

Research on the Current Situation of Practical Ability Cultivation and the Path of Improvement of Full-time Professional Degree Postgraduates

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Abstract: This paper analyzes the current situation and existing problems of the training of full-time professional degree practical ability, and takes the exploration of graduate practical ability training in Jiangsu University as an example, proposes to carry out the evaluation of professional degree graduate training conditions, set up application-oriented curriculum system, and strengthen the construction of practice base. Strengthen the joint training of practical ability inside and outside the university, perfect and implement the “double tutor” system, strengthen the application orientation of degree thesis and other countermeasures.

Key words: Full-time professional degree; Graduate practice; Countermeasure

1. Introduction

In order to meet the urgent needs of the country and the economy and society for high-level applied talents, China began to recruit full-time professional degree postgraduates from 2009, which is different from the traditional academic graduate training of college teachers and scientific research institutions. The goal of professional degree postgraduates training is to train high-level applied specialized talents with good professional literacy.

However, full-time professional degree graduate training has been more than 10 years, from the educational practice and the survey of the job market, practical ability training has been continuously paid attention to and strengthened, but it also shows a homogenization with the academic graduate training mode; The practice training has the phenomenon of simplification, formalization and coping. The national “14th Five-Year Plan” for the Development of Degree and Postgraduate Education takes strengthening the cultivation of practical ability of professional degree postgraduates as one of the tasks of development and reform. How to strengthen and improve their practical ability has become an urgent issue for us to solve.

2. The current situation and existing problems

After consulting the existing literature and visiting some colleges and universities, it is found that the professional degree training mode of domestic colleges and universities generally has a tendency to converge with the academic graduate management mode in different degrees. In terms of student selection, curriculum setting, practice requirements and management mechanism, there is a certain gap from the requirements of the Ministry of Education on the training of full-time professional degree postgraduates, which is reflected in:

2.1 The lack of practical and application ability inspection in the selection process

Post-graduate re-examination is an important process of student selection, the two types of degree training objectives are different, in fact, the content of the re-examination is different, for professional degree postgraduates, it is more to reflect the application ability of professional knowledge. However, according to the detailed rules for re-examination published by each school, there is basically no relevant assessment design in the actual re-examination content. The re-examination to the final admission result even dwarfs the admission standards and requirements of professional degree graduate students. This traditional re-examination method ignores the inspection of practical application ability of professional degree graduate students, and the selection criteria of students is not conducive to the later training of professional degree graduate students.

2.2 “Homogenization” of curriculum Settings and teaching methods

Due to different training goals, the curriculum Settings of professional graduate students should be different from that of academic graduate students, and should reflect the curriculum Settings based on professional knowledge learning and oriented to the improvement of practical ability. However, the curriculum Settings of professional degrees in most colleges and universities do not meet the needs of social and vocational knowledge structure. Secondly, in terms of course teaching methods, the teaching methods are mainly lectures, and the teaching objects are both academic and professional postgraduates, and the teaching contents tend to be “homogenized”. Moreover, the teachers lack the knowledge of application and practice, and the teaching contents tend to be theoretical.

2.3 The role of graduate practice bases to be improved Universities generally improve

The conditions for the training of professional degree postgraduates in accordance with the requirements of the Ministry of Education, and have built a certain number of graduate practice bases at different levels, but from the actual operation effect, they can not meet the actual needs of full-time professional degree postgraduates. Practice teaching is still a weak link in the training of full-time professional degree postgraduates. According to the survey report on the quality of graduate training in Jiangsu Province in 2013, nearly half of graduate students believe that practical training needs to be improved.

In addition, in terms of base construction, it is reiterated that the phenomenon of underreporting construction is widespread. After the application, some practice bases have actually not assumed the role of their graduate practice bases, and some have become “zombie” bases. For example, in the construction of graduate practice bases in one province, more than 6,000 graduate workstations have been set up by October 2024. With the rapid development of the number and scale, the problems existing in the operation and management of graduate workstations have gradually emerged over time. Some enterprises have limited production scale and cannot provide the research platform needed to meet the basic technology research and development. In order to meet the changes in social demand, some enterprises have changed their business model, deviated from the subject field of graduate training in cooperative universities, and do not have the basic conditions for joint graduate training. In the past five years, the education department of the province has carried out the assessment of the graduate workstations that have completed the construction period. Through two rounds of expert review of materials and field visits, nearly 1/3 of the assessment failed or gave up the assessment.

2.4 The external tutors in the dual tutorial system do not play their due role

According to the Ministry of Education on the training of full-time professional degree postgraduates requirements, in order to improve the effect of practical ability training, the implementation of the internal and external dual tutorial system, with the internal tutors as the main, the external tutors participate in the practice process, project research, thesis and other links of guidance. However, under the dual tutorial system model, the common reality is that there is a lack of effective division of labor and cooperation between tutors inside and outside the school, the management mechanism of students in the practice base is not perfect, the responsibilities and rights of tutors are not clear, the enthusiasm of tutors outside the school to guide the practice of graduate students is insufficient, the importance of the practice of tutors inside the school is not high, and the dual tutorial system does not really play a complementary role.

3. The practical ability training countermeasures of full-time professional degree postgraduates

As a local comprehensive university, Jiangsu University has enrolled a total of 11,000 full-time professional degree postgraduates in the past five years. According to the requirements of the Ministry of Education and Jiangsu Province on the training of full-time professional degree postgraduates, Jiangsu University has constantly explored what kind of people to train and how to train people-oriented education mission, and actively built a quality assurance system for the training of full-time professional degree postgraduates. The university has obtained some experience and results in the training of full-time professional degree graduates in practice.

