

Education in Korea



2020 Education in Korea



2020 Education in Korea

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Korean Education to Reach the World

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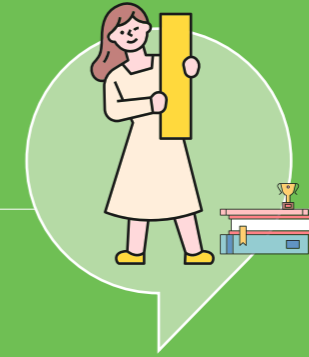
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Educational Statistics

2020 Education in Korea

An Overview of Korean Education



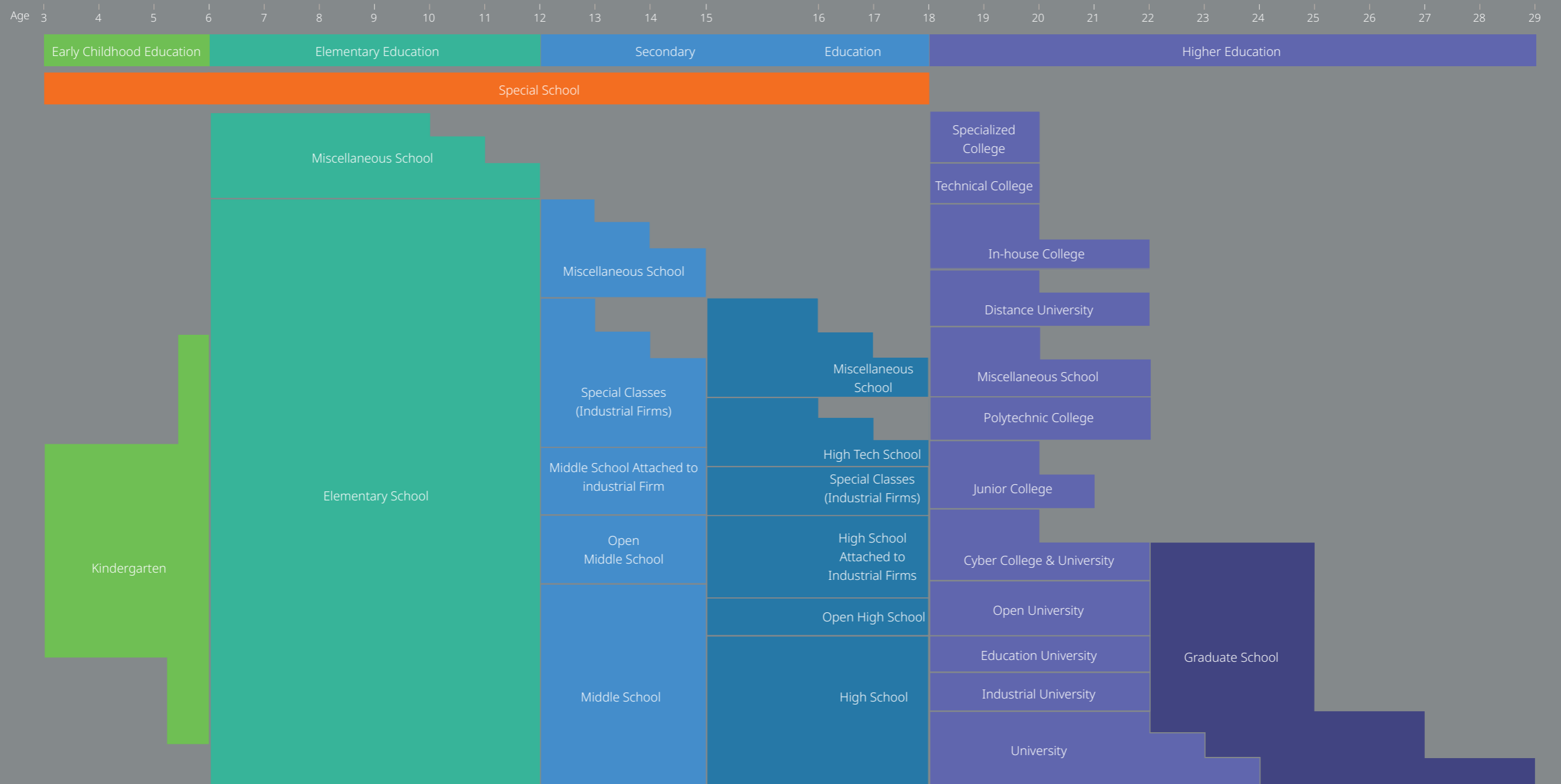
1. Korean Education System
2. Education in Korea Today



1

Korean Education System

📄 Korean Education System



2 Education in Korea Today

Korean education uses a 6-3-3-4 single ladder system - six years in elementary school, three years each in middle school and high school, and four years in university. All citizens have equal access to education based on their ability regardless of their social status or position. The nine years of elementary and middle school are compulsory, but from high school and beyond, students choose an education path in line with their career choice.

Early Childhood Education - Eliminating the Educational Gap

Early childhood education is provided in two different administrative tracks - kindergartens that educate three-year-olds and up and day care centers that provide care for infants and toddlers. Enrollment rates at educational and child care institutions for children at five years of age and under are 92.3% for three-year-olds, 93.8% for four-year-olds and 97.2% for five-year-olds. All three figures exceed the OECD average by a significant margin, which shows the importance Koreans place on childhood education and care before compulsory education. The kindergarten enrollment rate in 2000 was only 26.2%, but has steadily climbed to reach a record 48.9% in 2019.

To guarantee equal educational opportunities from early life, the government is expanding the state's responsibility for early childhood education. In particular, the government-funded *Nuri* Curriculum helps relieve burden on parents, offering more opportunities for early childhood education. The curriculum was launched in 2012 for five-year-olds and then expanded to three- and four-year-olds in 2013. Government policies to increase public accountability for kindergartens include statutory improvement in learning opportunities for children, expansion of public kindergarten services, encouragement of parental involvement, and a new accounting system for private kindergarten operations.

Elementary and Secondary Education - Guaranteeing Equal Educational Opportunities

Korea's compulsory elementary education began in 1950 and advanced in phases over the next 30 years. Starting in 1985, compulsory middle school education was introduced and expanded regionally, starting with small- and medium-sized cities in rural areas, then larger cities, and finally Seoul, with nationwide implementation in 2004. Most schools are public, and the same level of education based on the national curriculum is provided free of charge.

Students graduating from middle school or those who passed a qualification exam providing equivalent credits are eligible to attend three-year high schools. High schools are classified as general, vocational, schools for gifted students, special purpose high schools (for science, arts, physical education, etc.), and autonomous high schools that have more autonomy over school administration and curricula. Students are free to select the high school that is consistent with their career goals. While high school education is not currently compulsory, it is nearly universal with an enrollment rate of 99.7%. Accordingly, the government instituted free high school education in 2019 to reduce the financial burden on parents.

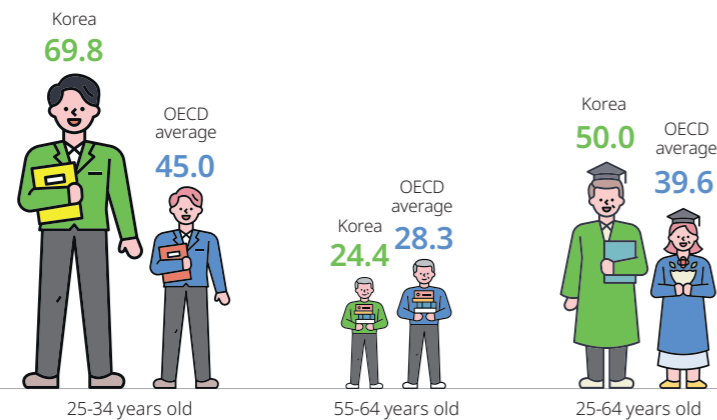
Tertiary Education – Equipping Future Generations with Inter-disciplinary Skills

Higher education is provided to high school graduates or individuals with equivalent educational backgrounds authorized by relevant laws and regulations in Korea. Universities, in general, select students based on the applicants' College Scholastic Ability Test results, school transcript, and other factors that indicate their readiness for tertiary education. Post-secondary

2 Education in Korea Today

📄 Tertiary Educational Attainment Rates

(Unit: %)



Source: Education at a Glance 2020: OECD Indicators

schooling is available at general universities, junior colleges, teacher's colleges that train elementary school teachers, and online learning-based cyber colleges.

Enrollment rates at higher education institutions remained below 10% until the 1980s, but there has been a sharp rise in enrollment with a growing passion for education, eventually reaching 67.8% in 2019. The majority of higher education institutions (372 out of 430 in 2019) are private. To give everyone higher education opportunities, the government has implemented a variety of national scholarship programs since 2012, and constructed more dormitories to lessen students' burden of housing. In addition, the government promotes universities as centers for fostering future leaders by customizing curricula to meet the skills requirements of both students and businesses.

Vocational Education - Promoting the "Job First, University Later"

Vocational education in Korea technically begins at the level of upper-secondary education. The majority of vocational education takes place in specialized vocational high schools, whereas Meister high schools offer industrial demand-driven courses, along with a number of general high schools that provide vocational education programs as part of their curriculum. The latest data (as of April 2020) reveals that there are 576 vocational high schools in Korea, accounting for 24.3% of all high schools, with 18.5% of high school students enrolled.

The government's employment support system connects the central government, local offices of education and schools in helping students find more job opportunities after graduation. The newly established Central Employment Support Center is responsible for identifying companies with good future prospects and shares the information with the employment support centers under the metropolitan and provincial offices of education. The recent "Job First, University Later" initiative helps students get a job at an earlier age and also allows them to pursue higher education whenever they want after getting a job in order to advance their competency. Other support includes expansion of the college curricula for working students and tuition assistance to help them reach their career goals.

More Support for Special Education

In Korea, special education for students with disabilities is compulsory from kindergarten through high school. Moreover, education is provided free of charge to children with disabilities under the age of three as well as those who want to continue to receive an advanced vocational and career education after graduating from high school. These advanced vocational

2 Education in Korea Today

and career education programs are usually offered in special education institutions for one or more years. Special education includes a special curriculum according to the disability type and characteristics, as well as customized services (counseling, treatment, and assistive technology device). In 2007, the *Act on Special Education for Persons with Disabilities, etc.*, was revised to expand public education opportunities for students in need. The number of students with special needs enrolled in these schools is growing annually (95,420 as of April 2020), and 27.9% attend special education schools and special education support centers, and 72.1% are in special classes or in regular classes with special education completely integrated in general schools.

Greater Access to Lifelong Education

Lifelong education in Korea incorporates systematic educational activities of six areas: complementary schooling; adult literacy education; vocational education; liberal arts/culture/arts education; and civic participation education. Starting with the introduction of the Bachelor's Degree Examination for Self-Education in 1990, the government's support for lifelong education is demonstrated in the Academic Credit Bank System and Part-time Enrollment System in 1995, Accounts for Lifelong Learning (ALL) in 2006, and a Lifelong-Learning University Project in 2008. In addition, semi-formal lifelong education institutions and online education systems are offered beyond the barriers of time and space for lifelong learning.

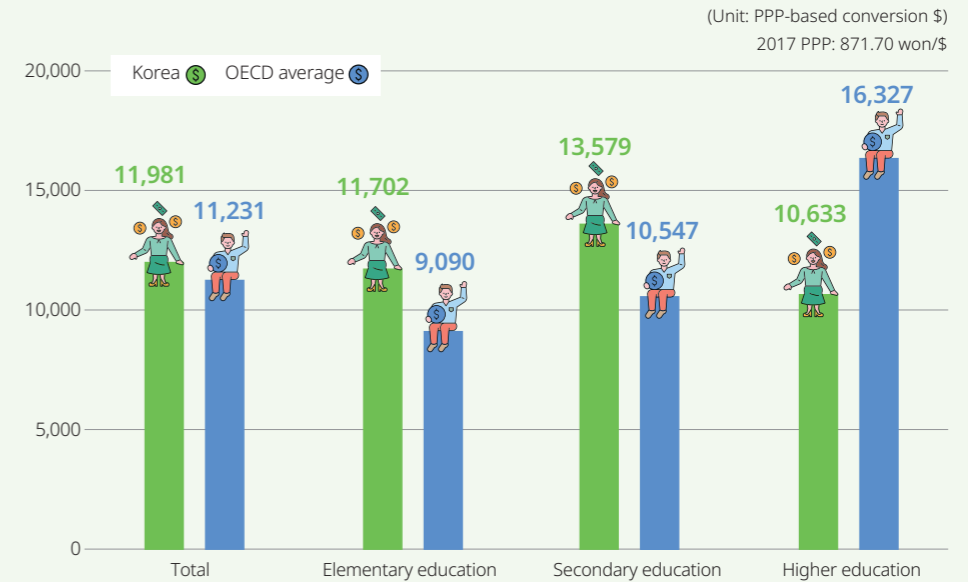


Education - One of the Substantial Governmental Expenditures

The Korean government has been gradually increasing its spending on education over the last 40 years, and in 2020, the government spent 75.7 trillion won or four times the 19.2 trillion won spent in 2000. During these 20 years, Korea annually earmarked 15-20% of its total budget for education, the highest among OECD countries relative to their GDP.

National and educational taxes fund the education budget, and local governments receive revenue from subsidies disbursed by the central government and local taxes. In 2020, funds from the central government accounted for 72.6% of local education budgets, and income from local taxes accounted for 17.3%, which improved the local education finances and ensured students receive a quality education regardless of where they live. The government's education budget funds the offices of education that oversee elementary and secondary school education, operate national universities and educational administrative/research organizations, and provide partial subsidies for private universities which mostly depend on admission and tuition fees to meet their operational costs.

Public Education Expenditure per Student



Source: Education at a Glance 2020: OECD Indicators

2020 Education in Korea



Main Issues of 2020



1. COVID-19 and Korean Education
2. Transition to Future Education in Post-COVID-19 Era

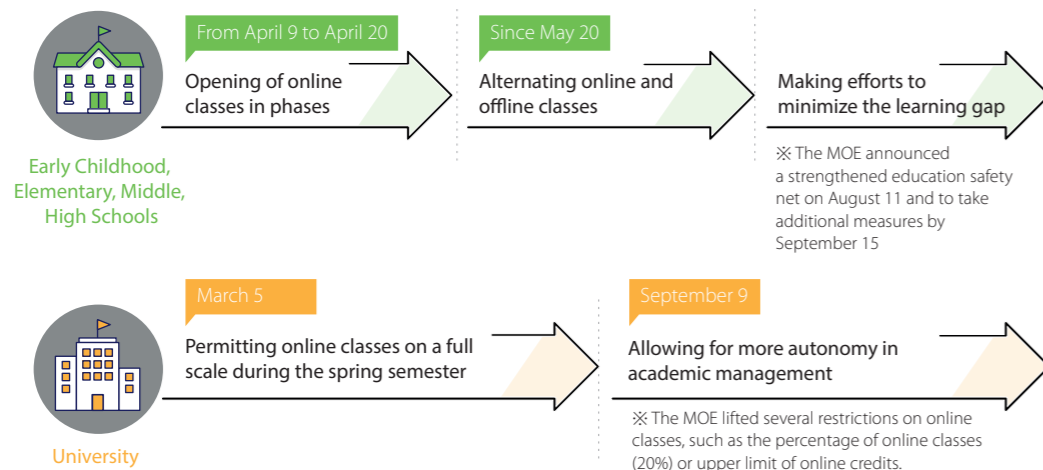
1 COVID-19 and Korean Education

In 2020, the COVID-19 pandemic forced everyone to make changes to their work and social lives, and education was no exception.

