

# The Development Strategy of Provincial University Characterized by Engineering Should Focus on Scientific Development and Quality Control

**Youling Wan, Huiling Wu**

Department of Graduate, Jiangsu University, Zhenjiang, China

**Email address:**

wanyouling@ujs.edu.cn (Youling Wan)

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**Abstract:** Aims: In future, the development of provincial university characterized by engineering needs to break away from the original traditional model, to implement the scientific development concept, to update the concept in time, and to make itself adapt to socialized production and local economic development. Methods and Results: They need to establish a correct view of quality and scientific development. From the strategic position, quality and development concept, the development strategy of the provincial university characterized by engineering was explored. Conclusion: The development of provincial university characterized by engineering must have a correct and scientific strategy, which is crucial for the development direction.

**Keywords:** Quality Concept, Development Concept, Engineering Characteristics, Provincial University, Strategic Positioning

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## 1. Introduction

In future, with the development of economy and society, people have added many new requirements to talents. The development of higher education is imminent, and higher education will meet opportunities and challenges. The ultimate feature of provincial colleges and universities is "locality". Serving local economic and social development is an important function of provincial colleges and universities [1]. The "Fudan Consensus" pointed out that provincial colleges and universities should play a supporting role in regional economic development and industrial transformation and upgrading. Fan Hais, former president of the University of Wisconsin, once said that "service should be the only ideal of the university" "The boundary of the school is the state. "Boundary" is the best interpretation of the service orientation of provincial colleges and universities [1]. The reform and development of local engineering universities has become the focus of attention, because engineering universities undertake the task of transporting large numbers of talents for local government and society. Therefore, the scientific orientation and development of local universities are related to the survival of schools. In the market environment, pressure from all parties has forced engineering colleges to reposition

themselves quickly, correctly, scientifically, further adjust their development strategies, improve their quality and education, and consolidate their position as a dominant discipline. Expanding new subject areas will enable them to remain invincible in the fierce competition [2].

## 2. The Importance and Necessity of Establishing a Local Engineering University

Characteristic education is different from the traditional teaching mode. It is not available in other educational methods, and has its own advanced and unique characteristics. The characteristics refer to the characteristics of running a school. It is the educational concept that the school has been practicing and accumulating in the long process of development since its establishment. It has different quality connotations from other schools. The characteristics of running a school must adapt to its own development, which is conducive to its own growth and progress. With the extension of time, it can be continuously optimized and adjusted according to the changes of the external environment. It is embodied in many aspects such as ideas, models and methods.

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With the rapid development of China's higher education, all institutions of higher learning are in an unprecedented competitive environment. If it is not reformed, it will lack combat strength and loss of fighting spirit in the fierce competition. The performance will be unremarkable. Compared with other institutions, there will be no obvious difference, which will bring disadvantages to its own development, will lose its dominant position in the competition, and will not be able to make itself invincible. This situation is very dangerous. Therefore, it is necessary to find a hair style and method suitable for their own development in the competition to maintain their independence and advancement so as not to be eliminated by fierce competition. Of course, in the process of seeking a development path, colleges and universities are all smooth sailing, and it is even more impossible to achieve them one by one. Only through slow exploration and accumulation can they gradually form their own characteristics and advantages.

### **3. The Current Situation and Existing Problems of the Strategic Positioning of Local Engineering Universities in China**

In recent years, higher education has developed rapidly in China, the scale of graduate enrollment has been continuously expanded, and the quality of training has gradually improved. However, for many local engineering universities, if the development strategy is not clearly defined, it will lead to various new problems and many detours in the process of development.

#### **3.1. The Strategic Positioning of Local Engineering Universities**

Looking at the development history of engineering universities in China, by comparing the discipline distribution and ranking of various universities, combined with the employment rate and employment problems of graduates, it can be found that the distribution of disciplines in most engineering universities is similar, although some universities are distributed in disciplines. There are differences, but a large proportion of engineering schools lack special advantages. Many schools have almost the same subject categories and do not have their own unique characteristics.

