



# The Successful Experiences of Higher Vocational Education in Serving the Local Economic and Social Development



## ——Take Liuzhou Vocational & Technical College as an Example

### Abstract

With the dramatic development of its economy and society, China became one of the world's largest economies. However, China takes longer to develop and train skilled technicians than it does to build factories. As the industrial base expanded, the need for vocational education to keep up with the escalating demand for technical expertise and skills became increasingly important in China. Liuzhou City, as one of western China's most important industrial cities, is an example of this kind of rapid growth and of the way in which continued development now depends on vocational education. To meet the demands of the growing industrial base, Liuzhou City government has established new colleges and upgraded existing city facilities. The analysis on which the poster is based examines the case of the Liuzhou Vocational and Technical College (LVTC). Recognized as one of the best vocational colleges in China, LVTC successfully meets the critical demands of both modernization and growth. The poster deals with the following important components of success: (1) goals consistent with the local economic and social development goals and needs; (2) majors that match up with the local labor market demand; (3) university-enterprise cooperation education projects; (4) support of social services; (5) preparation of students for the global economy; and (6) leadership in regional vocational education reform and development.

### ◆ Liuzhou City and Its Vocational Education

#### Brief Introduction of Liuzhou

Liuzhou, which Located in the center of Guangxi, is a livable city which gives priority to industry, and with a comprehensive development, a profound culture, and an ecological environment.

Liuzhou has formed a modern industrial system that take auto, machinery, metallurgy as the pillar industry, and pharmaceutical industry, chemical industry, paper making, sugar refinery, building materials, textiles among other traditional industries also exist.

#### Brief Introduction of the Vocational Education in Liuzhou

The level and quality of education of Liuzhou always are the tops in Guangxi. There are more than 1,600 all kinds of schools in Liuzhou at present. 29 of them are vocational college or school which has nearly 80,000 current students. Liuzhou attached great importance to developing vocational education. In recent years, Liuzhou put more than 200 million Yuan into vocational education per year. Liuzhou is the first city that starts the construction of a vocational education park in Guangxi. This park covers an area of 2,574 mi<sup>2</sup> and with a total investment of more than 5 billion Yuan.



(Photos of Liuzhou City)

### ◆ Liuzhou Vocational & Technical College (LVTC)

#### Basic Information

- 8 teaching departments and 46 majors;
- Over 10,000 full-time higher vocational college students: Over 8,000 adult higher education students: Number of employees is 699(faculty: 510).
- Covered an area of 753,000 m<sup>2</sup>: Fixed assets are over \$64.4 million;
- National Demonstrative Higher Vocational College (The highest level of higher vocational colleges in China)
- Won the award of Guangxi Advanced Employment Work Universities and Colleges for thirteen years (More than 60% graduates work in Liuzhou)

#### The Development Orientation and Goal

- Orientation** : Based on Liuzhou, Services Local, Influencing the southwest ( of China ) , Facing the Whole Country, Well Develop the Higher Vocational Education.
- Structure of Majors** : Most are related to secondary industry and some related to the tertiary industry.
- Goal of Development** : A national first-class vocational college that has a distinct characteristics.

LVTC takes the advantage of local regional economic development to develop the college, and serving the local economic and social development at the same time.



(Photos of LVTC)

### ◆ FOUR Important Measures LVTC Used in Serving Locals

#### 1. Carry Out University-Enterprise Cooperation Education Projects

- Advanced Quality Standards
- Advanced Technical Standards
- Advanced Management Standards
- The International Talent Training Standards

Train Inter-Disciplinary Talents  
"Professional quality + Technical skills + Management innovation ability"

Upgrade the Technical Personnel

Supporting the industrial transformation and upgrading of Liuzhou

##### University-Enterprise Cooperation Projects Example #1 : Auto Parts Precision Manufacturing Teaching Factory

Cooperative Enterprise : Liuzhou ZF Machinery Co., LTD

Highlight of Cooperation : Introduced the German parts manufacturing quality standards. Lean Manufacturing and Informatization.



(Photo of the Project #1)

##### University-Enterprise Cooperation Projects Example #2 : Advanced Automation Technology Joint Demonstration Training Center

Cooperative Enterprise : The Siemens (Germany)

Highlight of Cooperation : College and enterprise cooperated to build production line by independent research and develop. The fusion of automation technology and machining technology.



