

Образование в странах мира

RESEARCH OF THE COLLABORATIVE MODE OF EDUCATION OF POSTGRADUATES PROVIDED BY GOVERNMENT, BUSINESS, UNIVERSITY, AND RESEARCH INSTITUTE OF CHINA

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Questionnaire research and interview method were applied to study the introduction of the collaborative education provided by government, business, university and research institute in the area of rural and regional development at Zhejiang Ocean University (ZOU). Various training modes: joint enrollment and training, double-tutor system (two supervisors for one postgraduate, one is from the university, the other is from government or business or research institute) together with the establishment of collaborative staff training have been adopted to carry out the collaborative education that has provided better results. However, there are still some problems: misbalanced cooperation, unrelated cooperation fields that lead to the staff training objective not to be adequately met with practical needs. The article offers the way to construct a new training mode between government, business, university and research institute for the professional degree programme – Master of Rural and Regional Development.

Keywords: rural and regional development, staff training mode, government, business, university and research institute, professional Master's degree.

1. The research object and method

1.1. The object of the research

This article focuses on the training of postgraduates specializing in rural and regional development. Cooperating with the relevant government agencies, such as Zhoushan Port Authority, Zhoushan Marine Fisheries Service, Zhoushan Science and Technology Bureau, Zhoushan Culture, Broadcasting, Television, Press and Publication Bureau, as well as Zhejiang Zhenghe Shipbuilding Co., LTD, Yuanjian Tourism Research Institute, Zhoushan Daily, ZOU has gradually co-established the research base outside the campus. Qualified supervisors from the above organizations have been employed as well as university teachers, so that we can organize staff training programme of double-tutors. Moreover, the partnerships of cooperation with Wenzhou Personnel and Labor Bureau and Ningbo Education Institute in training postgraduates have been established. Finally, we have explored the way to construct a new staff training mode provided by government, business, university and research institute.

1.2. The research method

Questionnaire research and interview method were used in the research. Two types of questionnaires have been created taking into account the target of the research for supervisors and the other one is for postgraduates of grades 1 and 2. 51 questionnaires have been sent to supervisors

and 152 questionnaires have been sent to postgraduates. Totally, 198 questionnaires accounted for 97.5 % had been processed and the other ones were invalid.

2. Analysis of the status

2.1. Current training situation

ZOU had not been authorized to enroll the postgraduates of agricultural sphere until June 3, 2008. Since then, we have developed a detailed staff training program according to the “Notice of the working staff approved to get Master's degree in 2008” released by Academic Degree Commission of the State Council [1].

We have enrolled part-time postgraduates whose major is in rural and regional development for three years since 2008 and the majority of them have come from Zhejiang province. We hadn't been authorized to enroll full-time postgraduates for two years till 2009. 77 out of 178 full-time graduated postgraduates had been granted degree, and 37 out of 141 part-time postgraduates had been awarded degrees till 2013. The remaining 205 failed to get the Master's degree as they hadn't got enough credits. Both the number of enrolled and degree-granted students are increasing in number year by year which is deeply influenced by the training model.

2.2. Collaborative learning mode

Various collaborative learning modes have been adopted: “joint enrollment”, “double-tutor

system”, “research facilities placed out of campus”. They are aimed to make the Master’s degree programme more adaptive, innovative as to promote the agricultural technology and to boost rural growth it is necessary to have the practice-oriented and highly-trained staff. At present, we are gradually developing a Master’s training model characterized by collaborative education between government, business, university and research institute.

Mode 1: joint enrollment and training.

In addition to training full-time and part-time postgraduates, ZOU used a mode of joint enrollment and training with Wenzhou Personnel and Labor Bureau and Ningbo Education Institute to provide a group of part-time Master’s degree students. This mode takes advantage of highly dense population, a great number of state enterprises, and other private businesses in the city of Wenzhou and Ningbo. Wenzhou Personnel and Labor Bureau and Ningbo Education Institute as the partners are in charge of the enrollment and daily administration of part-time postgraduates in Wenzhou and Ningbo, and the teaching and supervisors were from ZOU. By doing this, we have expanded the scope of enrollment, on the one hand, and on the other hand, we have provided a group of practice-oriented staff for local government, state enterprises, and other private businesses. The collaborative training mode was appreciated by local authorities and students and has resulted in the enrollment increase in recent years.

Mode 2: double-tutor system.

