# Thematic workshop 4. Education and Skills for the Future workplace

# Recent innovative approach in skill development of Korea

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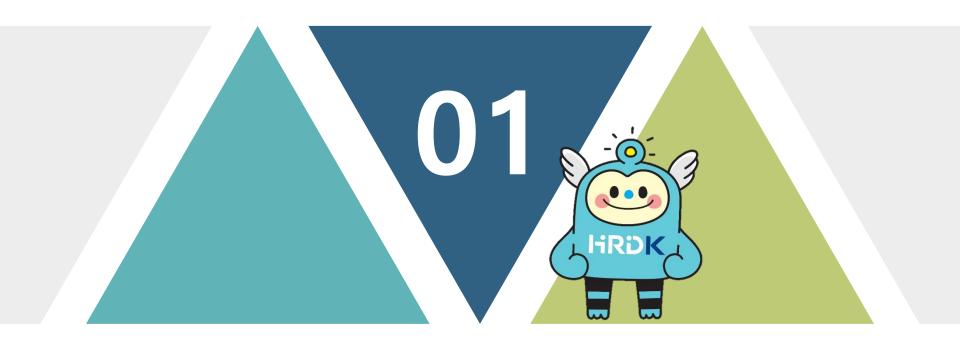


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Skill Development policy change in Korea -Changing role of HRDKorea-

# Policy change in skill development in response to the economic development

Stage	Economic/Social Background	Main Policies
70's (Beginning)	Export-oriented economic development	<ul> <li>Government-led HRD</li> <li>Intro. of Mandatory Vocational Training(1976)</li> </ul>
80's (Growing)	<ul> <li>Labor-intensive → technology intensive</li> <li>Mass production → small quantity batch production</li> </ul>	<ul> <li>Focused on training multi- skilled workers</li> <li>HRDKorea founded in 1981</li> </ul>
90's (Transition)	<ul> <li>Development of technology &amp; service industry</li> <li>Asian Economic crisis in 1997 caused massive unemployment</li> </ul>	<ul> <li>Intro. of Employment Insurance(1995)</li> <li>Mandatory Vocational Training abolished (1998)</li> <li>TVET as social safety net</li> </ul>
00'S~ (Innovation)	<ul> <li>Low growth and High youth unemployment rate, Bigger polarization in wealth</li> <li>Low birth rate, Rapid ageing population</li> </ul>	<ul> <li>Lifelong competency development</li> <li>National Competency Standards(NCS)</li> <li>Work-Learning Dual System</li> <li>Governance shift from providers to beneficiary</li> </ul>

## 1982~1990

### Training Technicians for Key National Industries

Establishment of Korea Vocational Training Management Cooperation(1982)

- 24 Vocational Training Institutions under the Ministry of Labor
- Central Vocational Training Institution, Vocational Training Research Institute
- Korea Technical Qualification Organization under the Ministry of Science and Technology
- WorldSkills Korea





## 1991~2000

Fostering professionals in Technology Intensive Industries

Name Changed to HRDMKorea(1991)

Reform of Technical Colleges (1993)

Name Changed to HRDKorea(1998)

**Established Central Human Development** 

**Centre** (1998)



Human Resources Development in a Knowledgebased society

Q-NET System Open(2001)

Qualification portal to provide one-stop service

Hosting World Skills Competition in Seoul

(2001)

Inception of EPS System(2004)

**Transferred Vocational Schools to Korea** 

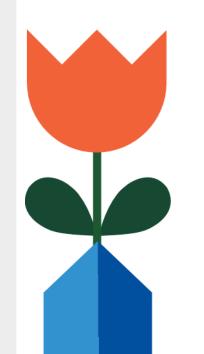
Polytechnics(2006)

**Started Managing National Professional** 

Qualification (2008)

Launched Work-TV (2010)





### 2012~Present

Human Resources Development in a Knowledgebased society

**Vocational Competency Development System** 

Reform(2012)

