

# Applied-oriented University Discipline Construction Strategy under the Background of “Double First Class” Construction

Xi Yang\*, Lei Yuan, Jing Kang

Shenyang City College, Liaoning 110112

**\*Correspondence to:** Xi Yang, March 1985, female, Han, born in Suizhong, Liaoning province, a teacher of Shenyang City College and a graduate student. Research interests: Environmental Design and its theoretical research.

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**Abstract:** The establishment of “Double first-class” strategy is to promote our higher education, for better development. In the process of implementation, this strategy has changed the development direction of universities and put forward new requirements for discipline construction. In order to meet the requirements of the strategic construction, universities must widen the ways of subject construction, so as to train more excellent talents for the society and promote the development of universities. Under the background of the continuous reform of educational contents, universities should give full play to the advantages of specialty and innovate the methods of construction in order to train the first-class talents. In this paper, the “Double first-class” under the background of the application-oriented university subject construction strategy for analysis and discussion.

**Key Words:** “Double first-class” construction background; applied university; discipline construction strategy; analysis and discussion

## 1. Introduction

After the “Double first-class” strategy is determined, the development direction of higher education in our country has changed. First-class universities and first-class disciplines must be established in order to promote the overall development

of the education sector through this role of demonstration. Especially for some modern colleges and universities, we must make full use of their own educational advantages and develop some advantageous disciplines with characteristics, in order to innovate educational



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results and provide better educational services for the society. The construction of first-class discipline can reflect the educational goal and comprehensive strength of colleges and universities. Discipline is the basis of the development of colleges and universities, representing the scientific research results of colleges and universities, and there is a certain relationship between the quality of education in colleges and universities. Therefore, universities must strengthen the construction of disciplines in order to improve their own educational level<sup>[1]</sup>.

## 2. Applied-oriented University Discipline Construction Status under “Double First Class” Background

### 2.1 Characteristic Discipline Construction Advantages are Not Fully Reflected

2.2 At present, in the construction of application-oriented colleges, it is mainly composed of higher vocational colleges and colleges, or several colleges join together to promote the application-oriented colleges. For the construction of such colleges, the orientation of running a school is mainly based on practice teaching. The basic teaching task is to train talents. In the process of practice teaching, we did not pay attention to scientific research and discipline construction, and even the leadership of colleges and universities did not realize the importance of these construction. In the actual teaching, the orientation between discipline and specialty construction is vague, the teaching of specialty is emphasized, and the construction of discipline is neglected. Even in the classroom teaching, too much attention to the teaching of theoretical knowledge, ignoring the training of practical skills. The talents trained by these institutions can not meet the application needs of society, nor can they lead other disciplines to better development through the exemplary role of excellent disciplines<sup>[2]</sup>.

### 2.2 Weak Construction Foundation

As shown, there is a big gap between the key disci-

plines and the first-level disciplines of the state and the construction level of different universities. Because some colleges and universities construction time is short, the basic ability of the discipline is insufficient, the cultural atmosphere of the school is relatively weak, in the actual construction, the lack of rich school-running resources. In addition, the investment of capital cost is insufficient, and some high-level disciplines with applied characteristics have not been built, or the corresponding platforms have been built in universities, but the platforms have not been integrated into the actual construction, the platform can not fully play the various functions. In practice teaching and scientific research, the technical level of colleges and universities is relatively low, reducing the efficiency of construction work. Even the conversion rate of scientific research results can not be effectively improved. These problems will hinder the construction of disciplines and even affect the development of universities<sup>[3]</sup>.

For example, in the construction of applied-oriented universities, the number of existing disciplines is relatively small, in the planning and design of disciplines, the layout is not reasonable, leading to the continuous decline in the strength of university discipline construction. In the process of industry-university-research cooperation, the depth of education is insufficient, and no sound social service mechanism has been established. In the actual construction, can not lead the innovative development of disciplines, also can not promote the transformation and upgrading of disciplines. Some colleges and universities even lack the ability of cultural inheritance, in the cultural construction, the lack of innovative awareness. These colleges and universities in the course of building, the lack of educational characteristics. The main reason for this problem is that many problems have arisen in the field of scientific research because of the weak foundation of discipline construction<sup>[4]</sup>.

