Contents

I. Korean Education Today
   01 School System 02
   02 Educational Administration System 05
   03 Educational Statistics in Korea 07

II. Development of Education in Korea
    01 History of Educational Development in Korea 12
    02 Development Strategies: Stepped, Systematic, and Sequential Approach 18

III. Key Elements of Education in Korea
     01 Education Finance 22
     02 Teacher Policy for Enhanced Competency 25

IV. Education Policy for the Future
    01 Quality in Education for the Era of the Fourth Industrial Revolution 28
    02 Equity in Education 36
       (Restoration of social mobility through education)
    03 Safety in Schools 40
    04 Creating Open Climate for Educational Autonomy 44
School System

The school system in Korea includes early childhood education, primary education, secondary education, higher education and lifelong education. The school system in Korea consists of nine years of compulsory education that includes elementary education and lower secondary education (middle school education), followed by the three years of upper secondary education (high school education) and generally four years of higher education. Various types of schools exist in upper secondary education and higher education according to their missions and purposes. In addition, schools where students with special needs attend are included in the official school system in Korea.

As the importance of early beginning of formal education is being emphasized, the enrollment rate in early childhood education institutions has been constantly on the rise. The kindergarten enrollment rate increased to 50.7% in 2017. The importance of early childhood education is reflected in the “Nuri Curriculum”, the national curriculum for all five year old children implemented in 2012. The age group who could benefit by being enrolled in the “Nuri Curriculum” and thus receiving financial support expanded into three and four year old children in 2013.

At the end of lower secondary education (middle school education), students usually choose types of high schools depending on their future life careers and plans. There are four different types of high schools according to their specialized curriculum; (1) general academic high schools where students receive college-preparation education and general education, (2) special-purposed high schools such as foreign language high schools and science and arts academy for gifted students, (3) specialized high schools that provide vocational education and training, and (4) autonomous public/private high schools which have more autonomy and latitude in school management.
The higher education institutions include four-year universities and colleges, two or three-year junior and technical colleges, and graduate schools. In addition to regular four-year comprehensive universities, there are special types of universities depending on their purposes of establishment such as universities of education where elementary school teachers are educated, industrial universities for lifelong education, cyber universities based on distance and online learning, intra-company universities founded by companies to meet the needs of their employees, and polytechnic universities for training job-related skills.

Most of universities have graduate schools which offer masters and doctoral programs. There are professional graduate schools in the areas of law, pharmacy and medicine, and specialized graduate schools in public administration, education, and business administration, where students pursue advanced degrees.

Schools in Korea can also be classified according to the type of founding bodies. National schools are established by the national government. Public schools are founded by local governments and private schools are founded by private foundations. Most of elementary schools are founded by the national or local governments. As of 2017, there are only 74 private elementary schools among the total number of 6,040 elementary schools, which take up only 1.2%. In secondary education, the percentage of private middle and high schools is far higher than in elementary education. As of 2017, there are 1,584 private middle schools and high schools among the total number of 5,573 secondary schools and the percentage of private schools in secondary education is 28.4%.

Although lifelong education is not part of the official schooling system in Korea, the increasing importance of lifelong learning in the rapidly changing society has people receive various forms of continuing education. Many types of continuing education institutions exist such as civic schools, industry-related schools, evening classes, online classes, self-accreditation programs for self-study, credit bank system and cyber and distance learning university. Diverse opportunities are given to those who seek to continue with their education for many purposes, such as learning new skills to build more solid careers and making a career change.
The educational administration system in Korea is two-layered. The central government, consisting of President, Prime Minister, National Council on Education\(^1\), and the Ministry of Education, plans and implements the educational policies at the national level, while local governments have authority over deciding educational policies significant to the communities.

At the national level, the Ministry of Education plays a role of the executive body of the central government, which has administrative control over planning, implementing, and monitoring educational policies that direct Korean education. The Ministry of Education is responsible for creating educational policies that are related to educational and academic activities in elementary, secondary, and higher education and implementing them successfully. The Ministry of Education provides the direction of education policies of the current administration, including university affairs and academic research, vocational education, higher education, school innovation, national curriculum, educational welfare, student support, lifelong learning and future education, educational safety information and educational statistics. Diverse educational needs of the time period have added some aspects to the main function of the Ministry of Education such as human resource development and overseeing and advancing science and technology (Ministry of Education and Human Resources, 2001; Ministry of Education, Science, and Technology, 2008).

With the Ministry of Education as the central governing body of educational policies, the Municipal, Provincial, and Regional Offices of Education are the other governing bodies that control local education system. With the enactment of the Local Autonomy Law in 1991, the major direction of educational administration has been toward decentralization and

\(^1\) This is an advisory organization that deals with education policies, directly reporting to the President.
democratization. The role of regional Offices of Education becomes more prominent in dealing with educational issues in the community. The Ministry of Education has delegated much of its decision-making authority over budget planning and administrative decisions to local Offices of Education. Under the direction of superintendents who are elected in general election, diverse local educational demands and needs can be better identified and addressed at the local level.

As of 2017, there are 17 Metropolitan and Provincial Offices of Education and 176 District Offices of Education. A District Office of Education serves as a local educational administrative agent that facilitates and supports the implementation of educational policies in local schools. The major issue in educational administration is how the central government represented by the Ministry of Education and the local educational administrative bodies work cooperatively with one another under different leaderships. (KEDI, 2016, p. 35)

**Metropolitan Offices of Education (8)**

- Seoul Metropolitan Office of Education
- Busan Metropolitan City Office of Education
- Deagu Metropolitan Office of Education
- Incheon Metropolitan City Office of Education
- Gwangju Metropolitan Office of Education
- Deajeon Metropolitan Office of Education
- Ulsan Metropolitan Office of Education
- Sejong City Office of Education

**Provincial Offices of Education (9)**

- Gyeonggido Office of Education
- Gangwon Provincial Office of Education
- Chungcheongbuk-do Office Of Education
- Chungchongnam-do Office of Education
- Jeollabukdo Office of Education
- Jeollanamdo Office of Education
- Gyeongsangbuk-do Office of Education
- Gyeongsangnamdo Office of Education
- Jeju Special Self-Governing Provincial Office of Education
Educational Statistics in Korea

As Korean education has grown quantitatively and qualitatively over the last six decades, the school system is remarkable expanded. The number of schools in every level of education has increased over the years. Yet, with the constant decline in the number of school-aged children, the increasing trends in terms of the number of schools have stopped recently. Now, it is anticipated that the number of schools will decrease gradually.

