Beijing VET Qualification Framework Reform for Lifelong Learning —A Bridge Between Workplace Learning and School Education?

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Part 1: Background

Introduction

- ***About my work:*** Institute for Vocational and Adult Education (IVAE) at Beijing Academy of Educational Sciences (BAES), we provide consultation and academic support to Beijing Municipal government, local education authority and vocational colleges in Beijing, also I am the coordinator for international exchanges and cooperation in my institution.
- ***About this presentation:***
- 1.VET school education vs. Workplace learning: school education still the major place to train student and less attention for workplace learning.
- 2.the pilot study can show some basic problems Chinese vocational education are facing
- 3.VET schooling itself need to improve in structure under the umbrella of lifelong learning

China

CHINA
0 km 200 400 600 km
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National Capital (11,510,000 in 2000)
over 10,000,000
over 6,000,000
over 2,500,000
over 1,000,000
other main city
other city
Capital of autonomous region
Capital of province
Shanghai Government-controlled municipality
Hong Kong* Special administrative region
RUSSIAN FEDERATION
MONGOLIA
NORTH KOREA
SOUTH KOREA
JAPAN S
Pyongyang
Seoul
YELLOW SEA
EAST CHINA SEA
SOUTH CHINA SEA
TAIWAN
DISPUTED TERRITORY
TAJIKISTAN
Kashmir
DISPUTED TERRITORIES
NEPAL
INDIA
BHUTAN
BANGLADESH
MYANMAR (BURMA)
VIETNAM
LAOS
THAILAND
PHILIPPINES
Bay of Bengal
Gulf of Tonkin
HAINAN
Hainan
Barnaul
Abakan
Irkutsk
Lake Baikal
Ulan-Ude
Chita
Blagoveshchensk
Khaba
Ulan Bator
Lake Zaysan
Lake Khanka
Vladivosto
Gobi Desert
Tien Shan
Tarim Pendi
Taklimakan Shamo
Kunlun Shan
Altun Shan
Qilian Shan
Qaidam Pendi
Qing Zang Gaoyuan
(Plateau of Tibet)
Himalaya
Aksai Chin
XINJIANG UYGUR (SINKIANG)
XIZANG (TIBET)
NEI MONGOL (INNER MONGOLIA)
QINGHAI
GANSU
NINGXIA HUI
SHANXI
SHAANXI
HEBEI
HENAN
SHANDONG
JIANGSU
ANHUI
HUBEI
HUNAN
JIANGXI
ZHEJIANG
FUJIAN
GUIZHOU
YUNNAN
GUANGDONG
GUANGXI ZHUANG
SICHUAN
HEILONGJIANG
JILIN
LIAONING
Harbin
Changchun
Shenyang
Fushun
Anshan
Dalian
Tianjin (Tientsin)
BEIJING (PEKING)
Taiyuan
Shijiazhuang
Jinan
Zibo
Qingdao
Zhengzhou
Luoyang
Xi'an
Lanzhou
Nanjing
Shanghai
Wuhan
Chengdu
Chongqing
Changsha
Nanchang
Hangzhou
Guiyang
Kunming
Guangzhou (Canton)
Shenzhen
Hong Kong*
Taipei
Urümqi
Karamay
Turpan
Hami
Kashi
Yining
Aksu
Kuqa
Daqaidam
Golmud
Xining
Yinchuan
Baotou
Hohhot
Datong
Changjiakou
Qiqihar
Daqing
Suihua
Jiamusi
Mudanjiang
Changchun
Jilin
Yanji
Fuxin
Liaoyang
Anshan
Dandong
Huludao
Jinzhou
Tangshan
Qinhuangdao
Baoding
Cangzhou
Dongying
Weifang
Yantai
Weihai
Linyi
Xuzhou
Huaibei
Suzhou
Huainan
Hefei
Wuhu
Ningbo
Wenzhou
Fuzhou
Xiamen
Shantou
Zhanjiang
Haikou
Sanya
Nanning
Liuzhou
Guilin
Changde
Yueyang
Jingdezhen
Nanchang
Changsha
Zhuzhou
Hengyang
Shaoguan
Meizhou
Longyan
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Jiujiang
Wuhan
Xiangfan
Yichang
Shashi
Enshi
Jingzhou
Huanggang
Xiaogan
Suizhou
Xinyang
Luan
Huainan
Bengbu
Chuzhou
Huangshan
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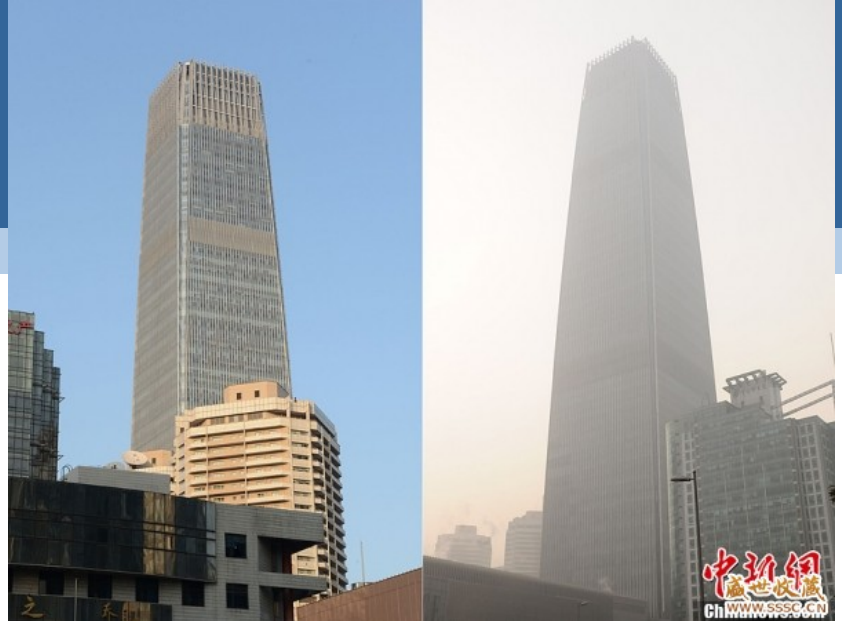
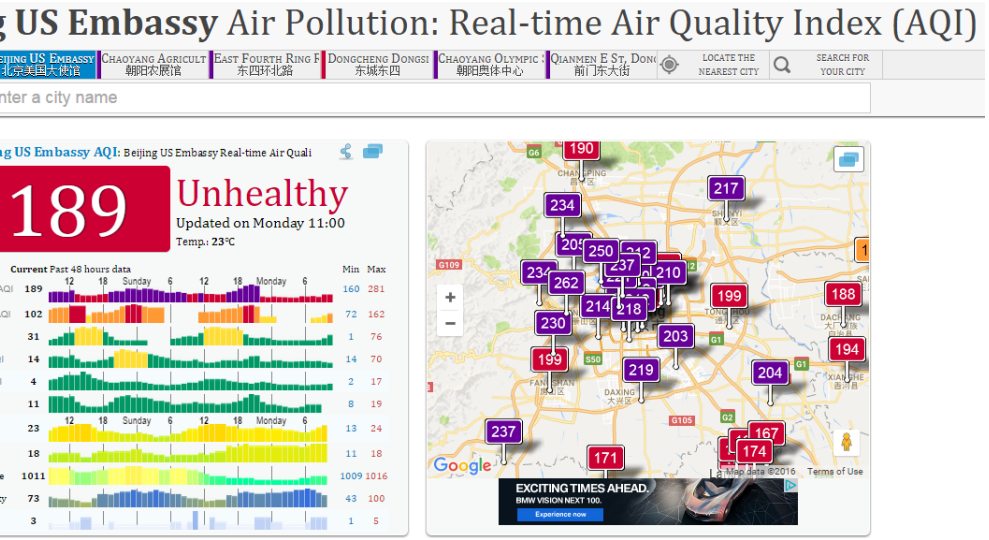
Yingtan
Jinhua
Shaoxing
Taizhou
Wenzhou
Lishui
Quzhou
Jiaxing
Huzhou
Changzhou
Wuxi
Suzhou
Nantong
Yancheng
Lianyungang
Xuzhou
Linyi
Rizhao
Weifang
Laiwu
Jinan
Zibo
Dezhou
Cangzhou
Langfang
Tianjin
Qinhuangdao
Chengde
Zhangjiakou
Xinzhou
Taiyuan
Yangquan
Changzhi
Jincheng
Linfen
Yuncheng
Luoyang
Pingdingshan
Xuchang
Zhoukouzhuang
Kaifeng
Zhengzhou
Anyang
Handan
Xingtai
Shijiazhuang
Baoding
Langfang
Beijing
Tianjin
Tangshan
Qinhuangdao
Chengde
Zhangjiakou
Datong
Shuozh