### 2.3 No Clear Construction Direction

In the process of discipline construction, it is mainly

to take the economic and social development in the region as the guidance, so as to provide scientific guidance for the discipline construction. In order to highlight the advantages of discipline construction, we must focus on the height and condense the characteristics of discipline. However, because of the short history of the construction of many colleges and universities, the orientation and development of the construction have not been accurately grasped. For the region's economic and social needs, there is no in-depth understanding. As a result, many universities have different problems in the construction of their disciplines. The university also has not carried on the pointed understanding to these questions, when carries on the discipline construction, lacks the local characteristic, causes the discipline development direction, and the research domain has the certain difference, has affected the actual construction of the discipline. In the production of scientific research results, there is a fragmented situation, can not be related to the work of scientific convergence. Even when doing scientific research, the direction of the research team is not clear. In the course of discipline design, the content of the discipline has been isolated, and even the phenomenon of repeated construction. These problems will reduce the coordination of university discipline construction, and even weaken the development of university, leading to the output of the discipline, as well as the training of talent, does not meet the social needs of the region<sup>[5]</sup>.

#### **2.4 Lack of Excellent Construction Teams**

At present, there are some differences in the ability of construction team in the process of subject construction. Although some universities have built high-level construction teams, they lack leaders. In the course of discipline construction, the structure of the team is not reasonable. When the members of the team do scientific research, the research fields do not intersect closely. Because this kind of research direction is quite divergent, when carries on the question research, can not continue all questions, has affected the team's academic atmosphere. Even in the construction of scien-

tific research team, the lack of corresponding cooperation, scientific research personnel's coordination ability is relatively poor, resulting in less overall research results. And in the team personnel training, the team's cooperation ability is poor, the lack of strong competitive ability, in scientific research, there will be more problems. Because for the construction of disciplines, through the development of high-quality disciplines, to promote better development of other disciplines. If in the course of Discipline Building, the direction of team research is not consistent, it will not be able to achieve the construction goals. These problems will affect the construction of disciplines and even reduce the competitiveness of universities<sup>[6]</sup>.

#### **2.5 Insufficient Teaching Mechanism**

In the construction of applied disciplines, the perfect system is the basis of competition. But at present, when many universities carry on the discipline construction, not only the system content is not perfect, the construction internal mechanism is also not enough perfect. In the course of subject construction and planning, although some universities from the overall level, the subject of planning and design. However, the design is more macro, only the top-level construction. Some secondary colleges and universities are difficult to optimize their own construction programs, or even the direction of development is not clear. In planning and design, they can not develop their own specialties according to their own advantages. There are some secondary schools and functional departments, not clear their own responsibilities, in the construction, did not play their due role. Even in the planning and design of the discipline, there is no detailed and decomposition of the content, resulting in the work in the development of confusion, face more problems. Colleges and universities have not formulated a reasonable development strategy in line with their own characteristics, in the process of development, there is a vicious circle, reducing the efficiency of construction<sup>[7]</sup>.

### **3. Applied Universities Discipline Con-**

## **struction Strategy under Background of “Double first-class” Construction**

### **3.1 Give Full Play to the Characteristics and Advantages of Colleges and Universities**

As an application-oriented university, it is faced with complex problems when developing its disciplines. Under the different development background, the university wants to carry on the accurate search to its own localization. According to the actual development of their own, combined with the content of the construction, the construction process, the existence of various factors, a comprehensive analysis. And the establishment of effective measures to solve these problems, in order to improve the level of discipline construction. There are great differences between the construction of applied discipline and that of research discipline. Because the construction foundation of applied disciplines in many universities is generally weak, the main task of the actual construction is to apply technology, R & D and Innovation. If a school wants to improve its scientific research strength and get better development, it should take the construction strategy as the basic criterion according to its own history and actual construction situation, so as to meet the needs of local development. In the course of discipline construction, we should take the regional economic and social development needs as the basic service, so as to innovate the scientific research results and solve the social practical problems.

For example, when the university carries on the discipline construction, may carry on the reasonable localization to own development. The advantages and comprehensive level of discipline development, as well as the direction of development to carry out precise refinement. This requires that when the university carries on the construction, must carry on the thorough understanding and the analysis to the regional local economy development request, according to the discipline construction logical nature, unifies the local economy development request, carry out actual construction. As

shown in Figure 2, in the course of discipline construction, but also with the development needs of the region, closely integrated in order to carry out sustainable development. If the construction of disciplines does not meet the needs of regional economic development, or there is no relevance, it is necessary to change these disciplines. If other colleges and universities have already developed the corresponding discipline, we should carry on the dislocation construction, realizes the difference development. In the provision of social services, we should highlight their own advantages, but also according to the problem of the direction of development optimization. As shown in Figure 3, through the interaction of a variety of disciplines, so that the content of the disciplines can be infiltrated each other. Focus on the advantages of a variety of disciplines, to provide first-class services to society, to ensure the construction of disciplines, to be able to obtain better development<sup>[9]</sup>.