Korea's passion for education and determination to ensure students continue to learn and grow were reflected on the steps taken by the government. Its disease control and prevention measures effectively protected students from infection and offered seamless support for emergency childcare services to dual-income and other vulnerable families.

Furthermore, in April, the Ministry of Education launched online classes for elementary, middle and high schools and special education schools that led to the uploading of 2.3 million learning materials in the first two weeks of operation. These materials were distributed through 470,000 online classrooms created on public learning platforms like the e-Learning Site and EBS Online Class. This online education system ensured the health and safety of both students and teachers while educating all students in compliance with the curricula.

Implementation Progress



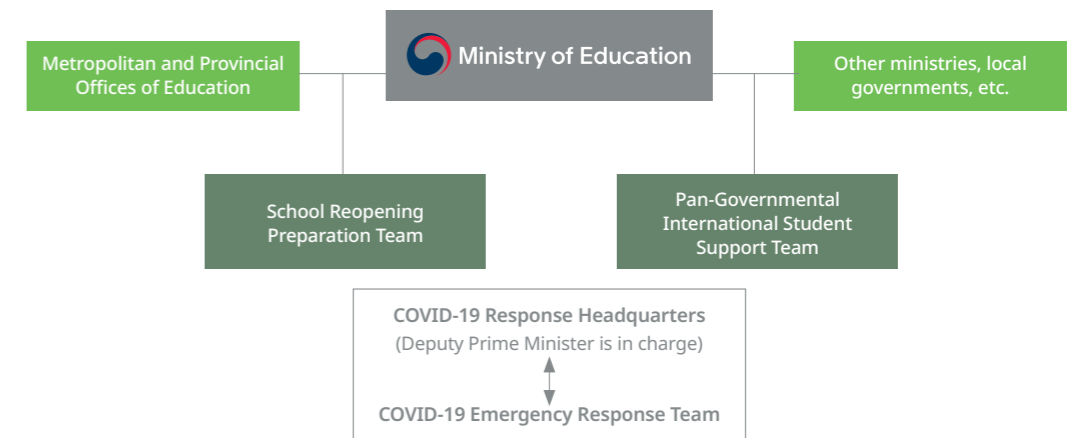
- 1. COVID-19 and Korean Education
- 2. Transition to Future Education in Post-COVID-19 Era

In addition, flexible instruction like blended learning of online and offline classes provided Korean students with the means to safely achieve their academic goals in the face of changing caseloads of COVID-19.

Building a Systematic Disease Control System for Schools

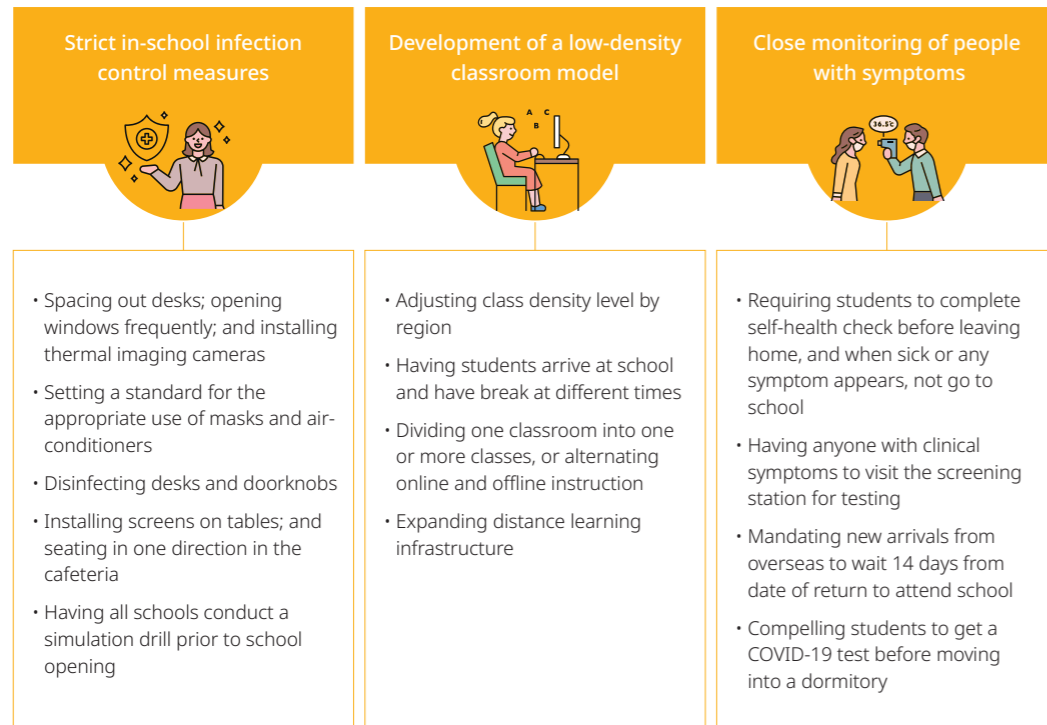
The Ministry of Education listened to infection and epidemiology experts and quickly formulated the *Guidelines for COVID-19 Infection Prevention in Schools* and formed the School Reopening Support Team to provide a safe school environment for everyone. The Team worked with the COVID-19 Emergency Response Team in each local education office. When a COVID-19 case was confirmed among students, faculty or parents, they shared the information and took appropriate action to continue delivering quality at-school education to as many students as possible. Thanks to these efforts, Korean students have been able to continue at-school learning while 91.3% of students globally haven't returned to school.

Implementation System



1 COVID-19 and Korean Education

📄 New COVID-19 Infection Control Model for Schools



≡ Strict In-school Measures for Limiting Community Spread

Utilizing strict school measures for limiting community spread and emergency management system, Korea quickly responded to and contained this contagious disease. On school grounds, everyone wore a mask and underwent a health condition check using a thermal imaging camera or thermometer before entering the classroom. The Ministry of Education offered an adequate supply of thermal imaging cameras, thermometers, hand sanitizers, and masks. Schools complied with the Ministry of Education's recommendations to space out desks and install screens in cafeterias for social distancing and regularly disinfected desks, doorknobs, and other high

contact areas. In addition, 40,000 health support staff were on duty in schools nationwide to help teachers concentrate on teaching.

≡ Developing a Low-density Classroom Model

Following the guidelines from the Central Disaster and Safety Countermeasures Headquarters, the Ministry of Education used a School Density System ranging from level one to five. Students arrived at school and had breaks at different times, and classrooms were divided into one or more classes or alternated online and offline classes to maintain social distancing in the classroom.

≡ Close Monitoring of People with Symptoms

Before leaving home, all students and faculty members in Korea took an easy-to-administer self-health check and uploaded the results on a mobile app developed and distributed by the Ministry of Education. Users could readily identify COVID-19 symptoms, and report recent overseas travel and whether anyone living in the household is under self-isolation. Anyone who is suspected of COVID-19 symptoms or comes in contact with a confirmed COVID-19 case must stay home after visiting and being tested in a nearby screening station. They could go to school only after receiving a "safe" result. If a student or a faculty member was diagnosed with COVID-19, a group test was performed on all students in the relevant classroom/grade/school depending on the contact tracking results.

While being on self-isolation due to a positive COVID-19 test result or classified as a contact person, any student experiencing psychological stress could access counseling services provided by the Mental Health Support Team composed of psychiatrists.

1 COVID-19 and Korean Education

Stable Operation of Online Classes

To prevent the spread of COVID-19, the Korean government postponed the beginning of spring semester from March 2 to April 9 and started online classes for middle school third graders and high school third graders. From April 16, elementary school fourth to sixth graders, middle school first and second graders and high school first and second graders joined online learning. Finally, on April 20, all students including elementary school first to third graders participated in online classes.

Out of 5.34 million students, 98.9% attended online classes. 470,000 online classrooms were set up on public learning platforms such as e-Learning Site and EBS Online Class, and 3.97 million students accessed them daily.

Expanding Public Infrastructure

Prior to the opening of online classes, the Ministry of Education began expanding public infrastructure to ensure all students could access online content successfully. The public Learning Management System (LMS) had additional Internet servers for three million users to simultaneously access the e-Learning Site and EBS Online Class. To offset any digital divide, digital devices were rented to 243,000 students free of charge and stocked an extra 253,000 devices for emergencies.

For lower-grade elementary school students who lacked digital skills, EBS (the national education broadcaster) increased channels and provided tailored learning according to grades. Teachers were provided with 200,000 new PCs to replace outdated models and new table PCs were distributed to 400 schools pioneering the use of online textbooks.

Starting from April, teachers could use Wi-Fi in the classroom, and all elementary, middle and high schools across the country will be equipped with giga-level wireless Internet by the end of 2021. To reduce the financial burden on families for wireless communication expenses, the government

exempted mobile data charges until the end of 2020 and eased regulations on copyrights to facilitate the development of teaching materials. In consultation with the Ministry of Culture, Sports and Tourism and copyright-advocacy organizations, it will ease copyrights regulations until the COVID-19 pandemic ends.

Various Types of Online Classes

Teachers were able to choose their preferred learning platforms according to their school circumstances. Online classes could be real-time interactive classes or one-way classes where students could engage in content-oriented and/or task-oriented sessions. Over 43% of schools used two or more types of classes.

Types of Online Classes

Types		Description				
1. Real-Time Interactive Classes		A video-conferencing platform enables real-time discussions and exchange of feedback between teachers and students. ※ Examples of video-conferencing platforms: Naver LINE WORKS, Gooroomee, Google Meet, Microsoft Teams, Zoom, Cisco Webex, etc.				
One-Way Classes	2. Content-Oriented Classes	<table border="1"> <tr> <td>Lecture type</td> <td>Teachers provide pre-recorded video lectures and/or learning content to students. They monitor whether students are watching and reply to students' questions.</td> </tr> <tr> <td>Lecture + Activities type</td> <td>After watching the lecture, students engage in online discussions by exchanging opinions with their peers about what they have learned.</td> </tr> </table>	Lecture type	Teachers provide pre-recorded video lectures and/or learning content to students. They monitor whether students are watching and reply to students' questions.	Lecture + Activities type	After watching the lecture, students engage in online discussions by exchanging opinions with their peers about what they have learned.
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	Lecture + Activities type	After watching the lecture, students engage in online discussions by exchanging opinions with their peers about what they have learned.				
3. Task-Oriented Classes	Teachers assign tasks for self-directed learning and monitor students' progress based on achievement standards for each subject.					
4. Others		Schools can adopt other types of online classes depending on the circumstances of the district offices of education and schools.				

1 COVID-19 and Korean Education

≡ Customized Support for Disadvantaged Students

The Ministry of Education provided customized support for disabled and multicultural students who encountered difficulties with online learning. Multicultural students received Korean language learning materials and parent notices were translated into different languages by working with metropolitan and provincial offices of education and local multicultural centers. Students with disabilities could access the Online Platform for Students with Disabilities and its customized content for different types of disabilities. As the COVID-19 pandemic continued to affect daily life, the government's learning website for children with disabilities (<http://nise.go.kr>) operated in consultation with the metropolitan and provincial offices of education, and for those who were unable to participate in online learning due to disabilities, one-on-one or one-on-two face-to-face education (at home or school) was offered.

≡ Enthusiasm and Commitment of Teachers

During the pandemic, teachers volunteered to participate in teacher communities and shared ideas on online teaching skills. They communicated with colleagues online as well as offline in a shining example of the spirit of collective intelligence. Less tech-savvy teachers made earnest efforts to strengthen their digital skills to provide quality online classes.

From April 9 until April 21, around 2.3 million online learning materials were developed by teachers and uploaded on the public learning platforms. Teacher-developed materials have been used and downloaded the most (58.4%), followed by those from the private sector (43.3%) and EBS lectures (42.1%). Under the common goal of avoiding a gap in student learning, teachers continue to work together to manage a quality education even in this global crisis.

≡ Supporting Professional Development

To strengthen teachers' online class capacity, the Ministry of Education actively utilized 495 pilot schools for online education to select and share best practices in online teaching methods. The Ministry of Education has developed and is currently using online teacher communities such as "The Community of 10,000 Teachers," "School-On," and "Knowledge Spring (*Jisik Saemteo*)," to support teachers' online classes. Aside from encouraging voluntary capacity-building opportunities through online communities, the Ministry of Education quickly recognized the benefits of offline teacher mentoring and nurtured 1,827 pioneering teachers and 300 instructors. These in-person or outreach consultations allowed teachers to learn the most effective production techniques for online materials. Because of their proven benefit, the Ministry of Education has elevated the in-school teacher learning communities to a formal teacher training body to make funding and support more efficient.

Online Teacher Communities

The Community of 10,000 Teachers

This online community is composed of teachers representing the 17 metropolitan cities and provinces, the Ministry of Education, the Korea Education & Research Information Service (KERIS) and relevant institutions. It helps schools run online classes more successfully by identifying and providing solutions to difficulties teachers may encounter online.

School-On

This comprehensive online learning support platform shares information on the production of online classroom materials and tips on keeping children focused when learning at home. Members voluntarily upload new online content on the website every day.

Teacher-On

A group of teacher volunteers answer questions posted online by other teachers and assist in creating online classrooms and designing and operating online curricula.

Knowledge Spring (*Jisik Saemteo*)

This interactive online knowledge sharing website enables teachers to directly communicate online teaching skills to peers. Flexibility is given to teachers with respect to making training materials and selecting topics, content and period of training.

1 COVID-19 and Korean Education

Seamless School Operation during COVID-19

To minimize learning loss during the extended COVID-19 crisis, the Ministry of Education reopened schools on May 20, 2020, and began providing a combination of both online and in-person instruction. The Ministry of Education announced a new *School Operation Plan* during COVID-19 and *School Reopening Plan* in compliance with the government's social distancing guidelines.

≡ School Operation Guidelines

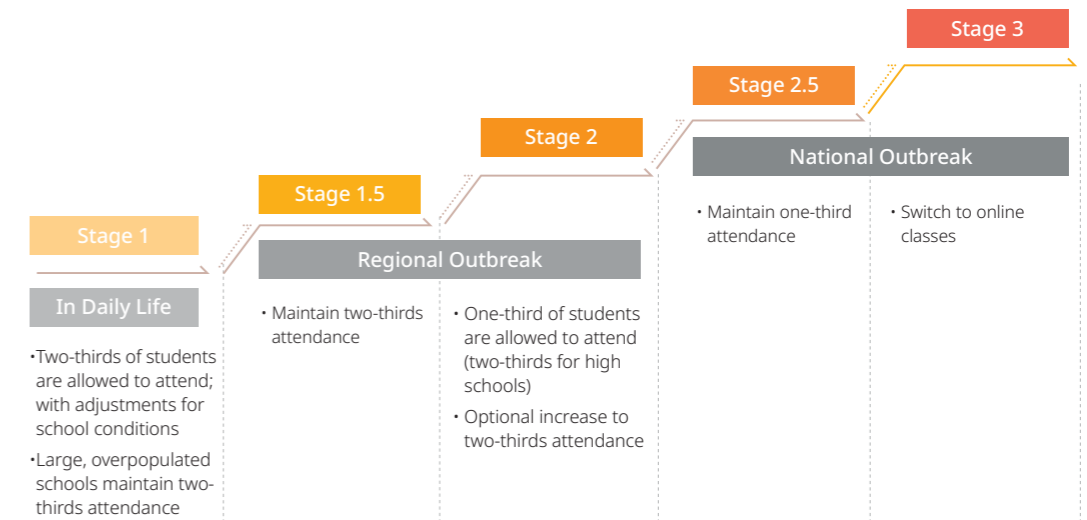
The Ministry of Education developed the *School Operation Guidelines* during COVID-19 to help all schools take timely actions to respond to the learning problems caused by the crisis. When schools are forced to close more than 15 days due to COVID-19, they can adjust the days of summer and winter breaks and even reduce school days by 10% (18 days for kindergartens, and 19 days for elementary, middle, high schools) to compensate. Also, flexibility in documentation and assessment requirements for schools and teachers has been implemented to lessen the burden of managing their work schedules.