The total number of schools including kindergartens, elementary, middle and high schools is 20,938 as of 2017. The numbers of kindergartens and elementary schools are 9,029 and 6,040 respectively. The number of middle schools is 3,236 and the number of high schools is 2,360.
The total number of students has declined over the last decades. Low birth rate, highly competitive educational environment, and high level of competition in society might have contributed to such a drastic decline in the number of school-aged children. The total number of students in elementary, middle and high schools, and kindergartens is 6,468,629 in 2017. The number of students attending both junior colleges and universities is 3,437,309 in 2017, and this number has been stable over the last 7 years.

The total number of teachers working in kindergartens, elementary, middle and higher schools, and higher education institutions is 492,187. The declining number of school-aged children, especially in elementary schools, caused changes in educating pre-service teachers and recruiting them to make the supply and demand of teachers steady in the mid and long term (Ministry of Education, 2017).
The increase in enrollment rate at every level of education reflects the expanding trends of educational opportunities. The remarkable increase lies in enrollment rate in kindergarten. Its enrollment rate was only 26.2% in 2000 and it reached 50.7% in 2017. The enrollment rate in tertiary education is also on the rise from 52.5% in 2000 to 67.6% in 2017.

The ratio of students to teaching staff is 16.8 in primary education, 15.7 in lower secondary
education and 14.1 in upper secondary education. Though these numbers are slightly higher than OECD average, they have been decreased over the last 15 years getting close to OECD average.

Since internationalization of higher education was taking place, many higher education institutions have made an effort to recruit more international students. As a result, the number of international students enrolled in degree and non-degree programs has been steadily on the rise over the last three years.

These representative statistical data demonstrate the recent trends of Korean education. The number of students per teacher decreases, which indicates that more quality-oriented and individualized education is presently possible. The increasing number of international students in Korea shows that internationalization of higher education is taking place, which provides enormous benefits of exchange in culture and knowledge to those involved. However, Korean education is faced with the emerging challenges, such as low birth rate, costly higher education expenses and high youth unemployment rate and losing potential of social mobility through education, which might threaten the future of the country.
Development of Education in Korea

01 History of Educational Development in Korea

A Quantitative expansion in primary and secondary education

Korea has achieved a remarkable economic growth for a relatively short period time from the remains of Korean War. The driving force that made such an outstanding growth possible is often said to be people’s enthusiasm for education. During the rapid process of industrialization, well-educated and trained workforce contributed to the development of a nation which had little natural resources but only ample human resources. Korea grew to become one of the major donor countries of Official Development Assistance of OECD.

The history of educational development in Korea often coincides with economic development of the nation. After the Korean War, education still played a critical role in reconstructing the country from the rubbles of the war. Basic literacy was crucial in cultivating capable and efficient workforce prior to the 1960s. The first stage of the development of the educational system of Korea was the expansion of primary education. After being liberated from the Japanese colonial rule, many Koreans remained illiterate and ignorant of the democratic principles. The expansion of democratic education along with literacy education laid solid foundation for basic education for further development. The reconstruction of educational system according to the new principles of democracy was required, and the universalization of primary and secondary education was followed.

The First Nation’s five-year Economic Development Plan was implemented in 1962, having the focus of the nation’s main industry shifted from labor-intensive light industries to heavy and chemical industries. The shift on the industrial map and economic landscape also made the focus of educational policies change from universalizing primary education to improving and strengthening vocational and technical education in secondary education. Expanding and
universalization of secondary education was necessary to provide skilled workforce for newly established wealth-producing industry.

As the national economy continuously developed after having implemented the Economic Development Plans, quantitative expansion in education continued. In order to accommodate increasing population and strong demands for education, more educational facilities were built and additional teachers were educated and recruited. The growth in quantity of education served as a strong foundation for the nation's economic development, providing skilled labor force until the 1980s.

Completing the establishment of compulsory elementary education created new educational demands for secondary education. The policy of middle school entrance examination was abolished in 1969, which made lower secondary education partially universal. Later in the mid-1980s, the policy attempt to make lower secondary education compulsory was made. Later it became compulsory completely in 2005.

Even though the operation of elementary and middle schools was stabilized, entering selective and prestigious high schools caused overheated competition, which indicated the
increasingly compelling demand for more quality high school education. As an attempt to normalize upper secondary education, the High School Equalization Policy was implemented in 1975. It contributed to standardizing upper secondary education and enhancing the quality of upper secondary education.

When completing the overall national educational system, the lack of public funds for building the entire secondary education system forced the government to heavily depend on private investors to establish the system. When the government focused most of its available resources on expanding elementary education, the private investors provided their funds to build more middle and high schools and succeeded in expanding the secondary education system.

High schools which focused on vocational training were promoted especially in the 1970s in order to meet the demands of industry such as steel, shipbuilding, machinery, and petrochemistry. Vocational high schools specialized in acquiring such special skills and knowledge were founded according to the industrial needs. Later in the 1980s and 1990s, the industrial focus was shifted from manufacturing and machineries to information technology, design, animation in order to meet the changed needs of the industrial landscape.

Looking at the statistical figures, the quantitative expansion is evident even until today. The number of elementary schools was 5,125 in 1965, but it is 6,040 in 2017. The number of middle schools was 1,208 in 1965, but it is 3,236 in 2017. The number of high schools was 701 in 1965, but it is 2,326 in 2017. The number of higher education institutions was 199 in 1965, but it is 430 in 2017.

In terms of the number of teachers, the number of elementary school teachers jumped from 79,164 in 1965 to 184,358. The number of middle school teachers increased from 19,067 in 1965 to 109,136 in 2019 and the number of high school teachers from 14,108 in 1965 to 134,840 in 2017. The number of faculty in higher education was only 6,801 in 1965 to 90,902 in 2017.2)

qualitative improvement in primary and secondary education

As Korean education has actively and effectively responded to industrial and social demands, new challenges arrived in the 1980s. The focus on the quantitative growth, which helped the nation to achieve economic growth by providing skilled, efficient, and productive workforce, had to be shifted with the new kinds of social demands emerging in the 1980s. Korean education was modernized in terms of the structure and the organization of the system, but the other indicators that implicated the quality of education might not have been up to the required standards of developed countries, such as the number of students per teacher and public educational expenditure per student.

