

Adjustment and Optimization for College Discipline Structure and Analysis on Issues of Discipline Management System Innovation

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Abstract. The rapid development of the world's new science and technology revolution, new educational reform and regional economic and social development require to optimize college discipline structure adjustment. Some issues of college discipline structure adjustment optimization and discipline management system innovation are analyzed in this paper. Besides, some ideas and measures to deepen college professional discipline construction are proposed.

Introduction

In new century, it is an important guarantee and urgent need for advancing education reform with Chinese characteristics to strengthen the researches on high-level compound talents training and science and equipment development. As a new strategic base for personnel training, colleges must play their important roles in the great historical process of promoting educational reform with Chinese characteristics. To adapt to the needs of Chinese-characteristics educational reform, advance discipline construction, train high-level compound talents and develop science and technology is an important task of the institutions. In college discipline construction, there are some issues such as the layout is not reasonable, the characters are not distinctive, and the advantages are not prominent. How to build innovation platforms and optimize innovation environment to carry out interdisciplinary research, and how to train a large amount of high-level compound talents with multi-disciplinary knowledge background, high capacity and strong innovation quality, become a major issue facing the institutions in the present

Optimization for discipline structure adjustment and innovating discipline management system and mechanism is an urgent need under the new situation for discipline building

The rapid development of new scientific and technological revolution in the world demands subject structure adjustment and optimization internally

At present, under the impetus of the world's new science and technology revolution, knowledge economy develops rapidly. To enhance independent innovation capability and promote scientific and technological innovation, occupying the high ground areas of knowledge, becomes a national strategic of all countries without exception. President Xi Jinping pointed out that to deepen the science and technology system reform, optimize the structure and layout of science and technology, accelerate the construction of national innovation system including technological innovation system, knowledge innovation system and national defense science and technology innovation system, improve independent innovation capability and building an innovative country, is our major strategic decisions which matters the overall situation of socialist modernization of our country. To meet with the modern science and technology revolution and building an innovative country requirements, establishing a complete, integrated-cluster disciplinary system adapting to the structural layout of the science and technology is particularly necessary. Therefore, it is the severe challenges and urgent tasks of subject construction to completely change the structure of single-discipline development mode and establish a comprehensive disciplinary system adapt to science and technology innovation, economic development, social progress and high-level talents training

The rapid development of regional economy and society brings new opportunities for disciplinary structure adjustment and optimization

To speed up the transformation of economic development, promote strategic adjustment of economic structure vigorously, improve the regional development policy, and continue to implement the overall strategy for regional development, is a major strategic task which matters the national economy. The transformation of economic development, the optimization of industrial structure and the overall strategy of regional economic and social development needs a strong intellectual support, personnel support and intellectual contributions, which requires education sectors, especially colleges and universities, to play their basic, guiding and global roles. As a base platform of science and technology innovation and the cradle of personnel training, discipline construction must properly redistribute and optimize subject structure to adapt to the needs of regional economic and social development and innovation system construction, promoting their further development, and fully play its roles. Colleges should make full use of its advantages of professional disciplines, and actively participate in regional economic and social development to seize the opportunity to optimize the discipline structure and layout, enhance the traditional disciplines advantage, build discipline characteristics and promote the coordinated development of discipline, providing personnel and intellectual support for regional economic and social development.

National Degree and Graduate Education reform requires discipline structure adjustment and optimization in policy

The first two decades of this century is period of an important strategic opportunity for Chinese degree and postgraduate education to achieve a comprehensive, coordinated and sustainable development. Degrees and graduate education development should adhere to the strategic approach of "optimization mechanism, coordinated development, focus on innovation, try to be the advanced", establishing operational mechanisms full of vigor and vitality, and achieve the transformation from a major postgraduate education country to a powerful postgraduate education country. It is the strategic requirements and strategic objectives in graduate education. Correspondingly, we need to carry out the audit work to adjust the degree structure, optimize the layout of the reform, widen Degree Authorization audit disciplines caliber according to disciplines authorized to carry out audits and disciplines to achieve the purpose of optimizing the layout of the discipline structure, making it become complete, reasonable structure and adapt to disciplinary structure layout needs of national construction. which inevitably requires us to wide caliber graduate students as the focus, optimizing subject structure, improve the level of discipline construction.