Some local engineering colleges do not set up disciplines

according to their regional and local characteristics. They pursue the national leading disciplines and first-class disciplines blindly. The discipline construction orientation does not match the actual level of the disciplines, and the discipline development goals are relatively vague [3]. There are also some local colleges and universities that do not integrate well with local realities. The subject construction services are not clear, and they are not closely integrated with the economic and social development of specific regions. They do not bring benefits to local governments and society, and lack the support of local industries. Practically create a local-oriented discipline to drive the economic development of the local government and society. It can be seen that the wrong positioning will have a major negative impact on the development of the school.

#### **3.2. Problems in the Process of Strategic Positioning of Local Engineering Universities**

The overall goal is to pursue "big and complete", lacking local roots and features, without clear signs.

Generally speaking, local engineering colleges and universities are basically "comprehensive universities" as the development goal, pursuing "big and complete", the development goals are not clear, while ignoring the local characteristics, without correctly understanding their own positioning, and then In addition, the objective factors such as social resources and scientific research funds are limited, the characteristics of the disciplines are not clear, and there is no difference between them and non-local universities. The overall level is not high, and the competitiveness of similar disciplines is weak. As a local engineering university, it must not only serve the society, but also serve the university. It has the local characteristics, serve the local economic development, and improve the local people on the basis of grasping and developing our own original disciplines. Therefore, the two are contradictory. In the pursuit of the goal of "big and complete", it is impossible for local engineering colleges to fully integrate reform and development with local realities [4].

(2) The advantages of dominant disciplines and featured disciplines are not obvious, lack of subject status, and the status of humanities and social sciences is slightly neglected.

Among the engineering schools in the country, universities with obvious dominant disciplines are not common. It can be seen that in the development of engineering schools, most of them do not emphasize the status of their dominant disciplines, lack of individual choices, most schools. The goal is to pursue comprehensive and multidisciplinary development. However, according to the distribution of topographical resources in various provinces and cities, this kind of comprehensive development is not conducive to the connotation development of local engineering colleges. In the long run, it will continue to weaken the establishment and development of local specialties, from another aspect. In fact, the concept of ignoring literary education has also affected the development of humanities and social sciences.

(3) The training objectives are too broad, and there is no

specific solution for talent training.

China often lacks specific programs in the training of talents. Most schools pursue the all-round development of morality, intelligence, body, beauty and labor, and pursue the cultivation of comprehensive talents, but they often neglect the individualized needs of service-related industries. This is quite different from many excellent universities abroad. For foreign schools, they are more focused on a certain type of industry or related fields. However, local colleges and universities in China often cannot provide professional services for local characteristic industries, featured industries or related fields, and reform and adjustment are urgently needed. Therefore, local engineering colleges should focus on the sustainable development of disciplines, actively adjust and optimize the discipline structure, and do not blindly pursue the mainstream direction of the discipline, but must follow the mainstream of the discipline as a realistic goal to determine the dominant direction of discipline development [5].

The local engineering characteristic universities have great advantages in some related industries and professional fields. On the basis of the original disciplines, they must work closely with the original industry to form a good partnership and serve the original industry. Keep communication open, build a good cooperation mechanism, strengthen cooperation between the two parties, and become a combination of interests. On the basis of development, cooperation is needed in other fields, so that the service surface will continue to expand, multi-level, multi-depth, and multi-faceted. In light of the actual situation in the locality, we will firmly establish a school-running philosophy that takes discipline construction as the leader, promotes the development of local engineering colleges, establishes the strategic position of discipline construction [6], and establishes key disciplines based on local economic structure, mineral resources, regional distribution, etc. Combining the development of the discipline with the local reality, the discipline construction becomes the starting point and the foothold of all the work of the school, serving the local economic development, adapting to the needs of local development, serving the local industrial structure, and providing support for local related industrial development effect.

## 4. The Strategic Positioning of the Local Engineering Characteristic University in Future

The strategic positioning of provincial university characterized by engineering can enable these universities to define their own status and determine their own advantages and development direction. It is conducive to the development of these colleges and the cultivation of more high-quality talents, and it also has an extremely important role and significance for local development.

### 4.1. The Function of Strategic Positioning of Local Engineering Characteristic Universities

(1) Provide guidance assistance. Provide help in the direction of the development of colleges and universities, so

that they clearly know where they should work hard or from what aspects, to achieve "targeted" and "precise force", do not blindly develop, have clearer goals. If the local characteristic engineering university can adhere to its own positioning and carry out schooling and education around it, it can form a school-running concept with its own style and suitable for its own development.