≡ Social Distancing and Density Criteria at Schools

To ensure that students keep learning in a safe environment during the pandemic, the Ministry of Education developed the *School Reopening Plan* in coordination with Social Distancing Stages mandated by the central government. Detailed reopening measures were left at the discretion of metropolitan and provincial offices of education and schools, given their specific needs and different opinions from their students and parents.

- 1. COVID-19 and Korean Education
- 2. Transition to Future Education in Post-COVID-19 Era

📄 School Reopening Plan according to Social Distancing Stages (effective from November 1, 2020)



≡ College Admissions Management during the Pandemic

To prevent confusion in test-takers and disruption in university operations due to COVID-19, the Ministry of Education postponed the College Scholastic Aptitude Test (CSAT) from November 19 to December 3. To ensure that all students could take the test in a safe environment, separate plans to prevent community spread of COVID-19 were established for test-takers classified as "Ordinary", "Under Self-isolation", and "Confirmed" patients. The Ministry of Education increased the number of test rooms and supervisory staff. For ordinary test-takers, 4,318 more rooms were provided than the previous year, and for students with symptoms and those under self-isolation, 7,855 rooms and 759 rooms were provided, respectively. The testing supervisory staff was increased by 30,410 teachers compared to last year to maintain the high standards of the testing process. For students in isolation, separate test venues were set up in eight regions across the country.

1 COVID-19 and Korean Education

One week before the test date, the Ministry of Education ordered all schools to switch to online learning to prevent test-takers from being exposed to the virus and during this time, buildings were disinfected and desk screens were installed.

To provide equal opportunities in applying for college admissions, the Ministry of Education changed the university admission screening period, reduced practical exams, and lowered the screening criteria (minimum CSAT scores).

Student Safety and Emergency Childcare

With all schools shut down and online learning offered to students due to COVID-19, many dual-earner parents or single-parents had to manage childcare on their own. To help these parents, the government made emergency childcare services available when daycare centers, kindergartens, and elementary schools were closed due to COVID-19.

Emergency Childcare Support

The Ministry of Education identified the great need for childcare service during the pandemic and quickly implemented the service. Guidelines were developed in consultation with metropolitan and provincial offices of education and coordinated with each school's faculty response plan and safety measures including disinfecting school premises and providing masks and hand sanitizers.

Also, any family desiring to take advantage of childcare services was eligible. Children at each school were cared for from 9:00 a.m. to 7:00 p.m., in low-density (less than 10 students per class) and free lunch was provided. As of May 2020, 241,554 children (39.1%) and 130,843 elementary school students (4.8%) participated in this service.

In particular, the Ministry of Education prioritized childcare service for

elementary students from dual-earner, low-income, and single-parent families. To accommodate the increased demand and to reduce classroom density, libraries and computer labs were utilized. In addition, after-school instructors assisted students with their online learning.

Stepping up Cooperation at the Pan-Governmental Level

Apart from the Ministry of Education, the government works with the Ministry of Employment and Labor, the Ministry of Health and Welfare, and the Ministry of Gender Equality and Family to guarantee student safety. First, parents with young children (eight years and younger or elementary school second graders) are recommended to work from home and can take advantage of 10 days of childcare leave from their jobs. For parents needing childcare when daycare centers and community childcare services are closed, service providers work on alternate days so the facilities are open daily. The *Idolbom* Service also provides daycare service for working parents with children aged 12 or below.

Childcare Measures in Response to COVID-19 Situation

Category	Elementary	Before online school opening (March 1-April 15)	After online school opening (April 16-May 26)	After returning to school (May 27-Present)
	Kindergarten	During school closure (March 1-May 26)		
Target		Students requesting childcare service	Students requiring childcare service *Priority is given to low-graders and dual-earner families	Students in the most need of childcare, such as dual-earner, low-income, and single-parent families.
Class Size		About 10 persons per class	About 10 persons per class	Can be adjusted considering student density
Operating Hours		9:00-19:00	9:00-19:00	9:00-19:00

2

Transition to Future Education in Post-COVID-19 Era

In response to COVID-19, the Ministry of Education witnessed the emergence of innovative changes in the education sector. To act on this opportunity and re-imagine the future of Korean education, it continues to hold forums and listen to the opinions of educational leaders and teachers to develop a vision and strategies.

Communicating with Educational Stakeholders

Based on the opinions of education stakeholders, the Ministry of Education has developed five guiding principles to shape the direction of Korean education in the upcoming years: 1) Ensuring the continuity of learning and growth during a crisis; 2) Guaranteeing education for all without a single student left behind; 3) Respecting teachers' expertise and autonomy and building up trust; 4) Preemptively responding to changes in the future environment; and 5) Prioritizing students' health and safety. In addition, to promote policies on school space innovation, digital-based educational innovation and educational welfare system, the Ministry of Education listens to the opinions and feedback from educational stakeholders, including teachers, citizens, potential service users, and experts.

Top 10 Initiatives for Future Education

The Ministry of Education announced its policy covering the Top 10 *Initiatives for Future Education*, reflecting feedback from teachers, students, and parents. The policy emphasizes the following:

Curricula of the future will focus on teachers and students. A paradigm shift will take place, heralded by improvement of the existing education policies -

the High School Credit System, secondary school vocational education, and online textbooks backed by an abundance of digital content.

The teacher management system will push ahead with reforming the training program for pre-service teachers with optimization of the supply and demand of in-service teachers. Furthermore, teachers will be sufficiently empowered to drive changes at schools.

A future-oriented school will embody democracy and empower schools and students. A safe and healthy education environment will be created through remodeling and rebuilding old school buildings, and digital-based curricula will be developed. Support for disadvantaged students will be expanded to prevent any gap in education and to ensure that the minimum achievement level is attained.

Higher and lifelong education will pursue win-win growth with local communities and cultivate future leaders to meet the demands of the digital age. Career development support for university students will be expanded and the right to lifelong education will be guaranteed.

Top 10 Initiatives for Future Education

Classification	Goal	Top 10 Initiatives
Early childhood, elementary and secondary education	Strengthening accountability and autonomy in education	<ol style="list-style-type: none"> 1. Revising the curriculum 2. Considering a comprehensive reform of the teacher management system 3. Building future-oriented schools by prioritizing students 4. Establishing a safe education system to ensure student learning and development
Higher and lifelong education	Seeking innovation through sharing and cooperation	<ol style="list-style-type: none"> 5. Promoting the advancement of universities and local communities based on collaboration and sharing 6. Fostering students equipped with qualities that meet future needs of society 7. Offering advanced vocational education to make graduates job-ready 8. Guaranteeing lifelong learning for all
Establishing a foundation	Establishing a foundation to preemptively address future challenges	<ol style="list-style-type: none"> 9. Laying the foundation for digital transition 10. Facilitating cooperative governance for future education

2020 Education in Korea



Heading Toward the Future Through Innovation and Inclusion



1. School Innovation for Customized Education
2. Strengthening Public Accountability for Education
3. Cultivating Future Talent Through Autonomy and Innovation in Higher Education
4. Ensuring Lifelong Vocational Education

1 School Innovation for Customized Education

The Fourth Industrial Revolution calls on the education systems around the globe to keep pace with the changing societal landscape and to drive further innovation. The Korean government's plan for innovation in the public education sector includes: 1) supporting the development of student competency through customized career education; 2) innovating the education system with digital technologies; and 3) building teacher competency as agents of innovation.

Customized Education for Student Growth

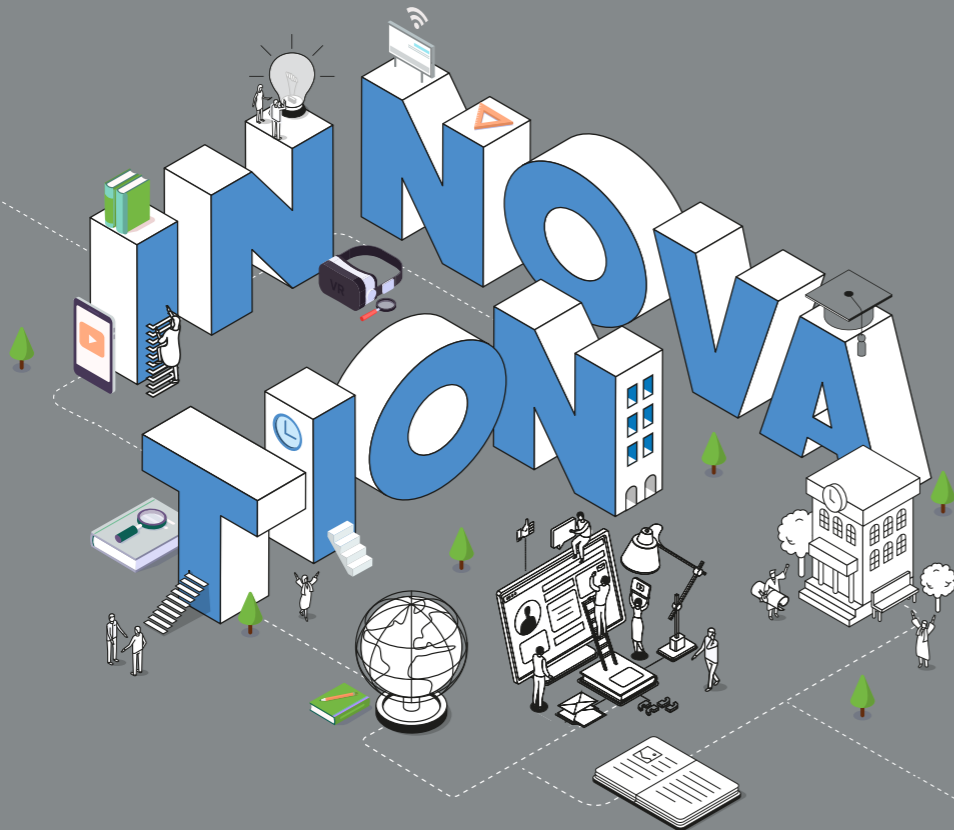
≡ Curricula Focusing on Creativity and Inter-disciplinary Studies

The Korean government oversees the national curriculum for early childhood, elementary, and secondary schools. The kindergarten curriculum was updated in 2019 to emphasize "learning by playing," while the secondary school curriculum was revised in 2015 to equip future leaders with key skills required for navigating modern life, namely humanistic imagination, scientific creativity, and practical skills. In particular, at the high school level, the Ministry of Education offers a student-customized curriculum in a flexible manner which offers a combination of elective and compulsory courses depending on local contexts and school-specific circumstances.

≡ Free Semesters and Career Exploration

The Free Semester programs originated to support middle school students in developing their talents and aptitudes. The program allows students to explore diverse career paths for one or two semesters in a student-centered, non-competitive environment. Student assessments are conducted by looking at how much progress they have made during the semester. The government began its implementation in 2016 in all middle schools, and

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1 School Innovation for Customized Education

in 2018, allowed schools to have the option of implementing a-year-long program for the first graders of middle school. The Free Semester programs aim to build students' creativity, character, and core competencies required in the 21st century.

≡ Career-focused High School Curriculum

The High School Credit System includes a student-centered curriculum to help students identify their talents and aptitudes for future careers by allowing them to design their own curriculum with career-intensive courses. For courses that are difficult to open at one school, neighboring schools collaborate in providing a joint course to ensure a wider choice of subjects. Moreover, a real-time, interactive online class platform guarantees that even students from small schools in remote areas can have wide-ranging options of subjects, as well as equal opportunities in earning their high school credits. Under the High School Credit System, students can choose courses that match their abilities and career path, and when they complete the courses, they receive credits with which they can graduate. This system was introduced at all Meister high schools (51 schools) in 2020 and will be offered at all vocational high schools in 2022. As for general high schools, they will begin to phase in parts of the system in 2022 before its full implementation in all schools in 2025.

≡ Emphasis on Arts and Physical Education

The Korean government has implemented mid- to long-term policies to encourage student participation in arts education. The "One Art for One Student" campaign encourages every student to engage in at least one art activity, such as art clubs, musical instrument lessons, or school orchestra. The Ministry of Education recently developed a mobile app to make information on various local arts-related activities and programs readily available to students to facilitate their active engagement.

- 1. School Innovation for Customized Education
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The government's policies on physical education include a survival swimming program for elementary school students, expansion of sports activities for female students, and support for career development in physical education. Likewise, students are encouraged to partake in at least one physical activity, such as student sports clubs and competitions. Moreover, to support student-athletes, their right to education is guaranteed through the "e-school" program to help them juggle both academic learning and athletics in a balanced manner.

Digital-based Educational Innovation

≡ Learner-centered Digital Education Ecosystem

To create an education ecosystem powered by digital technology, the Ministry of Education developed digital textbooks and software education courses. Digital textbooks were distributed to the third and fourth graders of elementary schools, and first graders of middle schools for social studies, science and English in 2018. Currently, the fifth and sixth graders of elementary school, and second and third graders of middle school are also offered digital learning materials. The Ministry has reinforced the digital infrastructure by improving wireless network connections and providing teacher training in digital pedagogy.

According to the 2015 Revised Curriculum, software education was introduced in some middle schools in 2018 and phased in to all middle schools by 2020. Elementary schools began adopting the program in 2019, and currently all fifth or sixth graders nationwide enjoy software education. The required credits depend on the school level, at least 17 hours for elementary school students, 40 hours for middle school students, and 51 to 119 hours for high school students in the form of elective courses.

1 School Innovation for Customized Education

≡ Transition to AI Education

The Ministry of Education first introduced artificial intelligence to its curricula in 2020. In September 2020, an AI-based math program was launched for elementary school students, and from 2021, AI elective courses will be provided in high schools.

The Korean government's first nationwide AI math education program is *Knock! Knock! Math Expedition*. The AI program analyzes student performance and provides learning content and tips that are appropriate for their academic levels to prevent educational gaps and learning loss. From the second semester of 2021, new AI courses, Artificial Intelligence Basics and

📄 Main Screen of *Knock! Knock! Math Expedition*



AI Convergence Education
AI pilot schools (24 schools in 2020); and general high schools designated to incorporate AI education into their curricula (34 schools in 2020)
New post-graduate inter-disciplinary AI courses established in graduate schools of education (1,046 persons in 2020)
AI Basics and AI Math established as new high school career-related elective courses (September 2020)

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Artificial Intelligence Math, will be offered as electives in high schools.

In addition, teachers' AI competency will be enhanced through the Ministry of Education's five-year plan that calls for 1,000 teachers to take master's degree courses in AI.

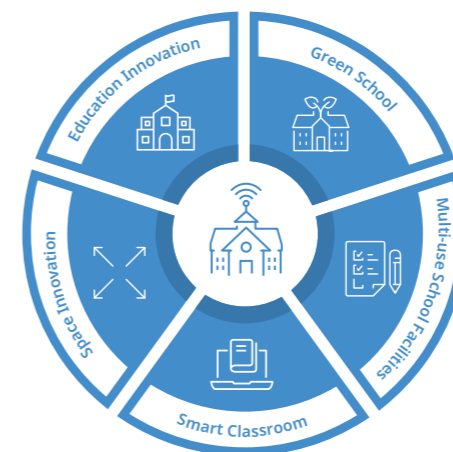
≡ Building Green & Smart Schools of the Future

To cultivate future leaders of the post-COVID 19 era and create a future-oriented, eco-friendly school environment, the government launched the Green Smart Future School Project. As its first step, the government earmarked 18.5 trillion won for school remodeling. During the next five years, 2,835 buildings aged 40 or more years will be turned into new "smart" buildings, and the project will initiate its second phase in 2026. This project is expected to generate 150,000 new jobs and reduce the annual greenhouse gas emissions by 190,000 TCO2 (Total Carbon Dioxide).