Issues about discipline structure optimizing and administrative system of innovative discipline

Discipline system integration Issues

The development of modern discipline is highly stratified, highly integrated, and based on highly integrated development situation. The formation of this situation puts forward new demands for structure and layout of the disciplines, breaks the traditional concept of academic development, and explore multi-disciplinary roads for developing. It is imminent to optimize the structure of the discipline. In the development of Universities, especially higher engineering and technical colleges, it is characterized by less basic discipline with lower lever of basic research, more applied disciplines without high level of application, scattered layout of disciplines and uneven development features. Without the powerful support of basic subjects and the obvious advantages of cluster development, it's more different for discipline to develop. Consequently, the first job for discipline Construction is adapt to scientific research, cultivating talent, strengthen applied sciences, gave birth to new disciplines, adjust structure and layout of discipline, the construction of an integrated system of discipline is the primary task of Discipline Construction.

Subject Characteristics Development issues

Distinctive characteristic is the salient feature of high-level university discipline structure. To make adjustment to discipline structure, we must base on the college, the region, and the industry conditions, seeking to achieve the goal of characteristics development. Characteristics can be described as "I have what others don't", "what I have is better than others," or "I have innovation on what others have". Thus, in the disciplinary structure adjustment, we need to bold innovation connotation, select the features, design features, and create features of disciplines. Currently some colleges, especially in the engineering and technical colleges, there is still a relatively large gap between the development of specialized subjects and the regional economic and social development in the direction. Current scientific research and training of personnel still can not fully meet the needs of scientific and technological development. On the whole, we still need to do a lot on enriching connotation of the existing disciplines and outstanding their features.

Subject Resource Integration issues

Broadly speaking, discipline is defined as a "community resource." This resource is a community of three types of resources integration--scholars, academic information and academic organic material basis. One important content of the adjustment and optimization for discipline structure and innovation in discipline management system and mechanism lies in the optimization for integration of human and material resources. It can be said that the subject resources, especially the adjustment of multidisciplinary teams and the integration of material conditions is the key to the success of disciplines construction. As the executive system, Colleges is too rigid and demarcated. In the progress of adjustment and optimization for discipline structure and innovation in discipline management system and mechanism, how to rational allocation of resources and improve resource utilization disciplines, will be a very prominent problem and arduous task. It must be changed of the ideas that subject resources are owned by personnel or entity. And only by breaking the boundaries of group, department and faculty, breaking down departmental ownership, strengthening cooperation among disciplines and the horizontal links between units, and integrating disciplines resources from disciplinary system, academic environment and academic multiple levels, can we really achieve the purposes of adjusting disciplinary structure optimization.

Operational Mechanism management issues

Carrying out discipline structure adjustment and optimization to achieve cross-disciplinary convergence development determine its management should be a networked structure model. This is the biggest difference between conventional vertical administrative systems. Because of its specificity, administrative units across disciplines hinder the internal disciplinary exchanges and cooperation and can't adapt to the comprehensive development of the trend. Therefore, institutional innovation and the establishment of disciplinary construction management system which adapts to mechanism is undoubtedly an important guarantee for the implementation of the disciplinary structure adjustment and optimization. We believe that in the management system, it is necessary to follow the law of discipline development with highly differentiated, perfecting discipline organizational system of top-down bureaucratic style of discipline, but also to follow the law of academic development with highly integrated development, establishing a sound matrix, networking discipline management system and inter-department, the department of transverse discipline organization, promoting the comprehensive development of the discipline. As for the management mechanism, we can introduce modern project management theory and methods into discipline construction management, it is an important way by means of objectives management, process monitoring, assessment and acceptance to promote discipline construction management system and mechanism innovation.

Ideas and Measures of Deepening Academy Characteristics Construction

In education transformation, it is required that actively optimizing the overall layout of disciplines, established disciplines of priority development status, accelerate the development of characteristic disciplines and the emerging discipline of professional education to Strengthen service capacity for force. Needs of the academic education and professional education should all be taken into consideration and strengthening discipline connotation construction. According to the principle, highlighting discipline development in academic education and professional education while highlighting direction development in training in rotation, targeting of discipline development in professional education building should be established and important facts should be given more intention during the construction. Intensify efforts to discipline cluster, scientific planning of various types of job training subject property. By breaking the traditional boundaries of disciplines, strengthening discipline integration and promoting development of three discipline features: comprehensive, intensive and extended connotation.

Optimize the structure and layout, scientifically lay the comprehensive planning of the scientific discipline construction

Most Academic education in institutions is integration of basic advanced subject professional subject. This kind of educational pattern determines that colleges should develop basic advanced subjects appropriately. Basic disciplines has good versatility, rapidly develop and has get a high level while professional subject development is lagging behind and does not fully meet the requirements of professional education. For this reason, in educational transformation, it must actively optimize the overall layout of disciplines, establish disciplines of priority development status, accelerate the development of characteristic disciplines and the emerging discipline of professional education, and strengthen serving capacity of academic education for technology. To adhere to develop superiority disciplines and exert "gathering" effect of superiority general discipline——gathering development source. Strengthening general disciplines application and education research and relying on general discipline in powerfully support for professional education; decisively renounce disciplines that do not have obvious advantages. Decreasing the number of general discipline, seeking to education quality, focusing on improving the overall level of professional disciplines..

