Curriculum System of Vocational Education in China

—-A case study of the curriculum reform of secondary vocational schools in the new century

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What is Curriculum System?
## Outline

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Curriculum System of Vocational Education in China
1. The Achievements of the Curriculum System

1.1 The diversified understanding of the essence of curriculum

At present, the vocational education curriculum of our country is in the midst of an important transformational stage of curriculum model — from the conventional discipline-based curriculum pattern to the current task-oriented curriculum (project curriculum) pattern. (Xu, Guoqing 2007)

In other words, the cognition of curriculum essence is changing from the traditional curriculum view such as emphasizing the theory and knowledge, underestimating practice and skills to the new curriculum view such as stressing on competency-based, work-in-progress, and practice-oriented.
1. The Achievements of the Curriculum System

• 1.2 The Construction of Curriculum Standards Being Valued and Established Gradually

  • “The Action Plan of Reform and Innovation of the Secondary Vocational Education (2010-2012)” stipulates explicitly developing the **professional syllabus of the core curriculum** and **five hundred professional curriculum standards (syllabus)** on the basis of the new **professional teaching-guided program**.

  • By 2008, the Ministry of Education had organized experts in all areas and developed **eighty-two professional teaching-guided plans** for the key majors and **syllabus** for four moral education subjects, **twenty-three types of basic courses**, and the **public basic courses of the engineering class**.

  • The Ministry of Education announced the first batch **curriculum standards “The Professional Instruction Standards of the Secondary Vocational School (trial)”** in 2014.
1. The Achievements of the Curriculum System

• 1.3 Establishing Comprehensive Employment-Oriented Vocational Ability Curriculum Objectives
1. The Achievements of the Curriculum System

• 1.3 Establishing Comprehensive Employment-Oriented Vocational Ability Curriculum Objectives

The three-dimensional curriculum objectives

- Knowledge and skills
- Process and method
- Emotion attitude and values

Comprehensive vocational competence curriculum objectives

- Professional competence
- Social competence
- Method competence
1. The Achievements of the Curriculum System

• 1.4 Taking Working Process as the Logic of Curriculum Content Organization

Introducing the German Learning Field Curriculum. Extracting working tasks from production process or position in enterprises and transforms them into teaching contents with learning value and forms oriented by working process.
Teaching materials contents of "Marketing practice"

- **Chapter 1 Selling and marketing occupation**
  - 第一节 推销的概念与含义
  - 第二节 推销的基本要素
  - 第三节 推销职业特性与职业价值
- **Chapter 2 The salesman's occupation literacy**
  - 第一节 推销员的职业素质与培养
  - 第二节 现代推销理念
  - 第三节 现代推销模式
  - 第四节 推销礼仪
- **Chapter 3 Sales preparation**
  - 第一节 推销准备概述
  - 第二节 熟悉业务背景与潜在顾客分析
  - 第三节 寻找顾客线索
  - 第四节 准顾客审查与管理
- **Chapter 4 Selling close**
  - 第一节 推销接近的性质、目标与任务
  - 第二节 推销接近的基本方法
  - 第三节 推销接近应注意的问题
  - 第四节 推销接近中典型难题的处理
- **Chapter 5 Sales negotiation**
  - 第一节 推销洽谈的原则与策略
  - 第二节 推销洽谈的方式与方法
  - 第三节 探测顾客需求信息
  - 第四节 产品介绍与演示
  - 第五节 影响顾客的购买欲望与购买信心
  - 第六节 推销沟通技巧
- **Chapter 6 Handling customer objections**
  - 第一节 顾客异议概述
  - 第二节 处理顾客异议的基本策略
  - 第三节 处理顾客异议的基本方法
  - 第四节 几种常见顾客异议的处理对策
- **Chapter 7 Sales transactions**
  - 第一节 推销成交概述
  - 第二节 推销成交应注意的问题
  - 第三节 推销成交的基本方法
- **Chapter 8 Sales tracking and management of customer service**
  - 第一节 推销售后工作
  - 第二节 市场维护与管理
  - 第三节 推销员管理
1. The Achievements of the Curriculum System

- 1.5 Forming a Diversified Curriculum Development Model

- Working-process curriculum
- Project-based curriculum
- Competence-based curriculum
- Integrated Curriculum
1. The Achievements of the Curriculum System

- 1.6 Formulating Policies to Promote the Curriculum Quality
- 《The Action Plan of Reform and Innovation of the Secondary Vocational Education (2010-2012)》（The Ministry of Education）

“to push on the curriculum reform, and curriculums in secondary vocational education ought to aim for the improvement of students’ comprehensive vocational ability and service for lifelong development, adjoin the practical working process at post, link up with professional standards, update curriculum contents, adjust curriculum structure, innovate teaching ways, build the curriculum system meeting the need of economic and social development, and promote students’ overall development.”

