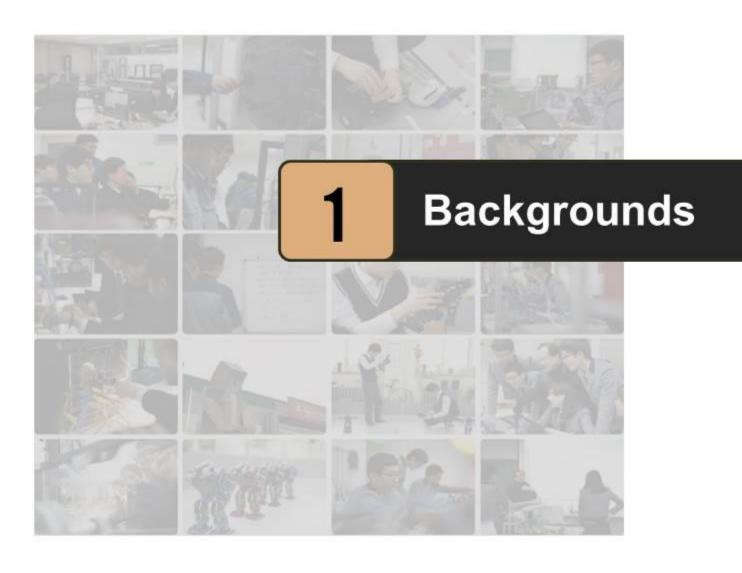


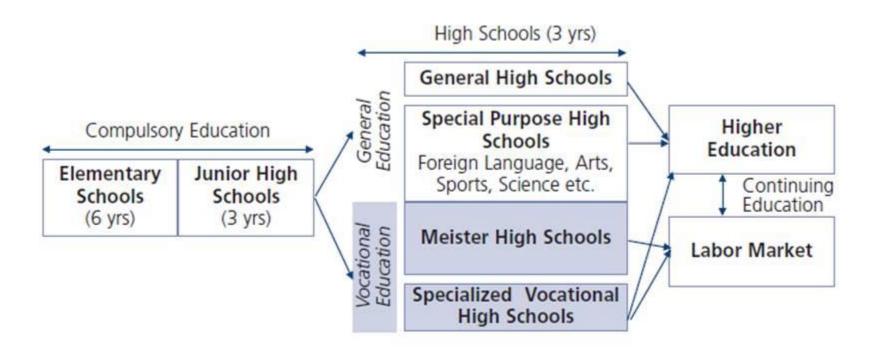


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1. Korean Vocational Education System



Source: Park(2011). Korean policies on Secondary Vocational Education, BiBB

1. Korean Vocational Education System

General high schools

- Students study liberal arts
- 90% of students aim to go to university
- Tight education schedule which runs from 8 am to 9 pm is provided

Specialized (vocational) high schools

- Most representative vocational training school in secondary education
- Specialized high school provides industry-specific education(machine, electronics, agriculture, housework, etc.)
- Compared to meister high school, the share of industry-academia cooperation and after-school education is small
- 40~50% of students get a job after graduation and others go to college or university

Special purpose high schools

- Schools that provide specialized education focusing on science, foreign language, art or sports
- Meister high school is included in special purpose high school category
 *Meister high schools: 100% of students aim to get a job after graduation and very intensive vocational training is provided

1. Korean Vocational Education System

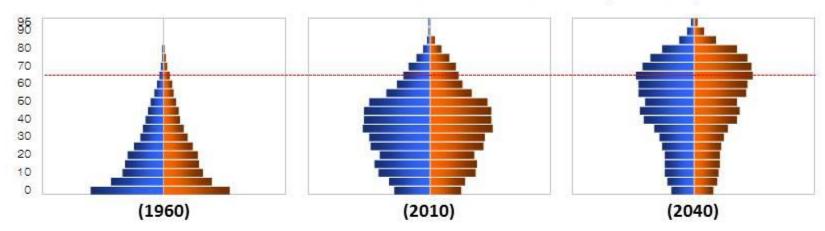
(2015.4.1)

Classification	Number of schools	Number of students
Elementary school	5,978	2,714,610
Middle school	3,204	1,585,951
High school	2,345 (100.0%	1,788,668 (100.0%)
General school	1,537 (65.5%)	1,278,008 (71.5%)
Special-purpose high school	149 (6.4%)	67,931 (3.8%)
Meister high school (a)	41 (1.7%)	17,904 (1.0%)
Specialized high school	498 (21.2%)	302,021 (16.9%)
Specialized vocational high school (b)	473 (20.2%)	299,223 (16.7%)
Autonomous high school	161 (6.9%)	140,708 (7.9%)
Total number of vocational high school (a+b)	514 (21.9%)	317,127 (17.7%)