(2) Drive to promote themselves development. If the local characteristic engineering university can correctly find its own role orientation, recognize its own status quo within the entire education system, and find its own position, it will not let itself go with the flow, so that it is in a firm, development, stable and advanced position. If a school accurately and accurately locates its role and sets up a correct development plan and moves toward the right development goal, it can stimulate its endogenous motivation, drive all students and educators, and inspire their morale. To enhance everyone's cohesiveness, overcome various difficulties, and move straight toward the expected goal.

(3) Warning function. If colleges and universities make a reasonable positioning for their own development, seek truth from facts, and study the status of colleges and universities in the social economy and the entire education system according to the needs of social development. In these processes, the development trend and existence of colleges and universities will be timely. The problems and the problems that may be encountered in the future, warnings to ensure that in the process of development, do not deviate from the direction, do not deviate from the goal, and keep their own advanced nature [7].

### 4.2. The Importance of Strategic Positioning of Provincial University Characterized by Engineering

The rapid development of the economy, the reform and innovation of science and technology, and the different social divisions require us to have outstanding talents in a variety of different fields. China's vast land and resources, along with the imbalance of resource distribution, determine the different economic development status of different regions. Due to the different locations, the establishment and development of disciplines in various local engineering universities are also very different. However, regardless of the distribution of disciplines, the establishment of key disciplines, and the direction of talent training, the development of local universities should be The local economic development is compatible with the industrial structure of the region to meet the needs of people living and working in various economic levels in the region, so that rapid and stable development can be achieved, and that they can continue to advance and not be eliminated by society.

### 4.3. Not only Must We Strategically Position It, but also Dynamically Look at It and Develop It

Normally, each local characteristic university has its own relatively strong and weak disciplines, all of which have their own advantages and disadvantages, such as regional, financial,

environmental and cultural aspects, specialties, undergraduate, master's degree, The education of doctors and so on is not necessarily very balanced. Even top-ranking universities such as Oxford and Harvard are not ranked in the world in every discipline. Therefore, it is very important to properly position, reasonably, objectively and fairly evaluate yourself. Seriously analyze your own strengths, find your own deficiencies, establish a correct development concept, foster strengths and avoid weaknesses, and combine local economic conditions and school resources. Adhere to and fight for it, form a core competitiveness that is exclusive to oneself, guarantee its advanced nature, and make itself invincible in a fierce competitive environment.

(1) Comprehensive. Accurate positioning is not just a certain aspect, but a system engineering, all aspects of each other, you have me, I have you, must comprehensively and comprehensively consider all issues together. Local characteristics of a university may be characterized only by a certain school, but the education of a school is interconnected in all aspects. It is an organic whole that is mutually restrained and mutually restrictive and cannot be separated. If a local characteristic university has distinctive school-running characteristics, it must be formed on the basis of reasonable and systematic positioning. If there is no accurate positioning, a comprehensive view, a special concept of running a school, and a school-running plan are rumors, and it is impossible to achieve.

(2) Dynamic. Positioning not only requires a comprehensive view, but also requires a dynamic view. The formation of positioning is not only necessary to have an accurate direction, but also to make actions in the actual process. It is also necessary to make dynamic adjustments according to the continuous changes in the internal environment and the external environment during the development process. This is also very important and necessary. of. Dynamic attention, we must not only pay attention to the development trend of the world economy, the economic development trends and scientific development changes of our country and region in different periods, but also pay attention to the different requirements of the society for talents, and fully understand the current situation of the development of the education system..

In the implementation of the strategic positioning of provincial university characterized by engineering, engineering should be the mainstay, and the humanities and social sciences should be developed simultaneously. At the same time, engineering should adapt to the local economic development, conform to the local industrial structure, and bring economic benefits to the local area. To do a good job in the teaching of the discipline itself, we must not only impart scientific and cultural knowledge, but also cultivate students' hands-on ability and cultivate application-oriented talents that are oriented to the society and suitable for local development services. In addition to cultivating certain undergraduate students, the featured disciplines must be developed into disciplines for master's and doctoral students, which will enrich the level of local colleges and universities. Facing the

