

# Research on the Characteristic Development of Specialized Colleges from the Perspective of Popularization

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**Abstract:** As a special group in the higher education system, specialized colleges play an important role in the process of diversification of higher education. China's higher education has entered the stage of popularization, which brings unprecedented challenges to the operation of specialized colleges and on the other hand, ushers in a broad prospect for the development of the specialized institutions. In view of the general trend of popularization of higher education, it is worth exploring how to develop their own characteristics and make rational strategic choices.

**KeyWords:** Popularization; Specialized colleges; Characteristic development

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## 1. Introduction

With a gross enrolment rate in higher education of 51.6% in 2019, the country has entered a phase of popularization in higher education. A shift in different aspects from education have taken place, including the size of higher education, the diversity of institutions, policies on enrolment, management and administration, curriculum and teaching formats, all of which have posed challenges on the diversity of higher education development.

Specialized institutions have their own root in the industry, their social influence is mainly on the industry, and the training of talents is also in the industry. As higher education has entered the stage of popularization, the national economy and industrial development have embarked on the stage of transformation and upgrading, which means the demand for high-quality talents in specialized industries has become more urgent. Specialized colleges have captured the information of the industrial economy and made continuous efforts in the construction of their own disciplines and professional training, ushering in a new round of development opportunities.

The common problem faced by those institutions is how to give full play to their traditional advantages in the fierce competition of popularization in accordance with the needs of social and regional economic development and the actual situation of such institutions<sup>[1]</sup>. Maintaining characteristics, strengthening traditional advantages and developing in a diversified, personalized and distinctive way is fundamental to the survival of the specialized colleges in the stage of popularization. This is not only the need for them to form their own characteristics in terms of disciplines, majors, curriculum, talent training, evaluation mechanism and employment, but also the urgent requirement of higher education and social development. Therefore, it is of realistic value for those institutions to find out how to make them stronger and more powerful on the basis of original characteristics in the popularization stage so as to have the ability to sustain competition.

## 2. Factors for the underdevelopment of the characteristics of specialized institutions

After the reform of the system, the specialized colleges have pursued comprehensive development, constantly expanding the coverage and areas of their disciplines, and the structure of the original disciplines has changed significantly, resulting in the phenomenon of multi-discipline and "non-specialization". This is mainly reflected in the aspects as follows.

Firstly, the name of the school has been changed and most of the original names reflecting the characteristics of the industry have become history.

The second is the expansion of the coverage of the major, the scale of enrollment is expanding, the proportion of the enrollment scale of their special majors is significantly reduced, and some special majors have lost their characteristics. Weakening of the characteristics of traditional disciplines and specialties. The opportunity for those colleges to obtain scientific research projects from the original industry is reduced, the connection with enterprises of the original industry is weakened, and the ability to serve the industry is declined, all of which has a greater impact on the development of traditional advantageous characteristic disciplines of specialized colleges. At the same time, in the pursuit of comprehensive development, industry-based colleges have adjusted their

traditional industry-specific specialties, which has weakened the core competitiveness of the characteristic disciplines and made impact on the development of those disciplines, coupled with the competitive pressure of new disciplines within the schools.

Thirdly, the change of school-enterprise relationship. The communication channels and mechanisms between industry-based colleges and the former industry system are getting weaker and weaker. The guidance and support given by the administrative departments in the former field have been decreasing in discipline construction, talent cultivation, academic development and scientific and technological innovation, resulting in the space for the industry-based colleges to give full play to their traditional characteristics and serve the industries shrinking to a certain extent. The guidance and support given by the former competent departments of the industry to the colleges' discipline construction, academic development direction and scientific and technological innovation ability with industrial characteristics are gradually reduced, and the space for the former industry-owned colleges to give play to their traditional advantageous disciplines and serve the industry is restricted to a certain extent. It has seriously affected the subsequent cultivation of scientific and technological talents and the innovation of new technologies in the industry.

### **3. The development path of the characteristics of industry-based institutions in the popularization stage**

The proportion of industry-based colleges in Northeast China is high due to historical reasons. Engineering colleges and universities highly matches the construction of the old industrial base, and they play an important role in the economic and social development, providing human, intellectual and scientific support for the revitalization of the old industrial base in Northeast China.

#### **3.1 Reinventing the relationship with the industry**

##### **3.1.1 Improve the mechanism of cooperation between industry-based colleges and enterprises**

In the stage of popularization of higher education, both the industry-based colleges and the industries are the main parts in the market. When formulating policies on talent training, scientific and technological innovation research and innovation capacity building, the relevant government departments should pay attention to the overall situation, coordination and orientation, fully consider the history, discipline attributes and service orientation of the industry-based colleges, set up special funds for the development of special disciplines that are compatible with the characteristics of the industries and regional features, and promote the formation and development of scientific research groups that are compatible with their characteristics and enhance its overall research level is improved. They should establish a new mechanism for the use of resources and the joint operation of colleges that is compatible with the scientific and technological development resources of former industrial enterprises.

##### **3.1.2 Form a new link between industry-based colleges and enterprises**

Industry-based colleges maintain natural ties with their original industries. They maintain and play an irreplaceable role in the scientific and technological progress of the industry. The establishment of multi-level and diversified industry-university-research partnerships to form an industry-university-research alliance with complementary advantages, shared benefits, interdependence and close integration, in order to enable these schools to continuously enhance their capabilities in personnel training, scientific research and social services in the process of providing services for the industry, and ultimately improve their comprehensive strength in operation.

#### **3.2 Constructing a professional structure of disciplines with a view to fostering a well-rounded person<sup>[2]</sup>**

The special characteristics of the disciplines developed by the industry-based colleges over the years not only help to promote the optimization and upgrading of the industrial structure of the former area, but also help to promote the overall development of the local economy and cultivate well-rounded people. At the stage of education popularization, in order to cultivate well-rounded people, it is necessary to improve the structure of disciplines and majors and to establish a close structure of disciplines and majors that support and integrate each other.

#### **3.3 To inherit traditional features and enhance their own development capacity**

While serving the local economic construction, specialized colleges should maintain and carry forward their traditional characteristics. Facing the needs of industry and regional industrial development, they should follow the direction of discipline development and research and development, focus on the basic research and technology research objectives of the industrial chain, carry out research on major technologies, key technologies and integrated technologies, maintain the irreplaceable role of the institutions in the industry which used to be run by the state ministry and now by the local government, and on this basis, extend their characteristics to serve the regional economy and enhance their scientific and technological innovation capability.

The comprehensive revitalization of the old industrial bases has put forward the demands to the industry-based institution for talent development, scientific and technological research, transformation of scientific research achievements and high-tech industrialization. It is these demands that build bridges between these colleges and the society and enterprises, thus providing a wide scope for comprehensively expanding social services, as well as unlimited space for giving full play to their academic and scientific advantages brought about by their advantages of talents.

### **References:**

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