



Chinese Postgraduate Education Reform: Transition From Academical to Professional

CHEN Qiao^[a],* DENG Lei

^[a]Faculty of Education, Southwest University, Chongqing, China.
 *Corresponding author.

Received 12 September 2014; accepted 22 December 2014
 Published online 26 January 2015

Abstract

A transition from leaping type growth to stable development has happened during the last 10 years of Chinese postgraduate education, but the growth of scale is still rising rapidly. Expansion of scale brings up a series of problems need to be solved, in which the most prominent problem is excessively focusing on academical postgraduate education and ignoring the training of professional postgraduate at the same time. This paper is aimed at clarifying the development trend of postgraduate education in China from academical to professional, and tries to explore the direction for further reform.

Key words: Chinese postgraduate education; Academical type; Professional type

Chen, Q. (2015). Chinese Postgraduate Education Reform: Transition From Academical to Professional. *Cross-Cultural Communication*, 11(1), 1-5. Available from: <http://www.cscanada.net/index.php/ccc/article/view/5995>
 DOI: <http://dx.doi.org/10.3968/5995>

INTRODUCTION

Since January 1981, the Regulations of the People's Republic of China on Academic Degrees implemented which has illustrated the autonomous development of Chinese postgraduate education started. For more than 30 years, the Chinese postgraduate education has made a series of remarkable achievements, and the scale of postgraduate education has reached the leading level in the world because of the enrollment expansion for many years. From 1990 to 1997, the average annual growth rate of doctorate awarded in the United States, Britain, Germany, Japan and India respectively are 2.6%, 4.2%, 1.1%, 3% and 0.8%, but in China, there were 2,127 doctor in 1990, and the scale of doctorate awarded increased to 6,793 in 1997, which average annual growth achieved 18 percent. By 2003, in total there were nine hundred and twenty-six thousand people awarded a graduate degree, compared with 1982, the amount of enrollment of postgraduate student has increased by twenty-threefold, the number of undergraduate students increased by 25.2 times, and the degree-conferring number rise 24 times. After this, the scale of Chinese postgraduate education is continued increasing. The total number of recruiting postgraduate student has reached more than five hundred and sixty thousand people, as showed in Table 1 and Table 2, China becomes the real superpower in postgraduate education training.

Table 1
The Number of Enrollment Graduate Student in China in 2005-2011

Years	Units: person		Doctor		Master		
	The total number of doctor and master	Total	Colleges and universities	Research institutions	Total	Colleges and universities	Research institutions
2005	36,4831	54,794	48,824	5,970	310,037	299,583	10,454
2006	39,7925	55,955	50,078	5,877	341,970	331,489	10,481
2007	418,612	58,022	51,916	6,106	360,590	349,778	10,812
2008	446,422	59,764	53,595	6,169	386,658	375,527	11,131

To be continued

Continued

Years	Units: person		Doctor		Master		
	The total number of doctor and master	Total	Colleges and universities	Research institutions	Total	Colleges and universities	Research institutions
2009	510,953	61,911	55,472	6,439	449,042	437,328	11,714
2010	538,177	63,762	57,392	6,370	474,415	461,815	12,600
2011	560,168	65,559	58,882	6,677	494,609	482,195	12,414

Note. Search from: <http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s4958/list.html>

Table 2
The Growth Rate of Enrollment Graduate Student in China in 2005-2011

Years	Growth rate	Doctor	Master
2005-2006	9.07%	2.12%	10.30%
2006-2007	5.20%	3.70%	5.44%
2007-2008	6.64%	3.00%	7.23%
2008-2009	14.46%	3.60%	16.13%
2009-2010	5.33%	2.99%	5.65%
2010-2011	4.09%	2.82%	4.26%

Note. Search from: http://www.gov.cn/gzdt/2012-08/30/content_2213875.htm

In general, the achievement of our country postgraduate education is obvious to all. Because of the increasing investment in science and technology funding, continuing to promote the popularization of higher education, strong market demands for high-level personnel, being based on the rapid enhancement of our national economic power, and the government policy which being as the driving power contribute to the rapid development of postgraduate education jointly. However rapid expansion still brings many deficiencies at the same time, in which the most prominent problem is excessively focusing on academic talents education at the same time ignoring the training of professional talents. In order to further improve the postgraduate education system, and train more and better high-quality talents, it is imperative to transform the main emphasis of Chinese postgraduate education, and needs to complete the transition from academic to professional.

