

Study on Dual-Tutor System of Postgraduates

CONG Bo^{[a],*}

^[a]Northeast Petroleum University, Daqing, China.
*Corresponding author.

Received 8 January 2015; accepted 10 March 2015
Published online 26 March 2015

Abstract

Due to the expansion of postgraduate enrollment scale in recent years, the traditional single-tutor system has been unable to meet the needs of higher education and social development. In order to ensure the quality of graduate education and cultivate high-tech talents with innovation ability, dual-tutor system of postgraduates arises at the critical moment. This article mainly introduces the connotation of dual-tutor system, its practical significance and value, and the important principles to be obeyed in the process of implementation.

Key words: Dual-tutor system of postgraduates; Talent-training mode; High-tech talents; Innovation ability

Cong, B. (2015). Study on Dual-Tutor System of Postgraduates. *Higher Education of Social Science*, 8(3), 23-26. Available from: URL: <http://www.cscanada.net/index.php/hess/article/view/6509>
DOI: <http://dx.doi.org/10.3968/6509>

INTRODUCTION

Ever since the establishment of the academic degree system in China, about 490,000 PhD graduates and 4,260,000 postgraduates have been cultivated for the past thirty years, and about 50% of them were educated in the previous five years (Du, 2014). But it is important to note that although Chinese universities and research institutes have been expanding the postgraduate enrollment scale and the number of graduate students has increased rapidly, the quality of graduate students, namely the cultivation of high-level talents in China is far less than the developed countries.

There is no doubt that quality is the key to graduate education and the tutors' qualification is the direct cause that affects the quality of graduate education. Tutorial system has been an effective and practical education system since it was first adopted in the 15th century. This system is not only an important bridge of communication between tutors and students, but also helps tutors to guide each student according to his aptitude. But in recent years, the rapid expansion of postgraduate education in China brings huge pressure to many tutors, who don't have enough time to instruct the students, let alone implement high-quality education. Therefore, it's obvious that single-tutor system can't meet the demands of the development of society and higher education any more. To solve the above-mentioned problems, *The Guidelines of the National Medium- and Long-Term Plan for Education Reform and Development* was formulated and implemented in 2010, in which it was presented clearly that we should vigorously push forward the reform of postgraduate cultivation mechanism and establish dual-tutor system as the leading tutorial system to implement innovation in postgraduate education¹.

1. THE CONNOTATION OF DUAL-TUTOR SYSTEM OF POSTGRADUATES

As a main tutorial system in the western countries, dual-tutor system was first applied to the undergraduate education in China. Afterwards Shanghai Jiao Tong University, Shandong University, Nankai University and some other colleges and universities began to apply it to postgraduate education in the 20th century. Dual-tutor system refers to a tutorial system in which a student is instructed by both intramural and extramural

¹ *The Guidelines of the National Program for Medium- and Long-Term Educational Reform and Development(2010-2020)*. Retrieved from http://www.gov.cn/jrzq/2010-07/29/content_1667143.htm

academic advisors, namely theory tutor and practice tutor to complete their studies. As the leading tutor, the intramural tutor mainly helps the student to promote in theory, while the extramural tutor will give the student more instructions on project research and practice operation. In short, dual-tutor system of postgraduates is designed to absorb the experts and scholars of different areas and the professionals with rich experience to share the training work of graduate students from the university tutors².

2. THE SIGNIFICANCE AND VALUE OF DUAL-TUTOR SYSTEM OF POSTGRADUATES

2.1 Dual-Tutor System of Postgraduates Is Essential for Improving the Quality of Graduate Education

The core of graduate education is to cultivate the postgraduates' innovation spirit and innovation ability which are also the basic criteria to evaluate the quality of graduate education. However, in the traditional single-tutor system in China, tutors in colleges or universities are dedicated to teaching theories and have overlooked to improve students' social activities and the ability of practice operation. While by applying dual-tutor system, the students can not only grasp good learning methods, but also have more opportunities to take part in scientific researches and social practices, which will provide them with broader space of development. In other words, in dual-tutor system the students will be instructed by both intramural and extramural tutors who may make good use of their own advantages, that is, the intramural tutors will help the students to lay a solid foundation in subject theories, while the extramural tutors will offer the students a great many opportunities to take part in a lot of practices to promote their professional skills and comprehensive qualities, which is helpful for graduate students' future career. Therefore, the overall quality of education of the graduate students will be improved finally.

2.2 Dual-Tutor System Is the Important Measure to Alleviate the Shortage of Education Resources for Colleges and Universities

Although the continuous enrollment expansion of the graduate students is to meet the demands of the development of higher education, society and economy in China, the shortage of education resources resulting

from the expansion is very worrying. For example, at present, for some especially popular majors in colleges and universities, there is a serious lack of teachers, funding and education facilities, such as experimental instruments, materials, and even books, etc.. Worst of all, the serious shortage of education resources is likely to make cultivating high-tech talents with innovation ability become hollow promises (Wu, 2013).