- 《Opinions on further deepening the reform of secondary vocational education curriculum》（Guangzhou 2008）
- 《Opinions on further deepening the reform of Vocational Education Curriculum》（Beijing 2009）
2. The Challenges of the Curriculum System

2.1 The Intrinsic Value of the Curriculum Objectives Required to be Pay Attention

- Knowledge
- Skill
- Practice

How to pay attention to the intrinsic value of the curriculum system?

- Professional affection
- Professional attitude
- Professional spirit
- Occupational values
- .........................
2. The Challenges of the Curriculum System

2.2 Curriculum Content Lagging Behind Technology

It is suggested from the companies that curriculum content in school lags behind technology and knowledge in practice, and curriculum content can not timely catch up with the changes in the new technologies, new processes, new equipment, new standards, and new norms.

The skills that the students learned can not meet the market demand.

Many graduates complain that what they have learned in school is difficult to be applied in society, and technology, process learned in school lag behind enterprise production.
2. The Challenges of the Curriculum System

• 2.3 The curriculum structure system still needs to be optimized
• First, whether the whole structure of the curriculum can meet the needs of talent cultivation, which is essentially the relationship between curriculum structure and the targets of talent cultivation.
• Second, basic courses are not related to professional courses, and students lack interest in basic courses.
• Third, how to achieve the organic integration of theoretical courses and practical courses, it is a difficult problem.
• Fourth, how to achieve the integration of campus courses and off-campus practice is also a difficult problem.
• Fifth, how to build the curriculum system according to students’ cognitive rules and the typical tasks appropriate for development stage.
2. The Challenges of the Curriculum System

2.4 Inadequate Preparations of Teachers in Curriculum Implementation

- Vocational teacher attach attention to comprehensive vocational ability development of students in curriculum implementation, but do not understand the qualifications of new technology;
- The curriculum content is not properly updated with the production;
- New teaching methods are experimented, but not used adeptly.
- It is an urgent problem to enhance the curriculum implementation capacity of vocational teachers, because curriculum reform will not be successful without the deep involvement of teacher.
2. The Challenges of the Curriculum System

Before the curriculum implementation activities, whether the teacher has a clear curriculum objectives?

**Table 1: Teacher's Understanding of Curriculum**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Teaching Activities</th>
<th>Materials</th>
<th>Teaching Content</th>
<th>Student Experience in Educational Activities</th>
<th>Difficult to Explain Above Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3%</td>
<td>37.4%</td>
<td>4%</td>
<td>13.9%</td>
<td>32.4%</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Table 2: Teacher's Understanding of Professional Education Curriculum**

<table>
<thead>
<tr>
<th>Mainly Teach Students Professional Knowledge</th>
<th>Mainly Teach Students Professional Skills</th>
<th>Simulate Professional Work Process Activities</th>
<th>All Three Views Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1%</td>
<td>20.1%</td>
<td>19.8%</td>
<td>58%</td>
</tr>
</tbody>
</table>

**Table 3: Teacher's Understanding of Curriculum Implementation**

<table>
<thead>
<tr>
<th>Teaching Activities</th>
<th>Implementation of Course Plan</th>
<th>Teaching Process of Course</th>
<th>Interaction Between Teacher and Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7%</td>
<td>24.3%</td>
<td>8.8%</td>
<td>63.2%</td>
</tr>
</tbody>
</table>
2. The Challenges of the Curriculum System

- In the face of the design of teaching material and students' level is not consistent, students and teachers are often out of touch and so on, advance planning program design a good many times cannot be implemented, leading to the teacher had to temporarily adjust the implementation plan.

<table>
<thead>
<tr>
<th>表 4: 如何进行课程实施</th>
</tr>
</thead>
<tbody>
<tr>
<td>忠实地按照课程计划和教材按部就班实施课程</td>
</tr>
<tr>
<td>根据需要对课程本身和教学活动进行相互调适</td>
</tr>
<tr>
<td>根据教师理解、学生需要和特殊教育情境等灵活地创生新的课程</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>表 5: 课程实施中是否会按照教材的顺序按部就班地开展教学活动</th>
</tr>
</thead>
<tbody>
<tr>
<td>一般不</td>
</tr>
<tr>
<td>10.2%</td>
</tr>
</tbody>
</table>
2. The Challenges of the Curriculum System

- Vocational teacher attach attention to comprehensive vocational ability development of students in curriculum implementation, but do not understand the qualifications of new technology.