2. Backgrounds of Meister High School

Low birth rate and aging population

Birth rate: 1.16(2010), 1.18(2015), 1.22(2020)
 OECD member countries (2008): US(2.09), France(2.00), Germany(1.37), Japan(1.37)



Retirement of baby boom generation

- born between 1955 and 1963(54–62 years of age) is about 7.125 million as of 2010 accounting for 14.6% of the total population
- Shortage in the number of engineer and technician
- Reduction in the number of economically active population

3. Policy & History

Policy Overview

- Core vocational education policy pursued by the last government
- Strengthening national-level support to establish Meister high school as model to increase the employment of graduates from secondary vocational education schools

History

2008

- Selected as core national agenda of the new government
- Organizing team to adopt Meister high school
- Establishing master plan to develop Korean-type Meister high school
- First-round designations (9 high schools were selected)

2009

- Second-round designations (selection of 12 schools)
- Opening of the Meister School Support Center at KRIVET
- President's visit to Wonju Medical instruments High School

2010

- Opening ceremony of 21 Meister high schools (attended by the president)
- Third-round designations (selection of 3 schools)

2011

- Forth-round designations (selection of 4 schools)
- Fifth-round designations (selection of 5 schools)

3. Policy & History

2012

- Opening ceremony of 7 Meister high schools (attended by the president)
- Sixth-round designations (selection of 2 schools)
- Seventh-round designations (selection of 3 schools)

2013

- First graduation ceremony of Meister schools (attended by the president)
- Opening ceremony of 7 Meister high schools
- Listed as one of the current administration's national tasks
- Eighth-round designations (selection of 2 schools)

2014

- Second graduation ceremony of Meister high schools
- Opening ceremony of 2 Meister high schools
- Ninth-round designations (selection of 3 schools)
- Tenth-round designations (selection of 2 schools)

2015

- Third graduation ceremony of Meister high schools
- Opening ceremony of 4 Meister high schools
- Eleventh-round designations (selection of 3 schools)

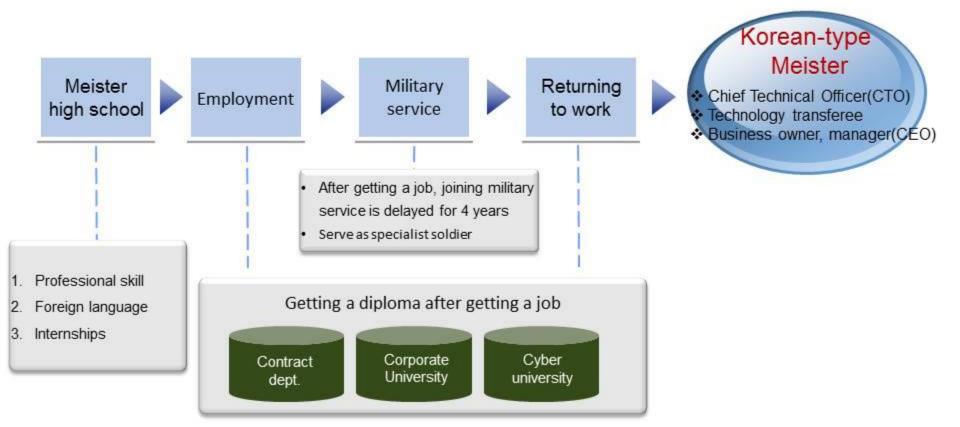
2016

- Forth graduation ceremony of Meister high schools
- Opening ceremony of 2 Meister high schools



Concept of Meister High School

- Inovative model of upper secondary VET in Korea(since 2008)
- Specialized high schools that offer tailored VET for student
- Training young meister who will be professional technican(Meister)



1. Concept of Meister High School

· Difference between vocational high school and Meister school

	Vocational high school	Meister high school
Aim	Encourage student to develop vocational competencies	Nurture young meister
After graduation	either getting a job or go to college/univ	Getting a job which is related to their major
Job	Operator	Technician
Curriculum	50% of general subject, 50% of vocational subject (more broad skills)	30~40% of general subject, 70~60% of vocational subject (more narrow and practical skills)
Instructor	Teachers with certificate	Same as vocational high school (cooperation with industry experts)
Student	Usually vocational school is their second choice	Excellent talented student
Qualification	High school Diploma	High school Diploma + reputation for meister graduates