Scientifically establishing lay out in developing discipline level, because a clear idea of discipline is a prerequisite for the development of professional disciplines level. It must be noted that the layout should meet the needs of force talent requirement and, especially, in high-tech information age, talent requirements. College should serve the community that institutions should vigorously train the talent that society lacks. Colleges should vigorously strengthen information literacy education, comprehensively implement the scientific development conception. Basing on new ideas, building new systems of discipline, establishing new training models, firmly following concept of modern education. During discipline Construction in Colleges, guidance is "2110 project core is these disciplines that closely related to information construction and new equipment development. Strengthen development of emerging disciplines and interdisciplinary, and strive to develop new growth points in discipline.

Strengthen key construction project to adapt disciplinary construction after the education transition

Various educational levels, to some extent, have different emphases in establishing targets and contents. In the principle——"professional education highlight development of discipline, the rotation highlight direction construction", establishing goals in professional education discipline construction, and then strengthening the construction according to goals. Professional education focusing on business skills training, so that proper scope of knowledge and depth is needed. What's more, professional education emphasize application, therefore, it must focus on professional development and strive to "profession" and "depth". Training rotation emphasize updated knowledge

and skills, focuss at one point and frontier knowledge.It is needed that constant dissemination of new theories and new technologies.Because of position-relevant,it should highlight the discipline direction construction and strive to "new" and "fine."

Optimize teacher construction, trying to forge with high-quality teaching staff represented of top-notch talent

First, we should focus on training with emphasize, improving the overall quality, According to the talent organizational model of "academic leaders + Innovation Team", accelerate the pace of top-notch talent training; send teachers to famous universities each year for PhD or encourage them to participate in important academic exchange activities international and domestic, improving the teacher team level. Second, we should try to strengthen the practice and training and enhance work experience. Every year, we should arrange teachers to investigate in research institutes and new equipment manufacturers, making them familiar with equipment to increase their capacity. Third, we should broaden channels to attract talents. By the means of taking special recruited into the army, cooperation research and other measures, attracting high-level personnel such as Yangtze Scholar and Doctors study abroad, transferring more postdoctoral personnel working in college.

Strengthen discipline and technology leader team building. Leader is the core strength and important support in the discip line construction, playing a role like the pathfinder and the helm. Not only should we strengthen the well-known expert in teaching and research cadre of construction through various forms and ways, also we should try to build a discipline leader team with strong research capabilities, and a technology leader team with strong technical ability of engineering practice, continuously improving the disciplines construction level.

Strengthen the teaching security conditions, providing good material conditions for the development of disciplines construction

First, we should improve the existing teaching facilities and play the comprehensive advantages. To existing teaching facilities and equipment resources, we should take a good use, strengthening the comprehensive application of professional interior and with other disciplines to show the comprehensive advantages of maximum performance. Second, we should strengthen the construction of teaching conditions according to the new training mission and professional characteristics. Take measures to expand their functions actively and make them adapt to the new training mission. Teaching equipment and construction equipment should take a high starting point, and the technological content should be increased, trying to create a more realistic modern combat environment for students. Third, we should develop new tools and simulation equipment and strengthen the implementation of internal network, achieving simulated teaching and training. Build a fully functional modern teaching space; strengthen the construction of special classrooms and laboratories and develop educational software; develop simulation training equipment and virtualization equipment, strengthen campus network construction, and actively carry out online education and distance learning.

Strengthen research work, providing a strong scientific support for disciplines construction building

First, we must strengthen exchanges and cooperation. Pay attention to links with domestic and foreign universities, research institutes and agencies, take communication means of "go out" and "introduce in" actively so that teachers can quickly absorb, digest frontier of new knowledge, new methods and new information, promoting the reform. Increase the open collaboration to research and actively seek major research projects to change the phenomenon of individual operations in the past into mode of inter-department, inter-diesoline and even joint research between colleges, trying to achieve a high level of scientific research the results and raise the overall level of discipline. Second, we must grasp the establishment and improvement of scientific management rules and regulations. The establishment and improvement of scientific management rules and regulations should be conducive to fully mobilize the department and other aspects of the initiative group to provide the necessary assurance for research and innovation. Third, we should actively promote the

transformation of work discipline. In particular, research should promptly be transformed into textbooks and teaching content to go to enrich and innovation theory, so that students can learn the latest development, promoting the virtuous circle of disciplines construction.

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