

## Research Article

# Segmentations and Distributaries Cultivation Reform of Food Service Specialties Based on "Platforms + Developments" Model

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**Abstract:** Based on the analysis of the quantities and qualities of the food industrial talents demands in China, the "platform curriculum" and "development curriculum" of food Service Specialties were explored after the category entrance and specialty Segmentations and Distributaries, respectively. And then, the segmentations and distributaries cultivation reform of food service specialties based on "platforms + developments" model was constructed.

**Keywords:** Cultivation reform, distributaries, food service specialties, segmentations

## INTRODUCTION

Food industry chains are so long that employees can find a job not only in the design and manufacture factories, food and accessories sale and safe shops, but also in food decoration shops and food enterprises. In recent years, China's food production and sales volume increased. And it makes new automotive-related industry employment stations nearly 8, 5 million of whom are technical services talents of aftermarket (Han, 2015).

Contradicts with the current development of the food industry are the lower quality and less quantity of the practitioners. Especially, the professional and technical workers in modern food management, safe, sales and after-sales service companies are particularly fewer. Statistics show that, although the amount of employees in food related companies are large, the general cultural level is too low to meet the companies' need. 38.5% of the 5 million workers, most of them lack advanced theoretical knowledge, graduated from junior middle school or lower schools, 51.5% of them graduated from senior middle school, only 10% of them graduated from colleges or universities, so the literacy degree ratio is 4:5:1 (Pu, 2014). But the ratio in western developed countries as high as 2:4:4 (Jianhua and Min, 2011). That the lack of higher level talents in food service, food electric technology or new technology food industries cannot meet the fast-growing industries' demands in China (Fig. 1).

At present, China is facing an important historical period of adjusting industry structure, transferring manufacture mode and stabilizing growth speed. If there is no talent cultivation reform of "segmentations and distributaries" on food specialties, the students are

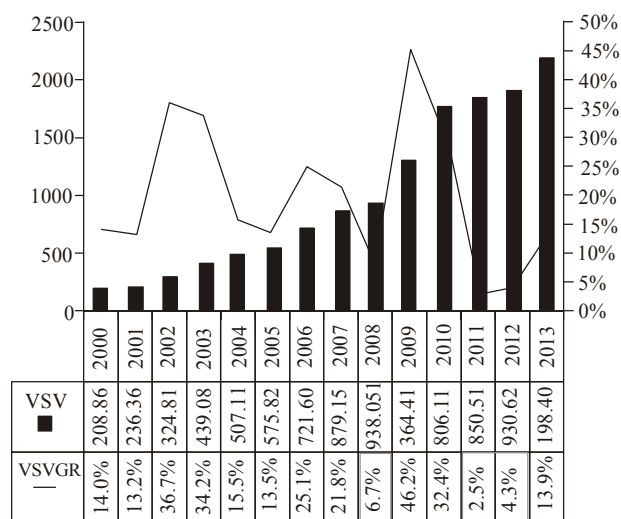
difficult to choose curriculum, draw up the study learning plans and career development plans, according to their characteristics and interests. Therefore, it's hard to provide enough qualified talents for China's economy development.

## MATERIALS AND METHODS

**Food specialties reform requirements:** To further implement National Medium and Long-term Plan for Education Reform and Development (2010-2020) and Several Opinions of Ministry of Education on Comprehensively Improving the Quality of Higher Education. Dexue (2010) accelerate the implementation of the Innovation Plan for Classroom Teaching in Colleges and Universities in Zhejiang Province (2014-2016) (Baoguo, 2014), our school is currently carrying out teaching innovation actions, namely "Yuanpei Plan", to provide students the "three-stage" segmentation options, which aims to create more growth opportunities for different students so that they will obtain the competences as shown in Table 1.

## RESULTS AND DISCUSSION

**Developing the "platform" curriculum after enrolling:** We develop "platform" curriculum of food service specialties, according to teaching situation and enterprises' demands. Currently, students enrolled in our college are the senior high school students who passed the National University Entrance Examination and they also had potential interests in food service specialties. Making full use of educational resources, we have constructed the talents cultivating program framework, as shown in Fig. 2, to train high quality talents with senior skills in food service specialties.