<table>
<thead>
<tr>
<th>表 6</th>
<th>是否有明确的课程目标</th>
</tr>
</thead>
<tbody>
<tr>
<td>有</td>
<td>说不清楚</td>
</tr>
<tr>
<td>85.3%</td>
<td>11.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>表 7</th>
<th>课程实施中最关注学生哪方面的发展</th>
</tr>
</thead>
<tbody>
<tr>
<td>专业理论知识</td>
<td>专业实践技能</td>
</tr>
<tr>
<td>4.8%</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>表 8</th>
<th>是否会了解或调查学生的课程需求</th>
</tr>
</thead>
<tbody>
<tr>
<td>一般不</td>
<td>很少</td>
</tr>
<tr>
<td>5.3%</td>
<td>14.7%</td>
</tr>
</tbody>
</table>
2. The Challenges of the Curriculum System

- Vocational teacher attach attention to comprehensive vocational ability development of students in curriculum implementation, but do not understand the qualifications of new technology.

<table>
<thead>
<tr>
<th>从没去过</th>
<th>很少去</th>
<th>有时去</th>
<th>经常去</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.9%</td>
<td>35.6%</td>
<td>29.1%</td>
<td>14.4%</td>
</tr>
</tbody>
</table>

Whether the teachers often visit and practice in the enterprises?

<table>
<thead>
<tr>
<th>不了解</th>
<th>了解一点点</th>
<th>了解很多</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1%</td>
<td>61.2%</td>
<td>29.7%</td>
</tr>
</tbody>
</table>

Understanding of the working process of related occupations.
2. The Challenges of the Curriculum System

- In the course content update, lack the practice of production enterprises

| 表 13·是否会将职业信息融入课程 |
|------------------|---|---|---|---|
| 一般不 | 很少 | 有时 | 经常 |
| 5.1% | 7.8% | 31% | 56.1% |

| 表 14·课堂中是否介绍相关的职业精神，职业制度和职业文化等内容 |
|-----------------|---|---|---|---|
| 一般不 | 很少 | 有时 | 经常 |
| 3.2% | 7.5% | 39.3% | 50% |

| 表 15·是否会以职业工作过程所需的知识与技能整合的项目或任务开展教学活动 |
|-----------------|---|---|---|---|
| 一般不 | 很少 | 有时 | 经常 |
| 2.9% | 13.1% | 45.7% | 38.2% |
2. The Challenges of the Curriculum System

- New teaching methods are experimented, but not used adeptly

<table>
<thead>
<tr>
<th>任务驱动教学法</th>
</tr>
</thead>
<tbody>
<tr>
<td>不使用</td>
</tr>
<tr>
<td>4.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>项目教学法</th>
</tr>
</thead>
<tbody>
<tr>
<td>不使用</td>
</tr>
<tr>
<td>10.7%</td>
</tr>
</tbody>
</table>

- Task-Driven Teaching Method
- Project Teaching Method

never, rarely, sometimes, often, Don't know yet
2. The Challenges of the Curriculum System

• **2.5 Enterprises’ Participation in Curriculum Reform Required to be Deepened**

Who is the subject of curriculum development?

- on the one hand, enterprises are not satisfied with the adaptability of school curriculum; on the other hand enterprises have no effective measures to develop new curriculum, which is an embarrassment. This decrease the enthusiasm of enterprises’ participation in vocational curriculum development, and it is difficult for them to cooperate deeply in curriculum development.
2. The Challenges of the Curriculum System

- 2.6 Insufficient Attention to Evaluation of the Quality of Curriculum

  How to properly evaluate the development of the curriculum?

  Do enterprises satisfy with the course?

  Who will diagnose the curriculum?

Curriculum quality evaluation criteria are not yet formed. These problems have not been paid full attention.
3. The Trends of the Curriculum System

3.1 Developing Curriculum Standards According to National Vocational Standards

Courses on vocational core skills and courses on professionals belong to the country’s dominated courses, whose standards should be developed by the central government.

For those professional curriculum with industry characteristics, regional characteristics and the school characteristics, their curriculum standards can be formulated by the industry, local government and school according to the requirements of posts, talents, professional qualification, etc.