3.1 To carry out the evaluation of training conditions for professional degree postgraduates to establish a

Sound regular evaluation system, for the practice of quality assurance is not in place, can not meet the requirements of practical training conditions, especially the practice time can not be implemented to resolutely rectify until the suspension of recruitment. With the continuous improvement of the social recognition of full-time professional degree postgraduates, the number of applicants for professional degrees has exceeded the academic type. In the process of reexamination, it is necessary to strengthen the assessment of professional aptitude, select tutors with practical guidance ability to participate in the re-examination interview, formulate the re-examination content and re-examination methods different from academic postgraduates, and increase the weight of the practical ability assessment results. From the source of students for the training of full-time professional degrees to select a good seedling.

To carry out a survey on the training quality satisfaction of full-time professional degree postgraduates, and evaluate the practical teaching quality of graduate students from the perspective of students' perception. The project declared by the university, “Evaluation Research on the quality of education Service of Full-time Professional degree Postgraduates based on students' perception”, has been funded by the Chinese Academic Degree and Graduate Education Association. The purpose of this project is to evaluate the various elements of the training of full-time professional degree postgraduates in the school from the perspective of students, so as to adjust the weak link in the training quality system of full-time professional master at any time.

3.2 Practical application-oriented curriculum system The curriculum

Of full-time professional degree postgraduates should be practical application-oriented, with the improvement of comprehensive literacy and applied knowledge and ability as the core, and adapt to vocational needs as the goal. The teaching content should focus on cultivating students' awareness and ability of researching practical problems. Social resources should be used to further improve the quality of postgraduate courses, strengthen the close connection between theoretical knowledge and social production practice, invite all disciplines to hire experts from outside the university to offer and teach postgraduate courses, and build a curriculum structure system that combines theory and practice.

Jiangsu University has deepened the reform of the training of professional degree postgraduates, such as strengthening the teaching of experiment courses, setting up wide-aperture open public experiment courses, and strengthening the training of postgraduates' practical ability; Add production practice links, through the enterprise or public platform of product design, processing, testing, etc., to strengthen the engineering consciousness of graduate students. We should increase the funding for postgraduate research projects, actively organize postgraduate students to participate in various science and technology competitions, and strengthen their awareness of innovation. In addition, through the “three excellent and one supplement” mechanism, that is, by giving priority to research projects, giving priority to awards, recommending bases for employment and providing economic subsidies, graduate students are encouraged to carry out research in industry-university-research bases in combination with the actual engineering, which has better changed the previous phenomenon of “talking on paper” and achieved a lot of results. Such as the power engineering discipline and engineering thermal physics professor Li

Detao guidance of graduate students in Wuxi oil pump nozzle research base combined with thesis topic research, has won 4 provincial excellent doctoral dissertates.

3.3 To practice base as a platform, strengthen the joint training of practical ability inside and outside the school

For professional degree master students, practical teaching is the inevitable way to improve the practical ability of graduate students, practical teaching can effectively combine professional knowledge and professional practice, through the practice teaching base platform jointly established outside the school, strengthen the training of their practical work ability and professional ability. On the one hand, the postgraduates apply their theoretical knowledge to the practical practice of the professional base, understand the frontier trends of the relevant technical fields of the major, and can enhance their work ability and practical innovation ability; On the other hand, with the continuous development of China's economic transformation and upgrading, cooperation units inside and outside the university can make good use of complementary advantages, carry out multi-form cooperation to solve the technical problems encountered in practice, promote the two sides of industry-university-research cooperation and the upgrading of scientific and technological innovation, and further improve the scientific and technological competitiveness and innovation ability of enterprises.

Jiangsu University and enterprises (industry) to establish a sound practice base management system and operation mechanism, on the basis of complementary advantages and win-win cooperation, clear the responsibilities and rights of both inside and outside the school, formulate the practice content and requirements of the practice base of graduate students, and strengthen the evaluation of practice assessment, to ensure the quality of practice of graduate students. On the basis of actively integrating the on-campus practice and experiment platform, the university strives to strive for off-campus resources, vigorously carries out the construction of industry-university-research bases, relies on the college to actively contact and negotiate with local and enterprises, creates a joint training base for graduate students, and jointly declares and identifies the provincial and university-level graduate workstations with enterprises with research and development capabilities. Encourage and require graduate students to enter the enterprise to conduct research topics, with the help of practice platform, so that graduate students better meet the actual engineering or production, can solve the actual problems of enterprises.

3.4 Improve and implement the “double tutor” system

Because the full-time professional degree graduates are recruited for fresh graduates, most of them do not have the actual professional ability, especially the need for outside tutors to give practical guidance. Therefore, employing off-campus tutors to cooperate with on-campus tutors to carry out professional practice guidance, and improving “double tutors” is a key link in the full-time professional degree training mode of colleges and universities.

First of all, the establishment of a sound dual tutor selection and employment system. The selection and recruitment of external tutors mainly consider the industry experience, professional skills, project results and other factors that can reflect their ability to solve practical problems. Jiangsu University takes the appointment of off-campus practice instructors for graduate students as the starting point, gives full play to the leading role of the “Provincial Industry Professors” and other school-enterprise cooperation talents project, and employs more than 1900 off-campus practice instructors from the support units of the provincial, university and college practice bases, providing conditions for the effective development of industry-university-research cooperation and practical training for graduate students.

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