“Double-tutor system” was introduced to train the postgraduates at the programme for rural and regional development, that is to say, the postgraduates were under the guidance of both university teachers and specialists from government, business, and research institutions. The criteria for the supervisors from the university are the following: they should have a Master’s degree or above; they should have a title of the Associated Professor or above; they should make some research in relative fields; they are responsible for the specific course of study, dissertation supervision and daily management work. Supervisors from government, state enterprises, and other private businesses should have a wide practical experience in related fields. They should also occupy senior posts or make some outstanding contributions in a relevant field. Supervisors share responsibility for the training, research projects and guidance. The combination of theory and practice improves the students’ ability to solve practical problems. More than 20 part-time

supervisors that were from Zhoushan Port Authority, Zhoushan Marine Fisheries Bureau, Zhoushan Science and Technology Bureau, Zhoushan Culture, Broadcasting, Television, Press and Publication Bureau have been employed. They gave irregular academic lectures at ZOU. According to the survey, the postgraduates preferred the economic and political topics to cultural ones. Most of their research is connected with the local conditions of agriculture and fishing. Following the principle “bring in”, ZOU employs the part-time supervisors who have wide experience in agriculture extension. Thus, we are able to make the basis for the practice of teaching [2]. These part-time supervisors make the postgraduate participate in key Chinese scientific projects and enterprise independent innovation projects without leaving the campus which opens students’ minds and broadens their horizons [3].

Mode 3: organization of the collaborative staff training base provided by government, business, university, and research institute.

The postgraduates are required to have internships for no less than 12 months since the training program focuses on the cultivation of practice-oriented staff. For this purpose, ZOU uses the opportunity to develop the agricultural area of Zhoushan Islands that requires highly-qualified staff to organize postgraduate training provided by government, business, university, and research institute. The School of Management at ZOU signed a cooperation agreement with Zhejiang Zhenghe Shipbuilding Co., LTD, Zhoushan Culture, Broadcasting, Television, Press and Publication Bureau where we sent our postgraduates to study in 2010. The postgraduates were guided by external supervisors from about half a year to up to one year. Since 2011 the practice platforms have been expanded by the collaborative education agreements with Yuanjian Tourism Research Institute, Zhoushan Daily. So far, five formal collaborative education training platforms for postgraduates have been organized in Zhoushan that plays a positive role in improving the Master’s programme of rural and regional development.

3. Problem Analysis

3.1. The training objectives of Master’s degree programme of our university don’t match the criteria

The Master of Rural and Regional Development should have a solid theoretical base and systematic professional knowledge in the field of agriculture. He should also have knowledge in management, humanities and social sciences that

presupposes strong specialized skills, technology transfer skills, ability to innovate and offer new ideas about agricultural development. It also presupposes the developed abilities to formulate and solve professional problems and the abilities to process the received results. The training objective of Master of Rural and Regional Development is to provide practice-oriented, highly-qualified staff able to study, apply, develop and promote agricultural technologies. If we take ZOU as an example, we can see that the group of candidates who have different background, different undergraduate major is small and the existing training programs are not suitable for the development of Master of Rural and Regional Development. As for the current training mode, it still prioritizes theory and neglects practice. In most cases, we copy the training mode of Master. The research field of the majority of teachers is beyond the sphere of rural and regional development because of the short time of recruitment. Currently, teachers that lack professional experience in rural areas only impart theoretical knowledge to students and don't know how to connect theory with practice. Besides, the curriculum design of rural and regional development can't meet the needs of society. As a matter of fact, the current training objectives aren't consistent with the criteria.

3.2. Misbalanced proportion of collaboration organizations

In all the modes used: collaborative education mode of joint enrollment and training, double-tutor system, research facilities placed out of campus government agencies accounted for the largest proportion. Moreover, the proportion of universities and institutes is very small as geographically the area of Zhoushan is a small one. As a result, we seldom have the chance to cooperate with related units. According to the questionnaires the final result is the following one: the number of government agencies accounts for 63.8 %, the number of enterprises accounts for 26.3 %, universities 9.9 %, research institutes 0 %. These data illustrates that the number of organizations provided by government, business, university and research institute is misbalanced, that, in its turn, definitely impacts the quality and results of collaborative education for the Master of Rural and Regional Development.

3.3. Small cooperation training sizes and unrelated cooperation fields

Recently, the number of postgraduates for the programme of Master of Rural and Regional Development at ZOU has grown. It is affected by

the policy of the Ministry of Education to increase the number of full-time postgraduate enrollment into universities. However, the majority of the candidates were reallocated and this major was not their first choice. The main reasons are: the lack of support from the government; insufficient motivation of enterprises; no cooperation with research institute and university that causes the gap between the objective of staff training and society needs. Universities should improve the quality of Master's education and cooperate with enterprises and research institutions of different regions, countries, organizing diverse cooperative institutions in different fields of study and promote broad cooperation geography [4]. Cooperation was mainly limited to Zhejiang province. It influenced the scope of practical knowledge for the postgraduates and restricts the area of their employment.

4. The creation of a new diverse postgraduate training mode provided by government, business, university, and research institute

The specialty of rural and regional development was created to further improve Master's degree programmes in the agricultural area, which is a significant initiative. To strengthen the practical skills of postgraduates, to encourage the training of postgraduates, to meet the actual needs of the employer, to study the interaction mechanisms of supply and demand for staff training in the agricultural area local government should increase support to the collaborative education of postgraduates provided by government, business, university and research institute, and universities should also do everything possible to organize cooperation provided by government, business, university and research institute. Large enterprises and institutions should also encourage cooperation through the order-based training.