### **3.2 Strengthening Collaboration between Schools and Enterprises**

The application-oriented university carries on the discipline construction, the most basic one carrier, is the discipline application platform. In the construction of the discipline platform, the development effect will directly affect the quality and quantity of scientific research products. For the construction of colleges and universities, because of the limited resources, funds are relatively tight, only rely on their own strength, it is difficult to promote the construction and development of the subject platform. Therefore, colleges and universities must cooperate with local governments and enterprises to build the corresponding disciplinary platform and form an integrated development concept<sup>[10]</sup>.

For example, the application-oriented universities can coordinate with the government to integrate the high-quality scientific research resources with the funds and equipment of enterprises. During the construction of the platform, we should avoid the repeated construction of the platform, and plan the various functions of the platform reasonably to highlight the func-

tional advantages of the platform. During the construction of the platform, the advantages of scientific research equipment and instruments should also be brought into full play. We can build a research and development platform for researchers, on this platform, to show some of the latest scientific research results. It is also necessary to build innovative demonstration base, carry out students' teaching practice, promote the rapid transformation of scientific research results, and promote regional economic and technological development. In the construction of subject platform, we should realize the integration of products and education, and build a more advanced platform through the deep-level cooperation between schools and enterprises. When the university carries on the subject platform construction, must also carry on the consummation and the optimization to the platform function, guarantees this platform in the application, can play the greater role, highlights the university characteristic discipline, thus leads other disciplines, for better development<sup>[11]</sup>.

### 3.3 Build an Excellent Construction Team

The application-oriented universities should always follow the principle of humanization in discipline construction so as to build a better discipline construction team. For example, colleges and universities can select some outstanding leaders and academic backbone talents, through these personnel to guide other personnel, build an excellent discipline construction team. Because for the construction team, the leader's research field and development direction, as well as the level of technology, will have a direct impact on the construction of the discipline. In the process of selecting and training the leaders, colleges and universities should introduce more outstanding talents and inject some fresh blood into the team. In the course of personnel selection, we should make clear the orientation of running a school in an applied university, combine the development direction with the needs of construction, and ensure that personnel can make clear the direction of development in the course of subject construction, pro-

mote better development in all fields<sup>[12]</sup>.

In the course of discipline construction, all kinds of resources are very limited, and it is difficult to introduce some higher-level talents. Therefore, colleges and universities in the selection of team members, should focus on training some outstanding personnel. For example, colleges and universities can set up some engineering projects to teach engineering and subject engineering, through the construction of these projects, train outstanding personnel. And promote the rapid growth of outstanding discipline leaders and cadres, for team-building, to provide effective support<sup>[13]</sup>.

In team-building, colleges and universities should also build some dual-division and dual-ability subject teams. The application-oriented university, when carrying on the team construction, should to each kind of talented person's proportion, carries on the full consideration. Only in this way, can promote the balanced development of the team. In the selection of team members, the structure and age of students, including the level of international development, a comprehensive consideration, so as to clear the direction of team development. For example, in the selection of personnel, not only to pay attention to the academic research capacity of teachers, but also to the scientific research capacity of teachers, as well as the level of practice. For the construction of the team, it is not enough to research and development results, but also to turn these scientific research results into teaching resources, in order to promote the overall development of colleges and universities. Therefore, the leadership of universities should train some application-oriented backbone talents, through these backbone forces, to drive other researchers to develop<sup>[14]</sup>.

In the team building, but also the construction of innovative research to enhance the cohesion between personnel, to promote the overall development of the team. In the selection of personnel, not only through the leader to lead other personnel, scientific research. It should also select the backbone of some disciplines to support the team for better development. In this pro-



cess, the team's ability to collaborate is also very important. The structure of talent must be scientifically configured to increase the centripetal force. Through innovative construction forms, cross-integration between disciplines to promote the construction of applied disciplines for better development. The leaders of colleges and universities should carry out scientific planning and design for the construction structure of personnel, promote the transformation of scientific research results through the cooperation of personnel, and give full play to the role of the construction team [15].

