

**МОДЕЛЬ ОБУЧЕНИЯ МАГИСТРОВ В УНИВЕРСИТЕТАХ КИТАЯ  
НА ОСНОВЕ КООПЕРАТИВНЫХ ИННОВАЦИЙ**

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**Аннотация.** Правительство Китая реализует стратегию инновационного развития страны для строительства великой и мощной державы. Решение задачи обеспечения устойчивого социально-экономического развития государства невозможно без преобразований в подготовке квалифицированных специалистов. Переход к инновационной экономике требует, чтобы обучение магистрантов, как второго уровня высшего образования, было основано на педагогических технологиях, позволяющих выпускать квалифицированных инновационных специалистов, обладающих исследовательскими компетенциями, практическими навыками и социально адаптированными к внешней среде. Уже в течение длительного периода времени технологии обучения в Китае направлены на совершенствование модели подготовки магистров, владеющих исследовательскими компетенциями. В настоящее время в процессе обучения магистров китайских университетов особенно остро встали такие проблемы, как, несовместимость концепции совместного обучения с концепцией подготовки магистрантов, владеющих исследовательскими компетенциями, цели обучения их подготовки не соответствуют требованиям времени, отсутствуют стандарты в оценке подготовки магистров. Существующая модель обучения магистрантов далека от требований времени и не позволяет обеспечить экономический рост в стране. В статье анализируются основные современные проблемы подготовки магистрантов китайских университетов и выдвигается идея совместной инновационной подготовки магистров, анализируются основные интересы совместных инноваций, описывается концепция обучения магистров на основе использования технологий совместных инноваций, предлагается эффективный механизм совместной работы по инновациям. Предложенная концепция гарантирует эффективное и устойчивое функционирование подготовки магистрантов в системе образования Китая с использованием новой стратегии в рамках механизма кооперативных инноваций. Использование нового подхода в обучение позволит эффективно решать существующие проблемы возникающие в процессе сотрудничества между производством, образованием и наукой, и повысит качество подготовки магистров.

**Ключевые слова:** китайский университет, кооперативные инновации, модель подготовки магистров

**POSTGRADUATE TRAINING MODEL OF LOCAL UNIVERSITIES IN CHINA  
BASED ON COOPERATIVE INNOVATION**

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**Abstract.** The government of China realizes the strategy of innovative development of the country to build the great and powerful power. The solution of a problem of ensuring sustainable social and economic development of the state is impossible without transformations in training of qualified specialists. Transition to innovative economy demands that training of undergraduates as second level of the higher education, it has been based on such pedagogical technologies which would allow to train the qualified innovative experts having research competence, by practical skills and socially adapted to the external environment. Already during the long period of time of technology of training in China are directed to improvement of model of training of the masters having research competence. Now in the course of training of masters of the Chinese universities there were especially sharply such problems as: incompatibility of the concept of coeducation with the concept of training of masters with research competences, the purposes of training of training of masters don't conform to requirements of time, there are no standards in estimates of training of masters. The model of training of modern masters is far from the requirements of time and doesn't allow to provide economic growth in the country. In article the main modern problems of training of undergraduates at the Chinese universities are analyzed and the idea of joint innovative training of masters moves forward, the main interests of joint innovations are analyzed, the concept of training of masters on the basis of use of technologies of joint innovations is described, the effective mechanism of collaboration in innovations is offered. The offered concept guarantees effective and steady functioning of training of undergraduates in an education system of China with use by a new strategy within the mechanism of cooperative innovations. Use of a new approach in training will allow to solve effectively existing problems arising in the course of cooperation between production, science and education and to increase quality of training of masters.

**Keywords:** Chinese university, cooperative innovations, model of training of masters

*1. Introduction.* With the development of science and technology in China, more and more attention has been paid to innovation ability and innovation behavior. Among them, universities, as an important base for training talents,

how to promote the cooperation between universities and scientific research institutes, enterprises and governments, It has become the key for China to enhance its independent innovation ability, integrate scientific and technological