4.1. Local government increased support of the collaborative mode of education

The Master's degree in agriculture was established to cultivate large numbers of professional, practice-oriented staff for the development of agricultural area, to increase the farmers' income since agriculture is the foundation of the national economy. There are two kinds of Master's degrees in China: professional and academic ones. As compared to the academic Master's degree, professional Master's degree focuses on the cultivation of the practical ability of postgraduates. It is also the result of the society development and market demand for practice-oriented

staff. Besides, the professional Master's degree requires the presence close links between academic and professional education.

Local government and universities should not only support collaborative education of professional Master's degree provided by government, business, university and research institute by setting up specialized funds, but they should also build a platform for staff training by developing rules and regulations. To establish an innovative mode of education for the professional Master's degree, we should establish links between traditional units of postgraduate education and external systems based on a combination of academic work, production study and research [5].

4.2. Universities should extensively absorb social resources to establish a new training platform

Local government should give tax credits to stimulate enterprises to participate in collaborative education of professional Master's degree provided by government, business, university, and research institute and to encourage enterprises to increase research and development investment, making it the main part of technological innovation. Moreover, we should build different types of practice platforms at enterprises and institutions, combining with the creation of scientific research platform and teaching platform at the university. The professional with a Master's degree can make use of professional knowledge and of the latest technologies to solve technical problems in the industry and to introduce innovation into practice. To achieve this goal, firstly, the university should build partnerships with relevant government departments, enterprises and research institutes to attract educational resources; secondly, the university should train and retrain its staff by cooperating with enterprises that have necessary production and test equipment. Thirdly, we should take advantage of the laboratory base of the university to solve actual business problems. These problems might become the topics of postgraduate theses. In addition, the candidates for professional Master's degree should improve their ability to solve practical problems through real-life practical tasks.

4.3. The professional Master's degree training should be market-oriented and based on the needs of local economic and social development

The main goal of developing the professional Masters' programme is to serve the community and to supply a great number of highly-qualified, practice-oriented staff for the rural development. So, to take into account the local economic development and to meet the needs of social development we should focus on the market. We should take account of the local situation in the area, so that postgraduates of rural and regional development programme can promote local economic development. To create the staff training programs and curriculum for professional Master's degree we take into account the staff needs' forecasts released by the government, the local government strategy on agriculture, farmers' and regional economic development needs, changes in the structure of industry and technology. Moreover, we must make some adjustments according to the market trends.

4.4. To construct a new professional Master's training mode provided by government, business, university, and research institute

Cultivating the innovative education for postgraduates plays a crucial role in the national educational system. The collaborative education provided by government, business, university, and research institute connects the local governments, universities, businesses, research institutes that will be a new trend. To meet to market needs this training mode combines professional Master's degree program in the field of agriculture with the highly-qualified, practice-oriented staff training plan at the enterprises and institutions. Postgraduates can make some projects with the help of supervisor where they can apply the latest advantages in the field of science and technology to real-life problems the enterprises encounter. Thus, we can not only promote collaborative education provided by government, business, university and research institute, but also play a significant role in the national education system in the creation of professional Master's degree programmes.

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Received 12 May 2014

**Bulletin of the South Ural State University
Series “Education. Educational Sciences”
2014, vol. 6, no. 3, pp. 110–114**

УДК 378.014 (510) + 378.014(47)
ББК 4448.44(5Кит) + 4448.44(2)

ИССЛЕДОВАНИЕ ОБУЧЕНИЯ ВЫПУСКНИКОВ ПУТЕМ ОБЪЕДИНЕНИЯ РЕСУРСОВ ПРАВИТЕЛЬСТВА, ПРЕДПРИНИМАТЕЛЕЙ, УНИВЕРСИТЕТА И НАУЧНОГО ИНСТИТУТА

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Проведено исследование с использованием методами анкетирования и интервьюирования обучения выпускников путем объединения ресурсов правительства, предпринимателей, университета и научно-исследовательского института в Китае. В качестве базы исследования использован Чжэцзянский Океанический университет. Представлены различные модели взаимодействия: объединение ресурсов нескольких университетов или институтов в подготовке магистрантов; система двойного тьюторства (один тьютор из университета, а другой – представитель правительственной организации, бизнеса или производства); создание единой ресурсной базы государства, бизнеса, университетов и научно-исследовательских институтов для обучения соискателей магистерской и более высоких степеней. Выявлены проблемы, возникающие при взаимодействии и объединении ресурсов различных организаций: несбалансированное взаимодействие; отсутствие заинтересованности представителей бизнеса, производства в решение задач образования. В статье предлагается способ конструирования модели взаимодействия и объединения ресурсов правительства, предпринимателей, университета и научно-исследовательского института при реализации программы подготовки магистра сельскохозяйственного и регионального развития.

Ключевые слова: сельскохозяйственное и региональное развитие, модель развития квалификации персонала, правительство, бизнес, университет, научный институт, магистерская степень.

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Поступила в редакцию 12 мая 2014 г.