(1) Sector

- Focusing on promising field related on the region's strategic industry
- MUST organize majors related to one sector
 (vocational high schools have various majors within a school(ex: mixed with mechtronics and commercials)

(2) Curriculum

- Tailored to industry demands (private sector experts are involved)
- Teach what industry needs!
- After school program tailored to each company needs

(3) Faculty

- Industry experts without teaching certificates can become principal
- Industry professionals can be teachers of meister high schools (contract teacher)

(4) Selection and Preparation

- Only few vocational high school can be meister high school
- Strict school selection criteria
 - (ex. clear target-industry, well-defined career path, guarantee of job opportunity via agreement with companies, 20 students per class..etc)
- 1 year for preparation
 - Adjusting target industry and departments
 - Developing curriculum, after-school activities, textbook
 - Graduation certificate system with industry
 - Secure faculties, facilities and dormitory

(5) Performance management

- Strict performance evalulation and re-designation system evey five year
- Annual perfrmance review by gorvernment and meister school support center(KRIVET)

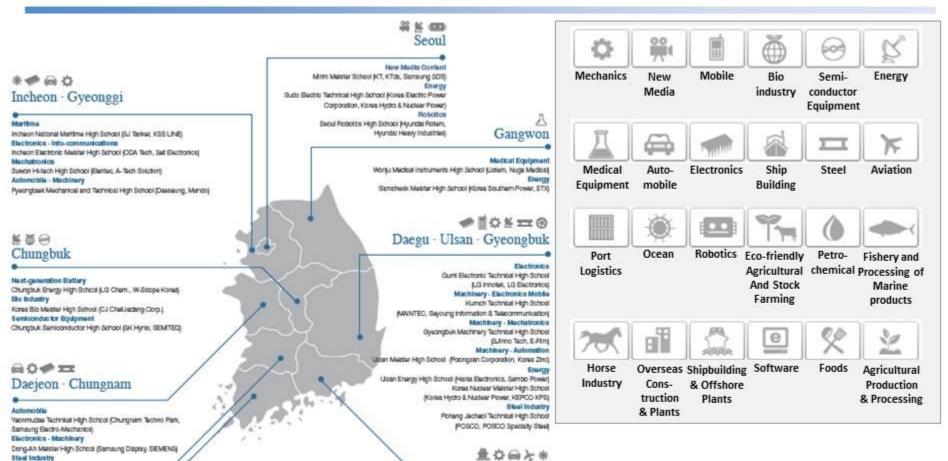
(6) Financing support

- Preparation year: 5.0 billion won(4.58 million dollar) per school
 - building dormitory, purchasing equipment, tool and materials, training teacher, etc
- Working year: 1.0 billion won(0.91million dollar) per a year/school
 - school operating expenses
- Generally, meister high school costs around triple as much as vocational highschool

 Select schools that meet standard requirements among specialized high schools which want to be a Meister high school

Classification	Standards
Career	 Well-defined growth path of meister high school Guarantee of job opportunity via agreement with industry-specific council and companies Provision of opportunity for higher education in the same field while one is employed in cooperation with industry
Support for Student / Student Selection	 100% exemption of tuition fee (scholarship, support for dormitory expense for students from low income bracket) Nationwide selection of students focusing on their interest and talent About 20 students per class
Sector	Focusing on promising field related to the region's strategic industry
Curriculum / Text book	Liberalization of curriculum to meet the needs of industry
Principal / faculty	 Recruitment of principal, guarantee of power and responsibility of principal Secure number of faculty at the same or higher level of science high schools Secure excellent meister high school faculty Support for attracting excellent teachers, improving expertise
Facility	Secure laboratory building and facilities, dormitory
Cooperative System	Agreement with industry(group), Sector Council(SC) and companies

3. Current Status



Busan · Gyeongnam

Automation Equipment Gwanglu Automatic Equipment Technical High

Gwangju Jeonnam

School (LinkLine) (C) Harbor Logistics Industry

◆目下(A==

Kareaport Lagistics High School (Dangby Bipress,

Hapduk Steel High School Hyundai Steel, Dongbu Steel

Kurisan Mechanical & Tachnical High School (Hyunda)

Choribul: Mechanical & Technical High School (Mando,

Korsa Horseman High School (Korsa Racing Authority,

Gongly Welster High School (Samsung Display).