#### 4. Conclusion

To sum up, in the process of social development, for the training of personnel, put forward higher requirements. In the construction of double-first-class disciplines, colleges and universities at all levels should carry out classified development. Only by developing its own characteristics and cultivating multi-level talents, can we meet the needs of enterprises. When carrying out practical education, colleges and universities should fully grasp their own advantages, make clear the fundamental task of construction, and fully reflect the characteristics of application and industry. According to the differences between regions, combined with their own educational conditions, the basic direction of discipline construction is clear. Therefore, scientific construction goals and training methods, through the construction of excellent education team, to promote the sustainable development of the entire industry.

#### References:

- [1] Yu Zhi-hui, Chen Peng. The development challenge and policy supply of Fachhochschule of applied technology in the background of "Double first-class" construction [J]. *VTE*, 2019, 40 (16) : 41-47.
- [2] Shen Wenhui, Wei Li. A study on the interdisciplinary coordinated development of practical training in applied universities from the perspective of "Double-first-class" [J]. *Journal of Mudanjiang Institute of Education*, 2019(05) : 30-32 + 40.
- [3] Lin Xiaoyun. Research on service innovation of intelligent libraries in applied universities under the background of "Double first-class" [J]. *Industry and Technology Forum*, 2019, 18(10) : 273-275.
- [4] Zhang Hong. A study on the construction of teacher education specialty in newly-established undergraduate colleges under the background of application transformation [D]. *Chongqing Normal University*, 2019.
- [5] Shen Wenhui, Wei Li, Yang Wen. A study on the interdisciplinary coordinated development of practical training in applied universities from the perspective of "Double-first-class" [J]. *Journal of Mudanjiang Institute of Education*, 2019(04) : 30-32.
- [6] Wang Qiang, Jiang Li, Dai Tongyan, Wu Biao, Zhang Peng, Zhu Rongfu. "Double first-class" and "New engineering" under the background of applied undergraduate university discipline, specialty and curriculum integration construction [J]-RSB-. *Journal of Hubei Institute of Engineering*, 2019, 39(02) : 72-75.
- [7] Wang Qiang, Jiang Li, Wu Biao, Dai Tongyan, Fu Baixue, Song Chengju. Subject construction strategy of applied universities under the background of "Double first-class" construction [J]. *China Metallurgical Education*, 2019 (01) : 43-45.
- [8] Huang Lin, Sui Guohui, Wang Rong. A study on the solution to the dilemma of integration of industry and education in universities in the context of application-oriented transformation [J]. *Heilongjiang higher education research*, 2019, 37 (02) : 89-93.
- [9] Zhong Miling. Practical worries and solutions of local colleges against the background of "Double first-rate" [J]. *Modern Education Science*, 2018 (10) : 36-40.
- [10] Chen Guanglei. Discipline adjustment and optimization of newly-built universities under the back-

- ground of “Double-first-class construction” — — based on the enlightenment of the closure of departments in Western universities [J]. *Journal of Tonghua Normal University*, 2018, 39(07) : 22-28.
- [11] Hu Dexin. Research on the development predicament and governance path of local universities under the strategy of “Double first-rate” — — an analysis based on the logic of multiple systems [J]. *Education science*, 2018, 34(03) : 32-38.
- [12] Zhao Dingzhou, Fan Lisha. To explore the orientation, predicament and train of thought of discipline construction in local universities from the perspective of “Double first-rate” [J]. *Journal of Liaoning Institute of Education Administration*, 2018, 35(02) : 30-34.
- [13] Zhang Wang, Long Ke. The basis and practical path for the classified development of universities under the background of “Double-first-class” construction [J]. *Education Review*, 2018(01) : 3-7.
- [14] Sun chun-wah. The institutional accumulation and development thinking of the “Double-first-class” construction of universities in our country [J]. *Journal of Xiamen University (Philosophy and Social Sciences)*, 2017(06) : 17-24.
- [15] Ping Heguang, Cheng Yu. The characteristics, predicament and outlet of the construction of “Double first-class” — — reflections on the related policies of the construction of “Double first-class” in 19 provinces and cities [J]. *Vocational and technical education*, 2017, 38(30) : 11-18.