RESPONDING TO COVID-19 : ONLINE CLASSES IN KOREA

A Challenge Toward the Future of Education

June 2020

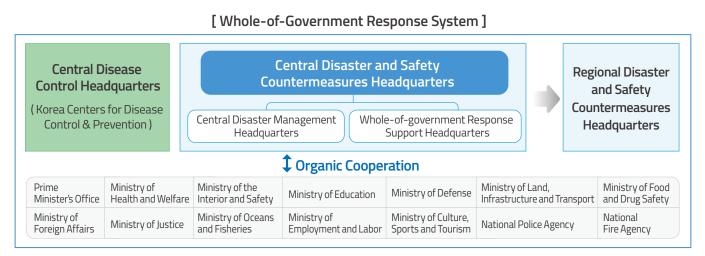


Ministry of Education Republic of Korea

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I. Introduction : Korea's Response to COVID-19

Korea is effectively responding to the outbreak of COVID-19 by adopting a whole-of-government approach, under the leadership of the Central Disaster and Safety Countermeasures Headquarters to prevent and contain the pandemic with the principle of "openness, transparency and democratic process."



As part of such government approach, the Ministry of Education published the [Guidelines on COVID-19 Control and Prevention*] in close coordination with the Central Disaster and Safety Countermeasures Headquarters in order to exercise "Intensified social distancing" both in and out of schools.

- On April 9, final year students of middle and high schools(K9, K12) started online classes which were later expanded to all grades sequentially. They are currently being run in a stable manner.
- * Guidelines include disinfecting school facilities and stocking up on face masks before reopening; checking body temperature; creating a hygienic environment by disinfecting facilities; and how to respond when suspected or confirmed cases of COVID-19 occur in school.

Due to the nation's "high level of civic responsibility and a sense of solidarity" to contain COVID-19, "intensified social distancing" measures (March 22-April 19) were eased to less strict social distancing (April 22-May 5). On May 6, Korea turned to "distancing in daily life" - maintaining social distancing while carrying on daily life.



[Three-Staged Social Distancing Rules]

II. School Closure and Preparing for Online Classes

Creating a Stable and Conducive Environment for Online Classes

The Ministry of Education postponed the start of the first semester from March 2 to April 9 in order to prioritize student safety and prevent the spread of COVID-19 in a preemptive manner.

X Academic year in Korea : Two-semester system (First Semester : March-June / Second Semester : September-December)

	Elementary school	Middle school	High school
Year Level	1 st -6 th	1 st -3 rd	1 st -3 rd
(Grades)	(K1-K6)	(K7-K9)	(K10-K12)

In early March, the Ministry of Education offered "voluntary online learning" classes for three weeks to help students continue in their learning. A week prior to the beginning of the online classes, "teacher-managed online learning" was implemented to serve as a period of adjustment for both students and teachers.

- Voluntary online learning
 Online classrooms were created to support communication between teachers and students, and to share learning content and various educational materials while providing support and overall guidance for students to engage in self-directed learning.
- Teacher-managed Teachers use both public and private online classroom services* to conduct real-time lessons, provide learning content and assignments as well as feedback in ways similar to that of regular classes.
- * Online classrooms are designed to support communication between teachers and students. Teachers can distribute learning materials and monitor student progress online.



A special school on the day of its online class opening ceremony



▲ The online class monitoring room

Decision to Introduce Online Classes in Stages

To ensure the health and safety of students and to protect their right to education, the Ministry of Education decided to implement online classes in all elementary, middle and high schools nationwide.

Decision to introduce
 online classes

The decision was made by comprehensively considering the number of COVID-19 confirmed cases, the national capacity to control the epidemic and public consensus* in close consultation with the Central Disaster and Safety Countermeasures Headquarters and epidemiology experts.

💥 Public Consensus Survey

[Realmeter Polls on March 29] "It is appropriate to all	ow school reopening on April 6″ 26% vs. "Inappropriate" 72%	26%	72%
[Gallup Polls on March 30] "It is appropriate to allow s	school reopening on April 6" 23.4% vs. "Inappropriate" 73.6%	23.4%	73.6%

• Implementation in stages On April 9, final year students(K9, K12) of middle and high schools initially started online classes, and on April 16, the first and second year students(K7-8, K10-11) of middle and high schools as well as the fourth to sixth year students(K4-6) of elementary schools started their education online. With the inclusion of first to third year students of elementary school on April 20, the introduction of full-scale online classes was completed.