**Commissioned 'Employer-based Training** 

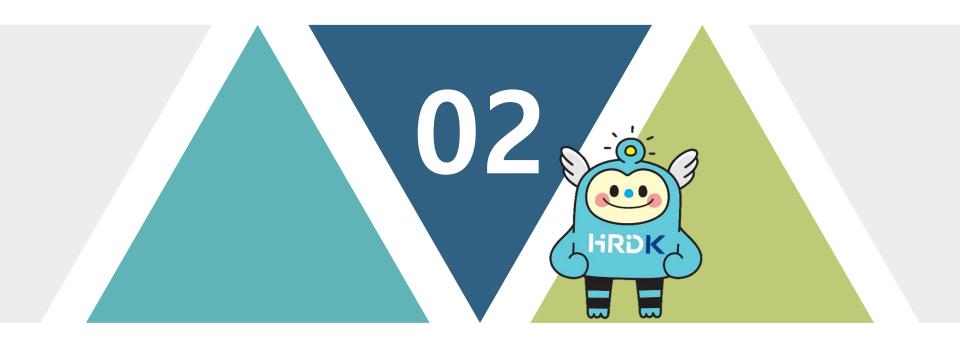
Program'(2012)

Proliferation of NCS(2013)

**Started Managing Course-based Qualification** 

System(2014)

Relocated Headquarters to Ulsan (2014)

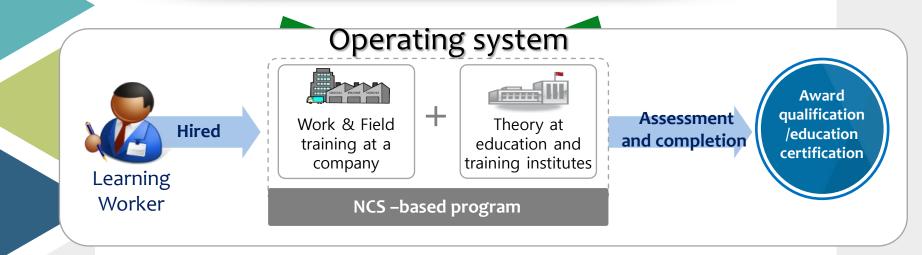


**Recent Innovative Policy Measures** 

### Demand-oriented & private sector participation

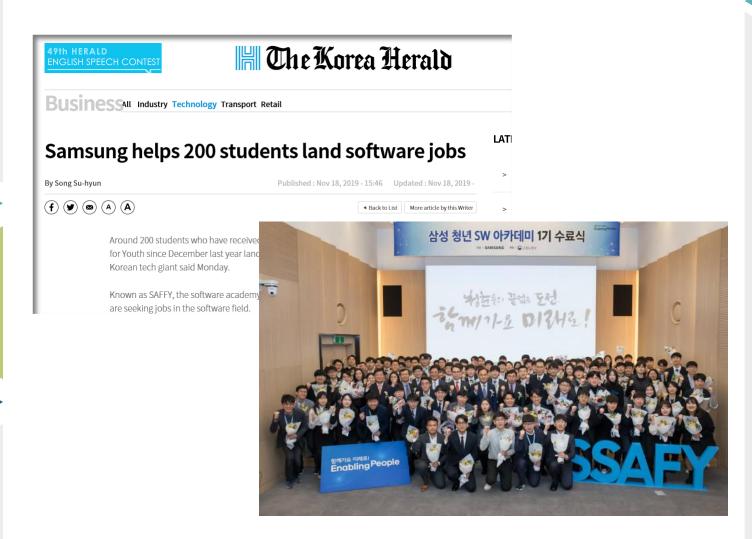
## Work-learning Dual System (Korean type Apprenticeship)

A system where a company hires the youth as learning workers and provide field training at work and theoretical education at training institutes s(e.g. schools) according to systematic programs and competencies of trainees are evaluated by the company or the nation to recognize one's qualification.



### Industry-led & government support program

# SAFFY program (Samsung Software Academy for Youth)

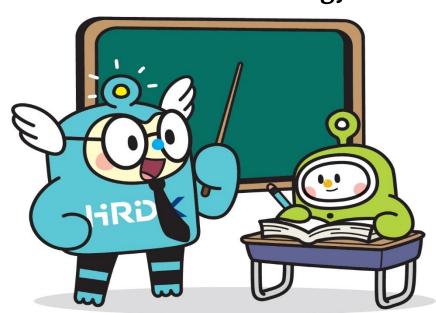


In this era of the 4<sup>th</sup> industrial revolution, when change occurs quickly, what is the most important competency required?