Population

世界人民大团结万岁



Pollution


US Embassy Air Pollution: Real-time Air Quality Index (AQI)
Chaoyang Agricult 朝阳农展馆
East Fourth Ring F 东四环北路
Dongcheng Dongsi 东城东四
Chaoyang Olympic 朝阳奥体中心
Qianmen E St, Dong 前门东大街
LOCATE THE NEAREST CITY
SEARCH FOR YOUR CITY
nter a city name
US Embassy AQI: Beijing US Embassy Real-time Air Quali
189
Unhealthy
Updated on Monday 11:00
Temp.: 23°C
Current Past 48 hours data
Min Max
PM2.5 AQI 189 160 281
PM10 AQI 102 72 162
O3 AQI 31 1 76
NO2 AQI 14 14 70
SO2 AQI 4 2 17
CO AQI 11 8 19
Temp. 23 13 24
Pressure 1011 1009 1016
Humidity 73 43 100
Google
Map data ©2016
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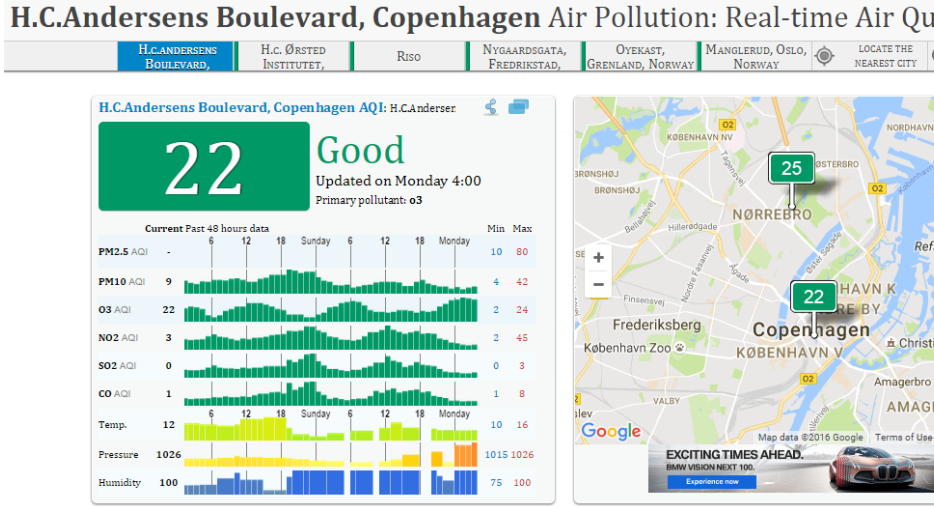
BMW VISION NEXT 100.
Experience now


H.C.Andersens Boulevard, Copenhagen Air Pollution: Real-time Air Qu
H.C.ANDERSENS BOULEVARD,
H.C. ØRSTED INSTITUTET,
RISØ
NYGAARDSGATA, FREDRIKSTAD,
OYEKAST, GRENLAND, NORWAY
MANGLERUD, OSLO, NORWAY
LOCATE THE NEAREST CITY
H.C.Andersens Boulevard, Copenhagen AQI: H.C.Anderser
22
Good
Updated on Monday 4:00
Primary pollutant: o3
Current Past 48 hours data
Min Max
PM2.5 AQI - 10 80
PM10 AQI 9 4 42
O3 AQI 22 2 24
NO2 AQI 3 2 45
SO2 AQI 0 0 3
CO AQI 1 1 8
Temp. 12 10 16
Pressure 1026 1015 1026
Humidity 100 75 100
Frederiksberg
København Zoo
Copenhagen
KØBENHAVN V
NØRREBRO
Google
Map data ©2016 Google
Terms of Use
EXCITING TIMES AHEAD.
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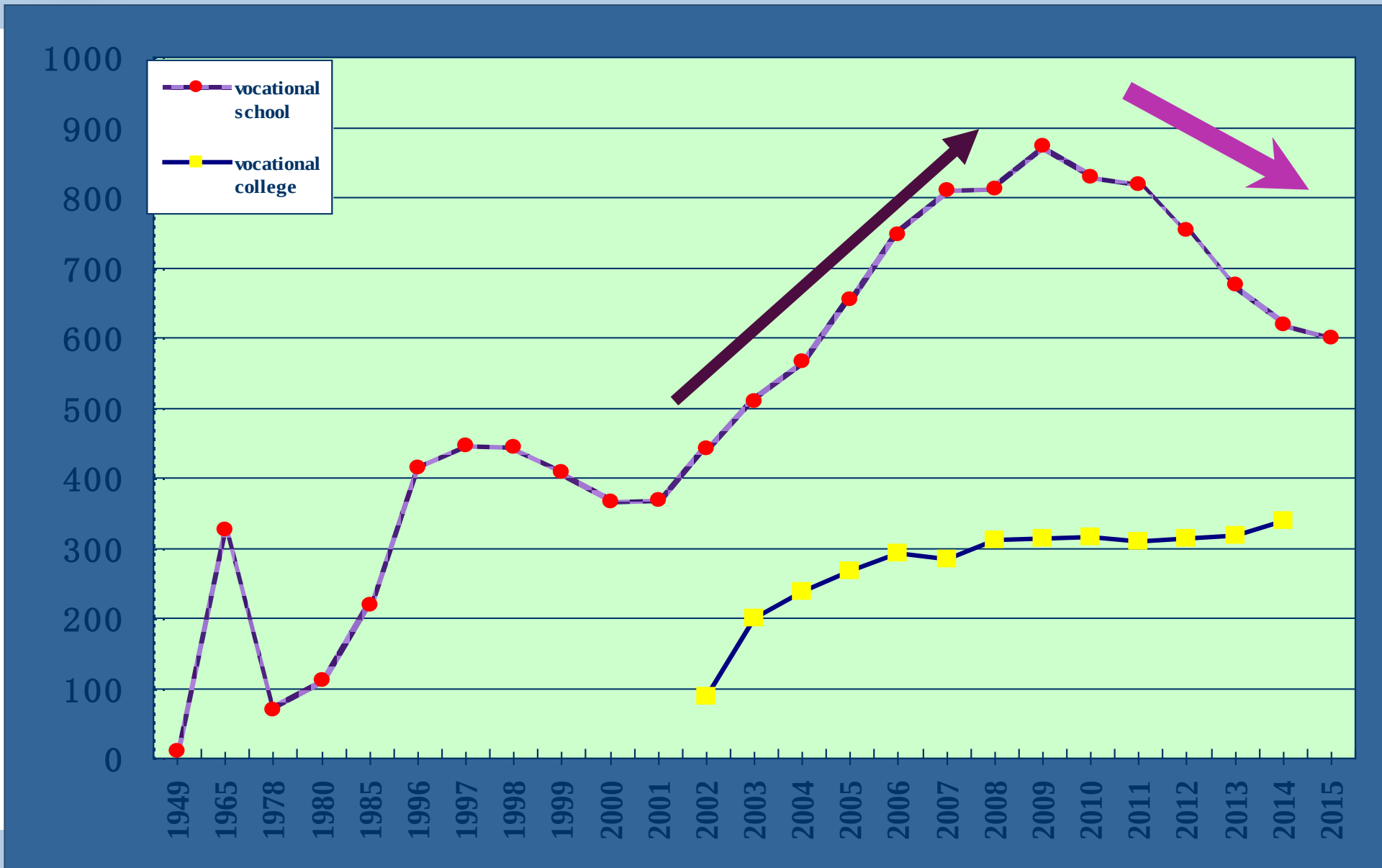
Experience now