Year Le (Grade		April 6-8	April 9-10	April 13-15	April 16-17	April 20~
High	3 (K12)	Break (3 days)	Adjustment period		Online classes (April 9~)	
School	1, 2 (K10-11)		Break (7 days)		Adjustment period	Online classes (April 16~)
Middle	3 (K9)	Break (3 days)	Adjustment period		Online classes (April 9~)	
School	1, 2 (К7-8)		Break (7 days)		Adjustment period	Online classes (April 16~)
Elementary	4-6 (K4-6)		Break (7 days)		Adjustment period	Online classes (April 16~)
School	1-3 (K1-3)		Break (9 days)		Online classes (April 20~)*

X Kindergartens were closed until physical attendance is allowed in consideration of the nature of their highly interactive teaching and learning activities, and the controllability of the epidemic, etc.

III. Systematic Preparation for Online Classes

Expanding Public Infrastructure

The Korean government prepared for full-scale online classes by further expanding its IT infrastructure.*

- * 99.7% of Korean households have access to the Internet; 99.9% of Korean teenagers use the Internet (Ministry of Science and ICT, 2019)
- Expansion of public infrastructure Check Content of Education predicted that 3 million users would simultaneously access each of the two public online learning platforms (i.e. KERIS e-Learning Site and EBS Online Class), and expanded the infrastructure accordingly to provide stable education service.

 KERIS e-Learning Site 	Seven-fold expansion of infrastructure in two weeks	March 23	470,000	April 8 3 million
 EBS Online Class 	300-fold expansion of infrastructure in a month	March 2	10,000	April 8 3 million

- <u>New EBS TV channels</u> <u>created</u> On March 23, EBS (Educational Broadcasting System) added more channels to support the specific needs of different school years. For the first and second year students of elementary school, who may experience difficulty in participating in online classes, EBS TV classes are broadcasted, while for the rest of the relatively older students, EBS Live Class is offered online to assist their real-time education.
- * **EBS** : (1st-2nd year students of elementary school, K1-2) Two channels created / (from 3rd year students of elementary and middle schools, K3-9) seven channels in total, one channel per grade / (from the 1st to 3rd year students of high school, K10-12) one channel

More and more online learning content is being added. About 50,000 public learning resources have been added on the public platforms and a lot of free content has been developed under public-private partnership.

 Linking and expanding online learning resources
 The learning content on the EBS Online Class and KERIS e-Learning Site are linked together to ensure their wide use. Additionally, some of the EBS's pay-to-access content, Naver's audio textbooks (3,000 books) and video lectures (306 episodes) are uploaded to allow students to access the content free of charge.

• Public Content5,500 content on KERIS e-Leaning Site; 43,000 content on EBS; government approved and
authorized textbooks in e-book (497 books); and digital textbooks (134 books)• Private ContentAudio textbooks on Naver; KERIS e-Learning Site uploads (3,000 content in Korean language,
English, mathematics, social studies, science and history); video lectures, etc.

- <u>Relaxed regulation of</u> <u>copyrights</u> In consultation with the Ministry of Culture, Sports and Tourism, the application of copyrights has been temporarily relaxed to give teachers broad access to copyrighted materials to create their own teaching materials.
 - * Some or all of the photos, videos, and passages excerpted from textbooks can be used / Music and video content on the market for sale can also be used as long as the usage does not inappropriately infringe upon the benefits of the copyright holders.

Supporting Teachers' Capacity-Building

To develop and distribute online learning models similar to in-class learning, pilot schools for online classes were designated (495 schools), and the best practices have been broadly shared to build the capacities of teachers.

- <u>Pilot schools for online</u> <u>learning</u> The pilot schools share their knowhow in conducting online teaching with other teachers, and help to identify and remove potential obstacles teachers may face in online classes.
- <u>Sharing best practices</u> of online learning

The Metropolitan and Provincial Offices of Education continue to share best practices of online classes in all elementary, middle and high schools.

[Exemplary Case of Online Learning]

Unam High School, Gyeong-gi province
Real-time interactive classes for all grades in all subjects
Real-time interactive classes are offered thanks to the thorough preparation made during the adjustment period for all teachers and students.
Depending on different characteristics of each subject, intensive learning, cooperative learning and debates using online chat rooms can also be applied.

Teachers voluntarily share information on how to improve their online teaching skills by participating in teacher communities. The government provided online education guidelines* and created "School-On" website to support teachers in advancing their capacities.

* The guidelines include information on how to maximize the effectiveness of online education (i.e. task-oriented classes; debate-oriented classes; and interactive classes) by taking into account the different levels of learning materials and teachers' ICT capacity.