Therefore, a new emphasis was placed on enhancing the quality of education. The improvement of the quality of education was pursued in educational policies and the need for lifelong learning was recognized. Education tax system was implemented to finance various educational reforms. During and after the 1980s, continuous economic growth that Korea has achieved based on its export-oriented strategy has met with new challenges caused by global competition armed with advanced technology. The compelling demands of enhancing the competitiveness of nation’s economy have changed the direction of educational policy, which focused on enhancing the quality of education. Some of the other reform movements that occurred during this time period are improving college entrance system, upgrading school facilities, securing high quality teachers, promoting science education and improving the curriculum and teaching methodology, etc. (Ministry of Education, 2016a).
Development of higher education

The expansion focused on secondary education gradually moved to the expansion of higher education. More and more students continued to pursue college degrees and advanced degrees. College admission system was reformed and more universities were established. The number of higher education institutions was 80 in 1960 and continuously increased to 372 in 2000 and 430 in 2017.

Number of Tertiary Schools

![Number of Tertiary Schools](image)


The expansion of higher education brought about a building pressure to increase the availability of quality higher education. Increasing the number of higher education institutions and enhancing institutional autonomy were the main policy concerns of the mid-80s, resulting in forming the first Education Reform Committee. The Committee recommended that college entrance quota increase and that graduation quota decrease, although graduation quota was abolished later. More than 30% increase in the number of college students occurred during the 1980s.

Research capacity of higher education institutions as the major function began to be highly emphasized. At the beginning of the 1990s, internationalization and globalization
became the dominating forces that heavily influenced the direction of education policy. Global competitiveness became one of the major indicators used to evaluate the performance of higher education institutions. In order to enhance global competitiveness, research capabilities of the faculty members of higher education institutions became critical.

The current challenges which higher education faces are to enhance global and domestic competitiveness, and to address the mismatch between the supply of college graduates and the demands of the labor market by educating them more pragmatically. It is required to restructure universities so that they are better equipped with preparing students for society. In addition, enhancing institutional autonomy in terms of student selection and the management of funds provided by the government is one of the current challenges that higher education institutions need to address.

D Development of lifelong education

Korean education has historically focused on the development of institutionalized schooling system. However, lifelong education becomes very important as social demands and technologies continuously change and as longevity is expected. Even though the notion of lifelong education existed in the official education system, its importance has been more strongly emphasized recently. Since the enactment of Lifelong Learning Act in 1999, lifelong education has been strongly promoted in order to create a society where each and every member of society can continue with their education anytime and anywhere.

Currently, lifelong education is pursued in more institutionalized forms such as cyber universities, university-affiliated lifelong education institutes, online classes and credit bank system for those who pursue self-study programs and for those who would like to prepare for various certificate examinations. Educational Broadcasting System (EBS) also contributes to expanding access to lifelong learning opportunities. Lifelong education policies attempt to create lifelong education programs tailored toward a person’s life cycle.

The expansion of access to basic education through the history of Korean education system
was the key factor that brought about rapid and qualitative economic growth. As Korean education is faced with new challenges such as the advent of the Fourth Industrial Revolution, one of the currently rising aims of education is to foster human resources with creativity, critical thinking skills and problem-solving skills, not to educate students with recited clusters of knowledge merely transmitted from teachers or other sources of information. The ability to think creatively and critically is needed to select and choose among a plethora of information and knowledge provided for them. Adaptability and flexibility in thinking and problem-solving are some of core competencies which are necessary to deal with various problems that they would encounter.

### Development Strategies: Stepped, Systematic, and Sequential Approach

The development of Korean education is characterized by three distinctive yet integrative strategies. The first strategy is the systematic approach. The systematic approach refers to a process that follows ‘a system of planning, implementing, and evaluating policies.’ When the government developed its education system throughout the country, it followed this system of planning education policies, implementing them, and evaluating the outcome of the implemented policies. The establishments of Korean Educational Development Institute (KEDI) and Central Institute for Education Evaluation, later renamed Korea Institute for Curriculum and Evaluation (KICE) contributed to successfully vitalizing this approach by putting research efforts in formulating education policies and by applying its research findings into implementing policies. The systematic approach became more meaningful, as scientific research findings helped to create more effective and scientific evidence-based education policies.

The second strategy is a stepped approach. The Korean government first focused on

3) This section is reorganized from a portion in Dynamic Education for Individual and National Development (KEDI, 2015), pp. 28-33.
primary education, then lower secondary education and upper secondary education and higher education in turn. At the beginning of establishing the entire system, expanding access to basic education was critical to build a solid foundation of the education system. The policy direction was initially placed on building as many elementary schools as possible nationwide in order to accommodate its citizens’ educational needs. In the 1960s, universalization of primary and lower secondary education was its priority. Labor-intensive light industry was the main industry of the nation at that time, which could be sufficiently run by workforce with basic literacy.

The shift from labor-intensive light industry to special skills-requiring heavy industry made the government realize new industrial needs, which initiated the expansion of upper secondary education and promoted vocational education. Expansion of upper secondary education and successful operation of specialized vocational high schools took part in providing skilled labor force to the intended industry, which in turn resulted in remarkable economic development of the nation in the 1970s and 1980s.

The expansion of opportunities to receive higher education in the mid-80s and 90s reflected that the next step was necessary to meet the needs of knowledge-based society. As global economic competition became more fierce, the demands for new scientific technology to go ahead of other countries increased, resulting in the expansion of higher education. A strong emphasis was placed on developing research capacities of higher education institutions.
Korean education historically took this series of steps, beginning from focusing on basic literacy education to increasing access to higher education, which have contributed to substantial development of the national economy.

The last strategy is a sequential approach. The sequence of Korean educational development is described from quantitative to qualitative. The process of implementing policies first focused on expanding access to elementary education, even though it caused many overcrowded classes. Then, the government worked on reducing the number of students per classroom by building more elementary schools, which resulted in improving the quality of education. Expanding secondary education also first focused on increasing availability of secondary schools, which depended on private funds and the government later provided quality control over secondary education such as abolishing middle school entrance examination and implementing High School Equalization policy.

