#### **7th International Skills Forum**

### Anticipating and Preparing for Emerging Skills and Jobs

12-14 December 2017 Asian Development Bank, Manila, Philippines

University-industry linkage in Hunan Province Prof. Wei Ha and Po Yang 2017/12/13

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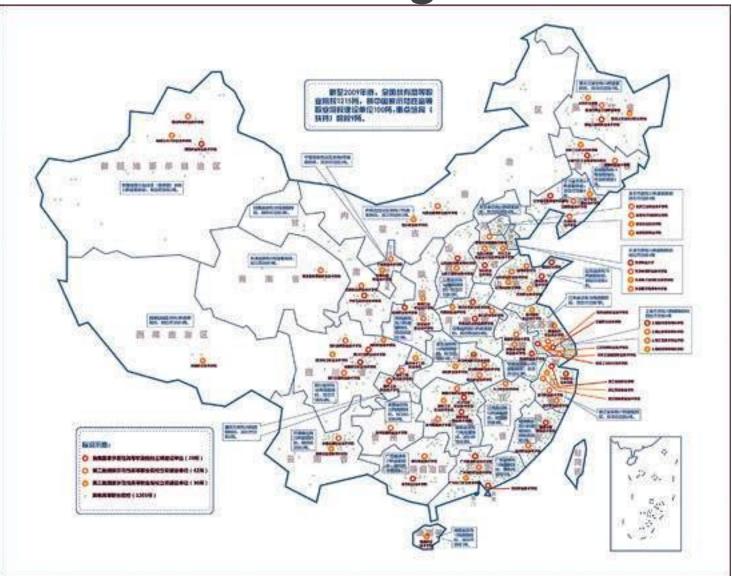


7th International Skills Forum Anticipating and Preparing for Emerging Skills and Jobs



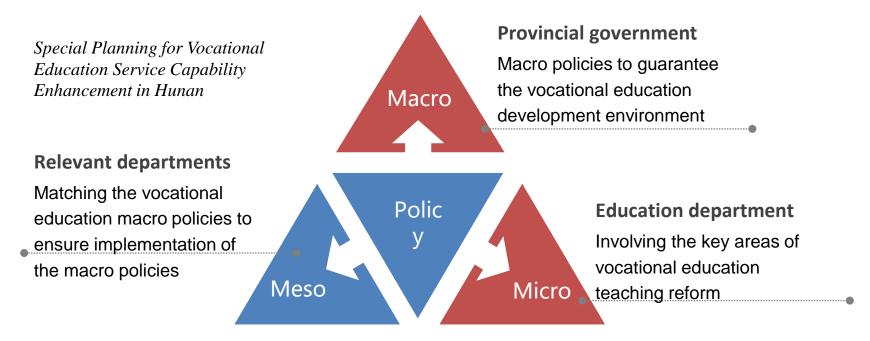
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### **Vocational Colleges in China**



# Policy framework in Hunan

Hunan Modern Vocational Education System Construction Planning (2014-2020)



23 professional teaching standards for secondary vocational schools



### **Cooperation Platform**

Constructing an enterpriseschool cooperation platform and support many types of enterprise-school collaboration on the platform

### **Cooperation Platform**



Creating vocational education groups

34 vocational education groups established under the leadership of vocational colleges currently, such as Hunan Arts Crafts Vocational Education Group, Hunan Automobile Vocational Education Group, Hunan Commerce & Tourism Vocational Education Group



Initiating vocational education alliance

Set up alliances, associations and other cooperation platforms, such as Aviation Vocational Education and Technology Synergy Innovation Center established under the leadership of Changsha Aeronautical Vocational and Technical College

# **Cooperation Platform** Key merit

Vocational groups, alliances, centers and associations effectively integrate the government, industry, university and enterprise resources, promote synergy between the vocational education and industry, and sets up a mutual benefit and win-win cooperation platform for all parties