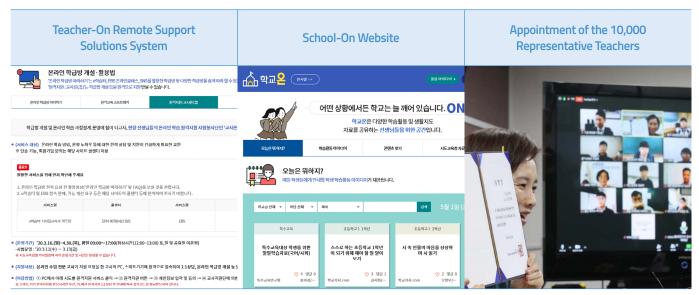
- <u>School-On</u> It provides teachers with information on how to use online learning platforms and tools, and encourages them to share ideas regarding online teaching and classroom management.
 <u>Teacher-On</u> It is run by a teachers' volunteer group that supports peer teachers who may encounter any difficulties in online teaching by providing real-time troubleshooting services and sharing best practices by using the Remote Call+Mobile Solution.*
- * **Remote Call+Mobile Solution** : It is a support solution service that remotely connects to the PCs and/or mobile devices of the users to resolve any technical difficulties.



 <u>The Community of</u> <u>10,000 Representative</u> <u>Teachers*</u> This community encourages teachers to share ideas and information on online education and gives advice to address any difficulties they encounter in online teaching.

* It supports online education by providing a real-time, interactive communications channel among 17 Provincial Offices of Education, the 10,000 representative teachers nationwide and relevant institutions, including the Ministry of Education.

[Exemplary Cases of Supporting Teachers' Online Teaching]



Revising Online Education Systems

The Online Class Guideline has been distributed to all schools nationwide to provide information on how to offer online education equivalent to regular school education, including how to track student attendance and performance, and record students' acheivement.

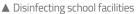
 <u>Online class</u> <u>operational standards</u>
 <u>Guideline</u>
 It provides guidelines on how to keep student records (including student attendance, evaluation of student performance, and record-keeping for school transcripts).

In cooperation with the Ministry of Science and ICT, the "10 Rules for Successful Online Classes" is shared with teachers and students to use the online service in more secure ways.

	• • • • • • • • • • • • • • • •
Service Stability	 Use wired or wireless (WiFi) Internet for online classes Access and log-on to the KERIS e-Learning Site and EBS Online Class in advance Be flexible with class hours based on individual school conditions Produce educational content in the standard-definition level (480p, 720×480) or lower Recommended to up and down-load educational contents a day earlier (preferably after 5pm)
Safe Use	 Set password for video-conferencing room and do not disclose the link to the public Do not use insecure video-conferencing apps (or webs), unable to protect personal information, and install security patch before the use Install security vaccine programs on the PC and digital devices Do not open e-mails or text messages sent by unidentified individual Do not distribute photos of teachers and students that have been screen-captured during online classes without permission



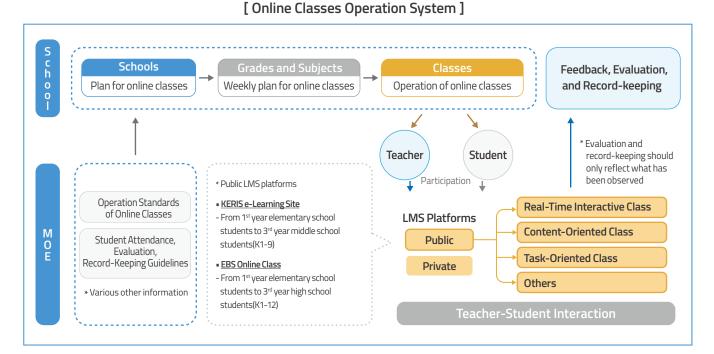






▲ Online class opening ceremony and monitoring

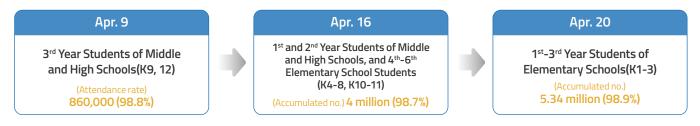
IV. Operation of Online Classes



* The above flowchart shows how online classes are generally operated by using smart digital devices. For the youngest 1st and 2nd year elementary school students who have been instructed to participate in online classes without using digital devices, learning packets and EBS TV channels are used to aid their education.

Online Class Participation (as of April 20)

On April 20, 98.9% of the 5.34 million students of elementary, middle and high schools participated in the full scale online classes.



About 470,000 online classrooms* have been created on the KERIS e-Learning Site and EBS Online Class, the public online platforms, with 3.97 million** users accessing them on a daily basis.