Education

Part 2: Beijing VET Qualification Framework Reform

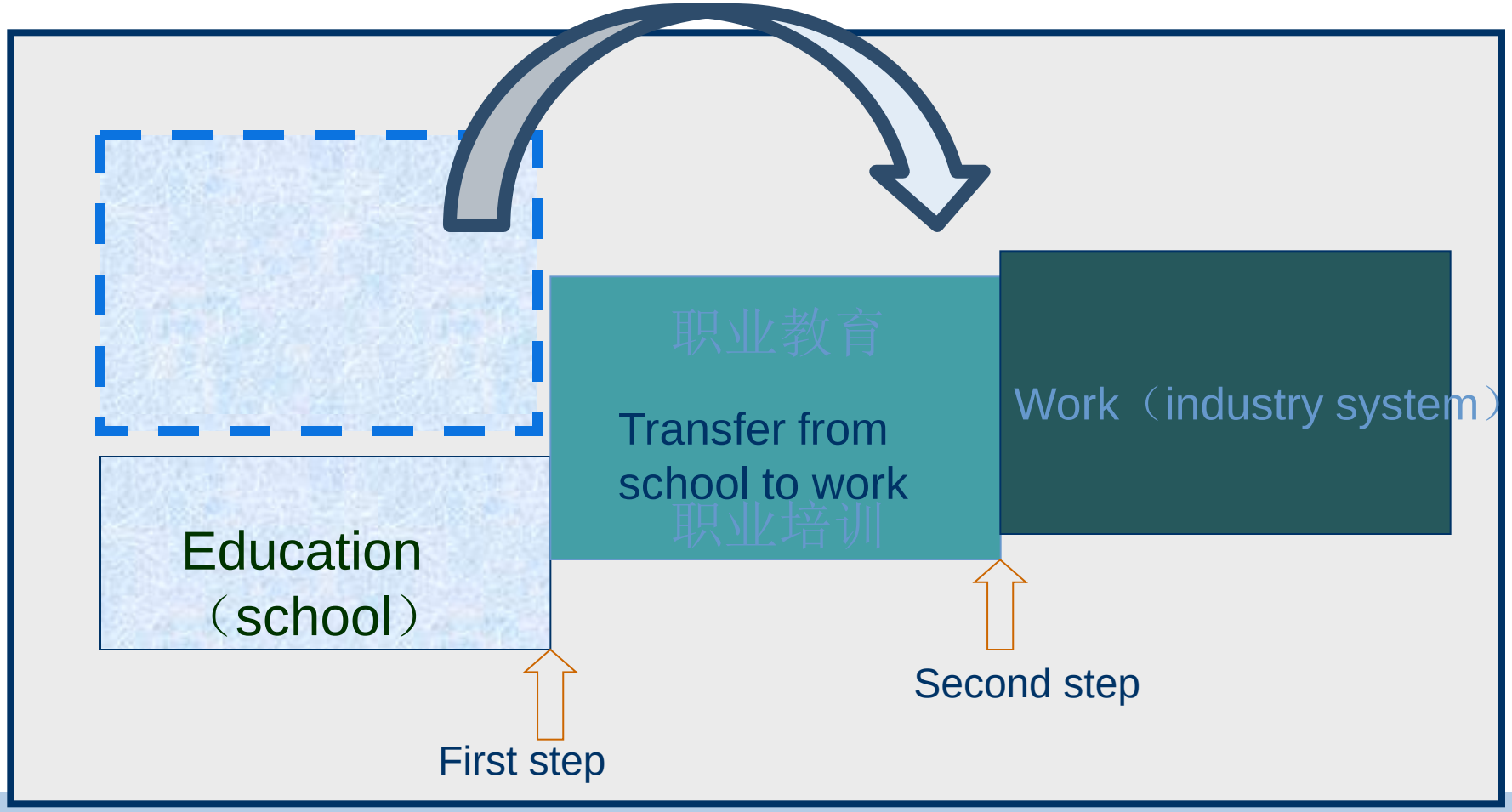
why？

1949-2015 vocational education students number

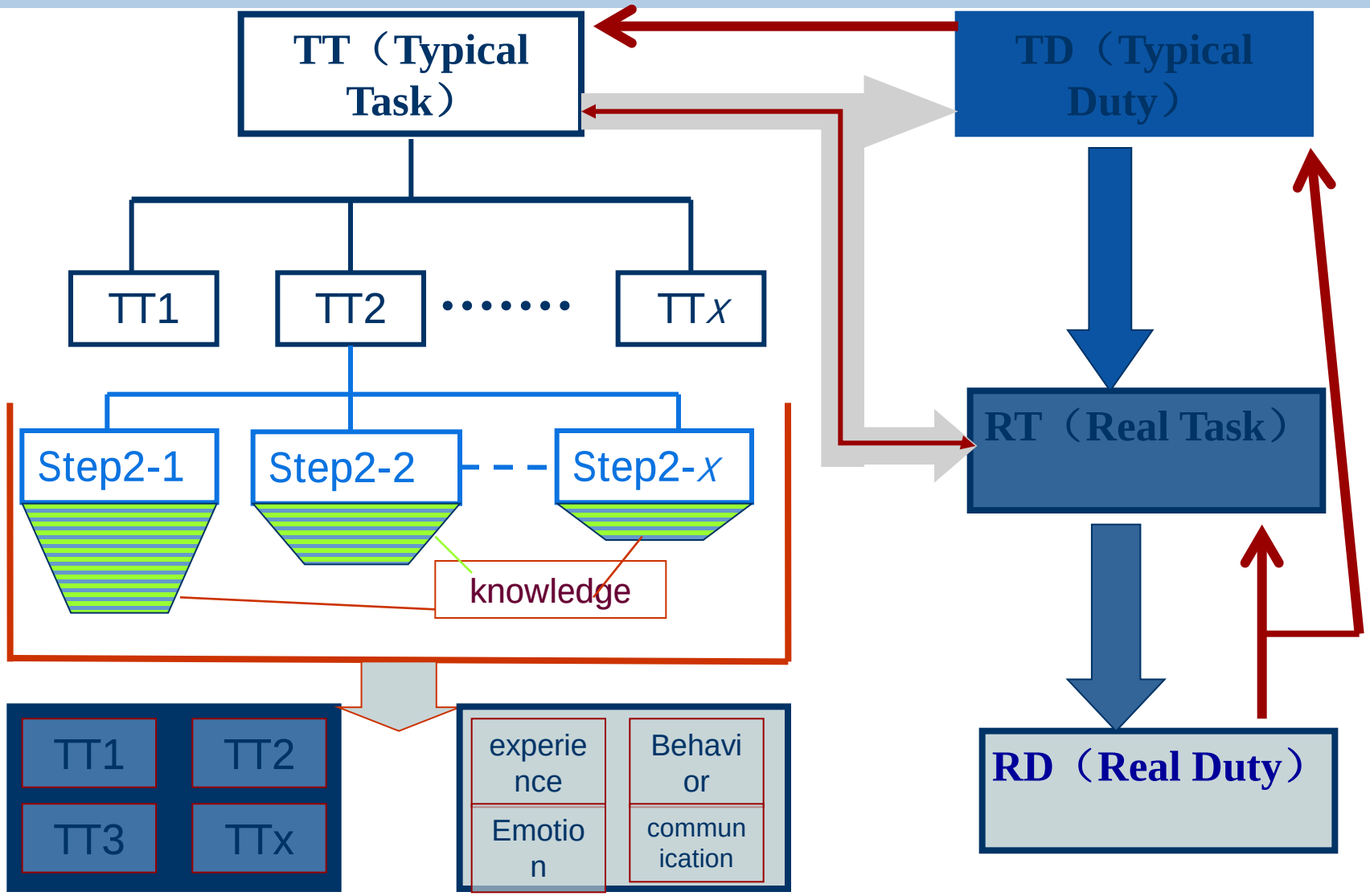


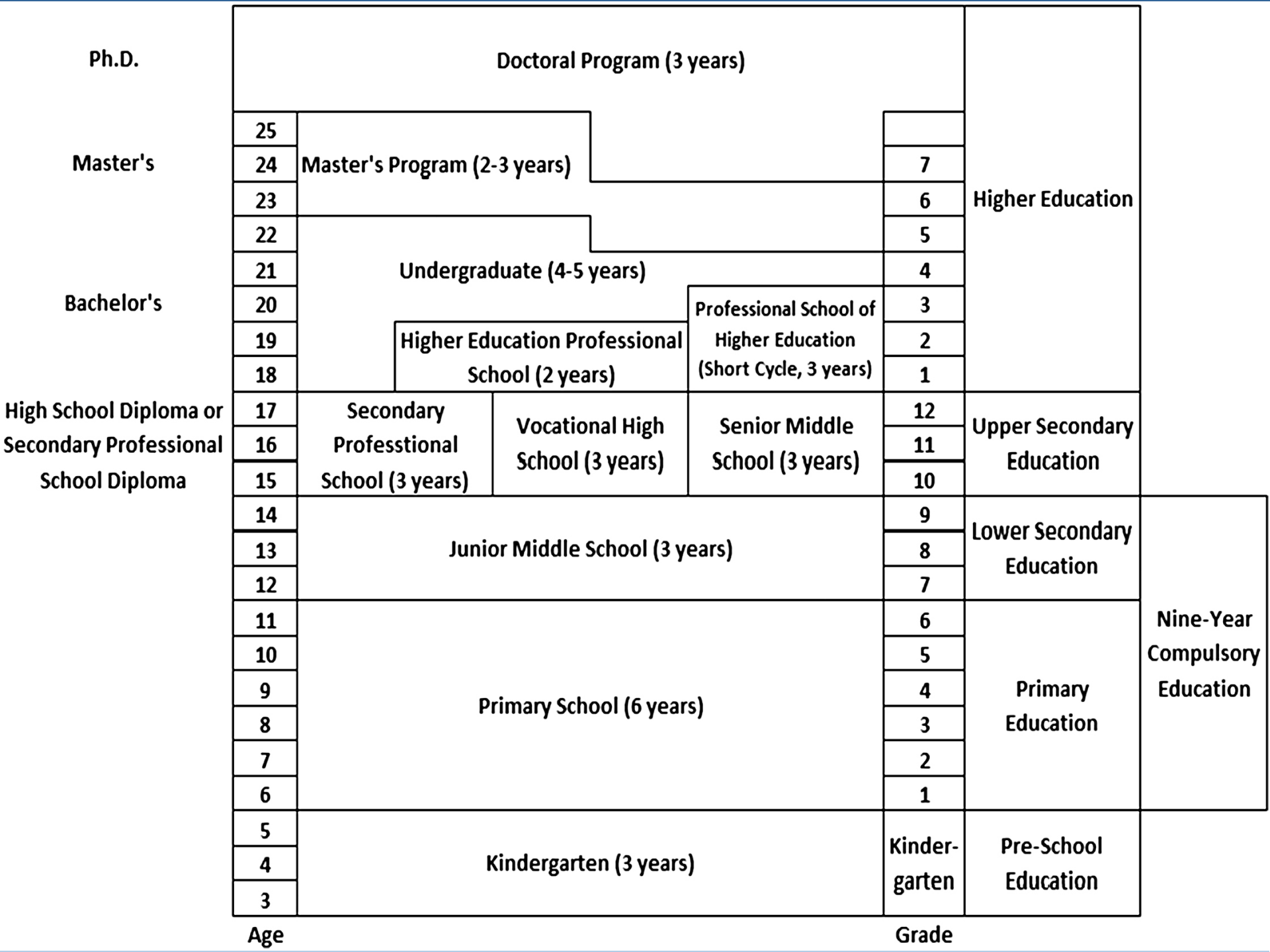
Rethink of VET education

Rauner,F.(1999), School-to-Work Transition: The Example of Germany.
In D.Stern and D.A.Wagner(eds.), *International Perspectives on the School-to-Work Transition* (pp.237-272). Cresskill,New Jersey: Hapmton Press