In case of higher education, the government first focused on the issue of access as well, then worked on the issue of quality. Since 2000, the government has put more emphasis on enhancing the quality of research and education provided by higher education. In order to help higher education institutions improve the capability of research and education, the government provided various kinds of financial support in the forms of national projects, such as Brain Korea 21 (BK 21), Advancement of College Education Project (ACE), Leaders in Industry-University Cooperation Project (LINC), and Initiative for ‘College of Humanities’ Research and Education Project (CORE), etc. Through these various types of national financial support projects for higher education institutions, the quality of higher education has been continuously enhanced.

The three major strategies contributed to the formation of the Korean education system now, and these systematic, stepped, and sequential approaches could achieve both quantity expansion and quality improvement of education.
Development of Korean Education

Elementary School → Middle School → High School → Tertiary

Step-by-step Approach
Sequential Approach
Quantity → Quality

Source: KEDI (2016). Education for the Future, p.9
Key Elements of Education in Korea

01 Education Finance

Korea managed to overcome financial challenges in achieving its educational development. Korean education has often been cited as the main driving force to make remarkable growth in both economy and society, which is often regarded as the Miracle on the Han River. However, financing this kind of rapid development was not an easy task. Such an outstanding development was possible due to the government’s strong leadership in providing required resources and gaining assistance from private investors for the expansion of the system of secondary education.

The budget for education has gradually increased over the last forty years. This trend indicates that the Korean government has continuously invested in education to improve its quantity and quality. However, for the last 17 years, the expenditure in education quantified by the percentage of the Ministry of Education budget over the Government budget has variably changed ranging from 15.9% (2015) to 20.4% (2000). For the year 2017, the percentage remains at 18.2%, indicating almost 2% increase from the previous year (16.4%).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Govt. Budget</th>
<th>MOE Budget</th>
<th>Govt. Budget vs MOE Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>93,937,057</td>
<td>19,172,028</td>
<td>20.4</td>
</tr>
<tr>
<td>2005</td>
<td>134,370,378</td>
<td>27,982,002</td>
<td>20.8</td>
</tr>
<tr>
<td>2010</td>
<td>211,992,599</td>
<td>41,627,519</td>
<td>19.6</td>
</tr>
<tr>
<td>2015</td>
<td>322,787,071</td>
<td>51,224,094</td>
<td>15.9</td>
</tr>
<tr>
<td>2016</td>
<td>329,909,201</td>
<td>54,065,928</td>
<td>16.4</td>
</tr>
<tr>
<td>2017</td>
<td>339,661,568</td>
<td>61,832,104</td>
<td>18.2</td>
</tr>
</tbody>
</table>


Note:
1. 2000: Govt. Budget = General Accounts + Special Accounts for the Management of Local Grant + Special Accounts for the Management of Local Education Grant
2. 2010~2017: Govt. Budget = General Accounts + Special Accounts
3. MOE Accounts = General Accounts + Special Accounts
4. 2010: MOE results are the budget of MEST (Ministry of Education, Science and Technology)
5. The results from 2013 are the budget on the basis of the MOE after reorganization, which includes the revised supplementary budget

The importance of education is reflected in the amount of money that the government is willing to spend. The expenditure on educational institutions in Korea stays above the OECD average in both elementary and secondary education and higher education.

**Trends in Expenditure on Education Institutions as a percentage of GDP by Year**

![Expenditure on Education Institutions as a percentage of GDP by Year](source)


The average expenditure on schools per student in Korea was below the OECD average in elementary and secondary education in 2010, but later it exceeded in 2014. Meanwhile, the expenditure on higher education still remains below the OECD average.

**Trends in Expenditure on Educational Institutions per Student by Year**

![Expenditure on Educational Institutions per Student by Year](source)

The sources of funding education in Korea are predominantly tax revenues. Internal tax revenues comprise those from the central government and local governments. Special Tax for Education were temporarily implemented to provide additional expenses to finance education in 1982, and it became permanent later in 1991. Tax revenues acquired from collecting Special Tax for Education are the central government’s main source of educational budget. It has served as a stable source of financing educational system since its implementation.

The Ministry of Education provides subsidies and education grants for the Metropolitan and Provincial Offices of Education. The main resources that support the Korean educational system come from national tax, local tax, and specially purposed imposed education tax. The central government and local governments provide funds to manage and operate the educational system, such as paying teachers and administrative officials and staff, building and fixing school facilities, supporting various school programs and projects, etc. Various tax transfers from local governments (Metropolitan and Provincial governments) and the central government take up a large portion of the education budget. The financing system of Korean education has secured stability by having various tax revenues as its source, contributing the government’s ability to reduce inequity in education and providing sufficient funds for the schools located in less affluent areas.

### Education Budget System of Central and Local Governments

**Ministry of Education**
- Local Education Subsidy
- Categorical Grants

**Metropolitan and Local Governments**
- Municipal and Provincial Tax Transfer
- Local Education Tax Transfer
- Tobacco Consumption Tax Transfer (Seoul-Metropolitan Cities)
- Other Aid

**Offices of Education**
- National Treasury-Dependent Revenues
- Self-governing Body Tax Transfer
- Own Revenues

**Cities, Countries and Districts**
- Educational Expense Subsidies

**School**
- School Operating Support Money
- Beneficiary Paid Expenses

**Parents**
- School Operating Support Money
- Beneficiary Paid Expenses

Local education budget consists of transfer from the central government, the local government, and other sources, independent revenue, local education bonds, and others. The transfer from the central government takes 66.3% of the 2016 revenue nationally.

The financial dependence on the central government can provide students with equitable quality education regardless of where they live, but it could serve as a setback to achieve local autonomy in education.

02 Teacher Policy for Enhanced Competency⁵)

The availability of highly competent teachers has certainly contributed to the quality improvement of Korean education. Since the reconstruction of Korean educational system, the role of teachers in providing quality education for all students from primary education to higher education.

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⁵) This section is reorganized from the contents from the Ministry of Education website (http://www.moe.go.kr).
education was critical in encouraging and strengthening the qualitative development of Korean education.

The teacher education policies have been centered around identifying teachers’ personality, character and capabilities to teach. According to the Act on Primary and Secondary School Education, teachers are generally classified into teachers (Grade 1 and 2), assistant teachers, professional counselors, librarians, training teachers, and nursing teachers (Grade 1 and 2). The required qualifications for each class of teachers vary, but they go through a vigorous teacher recruiting and certification process.