local economic development, combining local industrial resources and industrial structure, we will cultivate adaptable and applied talents, provide power for local economic development, ensure the stable development of the local economy, and ensure that local enterprises have sufficient ability to practice engineering in emerging industries [8]. From the perspective of social development, local colleges and universities must also cope with some urgent problems in the local development process. The scale of school-running should be adjusted according to the school's school resources, teacher strength, economic conditions, teaching facilities and external environment. Not necessarily big is good. While pursuing a complete range of disciplines, it is necessary to discover its own dominant disciplines, and vigorously cultivate and develop them so that the featured disciplines can be adapted to the local economic development, conform to the local industrial structure, provide assistance for local economic development, and vigorously develop distinctive disciplines. So that it does not follow the trend, occupying a place in the fierce competition <sup>[9]</sup>.

## **5. The Quality View and Development View of Strategic Positioning of Local Characteristic Engineering Universities**

The concept of quality and development is an important principle that must be followed in the development of a university. It plays an important guiding role in the development of colleges and universities. Therefore, the local characteristic engineering university should adhere to the principle of equal emphasis on quality and development when implementing strategic positioning, and give full play to their importance.

### **5.1. The Quality View of Strategic Positioning of Local Characteristic Engineering Universities**

The cultivation of talents is the fundamental task of higher education in China. However, the question of what type of talents to train requires us to look at the historical overall situation since the reform and opening up and to think deeply from the development path of higher education. Improving the level of higher education in China is also about cultivating talents and establishing a central position in talent cultivation. No matter how to promote and reform higher education, no matter how the higher education institutions develop, talent cultivation is the only subject. All development of colleges and universities must focus on the theme of "talent training". Judging whether a college is successful or not depends on how his talent training direction is correct, whether it is correct, and whether it plays a facilitating role in the overall development of talents. At the same time, whether it is adapted to the development of the national economy and the needs of society, to see if its quality concept is correct. Therefore, in the process of development, the question of "cultivating what type of

talents" and "how to cultivate outstanding talents" should be always considered. Only by actively serving local and regional economic and social development needs, the direction of industrial development is in the past. The pursuit of academic and theoretical elite education mode has been transformed into a technical and skill-based applied education [10]. Only by firmly grasping the quality control and constantly reforming the training mode of innovative talents can promote the development of the school.

At present, the development of our society is diversified, which objectively requires diversification of diverse talent specifications and talents. In the cultivation of talents, there must be a standard of quality judgment. According to different school levels, as well as a variety of disciplines, the training mode of talents and the quality judgment criteria should be different from school to school, depending on local conditions, and will vary with time and from person to person. University should overcome the pursuit of common development. Schools of different types and at different levels can rely on their own school-running traditions, school-running methods, school-running characteristics and school-running advantages to objectively and accurately carry out scientific positioning according to the development of the local economy. And do not follow the comparison, to develop themselves school characteristics and brand. Different levels of universities, taking on their different functions, should first identify their position, determine which areas and areas of their contribution, and strive to be unique in these areas, create their own brand features, and strive for Becoming one of the first-class, this "first-class" is not only reflected in the concept of running a school, but also in the purpose of running a school, education services, a sound management system and excellent school conditions, etc., in order to meet the needs of social diversity training.

Local characteristic engineering universities should always keep a clear mind, establish a correct quality concept, have self-knowledge, accurately and clearly judge their position, analyze their own advantages and disadvantages in the competition, and not pursue the so-called "big and full. Actively adapt to the local economic development, in line with the local industrial resources and industrial structure distribution, according to the needs of local social development and the needs of the social environment, combined with their own target positioning, clear their own talent training goals and positioning, competitive Differentiation and developmental characteristics have created a unique talent training program, so as to embark on a characteristic road that conforms to the law of education development and promotes its sustainable development.

### ***5.2. The Development View of Strategic Positioning of Local Characteristic Engineering Universities***

The "19th National Congress of the Communist Party of China" clearly pointed out that education is an important way to improve the overall quality of the people and promote the all-round development of the people. It is an important

cornerstone of national rejuvenation and social progress, and a cause of decisive significance to the great rejuvenation of the Chinese nation. Implement the party's educational policy and implement the fundamental tasks of the Lide Shuren [11]. The new historical period puts new demands on China's higher education, and higher education will face new opportunities and new challenges. Therefore, in the operation of colleges and universities, University always take the scientific development concept as the center to ensure the coordinated development of higher education.