* Accumulated no. of online classrooms (as of April 29): KERIS e-Learning Site - 257,315 / EBS Online Class - 209,156

** Average daily user traffic (as of April 20-29) : KERIS e-Learning Site - 1,863,728 / EBS Online Class - 2,104,165

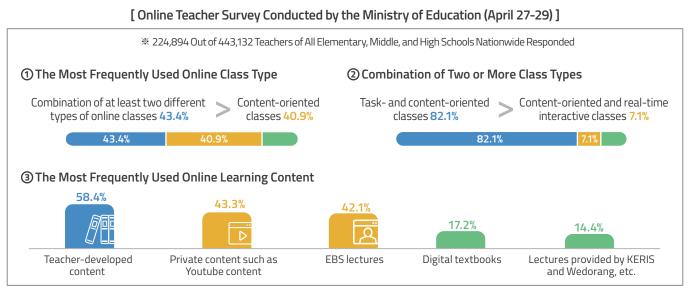
Types of Online Classes

Teachers can choose the most adequate type of online classes and online learning platforms, depending on their school settings, to offer either real-time interactive classes and/or one-way classes.

	Types		Operation
1 Real-Tim Classes	e Interactive	communication ※ Examples o	ractive online classes allow immediate exchange of feedback, including real-time ns and discussions by using video-conferencing f videoconferencing Platforms : Naver LINE WORKS, Gooroomee, Google crosoft Teams, ZOOM, Cisco Webex, etc.
	2 Content-	• Lecture type	Content-oriented classes allow students to watch video-recorded lecture and/or learning content, while the teachers monitor how much students have learned and provide feedback.
One-Way Classes	Oriented Classes	 Lecture+ activity type 	After watching the video-recorded learning content, students engage in discussions by leaving comments or asking and answering questions about what they have learned with their peers. * e.g. EBS classes, teacher-developed learning materials
sses	3 Task- Oriented Classes	standards of ea * e.g. A task is p	asks for self directed learning and monitor students' progress based on achievement ach subject resented to students → Students engage in learning activities (e.g. writing an essay, assignment or a task or a learning packet) → Teacher gives feedback
4 Others			online classes can be implemented depending on different conditions of Provincial ation and schools
• Platfor	rms	KERIS e-	line platforms such as the EBS Online Class (35.1%), as well as the Learning Site and Wedorang (31.8%) developed by KERIS are the quently used along with some private platforms.
			and, Kakao Talk, Schoolbell-e, etc.) ssroom, Microsoft Teams, etc.)
• The m	ost froquently	Content-	oriented classes (40.9%) and the combination of more than two

[Types of Online Classes]

 <u>The most frequently</u> <u>used type of online</u> <u>classes</u>
 Content-oriented classes (40.9%), and the combination of more than two types of online class types (43.3%) are the most frequently used types of online classes by teachers, and when they combine two types of classes, they usually combine task-oriented and content-oriented classes (82.1%).



In principle, student attendance should be tracked daily. However, considering the special nature of online classes, student attendance can be counted if it is confirmed within a week of each class.

• **<u>Real-time interactive</u>** The teacher tracks students' attendance in real-time.

classes

- <u>One-way classes</u> The Learning Management System (LMS) is used to track student attendance by checking log-on history, and monitoring their learning progress.
- <u>Others</u> For those students who have missed classes, their attendance can be confirmed based on the submitted assignments within a week of each class.
- * e.g. Printed learning packets and assignments are distributed, so that the assignments can be submitted after students are allowed to come to school. Additional parents' letter maybe required to confirm that students have been keeping up with their learning at home.

	Attendance Check								
Types of Real-tim		Learning Management System (LMS)					Others (Alternative Checking)		
Classes	Checking by Teacher	Starting Date	Progress	Online Access Record	Learning Time	Uploaded Assignment	SNS	Text Messaging	Document Submitted
Real-time Interactive Class	•			•			٠	•	٠
Content- Oriented Class			•	٠	•	•	٠	•	٠
Task-Oriented Class				٠			٠	•	٠
Validity Period	On the Day				On the Day o	or Within a W	eek (7 days)		

[Attendance Check in Different Types of Online Classes]

Student evaluation will be carried out in two forms : paper-based assessments and student performance evaluation. The result of both evaluations will be recorded in school transcript on the condition that the assessments are carried out fairly.