BVQF reform logic: TT→ TD/RT→ RD




Ph.D.
Doctoral Program (3 years)
Master's
Master's Program (2-3 years)
Bachelor's
Undergraduate (4-5 years)
Professional School of Higher Education (Short Cycle, 3 years)
Higher Education Professional School (2 years)
High School Diploma or Secondary Professional School Diploma
Secondary Professtional School (3 years)
Vocational High School (3 years)
Senior Middle School (3 years)
Junior Middle School (3 years)
Primary School (6 years)
Kindergarten (3 years)
Higher Education
Upper Secondary Education
Lower Secondary Education
Primary Education
Pre-School Education
Nine-Year Compulsory Education
25
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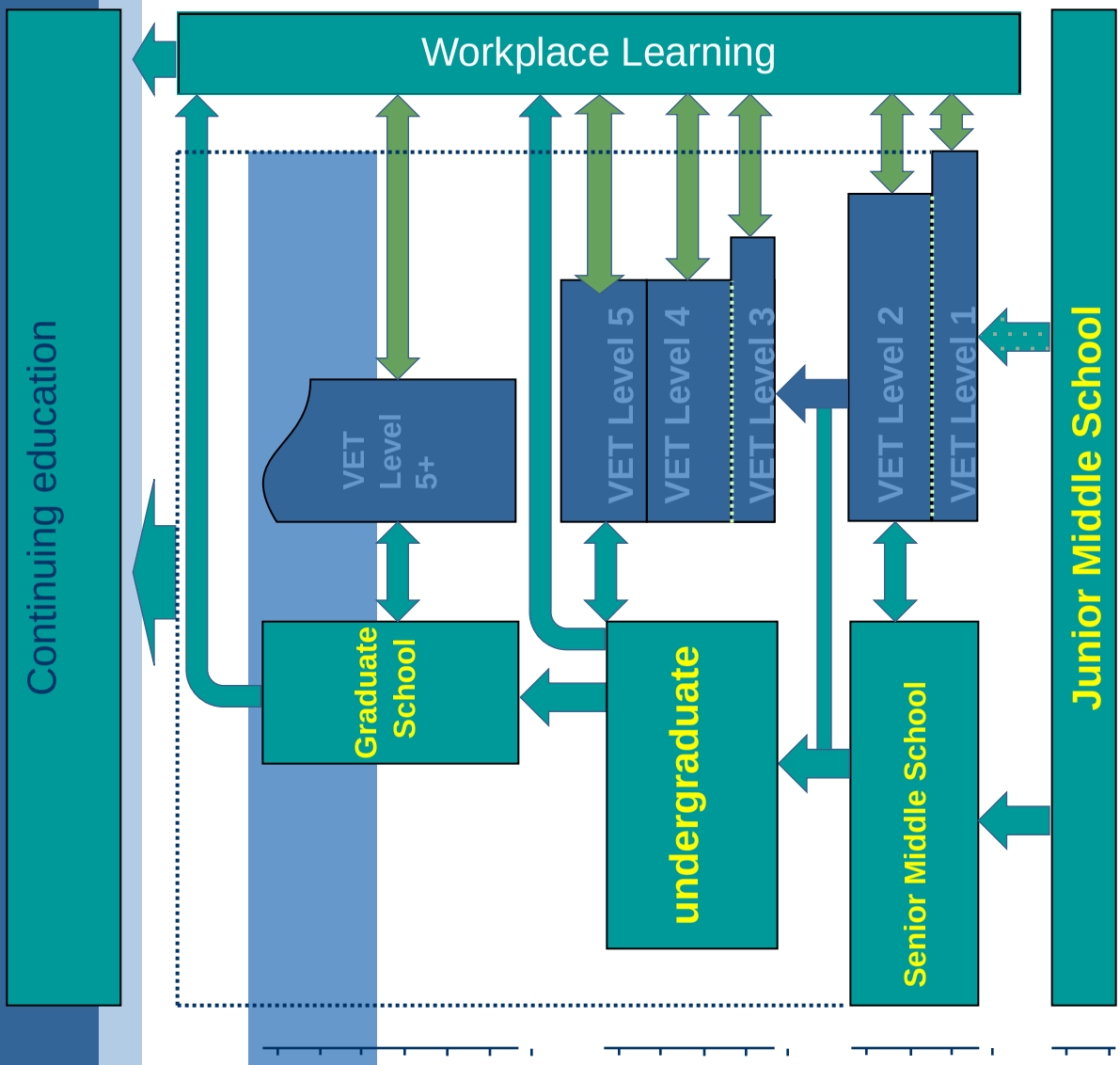
Kinder-garten
Age
Grade



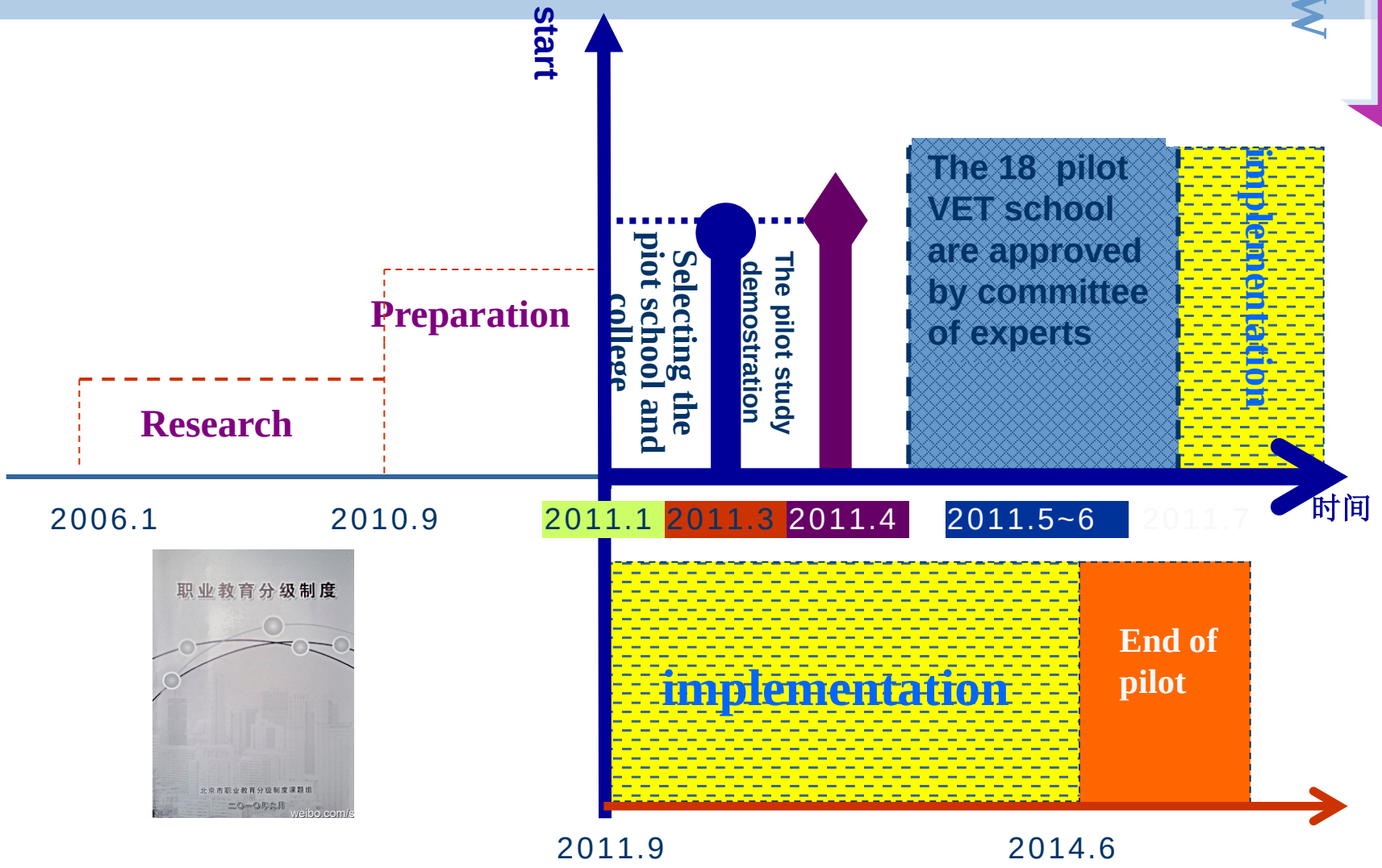
Beijing VET Qualification Framework

under the structure of lifelong learning concept

Part 2: Beijing VET Qualification Framework Reform

How?