resources, and improve its innovation efficiency. The Chinese Government has promulgated the opinions on the implementation of the Plan for the Promotion of Innovation ability in Colleges and Universities, and the implementation of the Plan for the Promotion of Innovation ability in institutions of higher Learning (hereinafter referred to as the "2011 Plan") encourages universities and colleges to cooperate in depth with all kinds of innovative forces. To promote the full sharing of high-quality innovation resources, to achieve the simultaneous upgrading of talent training quality and scientific research and innovation ability [1]. 2013, National Ministry of Education, National Development and Reform Commission, The Ministry of Finance jointly promulgated opinions on the Reform of Postgraduate Education. Opinions clearly defined the guiding ideology and development objectives of the reform and development of graduate education in China. At the same time, the Ministry of Finance pointed out. We should focus on the reform of graduate education mode and the overall framework of graduate education quality assurance system [2]. Synthesizing the text of the two major national opinions, we can draw a conclusion that how to deepen the graduate education mode reform based on the cooperative innovation strategy, To promote the healthy and orderly development of graduate education has become an important theoretical and practical issue for the postgraduate training, especially in local universities.

*2. The significance of Collaborative Innovation in Local Universities.* Local university is a general higher education institution affiliated to various provinces, autonomous regions, municipalities directly under the Central Government, Hong Kong and Macao Special Administrative regions, and funded by local administrative departments. There are more than 2,500 local universities, which form the main part of China's higher education system. To serve the regional economic and social development as the goal, focusing on training high-quality talent for the local.

Collaborative innovation is created by MIT Sloan's Center (Peter Gloor) of for Collective Intelligence first proposed that "the network group composed of self-motivated people form a collective vision and cooperate to achieve common goals by means of network exchange of ideas, information and working conditions." [3] Postgraduate education in local colleges and universities. It is an important form of cultivating high level applied talents in our country and shoulders the important task of cultivating innovative spirit and ability to build a powerful country in higher education and an innovation-oriented country.

*2.1. Break the limitation of one to one of the apprenticeship.* Unlike in the past, although every graduate student has his own mentor, in the collaborative innovation training model, the tutor is not only responsible for graduate students but has a division of labor of cooperative guidance. This model requires the establishment of interdisciplinary. Cross-regional teacher selection mechanism, to strengthen the exchange and cooperation between different disciplines, so that different academic background, knowledge structure, research direction of the mentor to form a collaborative innovation team, so as to avoid the procedural guidance, single [4], To enable graduate students to share the ideas and wisdom of mentors in different universities, regions, and even different countries. In such a free and relaxed atmosphere and in a wider space and time, tutors and graduate students can more identify with each other's academic values. As a democratic and equal though, sharing wisdom and feeling the joy of academic research.

*2.2. Realizing Cooperative Innovation among different cultivation subjects.* The times require that the scholars in universities and research institutes cannot completely transcend the real life and social need and only talk about academic. Colleges and research institutes with the dual task of talent training and scientific research are required to do so. Although it is the main body and basic force of graduate students, But the main body of graduate education

is not only university and scientific research institute, but also the cooperative innovation mode of postgraduate education requires that the university and research institute should respect the goal and demand of other stakeholders in graduate education, and face to the profession. Enterprises introduce high-quality educational resources, implement open education in different forms and links, strengthens the communication and convergence between theoretical research and fresh practice, and carries out project-based cooperation by jointly building innovative bases for practice. Establishing strategic alliances and other forms of talent training collaborative innovation platform, "explore the establishment of School-School collaboration, School-Research Institute collaboration, School-Enterprise (industry) collaboration, School-region (regional) collaboration," A new model of open, integrated and efficient international cooperation. [5].

*3. The present situation of Postgraduate training in Local Universities in China.* At present, in the field of high level talent training, local universities have made a certain attempt on the cooperative innovation way of "production, learning and research". They have set up compulsory links such as practice and practice, allowing students to take cross-disciplinary courses and listen to the students, etc. But because of their physique, resources, and so on, Risk and other problems, voluntary collaborative innovation model based on interest has not yet taken shape, and the barriers between disciplines, majors, disciplines and society have not been broken, resulting in the waste of postgraduate training resources and the lagging of training quality. There is imperative that further discussion.

*3.1. The goal of Postgraduate training cannot meet the needs of Society.* The nature of local universities determines that postgraduate education in local universities must actively adapt to the real and long-term needs of local economic construction and social development. We should work hard to train high level applied talents for the development of regional economy [6]. At present, most of the training models of Chinese master's degree students are in the form of the first year of theoretical study, the second and the third year of academic research and the writing of degree papers. In addition, although graduate students are now trained according to academic and professional degree types, what deviates from the original intention of the Ministry of Education in adjusting and optimizing the structure of degree types is that most colleges and universities do not have distinct characteristics of classified training. The goal of talent training is not clear, and the training mode of academic graduate students is basically adopted in the training of professional degree graduate students. The practical teaching links are relatively weak, lack of vocational guidance, insufficient training of professional ability, and unable to adapt to the multi-level of the society. The requirements of various talents.