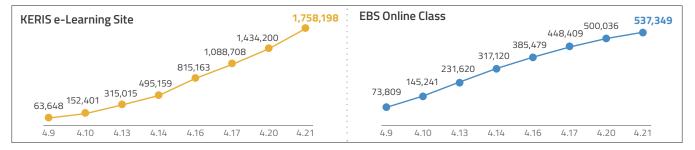
- <u>Paper-based</u> To ensure fair evaluation, paper-based assessments should be carried out only after students are allowed to physically attend school.
- * This paper-based assessments will cover both what the students have studied through online classes as well as in the actual school classrooms after school reopening.
- <u>Student performance</u> It can be carried out during online classes based on the teacher's observation of their students' class participation.
- * (e.g. Teachers can evaluate by observing real-time online debates and discussions, video presentations and recorded videos of physical activities or musical performances etc.)

Teachers' Passion and Commitment

Teachers voluntarily participate in various learning communities to share ideas and knowhow to further improve their teaching and enhance creative learning experiences of their students.

- <u>Teachers' learning</u> community It is highly encouraged to create various teachers' learning communities where they conduct in-service training on how to use online tools. They also develop and share various learning content. By using collective intelligence, teachers have strengthened their professional capacity in terms of practical use of ICT and improved the quality of teaching.
- ** According to TALIS (OECD Teaching and Learning International Survey) in 2018: The participation rate of Korean teachers in online lectures and seminars (90.6%) > OECD average (35.7%)
 - <u>Teacher-developed</u> As of April 21, about 2.3 million online learning resources have been developed by teachers and are continuously being uploaded on the two public platforms.
 - Teacher-developed materials* are most frequently used in online classes (58.4%) compared to other materials.

* Teacher survey conducted by the Ministry of Education (as of April 27-29)



[Accumulated No. of Content Developed by Teachers as of April 21]

V. Overcoming Challenges

Resolving Digital Divide

[Exemplary Case of Resolving Digital Divide Via Public-Private Partnership]

Seoul Metropolitan City and Provincial Cities	Funds to provide online learning devices (laptops) to disadvantaged students
► Statistics Korea	10,000 digital devices
► Samsung·LG	36,000 digital devices
► KB Bank	265 smartphones to Gwangju Metropolitan Office of Education
► Korea Southern Power Co., Ltd.	100 digital devices to Busan Metropolitan Office of Education
Ministry of Science and ICT. Three Major Telecommunications Companies	Zero-rating system for data use on educational websites
► LG CNS	Technical assistance related to EBS Online Class network overload

In cooperation with the Ministry of Science and ICT, Statistics Korea, local governments and 17 Metropolitan and Provincial Offices of Education along with private companies, the Ministry of Education provides digital devices and subsidizes Internet subscription fees to students from disadvantaged backgrounds to fully support all students with online classes nationwide.

- Free digital device All students who apply for digital devices can rent them without cost* (As of April 16, 280,000 students rented digital devices, which is 5.3% of all students).
- * Students from low-income families without digital devices (e.g. educational grant recipients) as well as those from families with multiple children, single-parent families, families in which primary caregivers are grandparents and those from multicultural families are given priorities in borrowing digital devices from their schools.
- Zero-rating policy In cooperation with the Ministry of Education, the Ministry of Science and ICT, and three major telecommunications companies, educational websites such as EBS can be temporarily accessed for free without data usage.

* Educational broadcasting websites, KERIS e-Learning Site and the Digital Textbook website can also be accessed for free.

Support for Disadvantaged Students

Students who encounter difficulties with online learning can receive customized support depending on their school settings and student circumstance.

• <u>1st & 2nd year of</u> elementary schools

In consideration of students' developmental stages, lower graders are provided with learning packets* and are instructed to watch EBS TV channels for their education instead of accessing online with digital devices.

* e.g. The first year students of elementary school are instructed to watch educational TV channels to learn Korean language and numbers, as well as to engage in art activities.

• <u>Students from</u> <u>multicultural families</u> A system to support interpretation and translation for multicultural families is established in cooperation with the Metropolitan and Provincial Offices of Education and regional multicultural education centers. Information materials in various languages are circulated to assist multicultural families.

* Educational materials including Korean language education content are shared via multicultural education web portals.

• <u>Students with</u> Students with disabilities are provided with various targeted support to meet their specific needs. For example, a website has been set up to assist them, and they are provided with learning packets and materials together with home visits.