Teacher education programs vary depending on where they are specialized to teach. To become elementary school teachers, students should be admitted to the National Universities of Education where they are educated and trained in pursuing a bachelor’s degree in education. Those who graduated from the National Universities of Education obtain elementary school teacher certificate.

While elementary school teachers are exclusively educated and trained at the National Universities of Education, secondary school teachers are educated and trained in various programs run by either teachers’ colleges or departments of education in national, public and private universities. Additionally, many universities offer teacher education courses for students interested in teaching career. Graduate Schools of Education also take part in educating secondary school teachers. Those certified after finishing the required courses and programs must pass the public recruitment examination to officially work at public middle and high schools.

Because teacher education and recruitment are strictly controlled and managed by the government, the quality of in-service teachers is far better than excellent. Once hired, in-service teachers are still required to go through programs for their own professional development to improve their teaching competency.

The programs for professional development for in-service teachers provide various and meaningful opportunities and incentives for teachers to develop professionally and improve their
competency in teaching. These programs are categorized depending on the types of training purposes such as on-the-job-training to enhance the ability to perform tasks, qualification training for promotion which is prescribed by the government, school-based training which is usually planned and directed by the principal or the vice principal, and self-directed training voluntarily initiated by self-motivated teachers. Training completion records of various types are used to decide on promoting teachers and raising their wages.

Because of excellent academic credentials that Korean teachers have, the collective quality of teachers in Korea has contributed to Korean students attaining excellent academic achievements.

Trends in PISA Scores: OECD Average & Korea

Note: The rankings are among OECD countries.

Korean education has developed quantitatively and qualitatively over the last six decades. It has been effectively adapted to the changes of various economic landscapes and has responded to social and economic demands of different time periods flexibly and affirmatively. As Korean education has faced newly emerging challenges brought by the advent of the Fourth Industrial Revolution, it needs to clearly demonstrate how the direction of future education policy should be set in order to flexibly address already existing problems and to show how it will benefit educational stakeholders. Some of the key aspects of Korean education policy for the future are presented as follows.

**01 Quality in Education for the Era of the Fourth Industrial Revolution**

**A Introducing the academic credit system in high schools**

As the advent of the Era of the Fourth Industrial Revolution occurs, a revolutionary change in the industry as well as in society has been expected. The competencies required to adapt to the new era have profoundly changed from the mere procurement of knowledge and skills to acquiring the ability of problem solving, creativity, and critical thinking. The current state of secondary education is enslaved by the concentration on college admission which totally overlooks the holistic growth of individual students. Consequently, a new paradigm for upper secondary education is called for. The main focus of upper secondary education should be shifted from preparing college admission to fostering individual students’ holistic growth. Inflexible and uniform education should become flexible and individualized, and tailored toward the needs of individual students.

In order to make possible the shift of paradigm in the system of upper secondary education, the implementation of the academic credit system in high schools is to be pursued. The
The academic credit system in high schools ensures students’ right to choose their own curriculum according to their own plans, which serve as a driving force to transform the nature of upper secondary education fundamentally. It also enables students to choose a variety of courses according to students’ academic paths and plans. A required number of cumulated credit hours grants students a high school diploma. Some of expected changes with the introduction of the academic credit system are as follows.

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>Expected outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td>• Passive learners that follow given curriculum</td>
<td>• Autonomous learners that procure their own competencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Grow to be autonomous and responsible democratic citizens</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Teachers</strong></td>
</tr>
<tr>
<td></td>
<td>• Deliverer of curricular knowledge</td>
<td>• Coach that supports the growth and learning of all students</td>
</tr>
<tr>
<td></td>
<td>• Guidance counselor on college admission</td>
<td>• Expert of teaching-learning</td>
</tr>
<tr>
<td><strong>Curriculum</strong></td>
<td>• Curriculum Unit: school year and class</td>
<td>• Curriculum Unit: a group of students who choose a course</td>
</tr>
<tr>
<td></td>
<td>• Supply-oriented, depending on the teachers who can teach given courses</td>
<td>• Demand-oriented, focusing on students’ academic paths, aptitude and interests</td>
</tr>
<tr>
<td><strong>Variety in education</strong></td>
<td>• Diversifying the types of high schools, aiming to expand choice, yet, school ranking system worsens</td>
<td>• A variety in curriculums within school is assured</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Collaboration with other schools in local community is encouraged</td>
</tr>
<tr>
<td><strong>College admission</strong></td>
<td>• Quantification and ranking of scores</td>
<td>• Qualitative and affective evaluation on students’ potential and competences</td>
</tr>
<tr>
<td></td>
<td>• College admission focusing on three main subjects and Scholastic Ability Test</td>
<td>• Selective/objective-oriented and voluntary learning activities are valued</td>
</tr>
<tr>
<td><strong>Linkage between elementary and secondary education</strong></td>
<td>• Distorted functions of elementary and lower secondary education</td>
<td>• Normalization of elementary and lower secondary education as a result of expected innovation of upper secondary education</td>
</tr>
</tbody>
</table>

**Source**: Ministry of Education. (2017, November 27). Direction for high school credit system and plan for research schools’ operation [Press release].
The implementation of the academic credit system will help students build core competencies and become active and autonomous participants in their learning process. The Ministry of Education have designated some model schools for implementing the academic credit system in 2018, and it plans to complete its implementation in all high schools by the year of 2022.

B Reforming upper secondary education system and college admission system

The policy of diversifying the types of high schools has resulted in ranking high schools, making primary and lower secondary education overlook its main functions. It also reinforces dependence on private education, even though the policy aims at expanding the right of students and parents to choose different types of schools and strengthening public education. In addition, an overwhelming pressure on college admission has caused exceedingly severe competition among students and too much emphasis on grades, losing the importance of fostering individual students' potential. Highly selective student recruiting and admission process of special-purposed high schools has negatively influenced the quality of lower secondary education and general academic high schools.

In order to normalize and restore public education, reforming the overall system of upper secondary education will be pursued step by step. The main purpose of reforming of upper secondary education is to alleviate the pressure and burden placed on students and parents who prepare for the entrance into special-purposed high schools and autonomous private high schools, which is generally thought to be the right pathway to entering prestigious colleges.