Now that the lack of teachers and funding can't be alleviated in a short time, the best way to solve this problem for colleges and universities is to make full use of high-quality social resources to educate the graduate students by implementing dual-tutor system. In fact, the implementation of dual-tutor system can not only give the students more opportunities to make good use of the advanced instruments and equipment in the laboratories outside the campus, but also help them to keep abreast with the latest trends of the academic development and learn the latest research results in his field, so as to expand their horizons and optimize the knowledge structure. Therefore, dual-tutor system not only makes the high-quality social resources the beneficial supplement of education resources in colleges and universities, but also changes the uniformity of the traditional training model of postgraduates, which is beneficial to the cultivation of different types of high-tech talents.

2.3 Dual-Tutor System Is the Guarantee for the Production-Teaching-Research Combination

It is indisputable that the cooperation of enterprises, universities and scientific research institutions can bring prosperity to the country. But in the traditional single-tutor system, the normal communication channel between them can't be well established, not to mention making full use of different education environment and resources on and off campus, so that the Production-Teaching-Research Combination won't come true. However, by implementing dual-tutor system, the enterprises, universities and scientific research institutions can take the opportunity to obtain the respective resources that they need, realizing mutual reciprocity and getting mutual benefit. For example, apart from cultivating high-tech talents for enterprises, universities and research institutions can also provide the corresponding technical guidance or consultation on projects on the enterprises' demand to promote their development and technological progress. Likewise, enterprises can not only provide the students with off-campus practice bases, but also provide financial assistance or scientific research equipment to the university so as to lay firm foundations for the further research and long-term partnership (Xu, Zeng, & Liu, 2011). So the implementation of dual-tutor system is the guarantee for the Production-Teaching-Research Combination.

² *The comments of the ministry of education on professional degree education of full-time postgraduates.* The ministry of education research [2009] no.1.

3. THE PRINCIPLES OF IMPLEMENTING DUAL-TUTOR SYSTEM OF POSTGRADUATES

3.1 Set the Strict Criteria for Choosing the Tutors and Clarify Their Responsibilities

Firstly, the strict criteria for choosing the tutors should be set and their responsibilities should be clarified in order to ensure the effective implementation of dual-tutor system. In terms of intramural tutors, they should not only have the corresponding qualifications and titles, but also have higher academic level and teaching ability. Apart from teaching theoretical knowledge, giving guidance on the thesis, etc. the intramural tutors should also support, assist and communicate with the extramural tutors to ensure the smooth implementation of dual-tutor system. As for the extramural tutors, they ought to be knowledgeable, experienced and successful people in their field. Apart from giving the corresponding guidance on the thesis and project research, they should also help to improve the students' ability of practice and make plans for the students' future career. In short, both the intramural and extramural tutors should be qualified and competent talents with virtues. Only in this way can the tutors fulfill the duty of guiding and cultivating the students.

We take Northeast Petroleum University, China as an example. We make up a complete management rules for Dual-tutor System (applied to Northeast Petroleum University), which includes some details:

3.1.1 Demands of Dual-Tutors

On principle, the intramural and extramural tutors should engage in the same research direction or have the same research project. And demands for the extramural tutors should be as follows:

- a) One who should own advanced academic titles;
- b) One who should own solid theoretical bases and professional knowledge system, be keen in directing the postgraduates, and have enough time;
- c) One who should have rich research experience and ability, possess research projects that can be used for the postgraduates' professional study, and own some research conditions and funds guarantees;
- d) One who should possess advanced academic achievements, publish some important essays, and should be the experts in the field;
- e) One who have meticulous scholarship, be honest and upright, be models of virtue for others, and be healthy;
- f) One who should be familiar with academic degree regulations, and assure the cultivation quality of the postgraduates.

3.1.2 Selecting and Appointing of the Extramural Tutors

a) Anyone who wants to be an extramural tutor should apply for it personally after he or she examines the

conditions and demands of the extramural tutors. And the authority of the university will check the applications and approve or not.

b) The application and permission are scheduled in October every year. The university authority will appoint the qualified tutors and grant the certificates.

c) The adjunct professors and the experts who have been appointed as doctoral supervisors can be appointed as extramural tutors during the employment term.

3.1.3 The Duties of the Dual-Tutors

The intramural and extramural tutors should cooperate closely and direct the postgraduates together. The dual-tutors help the students make the individual training plans, get the necessary credits, choose the thesis topics, write the opening reports for the graduation papers, write the thesis, make the thesis defense and engage in any professional skill assessments together. Meanwhile, the dual-tutors should be in charge of daily management and ideological education of the students.

3.1.4 Review the Qualification of the Extramural Tutors

a) The university authority will review the qualification of the extramural tutors every three years and will disqualify the ones who don't prosecute their responsibilities and couldn't assure the cultivation quality.

b) The extramural tutors, if not enroll postgraduates for three years, is considered to cease the certification as tutors automatically. And they must apply to the positions again if they want to reinstate the positions.