The ultimate goal is to create a ubiquitous environment in which learners can access a variety of learning experiences anytime, anywhere, as well as a low-carbon, eco-friendly learning environment based on sustainability.

📄 Transition to Green-Smart School of the Future

📄 Project Plan



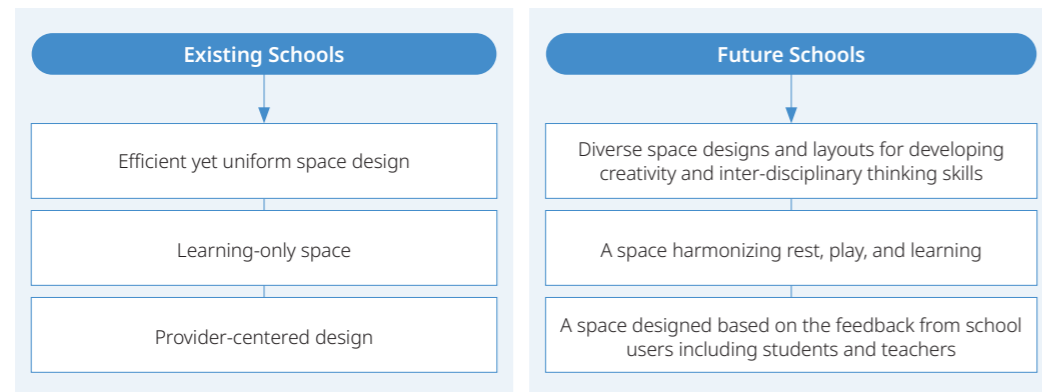
📅 Project Term	2021-2025 (5 Years)
💰 Project Cost	18.5 Trillion Won
🏫 Project Target	2,835 Old School Buildings
👥 Jobs Created	150,000 Persons

1 School Innovation for Customized Education

≡ Restructuring Learning Spaces

The Ministry of Education has launched the School Space Innovation Project to turn schools into a place where learning, playing and leisure are appropriately balanced and to bring profound changes to the teaching and learning environment. By 2021, 1.2 trillion won will be invested in the project, and the Ministry will collaborate with metropolitan and provincial offices of education, schools and expert groups on newly designing school spaces. This will help schools better adapt to the changing curricula and offer spaces desirable for future education by balancing student learning.

🔗 Space Innovation in Preparation for the Future



Professional Development of Teachers

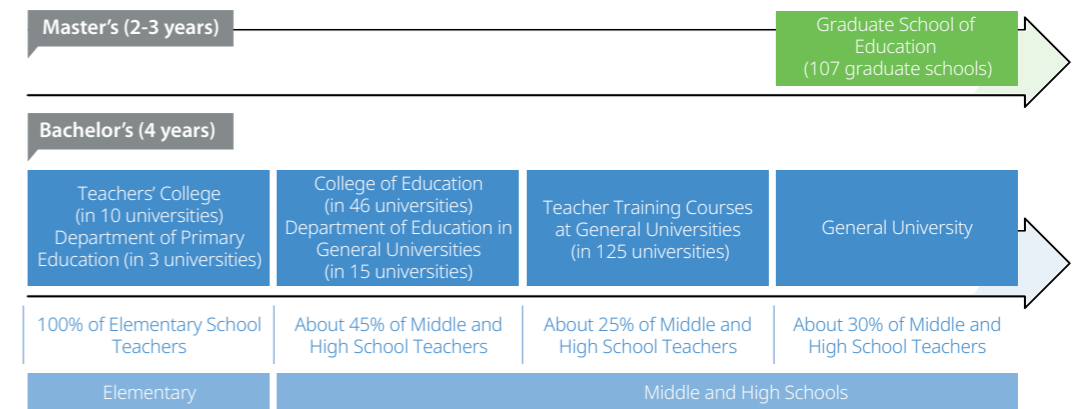
≡ Improving the Teacher Training System

In Korea, those wanting to become a school teacher must graduate from a teacher's college and pass an employment exam. This exam is extremely competitive due to its strong job security and high social status of the teaching profession.

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The government has improved the exam to further enhance teacher competency, and shifted its focus to practical skills. The Ministry of Education supports continuous development of teacher capacity by offering a variety of training courses.

🔗 Primary and Secondary School Teacher Training System



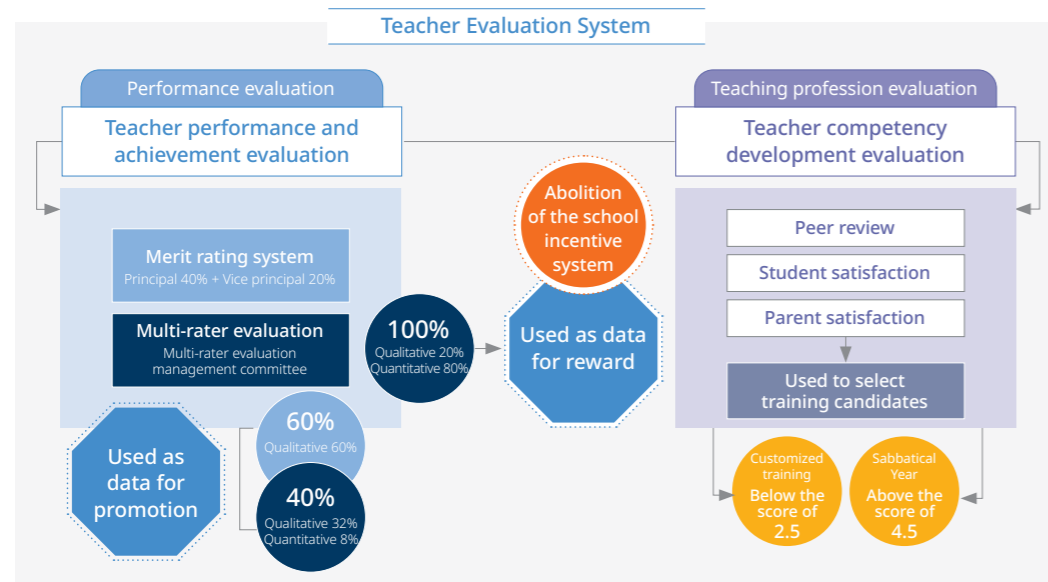
≡ Developing Teacher Competency and Expertise

Every year, the Ministry of Education conducts teacher evaluation of all teachers in elementary, middle, and high schools – both public and private – in a bid to build trust in the public education system. The teacher evaluation is conducted at the school level and is divided into a performance evaluation (i.e., teacher performance and achievement evaluation) and a teaching profession evaluation (i.e., teacher competency development evaluation). Since 2012, the Ministry has implemented a mentor-teacher program. This program encourages seasoned teachers with great teaching skills to serve as mentors to new or relatively inexperienced peers by sharing their knowhow in not only teaching, but also in student guidance. Teachers with more than 15 years of teaching experience may apply for the

1 School Innovation for Customized Education

position with a recommendation from their schools. The four-year term of a mentor teacher is renewable, and during the term, the Ministry assists them by reducing their required teaching hours and subsidizing their research activities.

Teacher Evaluation System

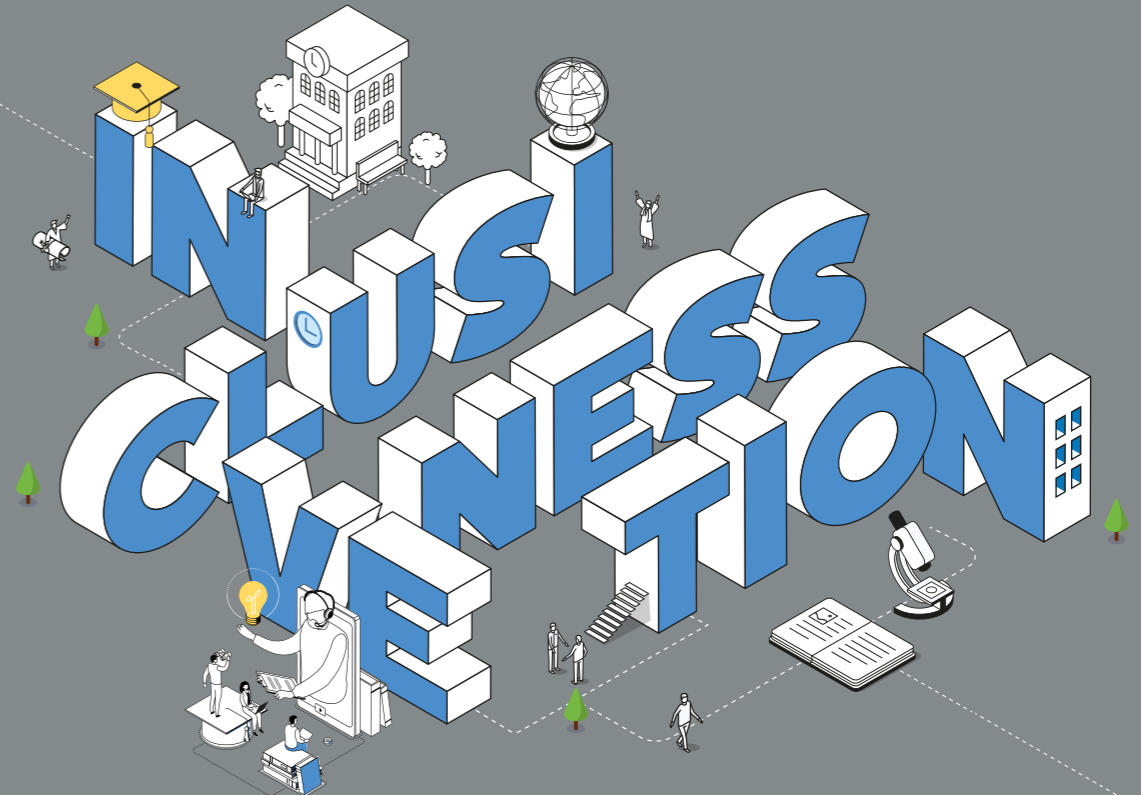


Best Policy / Training Program for Prospective Teachers

To develop the digital competency of pre-service teachers, the Ministry of Education opened the Future Education Centers at the higher education institutions of teacher training. As COVID-19 has dramatically transformed the entire educational landscape, teachers' digital competency has become more important than ever.

The Future Education Centers are fully equipped with online education infrastructure, such as online class labs and content-production workshops to allow pre-service teachers to further develop their digital skills and knowledge. In 2000, the Ministry spent 3.3 billion won to launch 10 centers across the country with 18 more to be added in 2021.

2



2 Strengthening Public Accountability for Education

Korean education policies are dedicated to ensuring equal opportunity in education for all from early childhood to higher education. Examples of the government's commitment to the universality and public accountability of education include its measures to reduce college tuition fees, cut down student housing expenses, and support disadvantaged members of society.

Reinforcing the Public Accountability of Education

≡ Providing Quality Early Childhood Education and Childcare Services

Since 2018, the government has fully funded education for children aged three to five with the introduction of the so-called *Nuri* Curriculum. To ensure fairness in kindergarten admissions, the Ministry of Education launched the Kindergarten Admissions Management System ("*Go First School*") to make online application available. In 2020, all national, public and private kindergartens became enlisted in the *Go First School* system.

Priority in enrollment is given to children from low-income families. To raise the admission rates in public kindergartens, the government has added at least 500 more classes annually, and is steadily improving the service by increasing after-class programs and the availability of shuttle buses. In addition, to strengthen accounting transparency, the Ministry of Education introduced the K-Edufine accounting system to all public and private childcare institutions in 2020.

≡ All-day Childcare System - Childcare Service in Elementary Schools

As part of the government's efforts to reinforce accountability for childcare services, the Ministry of Education closely works with schools and local governments. The all-day childcare program which began in 2018 reduced

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the childcare burden for many dual-income families, and around 530,000 people will benefit from this service by 2022.

The after-school childcare service in elementary schools will expand to offer 3,500 classes by 2022. Moreover, the childcare undertaken by schools in cooperation with local governments will provide the service to as many as 30,000 children in 2021. Meanwhile, community-based childcare service is provided in libraries, public facilities in apartment units, and community youth centers as a means of meeting the rising demand for childcare service to satisfy the needs of both students and parents.

≡ Safe and Healthy Schools

To protect the health and safety of students, the Ministry of Education collaborates with 12 other ministries to provide metabolic syndrome screening tests for obese students, designate medical examination institutions for students with disabilities, and give free flu shots for elementary school students.

The Ministry also manages students' mental issues, such as depression, with its 24-hour SMS/Cyber Counseling Network. In 2019, air cleaners were installed in all elementary, middle and high schools across the country to improve air quality in schools. To ensure the safety of students when they commute from home to school, traffic enforcement systems are installed as well as more traffic lights in school zones.

≡ Ensuring Basic Level of Education for All

The Ministry of Education has established a tight safety net to ensure that all students achieve a basic level of education.

As one of its efforts to prevent learning loss and help students reach the minimum academic level, the Ministry selected 42 schools in 2018 as model schools to have them share their best practices with other schools. The number of participating schools increased to 75 in 2020.

2 Strengthening Public Accountability for Education

The government introduced the *Do-dream School* program to help students who, for a number of reasons, do not reach the basic academic level. The number of participating schools rose significantly from 2,720 in 2018 to 4,801 schools in 2020. A team composed of a classroom teacher, a special education teacher and a counselor provides customized support to those students who lag behind academically.

To help students who face difficulties that cannot be addressed at the school level, the government launched separate learning clinic centers. As of 2020, 130 clinics were in operation. Also, the Ministry of Education introduced the Basic Academic Achievement Diagnosis and Intervention System to diagnose the cause of low performance and provide guidance on what a student should do both at school and home to make progress. Alongside this system, in 2021, specially-trained teachers will be sent to schools to assist under-achieving students.

≡ Reducing the Financial Burden of Higher Education

The government launched a national scholarship program in 2012 to ensure higher education opportunities for anyone with the desire and ability. Under this program, scholarships are granted according to the household income

Best Policy / Free Education for All High School Students in 2021

In Korea, high school education is not compulsory, but is *de facto* universal with a 99.7% admission rate for middle school graduates. To promote the public accountability for education and relieve the burden of education costs, the government offers free high school education and provides funds to cover admission fees, school operation costs, and textbooks. The program started in the second semester of 2019 with third graders of high school and will be expanded to all grades by 2021.

This saves about 4.8 million won for each student during the three years of high school education. In the face of the COVID-19 crisis, 15 out of 16 metropolitan and provincial education offices opted for an early implementation of a free high school education for the first graders in the second semester of 2020.

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level, and universities are requested to fund their own scholarship programs and refrain from raising tuition fees. Moreover, college admission fees were abolished at national and public universities in 2018. The admission fees for private universities will be abolished by 2022.

The government further reduced the financial burden on students and parents by lowering the student loan interest rate from 2.2% (second semester, 2019) to 1.85% (second semester, 2020), and 1.7% in the first semester in 2021.