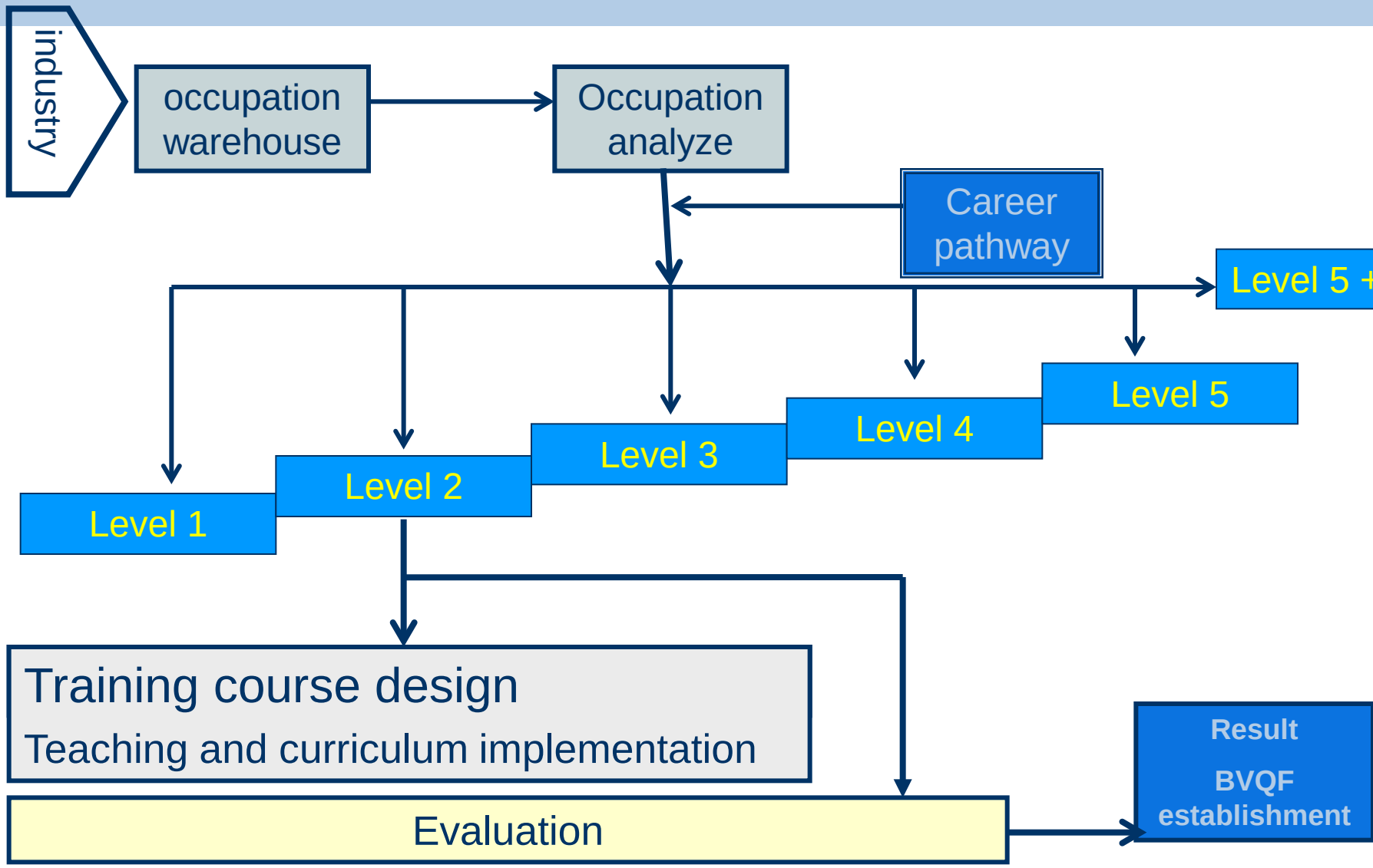
职BVQF reform timetable



Choose pilot majors of BVQF reform

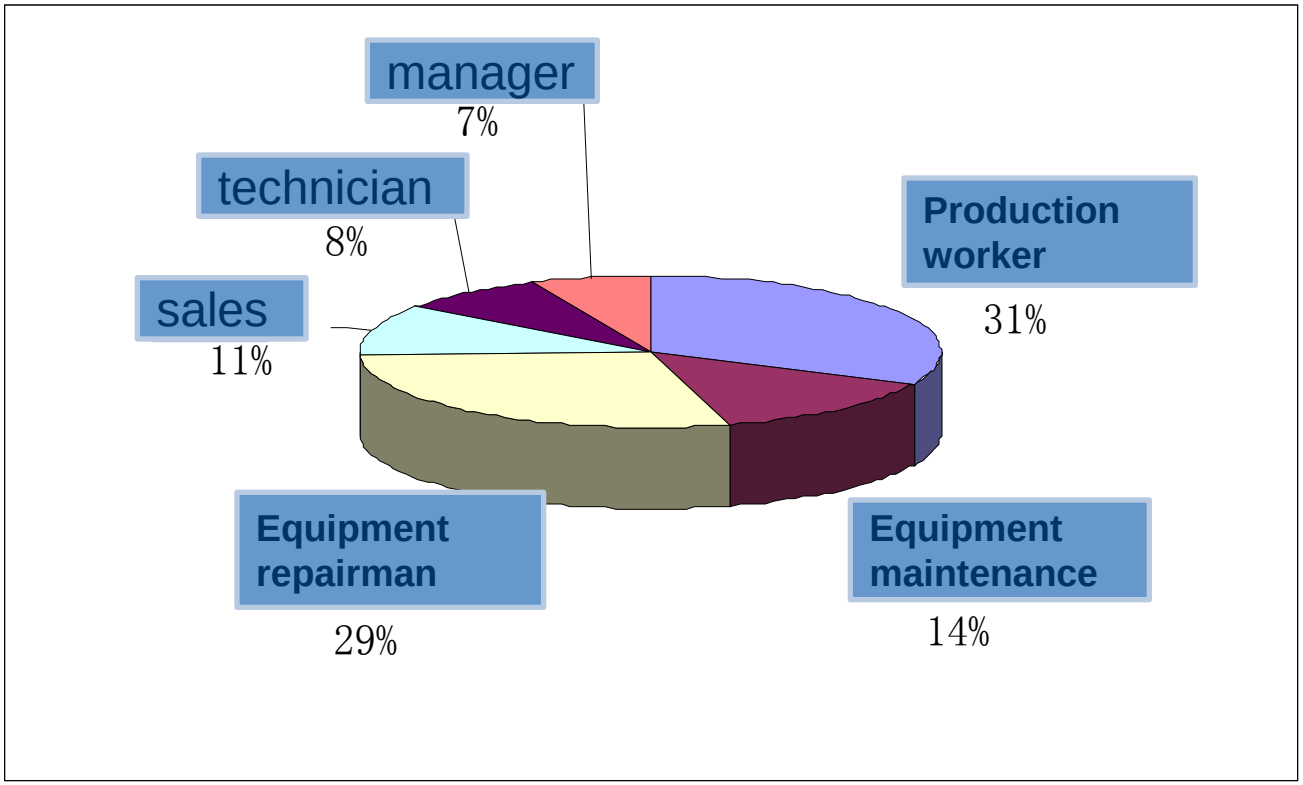
- Software technology
- Marketing sales
- Biological technology
- Auto manufacturing
- Mechanical and electrical integration technology
- Modern logistics
- Communication technology
- Animal husbandry and veterinary
- Tourism management
- Digital media
- Security management
- Automotive technical service
- Railway transportation
- Network technology
- Architecture and decoration
- Garden landscape
- Jewels processing, appraisal and marketing
- Elderly service