[Providing Customized Support for Different Types of Disabilities]

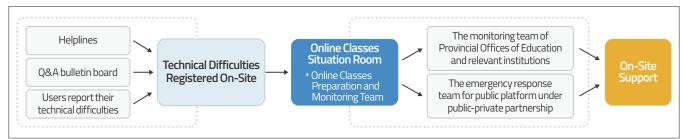
Visual Impairment	EBS online content is provided in braille, with learning materials customized and developed in larger fonts and in braille.
Hearing Impairment	Newly developed EBS lectures include subtitles, and the educational content on the Eduable website includes sign language and subtitles, with regional support centers providing sign language and stenography services.
Physical Impairment	Learning devices and assistive technology devices are provided.
Developmental Impairment	Various forms of distance learning are provided, including a combination of home visits and online learning, as well as content-oriented and task-oriented online classes.

Emergency childcare services are offered to dual-earner families as well as families in which primary caregivers are grandparents. In cooperation with the Ministry of Science and ICT, the childcare services are complemented with online education.

- * The Ministry of Employment and Labor has bolstered support for households with the start of the online classes, including family-care leaves and flextime arrangements, while the Ministry of Health and Welfare and the Ministry of Gender Equality and Family expanded the at-home childcare services, under the government's efforts to help parents assist their children's participation in online classes.
 - <u>Emergency childcare</u> At-school childcare services are provided to support parents. Additionally, in cooperation with relevant ministries, emergency childcare and at-home childcare services* are provided at community-based childcare institutions.**
 - * (Ministry of Gender Equality and Family) Child caregiver service is provided to dual-earner families whose children are younger than 12 years old by dispatching caregivers to the households in need.
 - ** (Ministry of Health and Welfare) Community-based Childcare Centers, Regional Children Support Centers; (Ministry of Gender Equality and Family) Youth After-school Academy
 - Online learning After-school program instructors and ICT instructors are dispatched on- site to help students with learning online, including accessing websites and completing and uploading assignments, etc.

Technical Assistance with Communication

[Online Classes Support System]

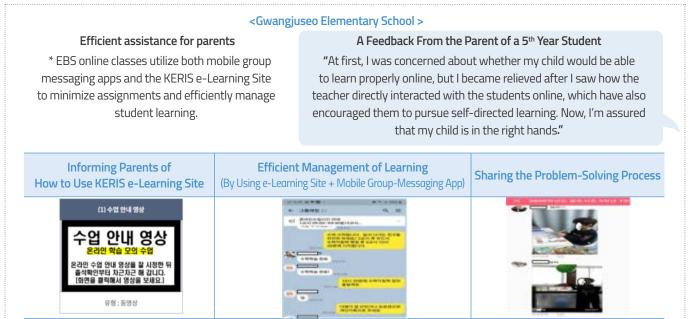


The Ministry of Education and 17 Metropolitan and Provincial Offices of Education operate helplines* to give immediate feedback to teachers, parents and students to address any technical difficulties they experience with online classes.

- * The 17 Metropolitan and Provincial Offices of Education run helplines, and at the start of the online classes, EBS and KERIS operated on-site troubleshooting teams to respond to technical problems.
- <u>Reinforcing communi-</u> cation between parents and teachers

As many parents were unfamiliar with online education, this may become a source of burden for them. To address this issue, parents can discuss their concerns with the teacher by phone, so that the teacher can assist immediately.

[Exemplary Case of Assisting Parents]



<u>Facilitating</u>
 <u>teacher to teacher</u>
 communication

Teachers are encouraged to share information and exchange ideas on online classes with the Community of 10,000 Representative Teachers, which consists of teachers selected by each Metropolitan and Provincial Office of Education and school around the country.

VI. Conclusion : Designing the Future of Education

The nationwide introduction of the online classes to respond to COVID-19 was a huge challenge and a path that we have never trodden before.

- However, it is meaningful that our students' health and safety and their right to education have been guaranteed even in the face of a pandemic with stable online education services.
- Implementation of online classes was possible thanks to the public consensus that educating future generations must continue no matter what the circumstances are, a shared notion underpinned by the deep understanding and collaborative efforts of teachers, parents, students, and the general public.
- The Ministry of Education will continue to improve our education system to brace for any future outbreak of a similar crisis by devising new education methods and establishing disease control and prevention systems in our schools.

The full-scale implementation of the online classes is an important step forward to the future of education as it presents an unprecedented form of school education and opens up opportunities for unprecedented forms of school education.

- Based on our experience of implementing online education, we will work to establish Korean-style Online Education Model* incorporating artificial intelligence and cloud computing system, with the cooperation of relevant ministries including the Ministry of Science and ICT along with the business sector and the IT industry.
- * Customized, blended learning system which combines both online and offline learning with the use of the latest EduTech to innovate school education and curricula.
- During this process, we anticipate that a new driving force will be generated by working closely with EduTech experts in the private sector, bringing about education innovation that will transcend time and space.