Educational Support for Disadvantaged Students

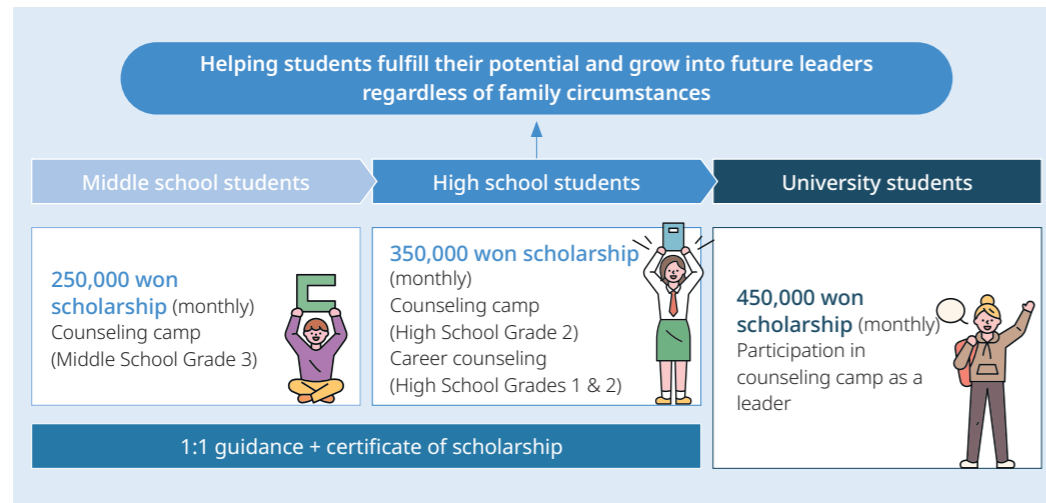
≡ Supporting Students from Low-Income Families

To prevent disadvantaged students from being deprived of educational opportunities, the government not only provides support for their educational expenses, but also operates a special screening system to better serve their needs. As for the high school admission, the Social Integration Screening is applied to students from high schools in areas where students are allowed to choose their own schools, instead of their admission being determined by a lottery system, whereas the Equal Opportunity Special Screening is being used at the university level.

To reduce the college students' burden of educational and housing expenses, the government is expanding the national work-study scholarship program and has opened the government-funded dormitory known as "*Happy Dormitory*." In order to support middle and high school students from low-income households showing academic potential, the *Dream Ladder* Scholarship Program is provided until they complete their higher education. In 2020, 700 high-performing students and 250 students with special talents were awarded the scholarship.

2 Strengthening Public Accountability for Education

📄 Dream Ladder Scholarship Program



≡ Customized Educational Support for Disadvantaged Students

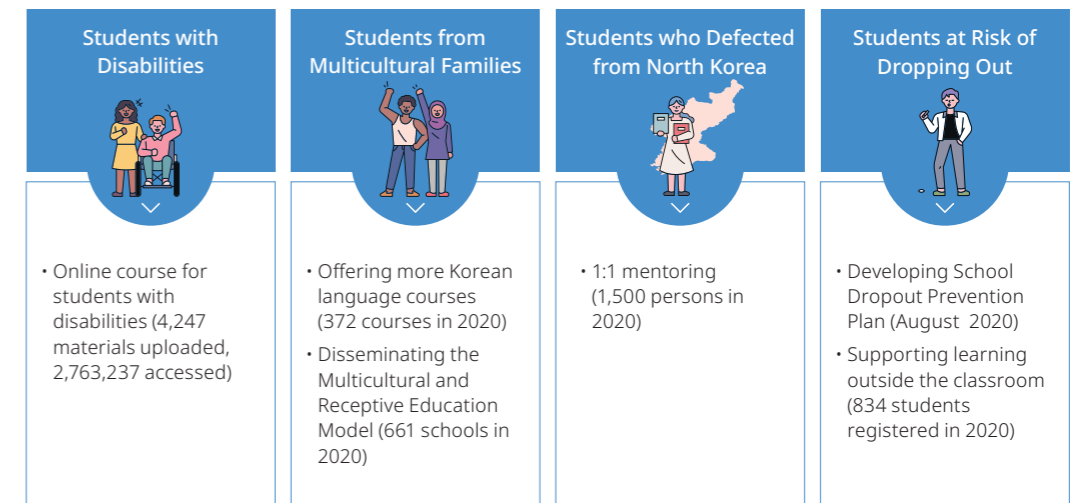
In 2020, the Ministry of Education started distance learning in response to the COVID-19 pandemic. To support students with disabilities, it set up the Online Classroom for Students with Disabilities Platform and uploaded 4,247 learning materials with no data usage fees. Also, the government allocated a budget of 8.5 billion won for the 2021 Distance Learning Infrastructure for Students with Disabilities Program to support the expansion of its online platform, develop curriculum, and create more experience-focused and engaging activities.

International students can also receive customized education, including Korean language courses and mentoring, while students who defected from North Korea are eligible to receive systematic counseling.

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📄 Support for Disadvantaged Students



≡ Support for Students at Risk of Dropping Out

The Ministry of Education is helping students who are at risk of discontinuing their education or those who have already done so. Once schools identify at-risk students, they share the information with metropolitan and provincial offices of education and community youth centers to help the students continue their education even if they are no longer at the compulsory education stage.

Also, students at risk of dropping out of school can take advantage of a minimum of two to a maximum of seven weeks of counseling and opportunities to explore potential career and art/physical activities to encourage them to continue their education.

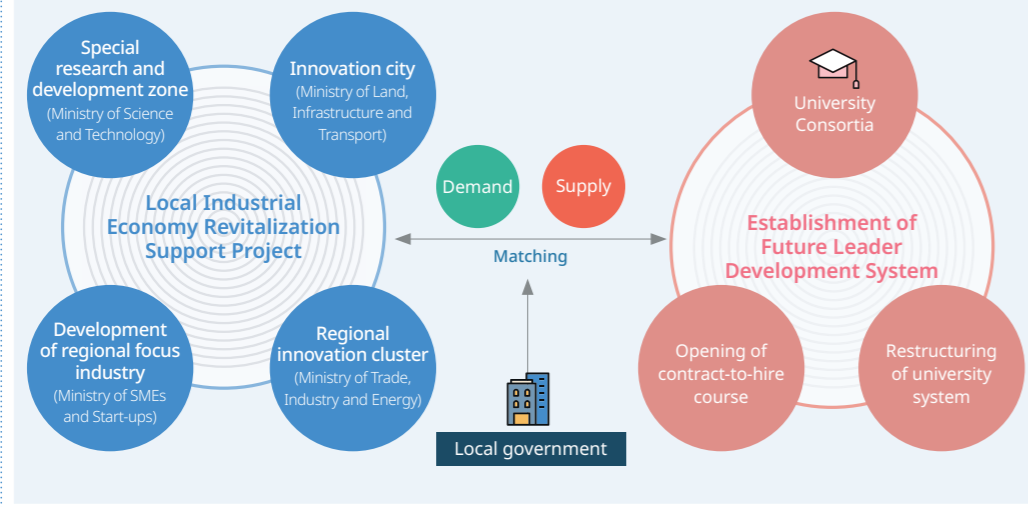
3 Cultivating Future Talent Through Autonomy and Innovation in Higher Education

with local governments, discovering prospective businesses, and fostering future leaders. They are working with local companies, research institutions, schools, and offices of education to generate joint curricula that combine the strengths of each university and create a network to enable universities to create dual/joint degree programs. In addition, the Ministry of Education is temporarily imposing the “regulatory sandbox” regime which exempts start-ups and innovators from regulations that may hinder their business operation. As of 2020, such innovative platforms are established in three regions, and are expected to further expand all across the country by 2024.

Linking Local Industries and Clusters

North Chungcheong Province created a virtuous cycle that includes

- 1 Selecting promising bio-health business or technology items in consideration of the region's bio-health base
- 2 Building a system for fostering talented bio-health professionals to match supply and demand in industry;
- 3 Promoting employment or the launching of start-up companies



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Restructuring of Universities

To address a rapid decrease in the school-age population and improve the quality of higher education, the government has been implementing structural reform in universities since 2014. They include reductions in enrollment quota, adoption of a new university evaluation system, and the establishment of an institutional framework for reform.

In 2018, the Ministry of Education adopted a new university evaluation system to diagnose universities' capabilities in support of their autonomous development. As a result, 60% of universities were recognized to have such capabilities and the government has provided funds for autonomously implementing their mid- and long-term plans. At the same time, the Ministry imposed regulations to reinforce the transparency of university operation.

Equipping Talent for Emerging Industries

Ensuring All Students Have Digital Skills

Starting in 2021, the Ministry of Education will collaborate with those universities having educational capabilities to meet the needs of emerging industries in implementing the innovative “university consortia” system to ensure that all students learn basic digital skills. Participating universities will share resources and develop curricula that serve the needs of businesses while meeting academic standards.

Universities will open inter-disciplinary courses in emerging technologies and develop modulated curricula that offer students customized learning content depending on their levels. A basic curriculum will equip all students with digital skills irrespective of their majors, while an online curriculum will be available for the general public, including students of non-participating universities and working students. This system not only includes curriculum development, but also the provision of assistance for students from

3 Cultivating Future Talent Through Autonomy and Innovation in Higher Education

graduation to employment thanks to the active participation of local governments, industries and universities.

≡ Government Support in Advanced Technologies

The Ministry of Education focuses on developing future leaders with master's or doctoral degrees in the fields of digital technologies through Brain Korea21 (currently in Phase 4, 2021-2027). This program grants scholarships to graduate schools participating in research activities, supports young researchers, and provides funding for their internationalization activities.

≡ Fostering Talent in Emerging Technologies

Disseminating skills in emerging technologies and fostering future leaders in these fields are the top priority of technical colleges. Their graduates must have the expertise to fulfill the needs of companies of all sizes.

The government funds programs that support the development of innovative curricula and improve the educational environment in emerging technologies. A tentatively named *Meister College*, which will be introduced in 2021, will have a customized vocational education curriculum that cultivates highly-skilled students in emerging and strategically-important technology areas.

Industry-Academia Collaboration & Employment Support

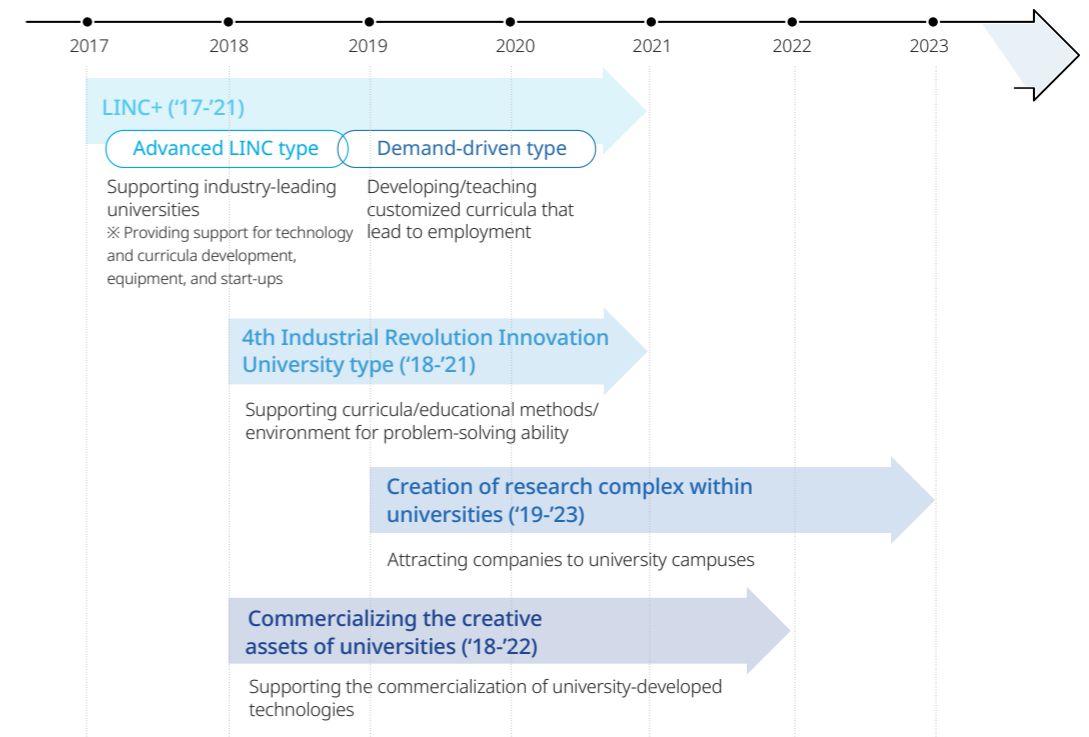
≡ Industry-Academia Collaboration

In October 2018, the government worked with eight ministries, industries, and universities to launch the National Industry-Academia Cooperation Committee (NICC) and its Industrial Education and Industry-Academia Cooperation Framework composed of four strategies: 1) development of human resources; 2) technology transfer and commercialization; 3) entrepreneurship; and 4) promotion of university-industry collaboration.

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Its focus is on developing a specialized workforce through the industry-university collaboration project (LINC+), which utilizes new curricula and additional support for those professors who more frequently and actively collaborate with industries. As of 2019, 2,350 curricula including Capstone Design were developed and 61 universities and colleges are now running joint curricula and demand-driven courses. Contract-to-hire courses of technical colleges are two-year curricula calling for basic skills education in the first year, with second-year students receiving advanced skills education and job placement. By 2021, Innovation Leading Universities will open new

☞ Support for Universities Pursuing Cooperation with Industry (316.6 billion won)



3 Cultivating Future Talent Through Autonomy and Innovation in Higher Education

majors in emerging technologies, such as “smart” healthcare and IoT to create industry-friendly courses on their campuses.

≡ Building a Solid Base for Emerging Technologies




To maximize the potential benefit of research, the government supports the transfer of technologies from universities to industries, such as patents and innovative ideas. For example, the BRIDGE+ Project has focused on commercializing universities’ creative assets since 2015, and it receives 15 billion won in funding annually. In 2019, there were 4,843 technology transfer contracts, which generated 102 billion won in revenue. Most recently, the Ministry of Education supports the technology packaging program, which is a technology convergence project under which universities collaborate on multiple technologies across industries to create innovative products and services.

≡ Support for Employment and Start-Ups

Starting in 2020, universities offer a career development curriculum and grant credits to students completing the program. They also provide opportunities for disadvantaged students to work overseas. The Ministry supports employment and start-ups in universities by developing start-up curricula or industry-university collaboration programs. The Korean government reserves 20 billion won to help universities set up venture capital companies to test their new technologies in the market. Scholarships are also available for young job seekers or those preparing to go to university while working.

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📄 Support for Career Development & Employment/Start-ups in 2020 (Unit : 250.5 billion won)

Category	Project	Description	Participants
Career Development 	Career Exploration Credit program	Supporting career development activities and granting credits	10 universities
	Global On-site Learning	Overseas internships for university students (4-6 months)	15 universities, around 50 junior colleges
	Work, English Study, and Travel (WEST) program	Language study and work experience in the U.S.	(1st half of 2020) 120 students; (2nd half of 2020) 170 students
	Blue Ladder	Short-term (4-6 week) overseas work experience for disadvantaged students	20 universities
Employment/Start-up Support 	LINC+ Demand-driven Type	Running employment-linked curricula	64 universities (497 contracts)
	Contract-to-hire curriculum	Running employment-linked curricula	8 universities
	University Enterprise project	Promoting employment/start-up capacity through on-site training	About 30 universities
	Start-up Education Hub University	Building a start-up-friendly environment	2 universities
	Student Start-up Team 300	Supporting student entrepreneurship	300 teams
	Research Lab Technology-based Start-up project	Supporting start-ups that commercialize lab technologies	15 graduate schools
Scholarship Support 	Ladder of Hope Type I	Providing scholarships to small- and medium-sized businesses and start-up aspirants	6,200 persons
	Ladder of Hope Type II	Providing scholarships to high school graduates who want to continue learning while working	11,200 persons

4 Ensuring Lifelong Vocational Education

curriculum with which supervising teachers instruct students at worksites. To ensure students' safety, the Ministry of Education conducts inspections of the workplaces in consultation with the Ministry of Labor, and metropolitan and provincial offices of education. Since November 2020, student trainees have been receiving the same legal, safety and health protection as regular workers.