3.2 Set Up the Evaluation System and Perfect the Management System

The cultivation of postgraduates is a dynamic process, so a reasonable evaluation system and perfect management system should be established to regulate and supervise dual-tutor system in the implementing process. First of all, the evaluation system ought to be set up based on the academic and professional standards. That is, the training targets, links and the tutors' performance should all be evaluated and traced duly and effectively in the whole training process by using the proper assessing methods. Secondly, the comprehensive management system should be scientific and practical, and all the links have to be managed and supervised before, during and after the implementation of dual-tutor system. In conclusion, the reasonable evaluation system and perfect management system are the foundations for the smooth implementation of dual-tutor system, for these systems can not only effectively arouse the tutors' enthusiasm of guiding the students, but also make the tutors strict with themselves in the whole training process. In the meanwhile, the reasonable evaluation system and management system enable the tutors to enhance the sense of social responsibility, and take into consideration the

requirements of the state and society for high-tech talents in the whole training process of students.

We take Northeast Petroleum University, China as an example. During the course of implementing dual-tutor, we have set up a unique system—"ONE-TWO-THREE-FOUR Management System". Specifically speaking, "ONE" refers to "One aim: cultivating the postgraduates' innovative and practical ability. "TWO" refers to two kinds of tutors: one is the tutors for guiding majors—they take part in the whole process of postgraduates cultivation because they would be employed for three years, and they can guide more students at the same time—the other is the tutors for papers—they mainly guide the gradual papers of their students because they are employed for only one year. "THREE" refers to three kinds of postgraduates: one is the specifically designated students in the state plan enrollment—they are enrolled alone after the postgraduates re-examinations with the same test standards for the dual-tutor system, which is allowed by Heilongjiang Province, China—another is the selected students at medium term—some second grade students are selected to the enterprises for some research demands or producing demands, meanwhile they study the materials for their gradual papers and learn the practical ability—the other is short-time internships—some students go to the enterprises to learn the practical skills shortly. "FOUR" refers to four items of works: for improving the theses—the students can take in the excellent out-school sources about science and research programs to complete and improve the theses and enhance the cultivation of the ability during the study of the theses; for offering the courses—inviting the experienced engineers to offer courses for the postgraduates; for academic exchanging—to encourage the regular academic seminar and exchange between the tutors and students regarding the interested research topics to create academic atmosphere; for researching—to promote cooperation and research results between the colleges and the enterprises through cultivating the students, cooperating the research projects and integrating resources.

All the postgraduates liked the dual-tutor system. In March, 2014, we invited 8 engineers offered a course "Frontier Technology on Drill", which was welcomed by the students warmly. 8 engineers taught the part that they were best at, which impressed the students greatly.

In order to let the theses satisfy the demands of the society improvement, our university makes some policy about the these criteria. We want to monitor and manage all the parts of writing theses: Thesis proposal, intermediate inspection, blind examining, making open reply, etc.. We emphasize that these should arise from the true research projects. We also stress the practical usages of the theses.

After the students having written the theses, the theses should be examined by at least 2 experts, one of which should be a practical expert from the field. The postgraduates should make open reply in the face

of The Defense Committee, which is made up of 3-5 professionals, at least one of whom be the expert in the field.

3.3 Give More Support to Dual-Tutor System to Ensure Its Sustainable Development

As a kind of innovative talent-training mode, dual-tutor system is helpful to break down the barriers between enterprises and colleges or universities and to integrating high-quality educational and social resources. It will promote Production-Teaching-Research Combination and enhance the comprehensive national strength of China. It is also beneficial to improve the quality of higher education and meeting the social and economic development's needs for high-level talents of all kinds. However, there are many problems to be solved in the implementing process of dual-tutor system, such as, how to overcome the differences between enterprises and colleges or universities, how to reduce the cost of hiring the extramural tutors, etc. Therefore, the successful implementation of this new training mode needs the participation and cooperation of enterprises, research institutes, colleges and universities. Especially the government, which is mainly in charge of education, should offer greater support in funds, policies and many other aspects to ensure the sustainable development of dual-tutor system, so that the quality of high education in China could be improved greatly.

CONCLUSION

To sum up, as a kind of innovative talent-training mode, dual-tutor system makes the training process of postgraduates more integrated. Under the co-guidance of the intramural and extramural tutors, postgraduates' innovation ability and their ability to integrating theory and practice can be promoted greatly. In a word, dual-tutor system could not only help to improve the quality of postgraduates' education, but also meet the demands of China for high-tech talents with innovation ability. Therefore, dual-tutor system of postgraduates is a training mode which is suitable for popularization and application in colleges and universities throughout China.

REFERENCES

- Du, Z. Y. (2014). *The of ministry education: Academic degree authorization will remain basically stable*. Retrieved from http://edu.gmw.cn/2014-10/20/content_13585316.htm
- Wu, T. J. (2013). Practice and innovation on dual-tutor system in local normal universities—Take Xinyang normal university as an Example. *Journal of Henan Institute of Education*, (5), 169-170.
- Xu, R., Zeng, B. C., & Liu, H. Y. (2011). On the cultivation mode of postgraduates through production-teaching-research combination. *China Collective Economy*, (36), 184.