In order to transform college admission-focused secondary education and alleviate competition, the qualitative change in college admission system is required. The current state of college admission system has been more influenced and controlled by the power of private education than by the quality of public education. Even though there are so many college
admission tracks, which could ensure more diverse opportunities for high school students, there has been a great deal of criticism on how college admission is currently determined. According to the study conducted by Kim et al. (2017), some of the problems identified within the current college admission system are the problems of validity and fairness. Frequent changes in how colleges select their students have caused students and parents a great deal of confusion. The lack of trust in fairness in the Comprehensive School Report track and the Admission Officer track has been pointed out as a serious problem, as they could subjectively evaluate students at ease.

Kim et al. (2017) suggested that the reform in college admission system should be directed toward ensuring and reconstructing trust and fairness. College admission system should be made more simplified and easily accessible so that it truly reflects students’ potential of growth and development in college and beyond. Any suspicion in the process of college admission should be avoided by guaranteeing transparency in student selection process. The reform in college admission system will help to normalize public education.

C Strengthening the competitiveness and autonomy of higher education institutions

The role of higher education in a rapidly changing society becomes more and more important in a way of fostering individuals who will live in a technologically advanced society which requires creative and critical thinking skills rather than having a cluster of knowledge. Therefore, it is imperative to strengthen the competitive advantage of current higher education institutions.

National and public universities which make efforts to innovate their management system will be supported financially. Private universities should be encouraged to manage themselves with transparency and clarity so that they positively restore the function of protecting public interests. In order to encourage balanced development of universities in the non-metropolitan area, various collaborating projects between regional universities, local governments and local community organizations are created and pursued. Small colleges which yet provide strong quality education in the region are intensively promoted and supported.
Furthermore, junior and technical colleges as institutions specialized for vocational education and training will be extensively supported as well. The way junior and technical colleges receive governmental financial support from the government is to be reformed. More junior and technical colleges will receive financial help so that vocational education and training offered is quality-assured and field-oriented. Redefining and reforming higher education by focusing on the intended role of each type of institutions will enhance the competitive advantage of each institutions.

Higher education in Korea has been tightly controlled by the government. The government regulated the number of admitted students in higher education institutions. Colleges and universities have depended on project-based governmental financial subsidies, which might limit the way in achieving institutions’ autonomy. Due to the practice of government control over higher education institutions, the issue of autonomy has become the major policy concern for universities and colleges. In order to help higher education institutions to achieve institutional autonomy, the extensive diagnosis and assessment are conducted to determine the degree of institutional competencies and independence. Financial resources
are to be allocated according to the results. The structural reform of higher education institutions will lead to enhancing their capacity for autonomous development. Autonomy of institutions’ financial management will be strengthened, as the government will simplify the ways in which it distributes the projects that provide financial subsidies based on their individual institutional capacity for autonomy.

The continuous effort to deregulate higher education will encourage higher education institutions to improve their capacity for autonomy. Exercising autonomy and flexibility in institutional management such as designing college curriculum, creating integrated and interdisciplinary degree programs and introducing flexible semesters based on the flexible management of academic affairs will be encouraged.

D Enhancing the capability of research and education of higher education

Research and education are the two major pillars of the functions of higher education. Innovation in research and education in higher education will be a driving force that leads the Era of the Fourth Industrial Revolution. The government plans to financially support higher education institutions to fulfill their fundamental function successfully. The government assists higher education institutions’ endeavors to improve their research capacity by providing funds for research so that they can create knowledge and develop technology for future society.

Research funds are provided in order to strengthen research capability of the fields of natural sciences, applied sciences and engineering. The budget for research funds for higher education institutions will increase so that more universities and colleges cultivate their research capacity. It aims to help higher education institutions to produce outcomes that are useful and beneficial for the virtuous development of society. For the fields of humanities and social sciences, young and beginning researchers are specifically supported so that they can develop into capable researchers in the long run.

As society rapidly changes, new directions for educating students should be taken into consideration. Human resources required by future society are different from those needed for
industrial society. Now, creative, critical thinking skills and problem-solving skills are highly valued. Therefore, competency-oriented education is encouraged, rather than focusing on delivering content knowledge. The quality of teaching-learning should be vitalized and enhanced so that students enrolled in colleges and universities will be well-educated and well-prepared for the advent of the Fourth Industrial Revolution. More diverse teaching methods such as project-based and inquiry-based learning should be developed and practised in order to help students to think creatively and critically.

Promoting vocational and lifelong education

It is anticipated that the Fourth Industrial Revolution will change the lives of ordinary people. With the rapid and fundamental advancement of technology, many people can easily connect with one another surpassing the boundaries of time and space. The key development of technology will force every aspect of society to face newly-emerging challenges, such as the disappearance of currently popular and familiar jobs, new job requirements that never existed before, and different types of skills required for the new era.

Therefore, higher education has yet to meet the new needs and demands of the labor market, while linking outcomes of higher education with success in labor market. Cooperation between higher education institutions and industry is one of the ways in which colleges and universities better prepare students for the labor market. The industry can financially support research and development that higher education institutions perform. It can benefit from the outcomes of its invested research and development. By providing internship opportunities for college students, the industry can pre-train their future workforce. Students can build field and practice-related experience which is thought to be lacking for new college graduates. Thus, the government is encouraging to enhance the role of businesses in industry-academy cooperation.

Along with encouraging industry-academy cooperation including the operation of contract-based departments within universities, the government supports universities and colleges’ programs to help students to create start-up companies. The plan is to increase funds for launching start-up business, so that more employment opportunities for college graduates
and young people can be created. The government actively responds to changes in future job environment by creating a master plan for effective, flexible and systematic vocational education, collaborating with the private sector.

The importance of lifelong education is more emphasized with constant and continuous changes in society. Education should be provided for all people at any stage of life. The function of higher education institutions providing lifelong education is to be expanded. Programs for adult learners who work and intend to continue to study are flexible enough to accommodate their needs. Adult learner-friendly programs such as acknowledging their experience as part of the requirement of a degree and intensive degree programs are implemented in colleges and universities.