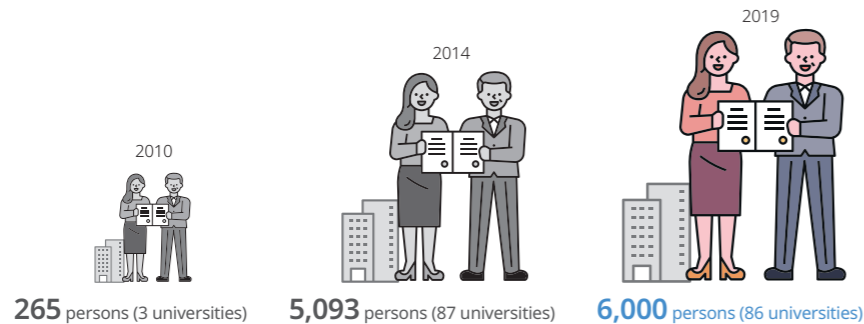
≡ Developing Basic Skills Required at Workplaces

Helping students develop basic skills is important because with this foundation, they can continue to grow and succeed in the workplace. The Ministry of Education developed a tool to diagnose and evaluate the basic skills of how to properly speak, listen, and solve problems on-site. During the first and second grades, students are given a basic occupational competency assessment that provides information on their strengths and weaknesses.

≡ Strong Employment Support

Most vocational high school students want to find a job right after graduation. Therefore, to support their employment, the Ministry of Education collaborates with schools and local offices of education in assigning teachers and employment assistance officers to search for companies capable of collaborating with local governments, public institutions, and the offices of

📄 A Special Admission Screening for Working Students



🏠 III. Heading Toward the Future Through Innovation and Inclusion

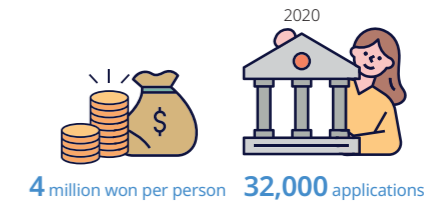
1. School Innovation for Customized Education
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education running the Employment Support Center. The Central Employment Support Center established in 2020 conducts research on policies and focuses on finding best companies for graduates.

≡ Supporting Continuous Competency Development

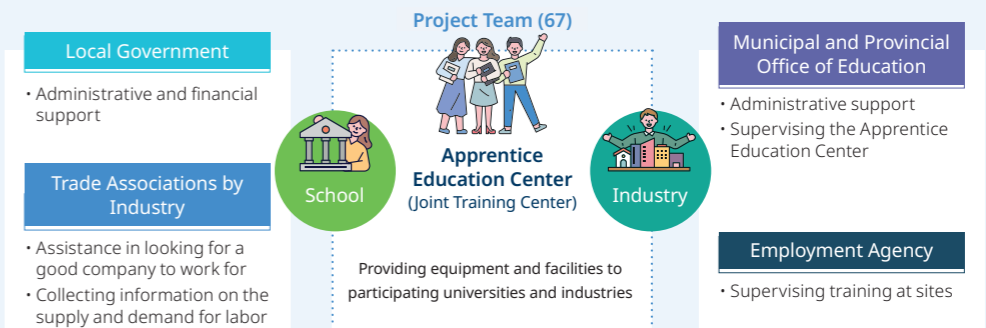
Since 2018, the government has provided scholarships to students working in small- and medium-sized companies. The Ministry of Education offers a special university admission pathway to vocational high school graduates

📄 Employment Support Scholarships



📄 Best Policy / Apprenticeship School, Learning at Work

The Ministry of Education runs an Apprenticeship School program under which universities work together with companies in developing and implementing a two-year curriculum that allows students to continue their education and career advancement. The program aims to help students develop practical skills, and students can participate in job training from the second year. As of 2020, 162 universities provided 183 courses to 67 project teams.



4 Ensuring Lifelong Vocational Education

who have a working experience of more than three years and operates a work/study curriculum that allows students to continue their competency development. The government provides a full scholarship to help those students continue learning regardless of their economic situation.

≡ Meister High Schools

Meister high schools were first established in 2008 to produce highly-skilled workers fully equipped to meet industrial demands. Currently, there are 52 Meister high schools. Compared to specialized vocational high schools, Meister high schools are given more flexibility in implementing the curriculum like project-based classes that benefit students in developing their problem-solving skills and self-directed learning to meet the needs of industry. Meister high schools provide quality vocational education and scholarship to all students as well as free housing in school dormitories.

Guaranteeing Lifelong Learning Right for All

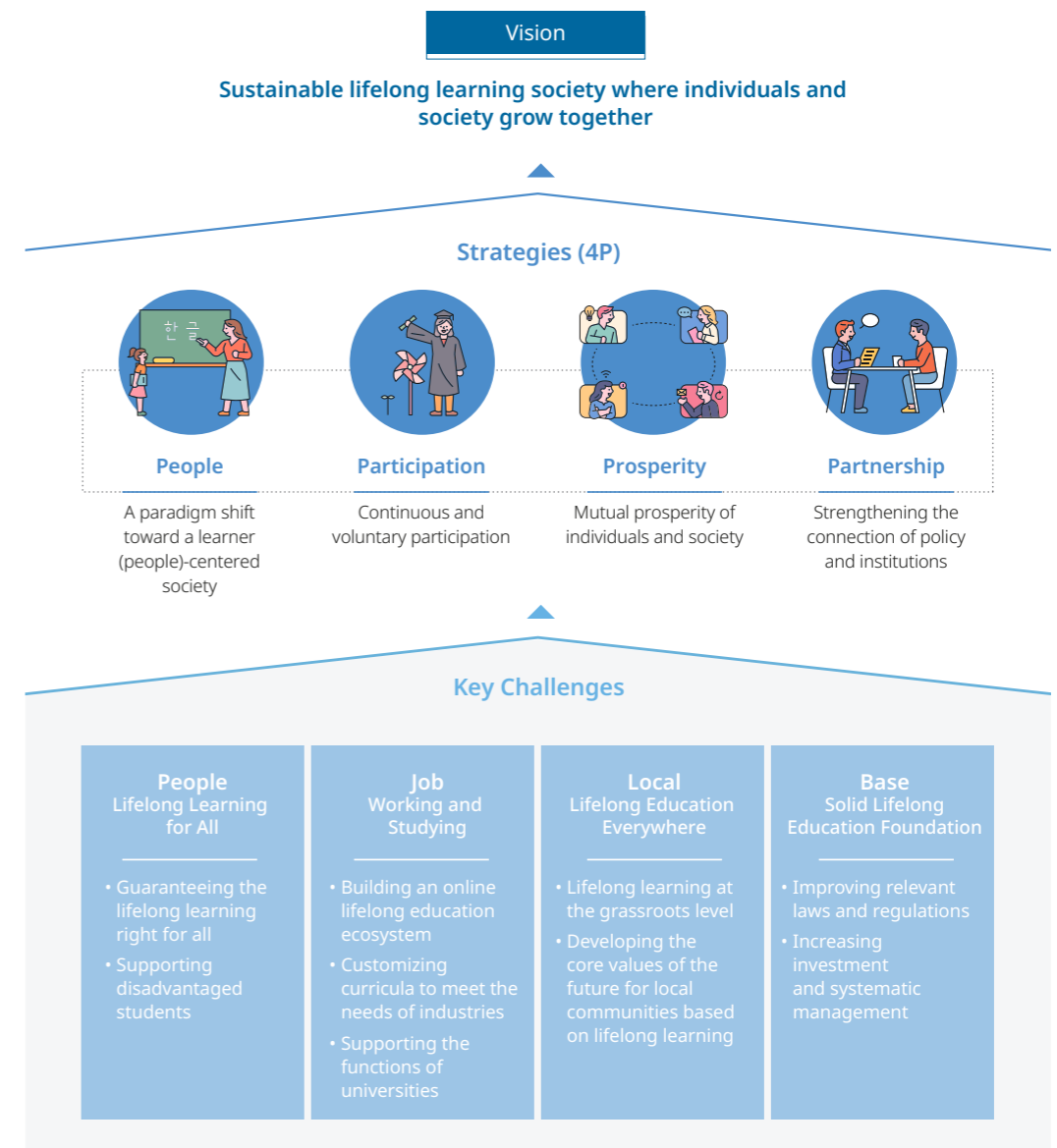
≡ National Lifelong Education System

The government revised the Korean Constitution in 1988 to ensure its responsibility for lifelong education, and enacted the *Lifelong Education Act* in 2000. Since 2002, the government has been upgrading the *Lifelong Education Promotion Master Plan* every five years, and now the Fourth Master Plan (2018-2022) is being implemented. The National Institute for Lifelong Education (NILE) program involves all levels of society with 17 offices at the metropolitan and provincial level and 129 Happy Learning Centers at the community level. As of July 2020, the government designated 175 cities as Lifelong Education Cities and launched a national campaign for the promotion of local communities. As a result, the participation rate of adults in lifelong learning rose significantly from 29.8% in 2007 to 43.4% in 2019.

III. Heading Toward the Future Through Innovation and Inclusion

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Fourth Lifelong Education Framework (2018-2022)



4 Ensuring Lifelong Vocational Education

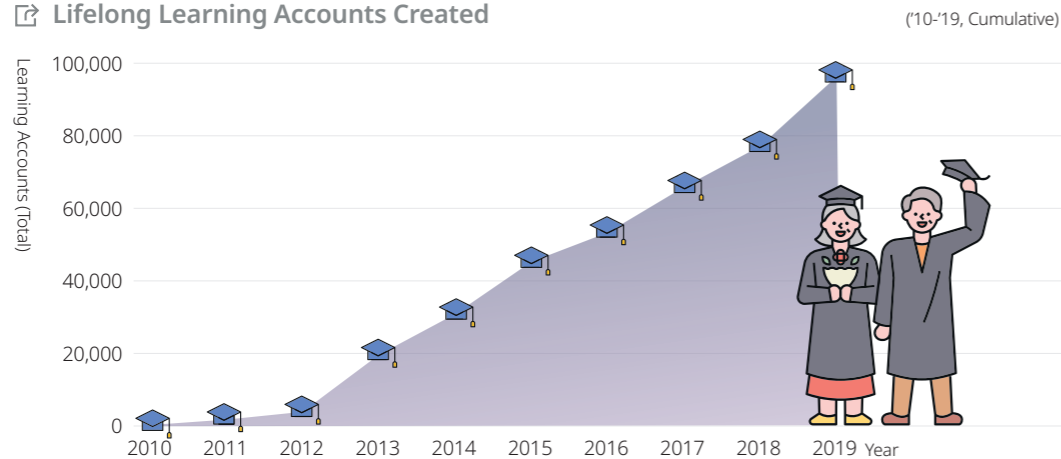
≡ Ensuring Lifelong Learning Rights for All

The government is making every effort to enhance access to lifelong learning for all. One of them is the Fourth Lifelong Education Framework, under which the government has handed out lifelong learning vouchers with a set value of 350,000 won to 5,000 people every year since 2018. In addition, 300,000 adults have received literacy education since 2006. The government provides an educational tool that measures learning outcomes and offers courses customized to each student's interest and ability.

≡ Creating Work, Life, and Study Balance

The government adopted the Lifelong Learning Account System (LLAS) which allows learners to keep track of their learning experiences in their lifelong learning account, and translate them into educational credits or vocational qualifications, or include them in their resume to ensure the learning outcomes are fully recognized and better utilized in the world of work. The system was introduced in 2006; and as of 2019, 96,994 accounts were created, 357,693 learning experience records were registered, and 4,810 learning courses were provided. Various pathways to higher education

📊 Lifelong Learning Accounts Created



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are available for adult learners, such as the Academic Credit Bank System and the Bachelor's Degree Examination for Self-Education. Going forward, the Ministry of Education will develop a system where work experiences are translated into academic credits based on the Korean Qualifications Framework (KQF) and "Learning-Training Linking Criteria." To make this possible, the Recognition of Prior Learning (RPL) System will be added to the Credit Bank System in 2024.

≡ Lifelong Education Function of Universities

As part of its lifelong learning policy, the government awarded bachelor's and associate's degrees to 761,916 persons through the Academic Credit Bank System from 1999 to March 2020. In the future, the curricula of the Credit Bank System will reflect the demands of emerging industries, such as artificial intelligence (AI), virtual reality (VR) and big data in response to technological changes. To increase access to university education for adults, universities will translate job experiences into university credits and reduce the number of required lecture hours depending on the major. Also, the government continues to fund adult-exclusive degree courses that reflect university's field of expertise as well as social demands. In addition, the Ministry of Education operates the Korean Massive Open Online Courses (K-MOOC), which provides 793 lectures covering diverse academic topics and vocational training. Since its introduction in 2015, the membership has steadily grown to 717,000, signing up for 1.71 million courses.

2020 Education in Korea



Korean Education to Reach the World



1. Enhancing Educational Mobility
2. Sharing Educational Experiences with the World
3. Providing Additional Support for Korean Language Education to Meet Rising Demand

1 Enhancing Educational Mobility

When it comes to Korea's remarkable economic growth and democratization, no one denies that education has been one of the key drivers. To provide human resources that are essential for industrial development, the Korean government designed and implemented educational policies that the world now admires. Since the Ministry of Education announced its *Education Internalization Plan* in 1994, it has taken aim at reinforcing its global network of education around the world. As of 2019, 160,000 international students studied in Korea from 189 countries.

The Korean government aims not only to increase the number of its international students, but also improve the overall quality of their management. For example, the government recognizes exemplary universities with great track records in managing international student affairs, such as those assisting Korean language education or providing an accommodative environment for the benefit of their students.

The government grants Global Korea Scholarship (GKS) to foster young talent from around the world to help them gain profound understanding of Korea by giving them an opportunity to study either undergraduate or post-graduate courses in Korean universities. The grantees receive scholarship and living allowance during the course of their studies. Since 1967, 11,156 international students have been invited from 156 countries, and in 2020,

📄 Government Scholarship Program for Foreign Nationals (GKS)

Category	1967	2005	2006	2007	2008	2009	2010	2011	2012
Number of Persons Invited	6	965	133	133	745	504	696	400	422
Number of Countries Invited	3	79	47	54	87	97	107	96	95

2. Sharing Educational Experiences with the World

3. Providing Additional Support for Korean Language Education to Meet Rising Demand

about 3,000 scholarship students studied across 84 universities in Korea. As many as 6,500 GKS alumni are actively serving their roles in politics, business, and academia around the world.

In 2015, the government began inviting outstanding students from ASEAN countries to Korea. Students from countries in Africa were also invited starting in 2017, and in 2019, students from Central Asia were invited. The CAMPUS Asia project (a university student exchange program) is implemented to foster talented individuals capable of promoting cooperation between Korea, China, and Japan. The AIMS (Asian International Mobility for Students) promotes student exchange among ASEAN countries.

Category	2013	2014	2015	2016	2017	2018	2019	2020	Total
Number of Persons Invited	827	887	838	871	692	803	873	1,320	11,115
Number of Countries Invited	137	131	131	143	135	139	138	134	156

2 Sharing Educational Experiences with the World

Korea has been repeatedly requested to broadly share its experiences that led up to its educational development with countries around the world. Korea is committed to sharing its story with its partners around the world as a means of returning the favor it received from the international community more than half a century ago.

From 2009 to 2019, the Korean government signed 69 education cooperation MOUs (25 in Asia, 18 in Europe and the rest between multi-parties).

Since 2012, the government has passed on its educational resources such as the university system and experiences to universities in developing countries, so that they can build the foundation for developing and operating their own systems. The purpose of this project is to improve the education capabilities of universities in developing countries and ultimately help them contribute to their local communities, while advancing national pride and international standing. This initiative reflects the Korean education ODA model that provides aid to overseas universities in need, which currently supports 21 universities in 15 countries.