VSV- food sales volume, VSVGR- food sales volume growth rate

Fig. 1: China's food sales volume and its growth rate (2000-2013)

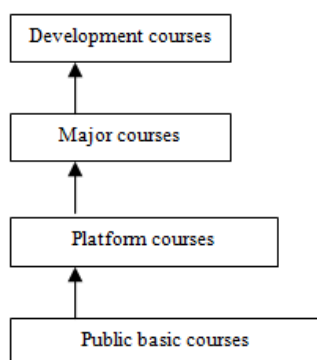


Fig. 2: Talents cultivating program framework of food service specialties

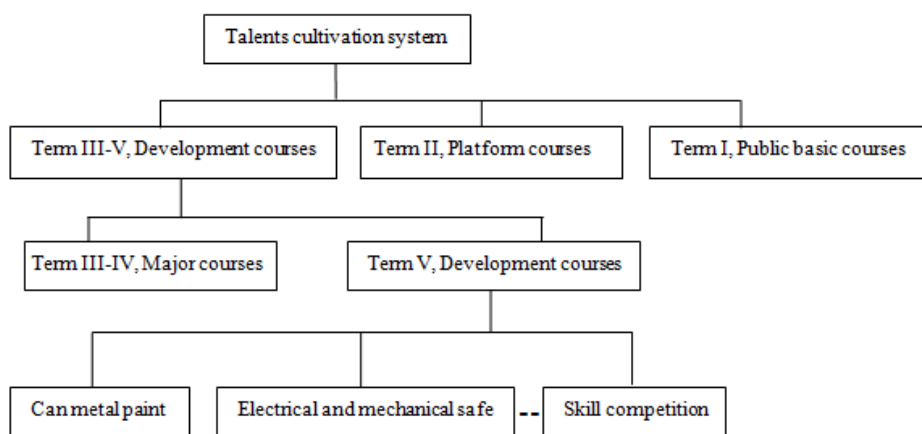


Fig. 3: "Platform + development" cultivation system of food service specialties

Table 1: General required competences of food service specialties' students

Professional competence	Methods competence	Social competence
<ul style="list-style-type: none"> <li>• Food testing and troubleshooting</li> <li>• Can metal painting</li> <li>• New technology food troubleshooting</li> <li>• Innovation on food electronics</li> </ul>	<ul style="list-style-type: none"> <li>• Able to judge and solve food failure</li> <li>• Can metal painted solutions according to the damage</li> <li>• Food electronics innovation</li> </ul>	<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Teamwork skills</li> <li>• Basic entrepreneurial skills</li> </ul>

Table 2: Teaching progress with embedded modules

No.	Embedded modules	Teaching progress
1	Food mechanical and electrical safe	Food structures; working principle; fault diagnosis with instruments; troubleshooting ideas and methods.
2	Food can metal painting	Can-metal working process; painting procedure; instrument and equipment.
3	Food electronics innovation	Food electronic technology; food electronics module design; teamwork.
4	New technology food technologies	New technology food structure; new technology food fault diagnosis.

**Developing the "development" curriculum after distributing:** After learning the "platform" courses, students better understand the basis of the specialties. Then, developing the "development" curriculum used for distributing.

According to the station skill requirements analysis on food technology and service jobs, tasks and capabilities, some specific modules, "food mechanical and electrical safe", "food container metal painting", "food electronics innovation" or "new technology food technologies", will be "embed" into a specific specialty (Table 2). In these modules, some considerations, such as "progressive segmentation" and "gradient ability", have been added to promote the teaching reform of "integrating theory and practice, combining knowing and doing".

**Constructing the cultivation reform model:** As shown in Fig. 3, according to the teaching practices, some optional courses and development courses, which will be used in cooperating enterprises or in competition, are added into the cultivation training system to form "platform + development" cultivation model of food service specialties.

### CONCLUSION

**Establishing the talent cultivation mode of "progressive segmentation" and "gradient ability":** "Progressive segmentation" was used in curriculum system. Public basic courses were learned in term I when students enrolled as food service specialties. And then, the students began studying "platform" courses in term II. When they came to the second school year, they began studying "development" courses.

**Constructing diversified, enterprise-related curriculum:** Based on jobs station requirements and graduate's career development needs, hooking up the national vocational qualification standards and professional qualification requirements of cooperative enterprise, some enterprise-related resources were embedded into the cultivation system to construct "platform + development" curriculum.

**Hierarchical and classified optional courses were provided to self selection:** Relying on deeply cooperation with some famous food companies, some courses were divided into a and b two different types and levels, which provided the option for students to self selection the courses depend on their own competence.

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