The subjects of the development of curriculum standards should be diversified, not only teachers and educational administrative departments should join in it, but industry personnel, technicians of enterprises, students and curriculum experts should be involved.
3. The Trends of the Curriculum System

• 3.2 Objectives of Secondary Vocational School Curriculum — The Whole Personality

The Whole Personality

- knowledge
- skill
- value
- attitude
- emotion
- others

Do it with heart

Be able to do

Be willing to do
3. The Trends of the Curriculum System

• 3.3 Building a Complete Curriculum structure

• Four kinds of curriculum structure model:
  • 基于完整职业能力的课程结构
  • Curriculum structure based on complete vocational ability
  • 基于课程功能优化的课程结构
  • Curriculum structure based on curriculum function optimization
  • 基于职业发展阶段的课程结构
  • Curriculum structure based on career development stage
  • 基于生产流程环节的课程结构
  • curriculum structure based on the production process

• Zhao, wenping. Analysis of several modes of professional curriculum structure design in Vocational Colleges. Vocational & Technical Education Forum, 2015(6).
3. The Trends of the Curriculum System

• 3.3 Building a Complete Curriculum structure
3. The Trends of the Curriculum System

- 3.3 Building a Complete Curriculum structure

![Diagram of Competency-based curriculum framework]

- Professional curriculum
  - For improving professional competency

- Basic Professional curriculum
  - For improving professional development competency

- Public curriculum
  - For improving sustainable development competency

Competency-based curriculum framework
3. The Trends of the Curriculum System

• 3.4 Optimizing the Curriculum Implementation Conditions
3. The Trends of the Curriculum System

3.4 Optimizing the Curriculum Implementation Conditions

- 《Orientation of the Role of Teachers in the Implementation of Working Process-oriented Course》（Zhao, Wenping 《Vocational and Technical Education》 2013-01）
- Based on the integrity requirements of working process, vocational school teachers should possess the course integration role.
- Based on the vocational requirements of working process, vocational school teachers should provide with the occupational culture role.
- Based on the generation requirements of working process, vocational school teachers should be equipped with the course creation role.
温州职业技术学院多层次的实践教学体系

第一层次：单一技能训练 —— 知识学习和技能训练（实现学中做，学校建）

鞋帮制作 学做合一
电子电器 学做合一
房屋结构 学做合一
模具结构 学做合一
温州职业技术学院多层次的实践教学体系

第二层次：综合技能训练 —— 生产实训和顶岗能力
（校内生产性实训，做中学，校企合作）

与德力西共建的电气生产性实训基地
与建达共建的模具生产性实训基地
与欧姆龙、三菱共建工业自动化控制实训基地

教学性、生产性、先进性
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第三层次：创新意识培养 —— 综合实践和应用能力（技术开发、毕业设计）

鞋样设计技术服务中心

模具研发服务中心

家具研发服务中心

服装行业科技创新服务中心
3. The Trends of the Curriculum System

3.5 Highlighting the Professional Course through School-based Curriculum Development

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural</td>
<td>Culture as the starting point for the development of school-based curriculum. Such as the car culture and automotive specialty-based curriculum development</td>
</tr>
<tr>
<td>Advantage</td>
<td>It focuses on the discovery and use of the advantages of resources to develop school-based curriculum</td>
</tr>
<tr>
<td>Career</td>
<td>Relying on professional standards, vocational schools develop school-based curriculum with new dynamic in a career as a breakthrough</td>
</tr>
<tr>
<td>Service</td>
<td>Cultural foundation courses serve for professional courses to enhance the adaptability and cultural foundation courses</td>
</tr>
</tbody>
</table>
3. The Trends of the Curriculum System

3.6 Forming the Proper Curriculum Quality Appraisal Mechanism

- First, who evaluate? Not only schools but also businesses and employer should join in the evaluation of vocational courses. Course Quality Evaluation may be organized by the industry.

- Second, how to evaluate? There is an urgent need to develop vocational curriculum quality evaluation criteria. Experience abroad is rationality of curriculum is measured by the industry standard, which differs from the Professional Teaching Standards.

- Third, what to evaluate? The content of vocational curriculum quality evaluation should be complete. It not only includes evaluation on students’ learning, but also evaluation of the course objectives, curriculum content, curriculum implementation, and curriculum effectiveness.
祝愿中德职业教育发展更美好！
Wish the development of Vocational Education in China and Germany is better！
谢谢诸位！
Thanks！
谢谢大家！