Nano-degrees for job performance competency awarded by the companies are introduced. Companies in specialized areas explore and develop core job performances and evaluation methods and degree programs can be designed. Those who completed these programs are awarded a nano-degree in respective certified and specialized job performance areas. Online courses are actively provided to overcome time and spatial limitations.
02 Equity in Education  
(Restoration of social mobility through education)

A Expanding enrollment in public kindergartens

The main function of public education is to provide sustainable hope for a better life in the future. Early childhood education is very critical as it provides the foundational starting point for every child. To provide quality and affordable early childhood education, the government aims to increase enrollment rate in public kindergartens nationally, achieving 40% rate by the year of 2022. Additionally, controlling the quality of early childhood education and building more public kindergartens serve as the foundation to build the education system that creates hope and promise for the future.

Another policy guaranteeing equitable early childhood education is to achieve the complete financial support for the operation of the Nuri Curriculum. According to the Ministry of Education’s website, the Nuri Curriculum is ‘a common curriculum for three to five-year olds, which helps children to develop balanced growth of mind and body.’Essentially, the Nuri Curriculum plays a role of combining child care and early childhood education as well as standardizing them. In response to the low birth rate and the high burden of child care on parents and guardians, The government has systematically increased financial support for childcare services. The Nuri Curriculum lays the equitable foundation to receive quality education at the early stage of life.

B The implementation of tuition-free universal upper secondary education

Elementary and lower secondary education in Korea are compulsory by law. Compulsory education means that education is universally provided and that parents and/or guardians of
school-aged children are obligated to send their children to school. It is also provided tuition-free. In contrary, upper secondary education is not compulsory or tuition-free yet, even though the advancement rate from middle schools to high schools is 99.7% in 2017.

In order to make sure that all students have equal educational opportunities, the government prepares the implementation of tuition-free upper secondary education by the year of 2020. However, it requires a series of procedural steps to be implemented. The solid legal foundation for relevant policies should be established. While the specific and systematic plan to finance the entire upper secondary education should be devised. The policy for tuition-free high school education is expected to alleviate the financial burden on households and to level the playing field by providing equal educational opportunities for all students.

Alleviating the financial burden of higher education

The cost of higher education is gradually on the rise worldwide, and Korea is not an exception. The government implements policy measures to alleviate the financial burdens of higher education. First, admission fee (entrance fee) that has been unilaterally imposed on enrolled students is phased out. Admission fee expects to be eliminated by the year of 2018 for national and public universities and by the year of 2022 for private universities.

Next, the number of beneficiaries of reduced college tuition gradually increases so that higher education becomes more affordable. Interest rates get decreased for students to lower burdens of repaying their loan. As an effort to help with the cost of living while in college, more dormitories are built to accommodate more students. The high cost of education should not prevent students from having the opportunity to pursue higher education. Alleviating the financial burden of higher education expects to lead college students to focus on preparing their future career.
Assuring basic academic ability for all students and supporting dropout and at-risk students

No child should be left behind in acquiring their basic academic ability. The mastery in Korean language and mathematics is essential in primary education, and it is important that students build strong academic foundation from early on.

Korean language and math education in lower grades of elementary schools should be more quality-oriented and individualized for individual student’s learning achievement. More sophisticated diagnostic tools to assess basic academic ability for elementary students are further developed. Remedial programs based on diagnostic results which used to run for students between the grade 3 and grade 9 are extended for students between the grade 1 and the grade 10.

Dropout students and at-risk students should not be overlooked. Students who cannot continue with their education within an institutionalized setting for various reasons should get the appropriate support that they deserve in public education system. Students who are at risk of dropping out of schools or being suspended are provided with counseling and professional support so that they contemplate on their position about continuing with their education and decide to stay at schools.

For those who pursue other venues of education rather than public education such as alternative education, governmental financial support is provided to building public alternative schools which are privately managed under the delegation system. Helping dropout students to continue with their education by offering alternatives ensures that no child is being left behind from having educational opportunities.
Supporting students with the disadvantaged background and expanding equal opportunity admission policy

Because of the increasing trends of spending more on private education, polarization in education becomes worse. Students with the disadvantaged background of low socioeconomic class, multicultural families, North Korean defectors and/or single-parent families should be paid more attention because they are more at risk of being deprived of fair educational opportunities.

In order to ensure that students from the disadvantaged class receive equitable education, children from the low socioeconomic background receive priority in registering in public kindergartens. More subsidies for their educational expenses are allocated for more students to receive financial and welfare benefits for their education. Educational subsidies can cover expenses for school uniforms, after-school activities and classes, high school tuition, and etc.

Ensuring equity in the education system is also necessary in higher education. More government scholarships is prepared for students with excellent academic achievements. College students who lack opportunities to explore overseas job and training experiences due to financial restraints receive financial support through the “blue ladder” program. The policy of equal opportunity admission toward the disadvantaged students expects to be mandated from the year 2021. In the meantime, more competent and qualified students from the disadvantaged background are admitted under this policy.
03 Safety in Schools

A Implementing all-day Edu-care system in elementary schools

As the number of double-income families increases, the role of schools and local communities in providing child care services becomes critical. Those who cannot afford to keep their children home with caretakers after school due to various reasons, such as financial problems and availability of caretakers, can apply for the all-day Edu-care system. Schools and local communities build common all-day child care system under the guidance of the government during nights, summer and winter breaks. Since the demands communities differ depending on the regions, locally tailored Edu-care programs are devised and implemented. The government encourages local communities and schools to develop quality child care programs based on the needs and demands of their own community.

By developing and implementing all-day, local-based child care system, parents with young children can have quality child care when they have to work late and when school is not in session. Child care system provided by schools is needed especially for first graders. Classes for first graders usually end early, and parents working full-time need safe and reliable child care services. On-site child care services provided by the school can give parents less burden in finding after-school services.

Already implemented Edu-Care Services by Edu-Care teachers and college student volunteers, yet close and strict quality control and constant monitoring over Edu-Care services are continuously encouraged. Having reliable and safe school-based child care services supported by the local community and the government help parents to raise children without anxiety about making plans of shuttling their children from place to place after school (Ministry of Education, 2016b).
Preventing and intervening school violence and child abuse

The incidents of school violence such as bullying appear in headlines of media every day. Creating safe learning environment is one of the most important issues that Korean education faces nowadays. More effective school violence prevention programs need to be developed. School violence prevention programs are implemented and run focusing on building empathy, having effective communication skills, learning how to do conflict resolution, maintaining self-regulation of emotions and strengthening self-esteem. Schools should also make an effort to create a safe climate in which school violence can be prevented.