(Photo of the Project #2)

#### 2. Build a Platform to Promote the Ability and Level of Social Services



##### 2.1. Technical Services

- In the last three years, a total of 127 items of technical services were carried out for the enterprise.
- The income of technical services is more than 320,000 dollars.
- Only in 2013, the number of patents is 105, which is the top of all higher vocational colleges in Guangxi.

##### 2.2. Training Service

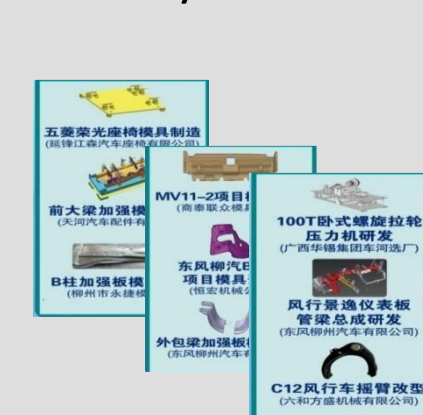
- Liuzhou Small and Medium-sized Enterprise Personnel Training Base
- More than 100 training and Testing project annual
- Trained more than 11000 testing personnel annual

##### 2.3. Production Services

- Provide production services to more than 40 enterprises.
- Annual total value of production services out-put is more than 4 million dollars.

##### 2.4. Consulting Services

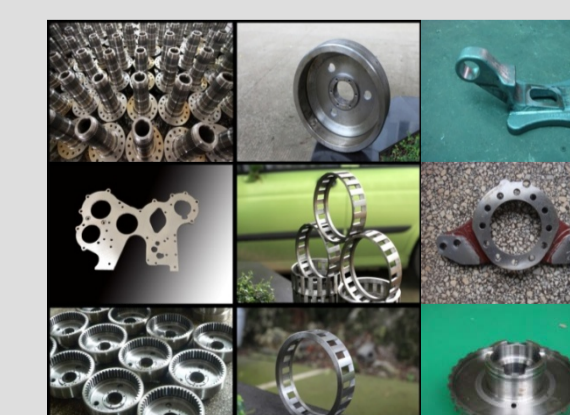
- Undertaken a lot of significant research subjects which are closely related to Liuzhou economic and social development.
- Signed a strategic cooperation framework agreement with Miao Autonomous County of Rongshui and supports the development of this county's tourism industry.



(Some Patents)



(Training Program)



(Products)



(Consulting Services)

#### 3. Introduced Advanced International Standards and Trained International Technical Talents

##### Cooperation Projects Example #1 : Sino-German Automotive Vocational Education (SGAVE) Project

- Highlight of Cooperation : Cooperated with the GIZ whose members include Five major car manufacturers in Germany, Audi, BMW, Porsche, Mercedes and Volkswagen.
- Introduced the automotive mechanical and electrical talent training standards of German.



(Photo of the Project Ex. #1)

##### Cooperation Projects Example #2 : DMG MS NC Professional Field Cooperation Project

- Highlight of Cooperation : The world's most famous high-end CNC machine tool manufacturers.
- The world's most advanced numerical control processing technology and equipment.
- The world's most advanced NC training programs



(Photo of the Project Ex. #2)

#### 4. Lead the Regional Vocational Education Reform and Development

LVTC are:

- The head unit of Liuzhou Vocational Colleges Principal Collaboration Association
- The head unit of Liuzhou Engineering Machinery Vocational Education Group
- The head unit of Liuzhou Logistics Vocational Education Group
- The head unit of Liuzhou Automobile Industry Vocational Education Group



(Photo of one association)

LVTC carried out:

- Pairing-Assistance : More than 30 middle vocational schools or higher vocational colleges.
- External Exchange : More than 150 universities, colleges or schools in or out of Guangxi. About 2000 person-time.



(Photo of Guangxi Autonomous Region)

### ◆ Conclusion

Through

- Carry out university-enterprise cooperation education projects;
- Promote the ability and level of social services
- Train the international technical talents
- Lead the regional vocational education reform and development

The higher vocational colleges in Liuzhou effectively served the development of local economy and society.

This is a noteworthy example for

- How to well develop vocational education in an industrial city;
- How can a higher vocational college successfully serve the local economy and society.

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