BVQF reform key points



The BVQF reform Process

1.Demanding analysis



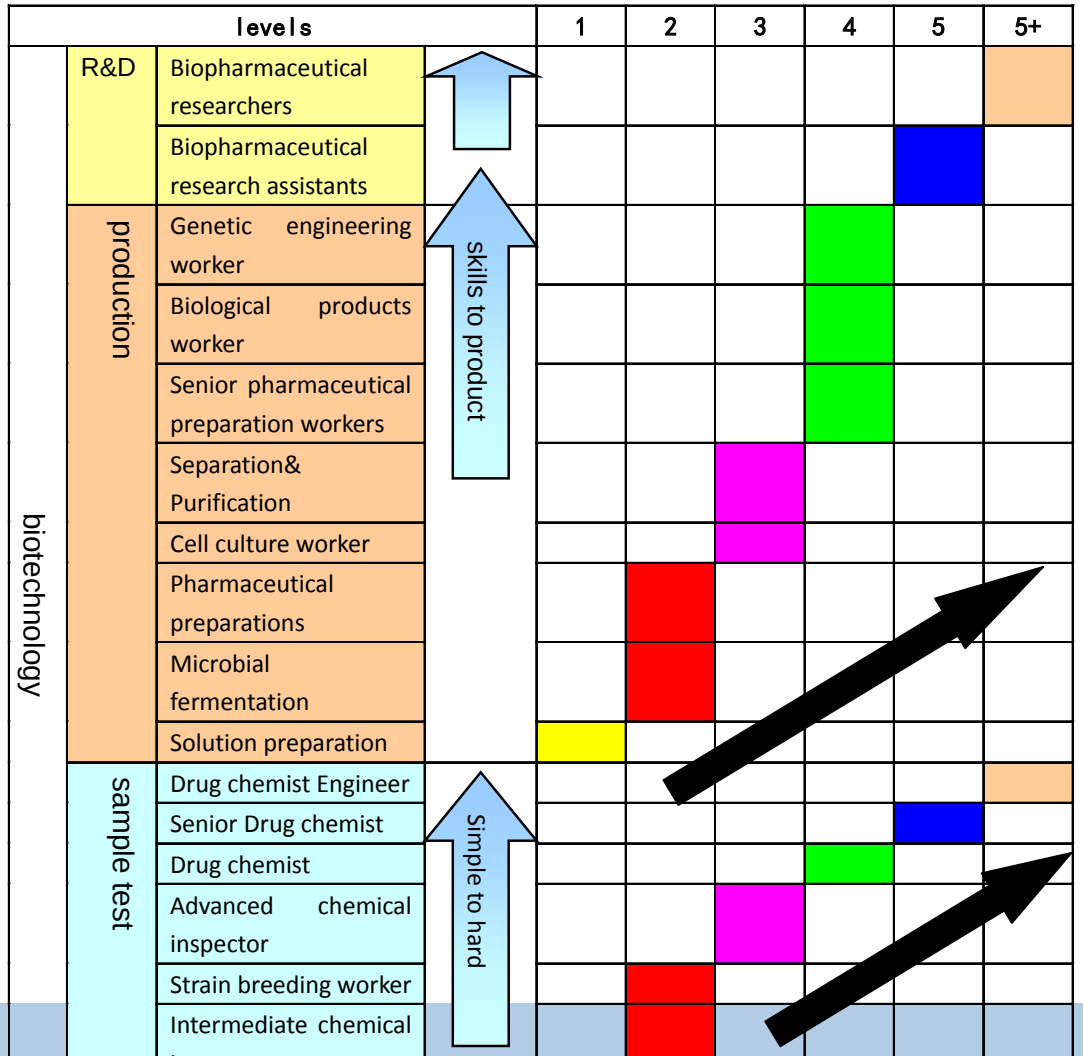
Research report based on different company

By *Beijing Polytechnic*

2.Establish the Occupation Warehouses

- BVQF reform is conduct by VET school cooperation together with industry and enterprises, analyze the professional types, structures and features in-depth, establish career structure model and divide the level rationally according to the classification system, and finally form the trial reform of “occupation warehouse".

Establish occupation warehouses



3.Setting the standards

- Vocational education standard is the objective reflection of social (industry, enterprise) demands for education process, and is the organic integration of national vocational qualification standards ,enterprise employment standards, school education standards and evaluation.
- VET Level standard is a standard system, in which every level has its clear boundary and also a reasonable cohesion with others.

4. Description of the ability of each level

A、Social Abilities

1 safety, 2 legal, 3 environmental protection, 4 compliance, 5 responsibility, 6 economic, 7 communication and cooperation

B、 Operation abilities

1. the ability to understand and implement enterprise production technical specifications and standards
2. the ability to understand and use production tools
3. the ability to master and use working methods
4. the ability to complete production tasks（1）、（2）、（3）

C、 Development abilities

1. learning ability (master new technology, new information and new policy)
2. Information ability（ information collection and handling application ability, information technology skills ）
3. Management ability (strategic thinking, planning and design, organization, coordination, execution)
4. Innovation ability