*3.2. The graduate training mechanism of collaborative innovation has not yet been improved*

(1) Lack of a reasonable benefit distribution mechanism

At present, the personnel involved in the collaborative innovation of graduate students come from different subjects. Their interests are different and their responsibilities are not clear. Therefore, the key issue of interest segmentation cannot be truly coordinated. The division of the interests of all parties is often unreasonable and often changed. These unreasonable factors of interest distribution can easily induce contradictions and differences within the innovation group and seriously dampen the enthusiasm of the parties involved in collaborative innovation.

(2) Unscientific evaluation mechanism

There is no effective incentive for the evaluation of the two main teachers and students in graduate training. In the performance evaluation system of teacher training in Chinese universities, there is not any effective incentive for collaborative innovation. There are not any quantitative indicators on interdisciplinary practical application and

teaching effectiveness. So far, the main measure of academic achievement is the level and quantity of academic papers and scientific research results. [7] Not enough attention has been given to the application of scientific research achievements. In the evaluation of graduate students, the assessment of practical ability and comprehensive quality is vague. The evaluation direction has dampened the enthusiasm, passion and creativity of many teaching and research staff and graduate students in interdisciplinary collaborative innovation.

#### 4. Cooperative Innovation of Postgraduate training Strategy in Local Colleges and Universities

4.1. *Setting up the concept of Postgraduate Cooperative Innovation training.* Under the background of the implementation of cooperative innovation strategy, the cultivation mode of graduate students should set up the concept of collaborative innovation cultivation, and universities should take into account the importance of collaborative cultivation of graduate students from a long-term perspective. With long-term vision, broad mind and keen observation, we can learn to think on the other hand, highlight the important position of "innovation" in graduate training and set up a correct view of collaborative innovation of graduate students. On the basis of reforming the evaluation system of scientific research in colleges and universities, graduate tutors should also renew their concepts, adjust key performance indicators, change the training mode of conducting scientific research and fighting alone, and strengthen the consciousness of cooperation so as to improve the ability of joint training and collaborative innovation.

4.2. *Cooperate to build a Community of interests in Joint cultivation.* The local colleges and universities graduate training is a collaborative innovation system, training model needs to change the traditional single subject participation of students, the students involved in the practice of a number of other innovative subjects to participate in college graduate training in high-level, in order to achieve the objectives of application personnel training. Therefore, we need to establish "with mutual benefit as the basic motive, the cultivation of high level talents for resources and interests, research by political research main innovation in the form of sufficient resource sharing and fair distribution of interests on the basis of the joint training community of interests. So [8]. need the subject, fusion of collaborative innovation universities, enterprises, Scientific Research Institute, integration and government, to mobilize the enthusiasm of all parties. It needs effective allocation of resources, to realize the benefits. At the same time should establish an efficient service system and quality control system. The establishment of special funds to ensure the implementation of the graduate training objectives and the construction of the interests of the community has been effective.

4.3. *Establishing and perfecting the Operation Mechanism of Collaborative Innovation.* Perfecting the mechanism for selecting and evaluating graduate mentors. Only by strictly controlling the tutors, can we really improve the level of graduate students' training, and pay attention to the academic level of tutors, such as academic innovation achievements and research project funds, at the same time, Strengthening the evaluation of the mentor's innovative guidance ability, breaking the mentor's lifelong system, perfecting the rolling out mechanism, strengthening the mentor's team building, realizing the cooperative guidance, selecting and employing the teacher with a strong theoretical level, Experienced senior technicians and senior managers work as part-time mentors for graduate students with professional degrees, establish joint training mechanisms, or encourage teams of mentors for interdisciplinary research.

**5. Conclusions.** Local universities are an important force for Chinese graduate education, and they are also the main units for the training of high level innovative talents in China. Local colleges and universities should be close to the requirements of the times, profoundly understand the concept of collaborative innovation, accelerate the

pace of reform of graduate student training mode, integrate production, research and development resources, achieve a high degree of integration of education and science and technology, and social development, and promote the connotative development of graduate education.

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