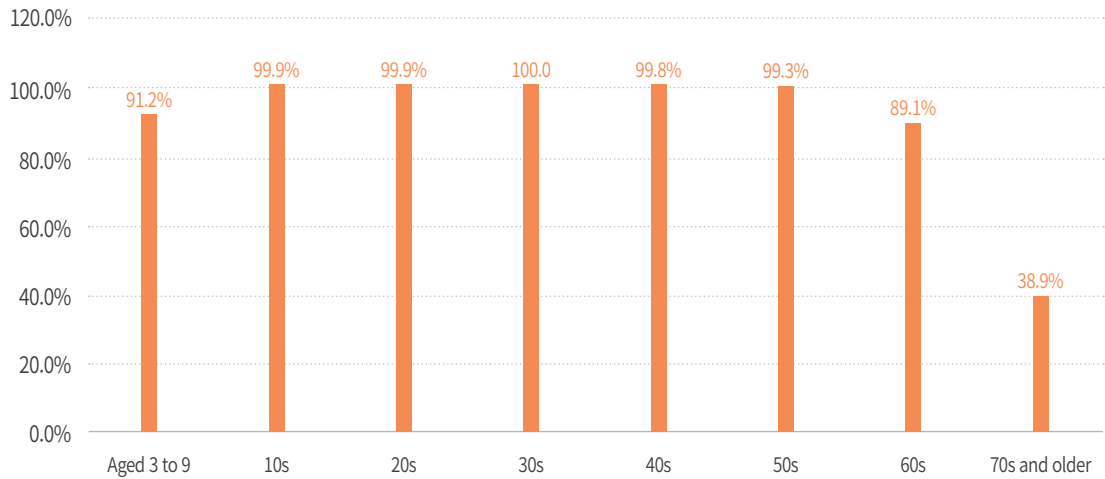
(Unit: %, thousands)



Source : National Information Society Agency(2019). 2019 Survey on the Internet Use. p.64.

By age, almost 100% of the population from teenagers to those in their 50s use the Internet. 99.9% of teenagers report now using the Internet.

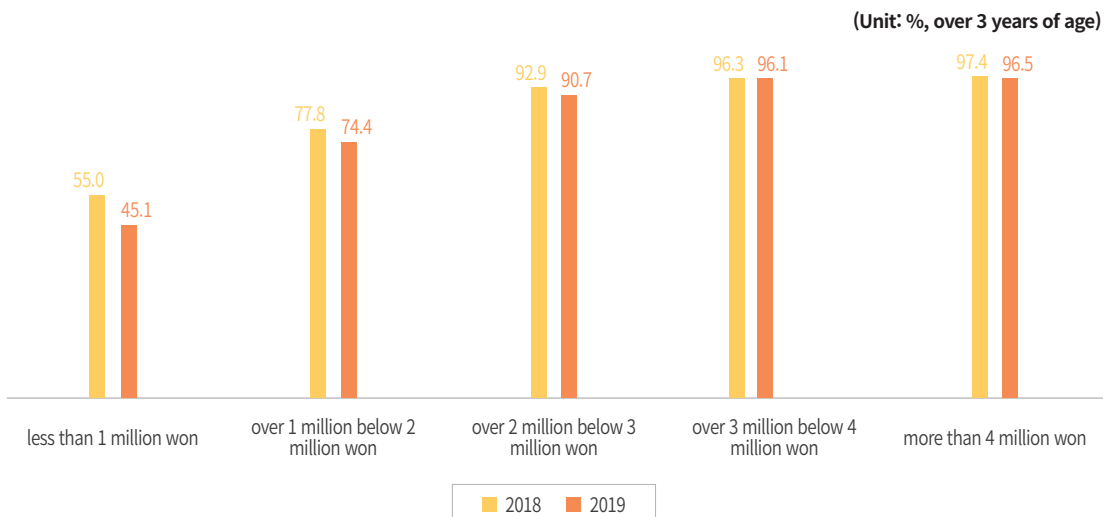
**[Figure 2]** Internet access rate by age group



Source : National Information Society Agency(2019). 2019 Survey on the Internet Use p68.

However, internet use depends on household income. The internet access rate of households with a monthly income of less than 1 million won is only 45.1%. For households earning between 1 million won and 2 million won, the rate is 74.4%.

**[Figure 3]** Internet access rate by household income



Source : National Information Society Agency(2019). 2019 Survey on the Internet Use. p73.

## Student-per-computer ratio

According to the 2020 Basic Statistics Survey on School<sup>3)</sup>, the number of students per computer was 5.3 in primary schools, 5.8 in lower secondary schools, and 4.0 in upper secondary schools. Especially, in the case of tablet PC, the ratio in upper secondary school is 36.4 compared to 11.2 in primary school and 16.1 in lower secondary school. For desktop, the ratio is 10.8 in primary school, 10.1 in lower secondary school, and 4.9 in upper secondary school. It indicates that tablet PCs are popular in primary and lower secondary schools, while upper secondary schools are mostly equipped with desktop computers.

[Table 1] Student-per-computer ratio

Educational level	Total		Desktop		Laptop		Tablet PC	
	2019	2020	2019	2020	2019	2020	2019	2020
Primary	6.0	5.3	10.7	10.8	166.0	129.2	15.2	11.2
Lower secondary	6.2	5.8	9.8	10.1	116.1	91.1	19.3	16.1
Upper secondary	4.4	4.0	5.2	4.9	70.2	53.9	46.6	36.4

Note : Student-per-computer ratio = number of students / number of school computers(desktops, laptops, tablet PCs)  
Source : Educational Statistics database(<http://kess.kedi.re.kr>)

The results of the Internet usage survey and the basic statistics survey on school pointed out that there was a gap in the rate of Internet use by household income although the overall internet access rate is high. To assure students' online class participation, schools and the government should carefully monitor whether there are any students who have difficulties to have internet access. Now, schools and Education Offices should improve the ICT device rental service for disadvantaged students to ensure sufficient supplies.

### References

- Ministry of Education. 2020. "Educational environment for online classes". MOE press release. April.6, 2020.
- National Information Society Agency. 2019. 2019 Survey on the Internet Use. National Information Society Agency.
- Korea Educational Development Institute. 2020. Educational Statistics Data base. <http://kess.kedi.re.kr>

3) National statistical survey conducted by Korea Educational Development Institute on every April 1.