BMT Equipment

Hana Microri

윤 다 ન(

Jeonbuk

B.X. Corporations

Horse Industry

Shipbuilding - Machinery

Secret Hill Farms Australia)

Heavy Industries, Doosan Infracore

CJ Kores Boress

Environment-Inlendly Agriculture

Jeonnam Life Science High School Farming Association Corporation in South Jacks Province)

Petrochemical Industry

Vaceu Petrochemical High School (GS Cattax Corporation)

Platery & Marine Product Processing Wando Fishery High School (Dongwon Industries, SAJO) Shipbuilding

Geoja Technical High School (Samoung Heavy Industries) Busan National Mechanical Technical High School

(Surbo Industries, LHE)

Automobée Busen Automotive High School (Fensult Samsung Motors, NEVENTRE) Aviation - Shipbuilding

Samchurpo Technical High School Alorsa Aerospace Industrius, Cleathin Aerospacel Maritime

Busan Maritime High School (PANETAR Shipping, Shinaung Shipping)

Air Force Aviation Science High School FICKAF Education & Training Command, KAI

- In this map, 8th~11th meister high schools(10) are excluded
- As of 2016, 43 schools are running and 4 schools are preparing for opening

(1) Design curriculum



(KRIVET)

- He/She is expert in vocational education and job analysis
- Using DACUM anlaysis or NCS
- He/She is only facilitator

(Subject-matter experts)

- He/She is expert in target industry matter
- He/She is panelist of job analysis

5~7 people per department





(Teachers from mesiter school)

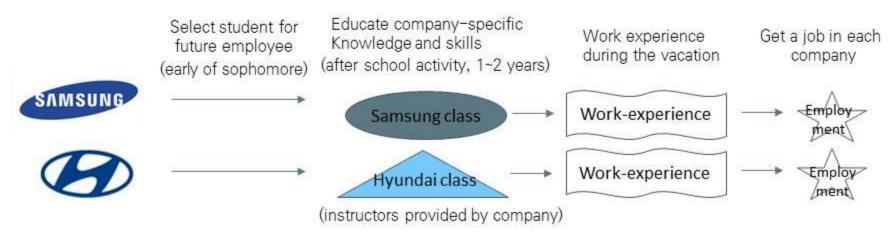
- He/She is only listener
- Sometimes he/she could explain the context and limitation of school
- 2~3 people per department

(2) Industry-tailored education

- Regular curriculum could not make all of the business satisfied
- Various needs, limited resources(teacher, learning material, and equipments)

(Large-sized enterprises)

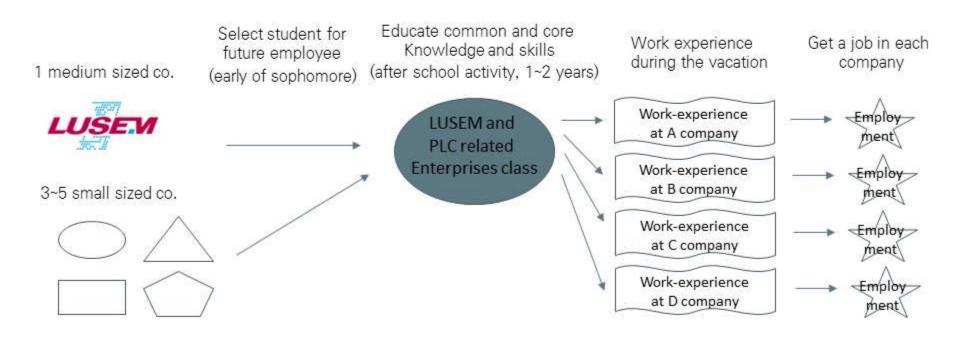
 Meister high school make company-customized class for large company such as SAMSUNG and HYUNDAI



(2) Industry-tailored education

(Small and medium sized enterprises)

Make clustered company-customized class for SMEs



(3) Enterprises in school

- Small start-up business are using space and equipment of school for free
- Those enterprises could be great place to experience real work

(4) Teachers' in-service training in industries

- Vocational high school teachers can participate the in-service training industry for a month
- Great opportunity to have up-to-date knowledge and skills

4. Meister high school-Industry Cooperation - example



((BUSAN city))

(1) Target industry

- Automobile industry: Renault Motors and its outsourcing partners
- They need car mechanic and technicians for factory

(2) Making Meister high school

- Select appropriate vocational school and make school reform
- Development of curriculum, textbook and other materials jointly with automotive industry
- Recruit prinipal from industry; 1st principal of Busan automotive meister school was former vice-president of Renault Motors

(3) School-industry cooperation

- Inustry got involved in evey learning activities
 (as Interviewer of student selection, instructor, consultant, counsellor, mentor, employer, etc)
- They participate in the school operating to qualify future employees and to choose the best for future employment

4. Meister high school-Industry Cooperation - How to make the industry participate in the education

(1) Government policy

- Ministry of education have put the pressure on the industry
- MOU with big company, tax reduction for copperative industry, etc.
- MOU with Samsung electronics (Dec. 2010)
 Employed 113 students
 - 스타고 산학열력 양해각서 체결식 2798년 10, 12.