COVID-19 is a universal challenge which requires joint response, and the global community should be committed to strong solidarity and close cooperation to overcome this crisis and take a leap forward to a brighter future.

• Going forward, the Korean government intends to share policy information and experiences not only on its introduction of full-scale online classes, but also on its school reopening efforts with the international community.

Appendix |

Responding to COVID-19 : ONLINE CLASSES IN KOREA A Challenge Toward the Future of Education

Appendix 01 | Overview on the Public Online Learning Platforms

- KERIS e-Learning Site
- EBS Online Class

Appendix 02 | Online Services for the Online Classes

- Wedorang
- School-On
- Teacher-On
- The Community of 10,000 Representative Teachers
- Appendix 03 | Overview of the Guidelines on COVID-19 Control and Prevention for Kindergarten, Elementary, Middle, High and Special Schools

■ Appendix 04 | References for Korea's Online Classes



KERIS e-Learning Site

Grades(K1-9)	1^{st} year students of elementary school ~ 3^{rd} year students of middle school
Aim	To offer subject-area content in Korean language, social studies, mathematics, science, and English, and enables attendance and assignment tracking on the Learning Management System(LMS)
Content	To provide about 5,500 content including video clips and resources on student motivation for elementary students(16,298 learning materials) and middle school students(7,531 learning materials) - Major content by EBS for elementary students are uploaded on the KERIS e-Learning Site(e.g. Korean language, mathematics, social studies, science, live lectures, etc.) *1st upload : 344 contents(April 20 - April 30), 2nd upload : 350 contents(May 6~)
Current State	257,315 online classrooms(152,835 for elementary, 99,744 for middle schools, 10,736 for others)
	Operated by KERIS (Korea Education & Research Information Service) X An organization under the Ministry of Education in ICT education and academic research, manages LMS, e-Learning site, and school/class online communities such as Wedorang, Teacher-On, and School-On

Grades(K1-12)	1^{st} year students of elementary school ~ 3^{rd} year students of high school
Aim	To offer subject-area content in Korean language, social studies, mathematics, science, and English, and enables attendance and assignment tracking on the Learning Management System(LMS)
Content	To provide a total of 43,000 EBS basic content [*] and limited time access to "pay-to-access content of EBS Premium Lectures ^{**} " on EBS Online Class free of charge(March 25~) * 4,129 elementary, 5,532 middle, 18,859 high school content ** About 390 lectures(~15,000 content) for 1st to 3rd year students of middle school
Current State	209,156 online classrooms(43,031 for elementary, 67,029 for middle, 99,096 for high schools / as of April 29)
	Operated by EBS (Educational Broadcasting System) ※ A TV/Internet broadcasting company focused on educational content, operates LMS and EBS Online Class

Wedorang Grades(K1-12) 1st year students of elementary school ~ 3rd year students of high school Aim An online school/class community for teachers to create an online classroom and provide educational materials, hold discussions/debates, and carry out project-based activities (can link it to digital textbooks) Content State 61,155 online classrooms (21,812 for elementary, 29,006 for middle, and 9,688 for high schools, 649 for others / as of April 29) Current State Operated by KERIS (Korea Education & Research Information Service) ** An organization under the Ministry of Education in ICT education and academic research, manages LMS, e-Learning site, and school/class online communities such as Wedorang, Teacher-On, and School-On

School-On

To offer an online platform and communication channel for teachers to share educational resources and expertise with regard to online classes in order to ensure continuity in learning during the COVID-19 pandemic		
A teacher-friendly website for teachers to easily archive educational resources about online lectures and teaching and learning materials such as student assignments, video clips, private EduTech company resources * Comprehensive online learning support system : http://onschool.edunet.net(March 20)		
 Daily student assignments by grade-levels and subject-areas, voluntarily developed by teachers across the country called "What are we learning today?" Materials created by relevant Ministries, including culture, arts, safety education, humanities, etc. Information on Metropolitan and Provincial Offices of Education's online learning and classroom operation services 		
Category	Description	
What Are We Learning Today?	Student daily assignments developed by teachers across the country	
Ideas on Academic Activities	Share ideas and information on the overall student guidance provision, textbook related assignments, appropriate usage of digital reference, etc.	
Content Archive	Information on subject-area content, educational websites, and indoor play and physical activities	
Operation of Online Classes	- Online Class Channel, FAQs - Link to remote support solutions (Teacher-On)	
Metropolitan and Provincial Offices of Education's Resources	Manuals and Guidelines on online learning developed by each Metropolitan and Provincial Office of Education	
	 expertise with regard to onl pandemic A teacher-friendly website f teaching and learning mate resources * Comprehensive on Daily student assignment the country called "What of the country called the country called the country called the country called "What of the country called the c	