In addition, the government dispatches competent Korean teachers to assist in implementing fully functioning education systems in other countries. These teachers focus on facilitating the development of basic education capabilities. Every year, about 450 teachers participate in such international exchange programs and contribute to the development of basic educational capabilities (math, science, and ICT) of developing countries.

Furthermore, the government extended such aids to Africa through the Better Education for Africa's Rise (BEAR) in cooperation with UNESCO to expand educational opportunities and improve vocational training systems in Africa.

3 Providing Additional Support for Korean Language Education to Meet Rising Demand

Korean language education is important as it effectively serves as the foundation for building friendship between Korea and other countries by nurturing those who have profound understanding of not only Korean language but also culture, based on which a stronger foundation for more vibrant bilateral exchange and cooperation in diverse socioeconomic fields can be established.

First, they are encouraged to create and run Korean language courses so that Korean language can be adopted as a second foreign language in their elementary, middle, and high schools. To improve the quality of Korean education, the Korean government provides assistance in developing the Korean language curriculum and teacher training programs.

In 2020, despite COVID-19, there were significant accomplishments in terms of high demand for Korean language education around the world. Since this initiative began in 1999, the number of countries that provide Korean language education has consistently risen to 30 in 2019. In 2020, nine countries were added, with India and Russia also joining the ranks of adopting Korean as a second foreign language. Globally, 152,000 students in 1,669 schools across 39 countries are now learning Korean.

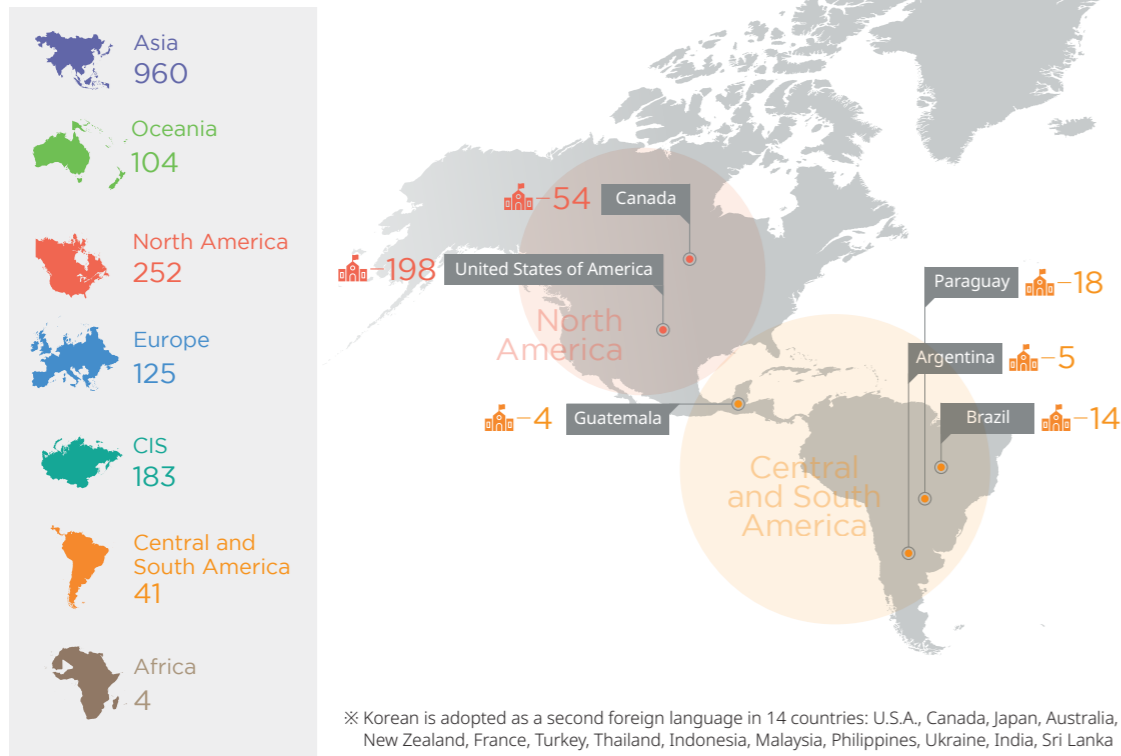
☞ Status of Korean Language Education Overseas in 2020

Category	2020
Korean language curriculum adopted in elementary and middle schools overseas	152,000 students, 1,669 schools, 39 countries
Korean teachers dispatched	70 teachers, 6 countries
Training for local elementary and middle school teachers (lecturers)	6 courses
Online training for local teachers	370 teachers
The number of TOPIK (Test of Proficiency in Korean) applicants	249,000 persons

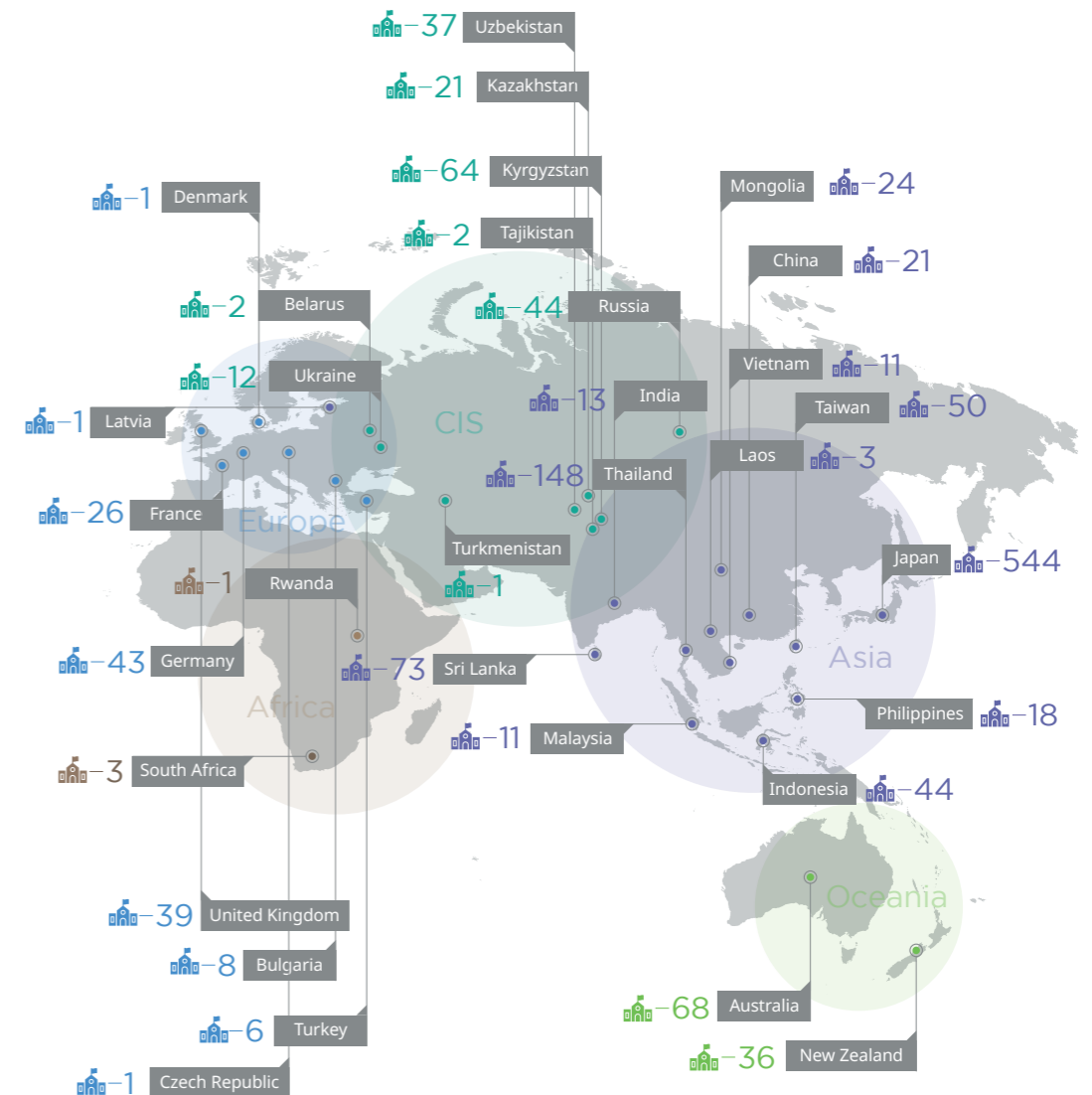
3 Providing Additional Support for Korean Language Education to Meet Rising Demand

In the long term, the government will work on further improving the Korean language education capabilities of universities in developing countries to see if they can develop and run their Korean language curricula independently. The Korean government will facilitate the promotion of Korean studies around the globe through its Promotion of Korean Studies Abroad Project. Korean education is going beyond borders and making its way in the world.

Current Status of Korean Language Classes in Elementary and Middle Schools Overseas (As of October 2020)



1. Enhancing Educational Mobility
2. Sharing Educational Experiences with the World
- 3. Providing Additional Support for Korean Language Education to Meet Rising Demand



2020 Education in Korea

Appendix

Educational Statistics



Number of Schools, Students, and Teachers 2020

Percentage of Enrollment by Year

Number of Students per Teacher by Year

Higher Education Completion Rate by Year

Percentage of Public Education
Expenditure compared to GDP

Public Education Expenditure per Student

OECD PISA Rankings

Government Budgets vs. Ministry of
Education (MOE) Budgets by Year

Number of Schools, Students, and Teachers 2020

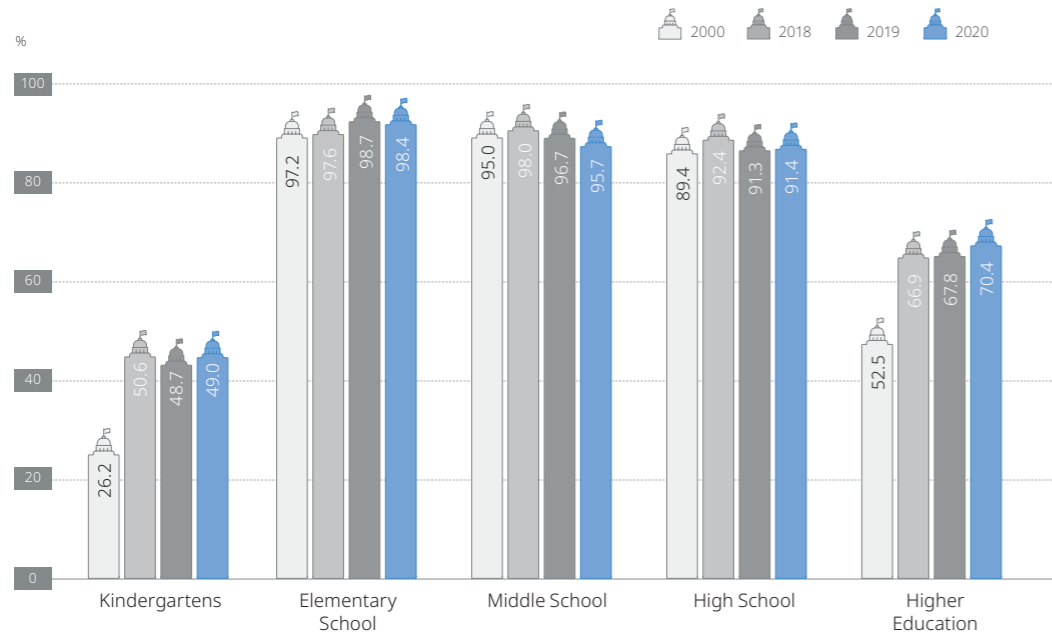
Types of schools	No. of schools	No. of students	No. of Teachers	
Kindergarten, elementary, middle, and high schools	20,740	6,010,006	498,281	
Kindergartens	8,705	612,538	53,651	
Elementary schools	6,120	2,693,716	189,286	
Subtotal	3,250	1,320,759	111,899	
Junior high schools	Middle schools	3,223	1,315,846	111,894
	Higher civic schools	3	48	5
	Open middle schools	24	4,865	-
	Subtotal	2,416	1,347,766	132,178
Senior high schools	General high schools	1,573	958,108	89,666
	Special-purpose high schools	160	64,493	8,012
	Specialized vocational high schools	489	212,294	25,200
	Autonomous high schools	145	102,417	9,226
	High Tech schools	7	552	74
	Open high schools	42	9,902	-
	Subtotal	182	26,269	9,882
Miscellaneous schools	67	8,958	1,385	

Note 1) Figures in brackets are not included in the aggregate total
2) No data is available for Special Classes (Industrial Firms) in 2020

Types of schools	No. of schools	No. of students	No. of Teachers	
Higher education institutions	429	3,276,327	89,475	
Subtotal	228	2,285,139	68,096	
Universities and colleges	Universities and colleges	191	1,981,003	66,054
	Education universities	10	15,628	827
	Industrial universities	2	15,384	346
	Technical colleges	1	60	-
	Open universities	1	144,239	149
	Miscellaneous schools	2	3,431	148
	Distance universities	1	898	8
	Cyber universities	17	124,225	563
	In-house colleges	3	271	1
	Subtotal	156	156,670,593	13,403
Junior colleges	Junior colleges	136	621,772	12,178
	Distance colleges	1	1,274	12
	Cyber colleges	2	6,086	39
	In-house colleges	5	143	4
	Major colleges	3	15,267	275
	Polytechnic colleges	9	26,051	895
	Subtotal	45	320,595	7,976
Graduate schools	Graduate schools	45	10,440	1,509
	Graduate schools within universities	[1,124]	310,155	6,467

Note 1) Figures in brackets are not included in the aggregate total

Percentage of Enrollment by Year



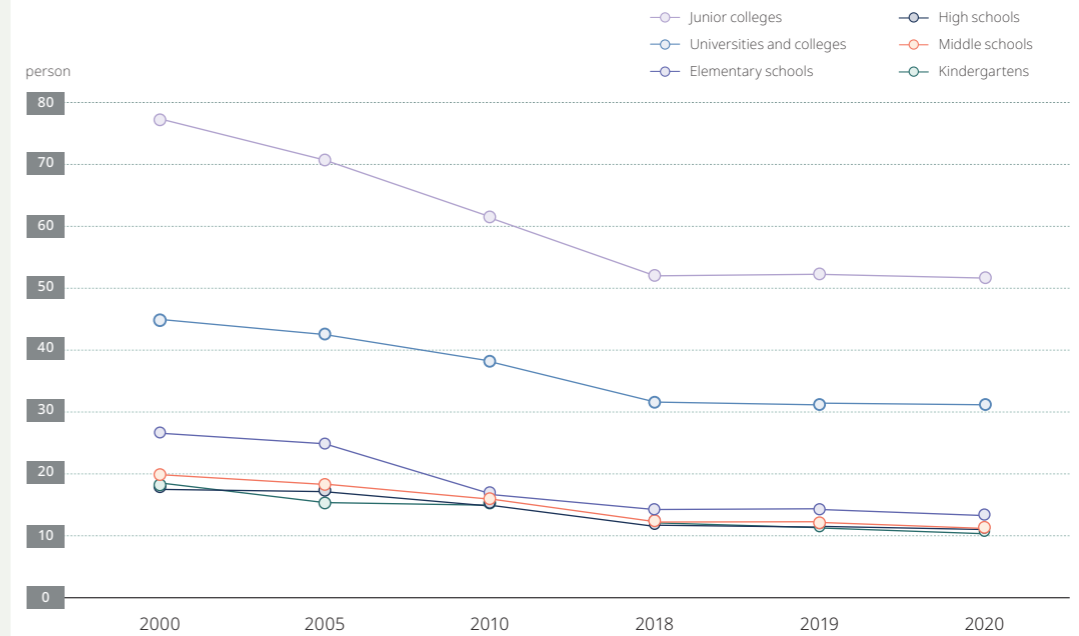
(Unit: %)