MOU with Hyundai Motors(Mar. 2011)
 plans to employee 1,000 students for ten years



- MOU between KITECH, Korea Craftsman Association and MEST(11.5.12)
 - *KITECH: support for root industries (molding, casting, welding and plating)
 - *Korea Craftsman Association: provide on-site experience and knowhow

4. Meister high school-Industry Cooperation - How to make the industry participate in the education

(2) MEISTER EXPO

- Do you buy new product befor you see and test?
- · Many Meister high school hold EXPO to show students' ability
- Recruiting officials see and test the result of team project

(3) Using sector council and other competent bodies

- Unlike the european countries like as Germany, Korea do not have the tradition of company-based VET
- Also we don't have powerful chambers or sector council
- Nevertheless, we believe sector council or other competent bodies could do their role in the field of VET
- Korean government have invested in sector concil and region-sector concil for a long time



Achievements

(1) Smooth school to work transition

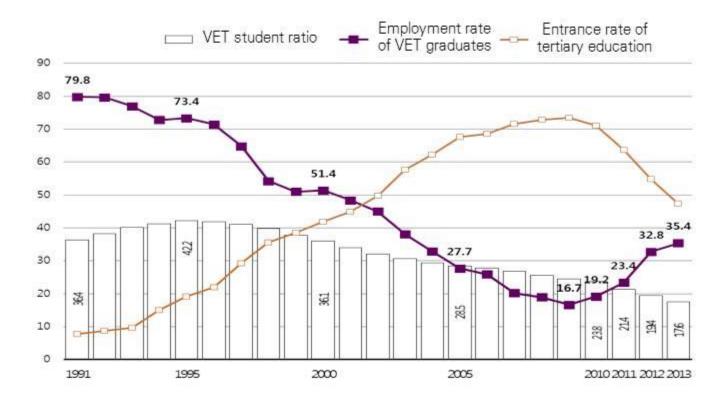
- As of 2013, 90.3% of first graduates are employed, 99.0% of them are regular employees, 59.2% of them are employed by cooperative business
- As of 2014, 91.4% of second graduates are employed, 99.0% of them are regular employees
- As of 2015, 91.2% of third graduates are employed
 - Regular Employee: 94.3%(2015, KRIVET)
 - Major Congruence: 96.1%(2015, KRIVET)
 - Job Type: Technician(52.0%), OP(44.4%), R&D(2.2%), Others(1.4%)(2015, KRIVET)
- Graduates and their parents have satisfied with their jobs. (average 4.38)
- Many of graduates got a decent job(over education = 16.5%, under education 42.3%)
- Industry have satisfied with mester graduates (over 80%)
- 89.4% of company answered that they would like to employ mester gradutes again.

Achievements

(2) Leading model for VET at upper secondary level

- Make VET more attractive!!
- Play major role in creating a competence-based society
- make people think high school graduates can succeed in technology and engineering field. (employment rate of VET school has inreased along with Mesiter school)

Achievements



Notes: 1) The existing comprehensive high schools (a type of school that combines general departments with vocational ones) were categorized as general high schools according to changes in high school types in 2010, but this data does not reflect such changes.

2)An analysis of the employment status of specialized high school and Meister high school graduates was conducted based on the linkage of health and employment insurance coverage from 2013. Accordingly, the employment rate was reportedly 37.8% in 2013. (Ministry of Education, press release on May 15, 2013).

Sources: Ministry of Education and Korean Educational Development Institute (each year)

Cited on Choi, D. S.(2014). The career path of high school graduate employees, in the KRVIET(2014). The Present and Future of Secondary Vocational Education in Korea.

2. Lessons in building the Meister high school

- · If industry want to avoid mismatch, they should participate in the VET
- Vocational education and training could not create the job
- Industry moves only when there are direct/indirect benefits
- · Schools are always late than industry, but they can teach better
- Industry should provide information about what they need in terms of workforce development

Thank you for your attention!