Teacher-On

Aim	To offer teachers instructional support on the use of various online content including digital textbooks and the e-Learning Site created by public and private companies for the smooth operation of distance learning in all schools during the COVID-19 pandemic		
Period	March 16, 2020(Monday) ~ April 30(Thursday)		
Teachers in charge	About 150 teachers proficient in online education selected by the Metropolitan and Provincial Offices of Education		
Role	To provide assistance/solutions to teachers facing difficulties operating online classes (Best practices) Lesson plans, pedagogical methods, activities as well as Questions and Answers are shared through the online class support community (Remote support solutions) Real-time online class couns eling, help setting up PC, digital devices, online classrooms through the remote support solutions* * Remote Call+Mobile Solution : It is remote support solutions service that connects to the PC and/or mobile devices of the user t resolve any technical difficulties Access the website of remote support solutions , Request for remote support solutions , 1:1 troubleshoot-ing (via chat room) , 2:1 (PC, digital device) (PC, digital device) (PC, digital device) (PC, digital device)		

The Community of 10,000 Representative Teachers

Aim	A community of representative teachers on online education, one teacher* selected from each school to establish the online education system and support online classes during the COVID-19 pandemic(10,996 representative teachers as of May 4) * Selected teachers are proficient in online education and curriculum implementation		
Role	To respond to difficulties peer teachers face through a communication channel between schools and supporting agencies (i.e. Ministry of Education, Provincial Offices of Education, KERIS, EBS, etc), interpret policies and system, as well as share exemplary cases on online education		
Previous		Digital Document/Offices of Education Website	Community of 10,000 Representative Teachers
vs. Current Method	Communication Method	One-way communication, provides information	Interactive communication, provides more than information
	Time for Feedback	Long time needed to start communication to identify errors and questions	Shorter time needed to start communication to identify errors and questions
	Effects	Increased work load on civil servant(s) at Metropolitan and Provincial Offices of Education	Multiple persons concurrently track the progress/ situation and responds accordingly

Appendix 03

| Overview of the Guidelines on COVID-19 Control and Prevention for Kindergarten, Elementary, Middle, High and Special Schools

Category	Guidelines	
Term	· Distancing in daily life	
Self health	 Use the self health check system on NEIS * Support the operation of the "self health check system," a system that uses both online survey programs and school-level applications 	
check/test method	 Body temperature (to identify signs of a fever) Shortness of breath, loss of appetite, decreased sense of smell or disturbances in taste, diarrhea, etc. Overseas travel record of oneself and/or person(s) living in the same household 	
Desk spacing in classroom(s)	• Reorganize and space out desks to secure the maximum distancing between students, yet use the front and back space as much as possible	
Face masks	• Wear face masks at all times	
Disinfectant(s) for decontamination	• Face masks, thermometers, hand sanitizers, sterilizers, disinfectant (alcohol) wipes, etc.	
Management of person(s) living with those under home quarantine	• A 14-day suspension in case a student/teacher lives in the same house with those under home quarantine	
Management of suspected case(s)	• Suspected person(s) with a fever or shortness of breath must visit a health clinic or screening center for screening/testing	
Confirmed case(s)	 Have the confirmed student/teacher under quarantine, and transition to online classes Additional restriction(s) applied according to the epidemiological investigation result 	
andards used to send student(s)· (In quarantine) When the health authority notifies releases from home quarantineck to school· (Suspected case) When symptoms are alleviated		

Appendix 04 | References for Korea's Online Classes

Category	References	
Ministry of Education	 Main Website English Website Ministry of Education's Youtube Website 	https://www.moe.go.kr http://english.moe.go.kr https://urmot.com/yt/ycv.php?id=UCexUyFaq9YH7XJfCQzVR_jg&page=62
EBS	• Main Website • Online Class	https://www.ebs.co.kr/main https://oc.ebssw.kr
KERIS	Main Website Wedorang e-Learning Site	https://keris.or.kr/main/main.do https://rang.edunet.net/index.jsp https://cls1.edunet.net
School-On	• http://onschool.edunet.net/onSchool/listBoardForm.do?board_seq=6	
Affiliated Ministries/ Agencies	 Ministry of Science and ICT Ministry of Health and Welfare Ministry of Gender Equality and Family Seoul Multicultural Education Support Center 	http://www.msit.go.kr http://www.mohw.go.kr http://www.mogef.go.kr http://www.multiculture.sen.go.kr