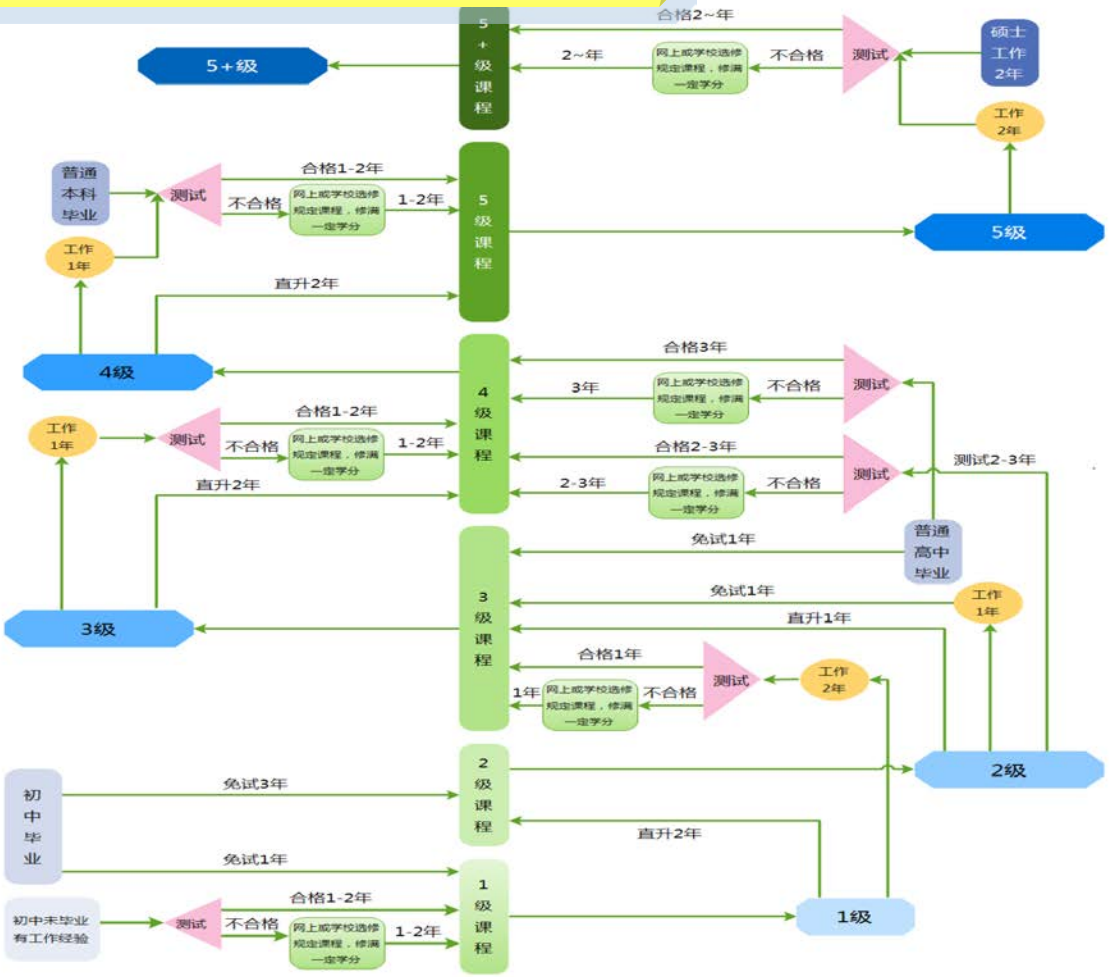
4. Description of the ability of each level

Level	Level 1	Level 2	Level 3	Level 4	Level 5
definition	Able to correctly express information	Able to listen and clearly express information	Can be concise, effective communication	Ability to communicate with analysis tools	Can encourage two-way communication
description	Can correctly express what they want to say, can correctly convey the content of others to say; Body language and expression of the same intention	Have basic English proficiency Can encourage others to take the initiative to communicate; Be able to actively and objectively listen, do not interrupt each other; At any time with each other check the correctness of communication information, such as duplication, interpretation	Have basic English proficiency Can encourage others to take the initiative to communicate; Be able to actively and objectively listen, do not interrupt each other; At any time with the other check the correctness of communication, such as duplication, interpretation; Communication can be concise and clear	Have basic English proficiency Can encourage others to take the initiative to communicate; Be able to actively and objectively listen, do not interrupt each other; At any time with the other check the correctness of communication, such as duplication, interpretation; Communication can be concise and clear; Effective communication with effective tools	Have intermediate level of English Can encourage others to take the initiative to communicate; Be able to actively and objectively listen, do not interrupt each other; At any time with the other check the correctness of communication, such as duplication, interpretation; Communication can be concise and clear; Can communicate effectively with effective tools; To the relevant data, case, information to support communication

communication ablity

5.Design the learning path

Learning path



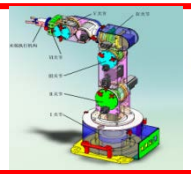
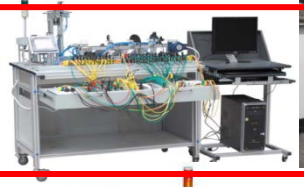
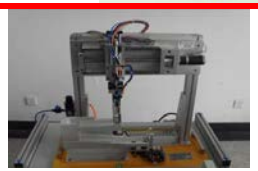
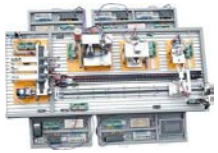
6.Design TOPIC of vocational education

- Phase is a physical and chemical concept. According to the difference of existing material forms and distribution, a system is divided into phases. A phase has the same physical and chemical properties and can be distinguished with the rest of the system.
- "Phase" used in vocational education means a professional career education teaching system which can be divided into several units like content, function, method. These units can be parallel or stacked
  - ✓Reflecting the teach-learn-do combination feature in kind,
  - ✓Presenting the enterprise training standards, school education standards, students‘ mind and body development fusion feature in content，
  - ✓Reflecting the characteristics of behavior field, the study field, learning situation, the cycle of behavior field in structure.

Design TOPIC of vocational education

- *Training Object Phase In Class*，TOPIC
- The whole process of learner-centered teaching, studying, training, and do designed according to the specific production project to (professional) design task.
- TOPIC is completed in school, which is bigger than learning area in German and equivalent to learning field + enterprise training modules.
- TOPIC solves the standardization of vocational education and realized zero distance between enterprise's requirement and standard.
- TOPIC is the basic unit of vocational education and also the practical teaching organization plan.
- TOPIC exists with and digital multimedia forms.

Design TOPIC of vocational education

Level 5	
Level 4	 
Level 3	 
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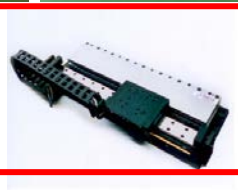
Level 1	

3.Pilot projects of VET Level Framework to be argued

Design TOPIC of vocational education

Cattle and cow disease prevention

Pet care

Animal disease prevention and control

Poultry and poultry disease prevention

7. Quality Monitoring And Evaluation

- Establish student training quality monitoring system, including student training quality monitoring index, the method of obtaining the student training quality monitoring information and data, the using of student training quality monitoring results.
- Establish student training quality evaluation system, from the evaluation of every teaching project to every level of evaluation standards, factors methods. Form a scientific and strict quality management, monitoring and evaluation system.

Seven Step to achieve good vocational education

1. Demanding analysis
2. Establish the occupation warehouses
3. Setting the standards
4. Description of the ability of each levels
5. Design the learning path
6. Design TOPIC of vocational education
7. Quality Monitoring And Evaluation

Part 2: Beijing VET Qualification Framework Reform

Result

The result of BVQF

- Enroll vocational students only 1 year(2011), the programme end in 2014.
- The evaluation is not process as planned, no students can get the qualification issued by government or any committee.
- The vocational schools/colleges did a very good survey of the industry.
- The relation between schools/colleges and industry are much more closed than before, the teachers and skill workers are exchanged quite often. We provide funding for this kind of exchanges.
- The students have chance to learn skills need in the working place, and the workers have chance to go back to school for further taining.

Some reasons for the BVQF not to continue

- Low students number
- Supporting policy is not enough(committee、funding、student learning outcome）
- Workplace learning is not easy to mobilize(motives 、policy、funding)
- Culture is still degree first
- The whole design is complex.
- No national example to follow.

The future

Modern apprenticeship

VET system building

VET groups

Employer engagement

Community engagement

……

Thank You !

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