Emancipating the mind, seeking truth from facts, and updating the concept in a timely manner are very important for the development of colleges and universities. You must understand and be clear about your position. Under the influence of long-term original ideas, many schools have formed inherent traditional ideas. If these traditional ideas are not abandoned in time, schools will easily continue to follow the old path. Therefore, university must effectively revolve around the scientific concept of development, update our thinking in a timely manner, change our way of thinking, adapt to the needs of modern large-scale production, adapt to the development of local economic and social development, and re-examine our own development with a dynamic and comprehensive vision, so that local characteristic engineering universities With the development of society, the corresponding development and changes will be carried out in time.

From the traditional mode of running a school, university will not blindly pursue a large and comprehensive development model. On the basis of pursuing the comprehensiveness of disciplines, university will focus on the development of distinctive disciplines, timely observe the economic development direction of the country, development dynamics, and social development needs. In addition, university must combine the local economic structure, update the school's school-running thinking in a timely manner, adapt the discipline's education and talents to the needs of social development, and cultivate innovative and development-oriented applied talents.

It is released from the traditional mode of running a school of science and technology, and from the development of the college, it defines its own goal of running a school. Under the guidance of the scientific concept of development, it constantly develops and innovates to promote the comprehensive development of local characteristic engineering universities. Local characteristic engineering universities should stand on the overall level, correctly recognize the grim situation and tasks faced by the university, unify their thinking, update their concepts in a timely manner, speed up their pace, adapt to the development of the new era in a timely manner, update the concept of running schools, and optimize the structure of the college. Improve the quality of running schools and increase the efficiency of running schools. Start from a fundamental change and create a new model that is conducive to the cultivation of talents.

While improving the concept of running a local university,

we strive to improve the level of teachers, use the platform of school-enterprise cooperation to improve the ability of teachers to teach theoretical and practical teaching, establish a part-time teaching staff to adjust the structure of engineering faculty, and comprehensively improve the overall quality of teachers to achieve the goal of college personnel training [12]. Students must keep pace with the times, teachers must keep up with the times and receive new education in a timely manner, because they are the disseminators and instructors of cultural knowledge, students need to receive new knowledge from them, so we must improve education in a timely manner. The education level of workers will broaden the knowledge of teachers and expand their horizons. At the same time, the implementation of base education practice, the cultural knowledge and hands-on practice are closely combined, not only the cultural knowledge is fully prepared, the hands-on ability is also trained, focusing on the improvement of innovation ability and the cultivation of speculative thinking, so that students can be truly competent social needs and job needs [13].

### 5.3. The Importance of Both Quality and Development in the Strategic Positioning of Engineering Universities

The correct quality concept and scientific development concept are very important for the construction and development of local characteristic engineering universities. At the same time, we must take into consideration both the correct quality concept and the scientific development concept. Only when the two are closely integrated, local universities will develop in an all-round way.

If we only pay attention to the quality concept and have no scientific development concept as a guide, then the university cannot scientifically position itself in time, and cannot timely adjust the reform according to the social environment and the local economic development, and can not adapt to the needs of social development. The local economy's rising demand, local characteristic engineering schools can not make a good contribution to the local economic development, and its endogenous motivation will only become weaker.

If there is only a concept of development and no quality concept, then although the university can develop, the training capacity of the school will not be improved, even under the current situation of enrollment expansion, the quality of college education will lag behind other In colleges and universities, the competitiveness is insufficient, and the quality of talent training will be greatly reduced. The development of colleges and universities can only be gradually eliminated with the development of society.

## 6. Conclusion

In summary, the development of local characteristic engineering universities must first have a correct and scientific strategic orientation for themselves. This is crucial for the development direction of the school, because only by recognizing its position can it be practical. Development, if it

is impossible to carry out scientific positioning, it is like a frog at the bottom of the well, and it is blocked. In addition to the scientific positioning, we must do our utmost to develop key disciplines, to achieve "people without me", to adhere to both the quality concept and the development concept, and to closely combine the two to contribute to the local economic development. The characteristic engineering university can achieve sustained and healthy rapid development.

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