#### **Empathy**



#### **New technology**





## National Competency Standards (NCS) on Pet Behavior Modification Recommended to those who chose "empathy"





National Competency Standards (NCS) on Virtual Reality Content Design Recommended to those who chose "new technology"

**Realistic experience similar to reality** 





#### **Recent Reform Measures for skill development**

## **Innovation Initiative on SD Policy**

## 4<sup>th</sup> industrial revolution

- New technology and jobs created
- Existing industries become obsolete
- Establish a lifelonglearning system
- Respond flexibly to new technologies

## Gap between education and actual work

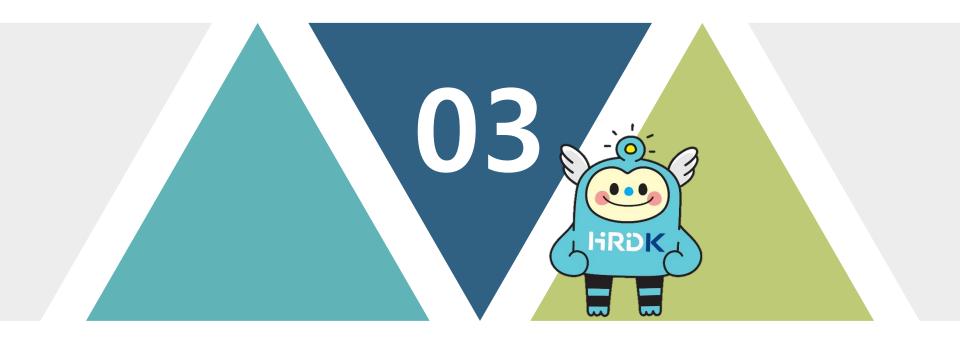
- Need to reflect demand in industrial fields into education and training
- NCS-based education
  and training
- Adoption of training to improve the capability to solve problems.

#### Low level of training

- Need for training program for highly educated job seekers
- Establish a training system for nurturing professionals

#### Solution is vocational training!

- · Establish a lifelong vocational training system to make people respond flexibly to environmental changes.
- · Conduct vocational training to improve practical skills in the field and problem solving capabilities.
- · Nurture highly skilled people who will lead the 4th industrial revolution and intelligent information society.



Innovative Training Method -VR Training Simulator-

## **Development of Virtual Learning Tool**

#### 1. Background

- Increase training effectiveness in high-cost and high-risk education and training courses
- Diversify training methods using digital technology
- Establish VR training platform for Work-learning Dual Program

#### 2. Development Process



## **Development of Virtual Learning Tool**

#### 3. Structure

#### <HRDKorea>

- Overall management of program
- Agreement with JTC
- Grant-aid, M&E

#### <JTC>

- Overall management of development
- Selection of developers and contract
- Learning tool maintenance
- Course development
- Quality control



#### <Review committee>

- Screening(document/ site visit)
- Cost adjustment
- Selection of agency

#### <Developers>

- Equipment Development
- Reports
- Orientation how to use equipment
- Provision of development data

## **VR Training Simulator for Tower Crane**

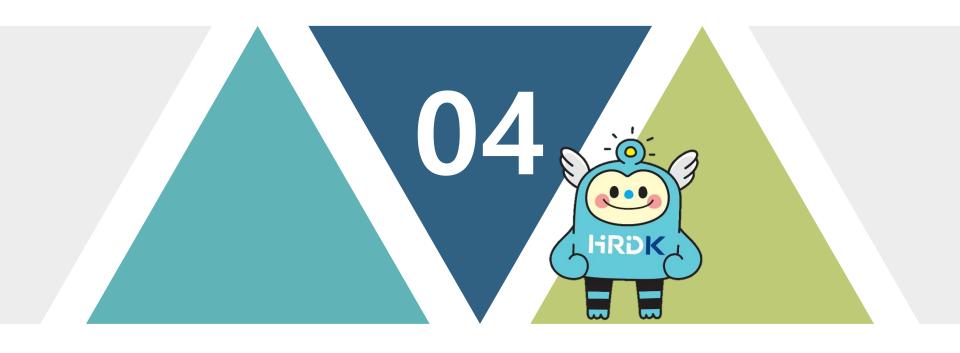
-Cabin Module-



## **VR Training Simulator for Tower Crane**

-Video Clip-





Partnership with WB and HRDKorea

#### **ASEAN+3 HRD Forum**

Knowledge sharing platform for policy makers of ASEAN members in skill development (organized by HRDKorea and WB under KWPF)



### **Hub of Transferring Skills**

## **Global Institute for Transferring Skills(GIFTS)**









## Capacity Building Program in skills competition -GIFTS, HRDKorea-



## Thank You