### **Diverse collaboration**

Enterprises and schools involve in diverse collaboration on platform including co-construction of specialized schools, coconstruction of major clusters, joint education, and joint innovation and R&D

### Specialized school on platform



- 2013: the college created Aviation Vocational Education and Technology Synergy Innovation
  - The college serves as the chair of board of trustees
  - The board includes 10 members (2 military production firms; 2 aeronautic universities; 3 general purpose airplane production firms; etc)
  - Other members of the center include many defense-related manufacture firms, vocational colleges with related fields, defense-related research institutes)
  - Industry associations and dominant firms oversee occupation standards and curriculum of the college; align college's training with industry needs
  - Specialized colleges catering to the needs of a consortium of firms in same industry



### Specialized school on platform



# **Co-construction of major clusters**

Overall colleges and enterprises co-construct the specialties (major clusters) in terms of course construction, practical training condition construction and teaching staff construction and jointly promote the specialties to be greater and stronger

#### **Changsha Aeronautical Vocational and Technical College**

More than 30 enterprises donate airplanes, engines and other teaching attachments with the market value over RMB 300 million

Jointly construct 24 practical training bases inside schools which integrating practice and training, skill training appraisal, technical services and other functions Jointly set up 197 practical training bases outside schools which integrating student on-the-job training, professional teacher factory practice, technical project development and application and other functions

#### **Yueyang Vocational Technical College**

Yueyang Vocational Technical College and the enterprises jointly develop 187 course standards, 15 skill selective examination standards, more than 300 courses and 8 practical bases including Guotai Yanggang Nursing Home and SK Hospital



# Joint education on platform

- Vocational colleges and enterprises jointly develop the talent cultivation scheme, jointly implement the workir place learning talent cultivation mode and explore contract training and modern apprenticeship
- Hunan Vocational college of Railway
  - The college works closely with Guangzhou Railway (Group) Corporation, CRRC Corporation Limited, and provides trainings for these corporations and their upstream and downstream firms
  - The college coordinates the skill production for multiple firms in the railway industry and subway industry
  - Large SOEs use the college as their internal training centers, and the college provides also examinations and certifications for firms





## Joint education on platform







# Joint education on platform

#### Changsha Social Work College

 College cooperates with Carnation, Wanzhonghe and other enterprises to explore the point-to-point small order, point-to-face large order, face-to-face large order and other types of modern apprenticeship talent cultivation modes and provide professional talent support for rapid development of pension service industry

#### Hunan Industry Polytechnic

The Polytechnic sets up "Zoomlion class", "Bosch class", "subway class", "CRCC class", "Dahua class", "Geely class", "Ninetowns class", "Changfeng class", "Changjiu Botent class", "AsiaInfo class" for contract training purpose

#### • Hunan Urban Construction College

 The college runs schools, such as "Shenzhen Yihui class", "Wuhan Bitebite class", "Hopu IoT class" and "property management class" jointly with the enterprises.

# Joint innovation and R&D



- Hunan vocational colleges adhere to school-enterprise collaborative innovation and have obtained certain achievements in terms of applied technology R&D and popularization
- Till 2016, vocational colleges and enterprises had co-constructed about 80 technology R&D centers; in 2016, the colleges and enterprises jointly carried out about 700 production technology key projects

# Joint R&D on platform

- Hunan Industry Polytechnic
  - The polytechnic co-constructs an engineering mechanical and technical service base with Zoomlion and other engineering machinery leading enterprises, jointly researches and develops whole series of straw fertilizer making machinery with Biye Hunan Agricultural Science and Technology Development Co., Ltd., jointly establishes a technology development center with Changfeng Group
- Yueyang Vocational Technical College
  - As of 2016, the college declared and initiated 4 provincial major special projects including "Construction technology research, application and promotion of Yueyang Lingang logistics service collaborative service system" in conjunction with the enterprises, developed 12 industry development plans and 6 standards and obtained 33 patents, including 4 patents for invention and 10 scientific and technical progress rewards at municipal level or above



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