Classification	2000	2005	2010	2018	2019	2020
Kindergartens	26.2	31.1	40.3	50.6	48.7	49.0
Elementary schools	97.2	98.8	99.1	97.6	98.7	98.4
Middle schools	95.0	94.3	96.5	98.0	96.7	95.7
High schools	89.4	92.1	91.7	92.4	91.3	91.4
Higher education	52.5	66.1	69.3	66.9	67.8	70.4

Note 1) Enrollment rate (%) = (School-age children enrolled in school/School-age population) × 100
 2) School-age population is based on KOSTAT's "Population Projections for Korea" (up to 2017: finalized figures; 2018 to date: projections)
 3) School age: 3-5 yrs. old for kindergarten, 6-11 yrs. old for elementary school, 12-14 yrs. old for middle school, 15-17 yrs. old for high school, and 18-21 yrs. old for higher education institutions
 4) Figures for higher education institution are based on the no. of students enrolled (including current students and students on leave of absence. From 2019, includes students who postponed Bachelor's degrees)

Source Statistics Korea (as of March 2019), Population projections database (<http://kosis.kr>)

Number of Students per Teacher by Year

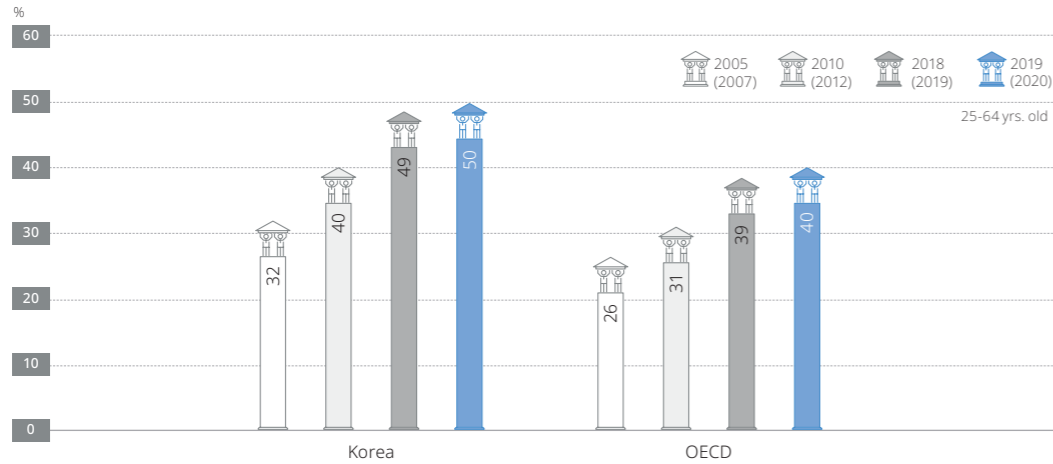


(Unit: person)

Classification	2000	2005	2010	2018	2019	2020	
Kindergartens	19.5	17.5	14.8	12.3	11.9	11.4	
Elementary schools	28.7	25.1	18.7	14.5	14.6	14.2	
Middle schools	20.1	19.4	18.2	12.1	11.7	11.8	
High schools	All types	19.9	15.1	15.5	11.5	10.6	10.1
Higher education institutions	Universities and colleges	44.4	42.1	38.1	31.9	31.8	31.4
		(31.8)	(29.5)	(27.0)	(23.6)	(23.7)	(23.4)
	Junior colleges	78.0	70.9	61.2	52.4	52.2	51.1
	(51.2)	(44.1)	(39.4)	(35.0)	(35.9)	(35.7)	

Note 1) Teachers for kindergarten through high school include regular full-time faculty, short-term teaching staff, and teachers on leave. Retired teachers and instructors/lecturers are excluded.
 2) For higher education institutions, the figures are the no. of enrolled students per teacher, and the figures in parentheses are the no. of current students per teacher.
 3) The statistics for universities and colleges include the figures for students and teaching staffs at regular graduate schools

Higher Education Completion Rate by Year



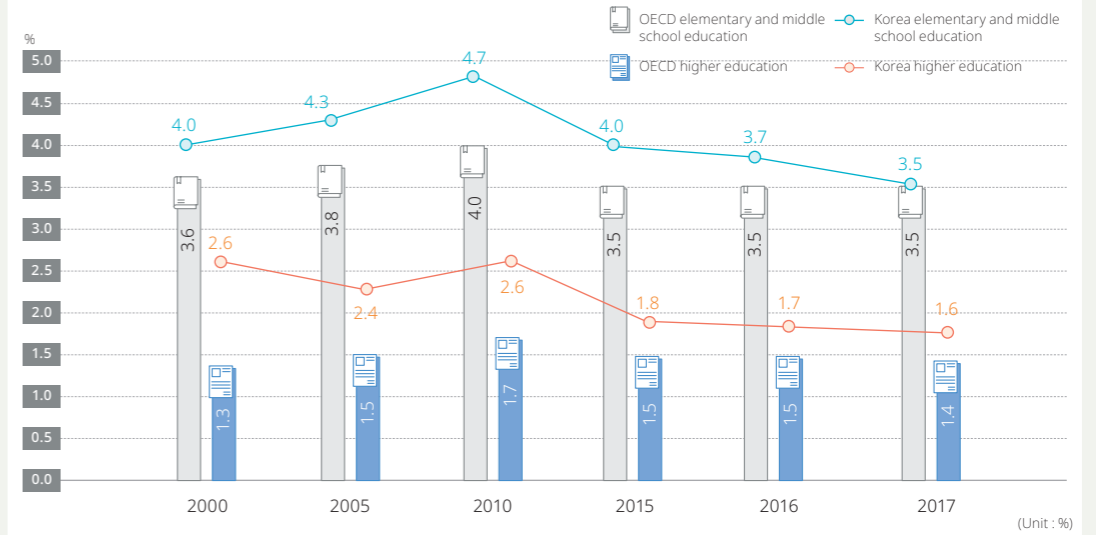
(Unit : %)

Classification	Tertiary education completion rate					
	25-64 yrs. old	25-34 yrs. old	35-44 yrs. old	45-54 yrs. old	55-64 yrs. old	
2005 (2007)	Korea	32	51	36	18	10
	OECD	26	32	27	24	19
2010 (2012)	Korea	40	65	47	27	13
	OECD	31	38	33	28	23
2017 (2018)	Korea	-	70	-	-	-
	OECD	-	44	-	-	-
2018 (2019)	Korea	49	70	-	-	-
	OECD	39	44	-	-	-
2019 (2020)	Korea	50	70	-	-	24
	OECD	40	45	-	-	28

Note 1) "Completion rate" refers to the percentage of individuals who completed their high school or tertiary education within the same-age population bracket.
 2) The first years refer to the school year. The years in parentheses refer to the EAG (Education at a Glance) publication year.
 3) The asterisks refer to unannounced indicators

Source OECD (for each publication year), Education at a Glance: OECD Indicators

Percentage of Public Education Expenditure compared to GDP



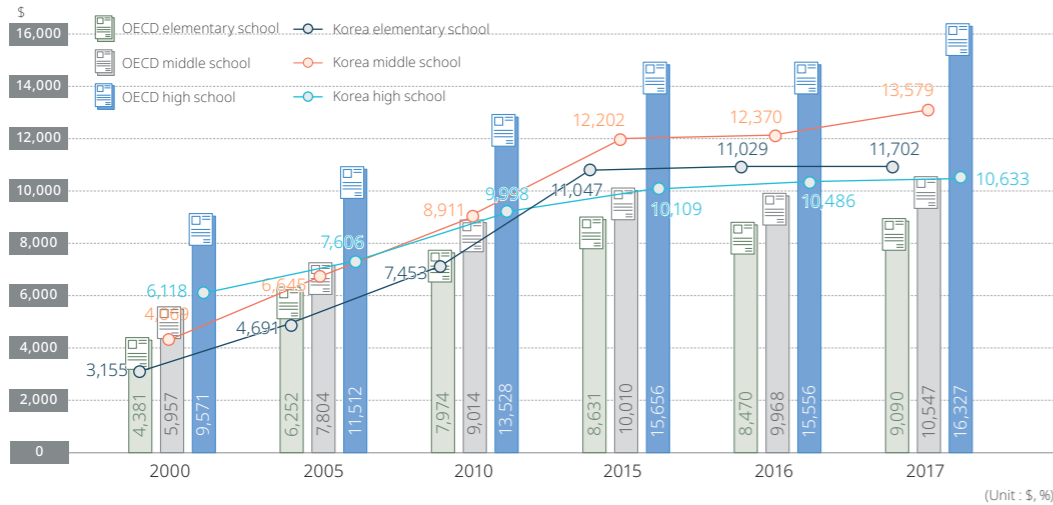
(Unit : %)

Classification	Elementary and middle school education			Higher education			
	Total	Government funded	Privately funded	Total	Government funded	Privately funded	
2000 (2003)	Korea	4.0	3.3	0.7	2.6	0.6	1.9
	OECD	3.6	3.4	0.3	1.3	1.0	0.3
2005 (2008)	Korea	4.3	3.4	0.9	2.4	0.6	1.8
	OECD	3.8	3.5	0.3	1.5	1.1	0.4
2010 (2013)	Korea	4.7	3.9	0.9	2.6	0.7	1.9
	OECD	4.0	3.7	0.3	1.7	1.1	0.5
2015 (2018)	Korea	4.0	3.5	0.5	1.8	0.7	1.2
	OECD	3.5	3.2	0.3	1.5	1.0	0.5
2016 (2019)	Korea	3.7	3.1	0.5	1.7	0.7	1.1
	OECD	3.5	3.1	0.4	1.5	0.9	0.5
2017 (2020)	Korea	3.5	3.0	0.4	1.6	0.6	1.0
	OECD	3.5	3.1	0.3	1.4	1.0	0.4

Note 1) Total = (Government funded + Privately funded + Overseas public education expenditures)/GDP x 100. Due to decimal points and rounding, the aggregate sum might be different from the summation of the figures (Government funded + Privately funded). Starting with the OECD Education Index 2018, the calculation standard was changed to include overseas public education expenditures.
 2) The first years refer to the fiscal year. The years in parentheses refer to the EAG (Education at a Glance) publication year.
 3) Starting with the OECD Education Index 2018, public education expenses are calculated on the basis of 'final resources,' which includes government transfers to the private sector.
 ※ Examples of government transfers to the private sector: Student scholarships, household support, etc.*
 4) Starting from OECD Education Index 2019, carryovers and reserves in all education levels from the previous year are excluded from the public education expenses (higher education level is excluded starting from OECD Education Index 2018)
 5) Starting from OECD Education Index 2017, public education expenses are calculated by including all program expenses without education level classification for each education level - Korea data for 2010 (fiscal year) are calculated by KEDI for time series comparison
 6) Korea's GDP (based on fiscal years) was 522 trillion won for 2000, 811 trillion won for 2005, 1,173 trillion won for 2010, 1,564 trillion won for 2015, 1,642 trillion won for 2016 and 1,836 trillion won for 2017.

Source OECD (respective year), Education at a Glance: OECD

Public Education Expenditure per Student



(Unit : \$, %)

Classification		Elementary school education		Middle school education		High school education	
		Public education expenditure per student	Percentage of annual public education expenditure per student compared to per capita GDP	Public education expenditure per student	Percentage of annual public education expenditure per student compared to per capita GDP	Public education expenditure per student	Percentage of annual public education expenditure per student compared to per capita GDP
2000	Korea	3,155	21	4,069	27	6,118	40
(2003)	OECD	4,381	19	5,957	25	9,571	42
2005	Korea	4,691	22	6,645	31	7,606	36
(2008)	OECD	6,252	21	7,804	26	11,512	40
2010	Korea	7,453	26	8,911	31	9,998	35
(2013)	OECD	7,974	23	9,014	26	13,528	41
2015	Korea	11,047	31	12,202	35	10,109	29
(2018)	OECD	8,631	22	10,010	25	15,656	38
2016	Korea	11,029	30	12,370	33	10,486	28
(2019)	OECD	8,470	21	9,968	25	15,556	38
2017	Korea	11,702	29	13,579	33	10,633	26
(2020)	OECD	9,090	21	10,547	24	16,327	36

- Note**
- 1) The equation for calculating public education expenditure per student uses a changed basis for calculation starting with OECD Education Indicators 2018.
- Previous equation: $\{(Ordinary\ expenditure + Capital\ expenditure) / No.\ of\ students\} / PPP$
- New equation: $\{(Direct\ expenditure\ by\ education\ entity) / No.\ of\ students\} / PPP$
 - 2) Starting from OECD Education Index 2019, the carryover and reserves of the previous year's primary, secondary, and secondary education levels of approximately 6.8 trillion won are excluded from the public education expenditures. (The higher education level is excluded from OECD Education Index 2018.)
 - 3) Starting from OECD Education Index 2017, public education expenses are calculated by including all program expenses without education being classified into different levels - Korea data for 2010 (fiscal year) are calculated by KEDI for time series comparison
 - 4) Korea's per capita GDP (based on fiscal years) was US\$ 15,186 for 2000, US\$ 21,342 for 2005, US\$ 28,829 for 2010, US\$ 33,520 for 2015, US\$ 37,143 for 2016 and US\$ 41,001 for 2017.
 - 5) Korea's PPP conversion rate (based on fiscal years) was 731.19 won per \$ in 2000, 788.92 won per \$ in 2005, 823.67 won per \$ in 2010, 870.93 won per \$ in 2015, 862.55 won per \$ in 2016, and 871.70 won per \$ in 2017

Source OECD (respective year), Education at a Glance: OECD Indicators

OECD PISA Rankings

(Three year cycle, Object : 15 years olds)

Classification		2000	2003	2006	2009	2012	2015	2018
OECD Member Countries	Reading	6	2	1	1-2	1 - 2	3-8	2-7
	Mathematics	2	2	1-2	1-2	1	1-4	1-4
	Science	1	3	5-9	2-4	2-4	5-8	3-5
All participating countries	Reading	7	2	1	2-4	3-5	4-9	6-11
	Mathematics	3	3	1-4	3-6	3-5	6-9	5-9
	Science	1	4	7-13	4-7	5-8	9-14	6-10

- Note**
- 1) PISA: Programme for International Student Assessment
 - 2) The results are for 43 countries in 2000, 41 countries in 2003, 57 countries in 2006, 75 countries in 2009, 65 countries in 2012, 72 countries in 2015, and 79 countries in 2018
 - 3) Starting with PISA 2006, the OECD has provided the range for each country's rank at a 95% confidence level

Government Budgets vs. Ministry of Education (MOE) Budgets by Year

(Unit : Million won, %)

Year	Government budgets (A)	MOE budgets (B)	B vs A (%)
2000	93,937,057	19,172,028	20.4
2005	134,370,378	27,982,002	20.8
2010	211,992,599	41,627,519	19.6
2014	309,692,464	50,835,377	16.4
2015	322,787,071	51,224,094	15.9
2016	329,909,201	54,065,928	16.4
2017	339,661,568	61,832,104	18.2
2018	368,646,277	68,549,213	18.6
2019	399,769,098	74,947,793	18.7
2020	427,109,370	76,995,734	18.0

- Note**
- 1) Government budget for 2000 = General accounts + Special account for the management of funds transferred to local governments + Special account for the management of funds transferred to local education agencies
 - 2) Government budget for 2010 - 2020 = General accounts + Special accounts
 - 3) MOE budget = General accounts + Special accounts
 - 4) MOE budget for 2010: Budget of the now-obsolete Ministry of Education, Science and Technology (MEST)

Source MOE(budget officer); DBAS(Digital Budget and Accounting System)

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