When incidents of violence occur on the school premises, prompt and appropriate intervention is implemented. The expertise of the Committee on School Violence needs to be strengthened, and its activities should be well-organized and effective in terms of prevention as well as intervention.

The government provides schools and school administrators with guidance services for resolving incidents of violence and minimize the aftermath. In addition to providing one-
stop tailored prevention services, more counselors specialized in school violence are placed at schools to professionally help victims and perpetrators of school violence. Prevention programs can raise awareness of the danger and severity of school violence including bullying, cyber-bullying, physical and verbal acts of violence.

As the problem of child abuse becomes a national issue, special attention needs to be paid to children who are at risk of being abused at home. For protecting those children, teachers and community members need to notice any suspicious signs of child abuse and report to the authorities.

Schools, local authorities, and local communities should cooperated to conduct a close investigation on school-aged children who do not attend or frequently miss out schools under the Compulsory Education Law and children who frequently miss school. The systematic approach needs to be taken to spot children suspected of being abused. The diagnosis on children who are at risk of being abused should continue because the effective system in which at-risk children are early detected can be established.
Reinforcing earthquake-resistance of school buildings and implementing policy measures against fine dust

After a series of earthquakes in cities of Gyeongju and Pohang happened recently, earthquake-resistance of school buildings has become very critical for the sake of the safety of school members. For areas prone to having earthquakes, plans to reinforce earthquake-resistance structurally are expedited from the originally scheduled plans. In addition to reinforcing the building structure resistant to possible earthquakes, the instruction in the event of an earthquake is systematically established and learned by students and teachers.

As students spend most of their time on school premises, having the environment free from fine dust is important for the health of children. Since students’ outdoor activities are often limited by occasions of dense fine dust, more indoor facilities where students have physical education classes are built to make sure that students have safe and healthy environment for participating in all school-related activities.

Other policy measures on ensuring safety include the effective management of infectious diseases of students and the confirmation of students’ status of having vaccinations. Drills to
infectious diseases are conducted once a year as well. Controlling and monitoring the quality and hygiene of school lunch is reinforced so that mass food poisoning and other health-threatening incidents can be prevented. The nutrients of school lunch are carefully managed for healthy meals at school.

04 Creating Open Climate for Educational Autonomy

A Institutionalizing the system of public deliberation on education policies

Participation in the decision-making process is one of the key elements of democracy. The government encourages that public policies should reflect citizens’ opinions and that the system to reflect people’s opinions is necessary in the process of making public policies. In terms of education policy, the same system ensuring citizens’ participation is institutionalized.

The process of public deliberation encourages self-determination and autonomy of citizens by participating in the important decision making process.

Some important education policies that could cause conflict and controversy are initially considered whether they need to be put up for public deliberation. Plans to facilitate open communication between the government and the public are subsequently established. Next, public opinions on the issue are gathered and analyzed. Then, decisions are made and policies are implemented accordingly. Public deliberation encourages policy makers and citizens to communicate openly about public affairs, and it ensures the process of democratic participation.
Establishing the National Board of Education\(^6\)

Even though the direction of national education policy is geared toward strengthening the local autonomy, the current administrative system of education is mostly managed by the Ministry of Education, especially in planning educational policies. Because of apparent difference in leadership, there has been conflict between the Ministry of Education and directly elected superintendents. The Ministry of Education is still the main decision-making entity in education policies, and changes in political leadership have often caused discontinuity in education policies.

Therefore, the need of establishing an organization that could ensure consistency, continuity and stability in the process of making decisions on education is on the rise and the National Board of Education might function as such. While the nature, function and composition of the organization still needs to be discussed, the demand of having such an organizational body that can create consistent and meaningful educational policies is highly strong. The establishment of the National Board of Education expects to force the Ministry of Education to be reorganized and restructured in terms of its function in administering educational policies.

Strengthening collaboration with National Council on Education

While the debate on whether to establish the National Board of Education still continues, the National Council on Education is working closely with the Ministry of Education in order to facilitate open communication with the public at the policy-making level. The National Council on Education is an advisory organization working with the President. Its close cooperative relationship with the Ministry of Education is important to build mutual understandings on the direction of educational policies.

\(^6\) Following Park(2017)'s translation.
Facilitating continuous communication from the beginning stage of planning education policies is critical in order to make the policy acceptable and understandable to the public. The main function of the Ministry of Education is about to be reformed into focusing on higher education and lifelong education. The authority on primary and secondary education plans to be delegated to the municipal offices of education for strengthening the local autonomy in education. Collaboration among the delegates of the Ministry of Education, the offices of superintendents and district offices of education is organized in order to accelerate the process of building an effective system of educational administration. Planning and administering education policies on higher education and lifelong education becomes the main function of the Ministry of Education.

Even though the local autonomy is partially achieved by the election of superintendents disharmony and conflict can occur in the process of implementing educational policies imposed by the Ministry of Education. Therefore, open and continuous communication needs to be sought for the sake of rationalizing educational policies and reflecting the opinion of citizens.

**D. Strengthening collaboration between local governments and regional Offices of Education**

Local government bodies are partially responsible for providing finances for the implementation of educational policies. Therefore, the control over spendings can be a cause of disharmony and disruption in planning and implementing various educational policies. Therefore, stable, reliable and trustworthy relationship between local governments and regional Offices of Education needs to be built based on open and active communication.

Some of local governments’ authority to make financial decisions are rationally delegated to the regional Offices of Education so that funds can be effectively distributed to educational activities in local community. Innovation in the local education system for making their own decisions about the educational issues of the local community continues to make with open communication between the local governments and regional Offices of Education. Governmental subsidies are provided for the projects that aim to innovate local education.
Open communication between local governments and Offices of Education is possible with the interests of local community members.

Education in Korea has historically proved to achieve remarkable things. People still believe that education should provide hope and promise for everyone. In addition to previous efforts, now is the time for Korean education to work harder to restore its main function for society, that is, education providing hope.

The role of public policy is to institutionalize the ways in which such inevitable social inequality is reduced and alleviated so that all members of society have a fair share to succeed in life. Education policy should perform a role of restoring hope of having social mobility through education. Korean education for the future will be education of all students cooperating and participating, education of providing hope of having social mobility restored, and education of being field-oriented and practice-focused.
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