1. ENLARGING THE SCALE OF PROFESSIONAL DEGREE AND ENRICHING PROFESSIONAL DEGREE EDUCATION LEVEL

For a long time, the cultivation of postgraduate education in China is training the “academic” talent which being as the main purpose. In order to match the demands of high-level and professional talents, in mid and late 1980’s, a fringe of postgraduate cultivation units began to explore the cultivation of applied masters and professional masters. But overall, the main body of postgraduate

education is still a degree and diploma education which is aim of cultivating postgraduate students for the “academic”. Taking doctor cultivation as an example, there awarded 35,628 doctorates in 2006, including 394 professional degrees, only 1.1 percent of the total. At the end of 2006, the ministry of education and the academic degrees committee of the state council approved for training professional postgraduate degree units in 402, there are 610,000 persons in the admission of professional postgraduate degree and 100,000 persons in learning the professional postgraduate degree through a variety of ways like full-time or on-the-job learning. In general, the setting range of professional degree, the scale of enrollments in professional degree and the proportion of professional degree is significantly lower. Although the professional degree education has a great development in recent years, but, with the further enrollment scale expansion of postgraduate education and the continued demands for compound and applied talents, there is still a gap between the postgraduate education scale and the actual demands.

Therefore, completing the transformation from academic to professional on the training scale will be the top priority in the reform of postgraduate education in China. At present, the number of fresh students for professional degree in our country accounts for only about 25% of the total number. According to the data from the United States department of education National Center for Education Statistics (NCES) shows that, since 1980’s, the United States has named more than 660 kinds of master degrees, and the master’s program has involved more than 2,000 different subject areas. Of all the master degree, there is 85 percent the application direction of master degree, only 15 percent purely academic master degree, in which the science and engineering degrees accounted for a quarter of the whole degree awarded in the United State, and the enrollments in setting are widely distribute in all kinds of professional school. In order to gear to the international standards and response to the society demands effectively, in Chinese postgraduate education, there should reduce a reasonable quantity academical degree education training in the future, and improve the professional degree education proportion gradually.

Second, enriching the setting level of professional degree, combining the key construction with the classified development, building a multilevel and comprehensive

professional degree postgraduate education. At present, the professional degree postgraduate students enrollments are focussed on research universities basically which comprehensive strength is relatively strong. In the theory, the professional degree talents cultivation and academic degree talents training both are the two important aspects of cultivating high-level talents, but there is a tendency that our universities generally value academical than professional in the implementation process. In recent years, the government has highlighted the strategic position of professional degree education in higher education and the development of economy and society by arranging the institution and designing the top layer. At the same time, the market economic development also requires training and relying on a large number of application-oriented high-level specialized personnel. Therefore, we should highlight the important position of professional degree education in the strategic orientation, system designing and the deployment. Our government should increase investment in construction funds, provide the supporting conditions and institutional guarantees for school development, especially for the school that has its local characteristics, industry characteristics and its own school-running mode features. On the one hand, it has the advantages of innovation that the research university should focus on academical degree while construct high-level professional degree education emphatically; on the other hand, local colleges and universities hold the academical degree, at the same time, should consider own capacity and conduct professional degree education with own features actively. Local government needs to provide appropriate policy support combined with local demands and the characteristics of school, invests in school construction hierarchically and systematically in order to show the features and school-running orientation.

2. INCREASING THE FUNDS INVESTMENT, AND IMPROVING THE PROFESSIONAL DEGREE EDUCATION CULTIVATION QUALITY

On the 'Postgraduate training pattern reform in China' high-end forum in 2009, there issued 'the quality of postgraduate education' subject investigation report formally which is finished by the scholars from Wuhan university and Wuhan science and technology university. In this report, 62.7% of surveyed postgraduate students thought that the quality of postgraduate was lower slightly or significantly than five years ago, only 37.6% of surveyed thought the existing teaching conditions can match the demands of recruit postgraduate students scale year-by-year expansion, and there are 60.7% of surveyed postgraduate students believing the enrollment scale of colleges and universities should be compressed

or decreased, it is undeniable that there is a decline in the quality of postgraduate matriculate. On the one hand, with the rapid enlargement of postgraduate admission scale, the investment from government for education has a long stagnation; on the other hand, the teaching conditions of postgraduate education in colleges and universities and the development speed of faculty can not consistent with the scale enlargement. These are the reasons that made quality of postgraduate education declined. According to the current development trend in postgraduate education, there needs a reform that the development of postgraduate education in China should be changed from expansion to improve the quality. Because cultivation of professional degree is much more applied, it asks for improving higher quality.

First of all, government should increase the investment and provide policy support for postgraduate education, in order to attract more excellent talents. According to the data that from Wuhan university subject investigation report 'quality of postgraduate education' in 2010, 84.8 percent of Chinese postgraduate students think that the tuition is a little expensive or too expensive. In fact, the Chinese government education funds investment has been in a low level over the years. At present, the global average of financial education funds investment proportion of gross domestic product (GDP) is 5% all over the world, some developed countries are more than 10%, a lot of developing countries are also achieved the level from 5% to 6%, while the investment level in China has not been able to reach 4% for a long time. According to the figures published by the National Development and Reform Commission (NDRC), the financial education funds investment is reached 4% finally until 2012. There is only less than a third of postgraduate students can get free education qualifications, most of the rest postgraduate students have to pay the high tuition fees in 7000 to 10000 yuan a year in China. In 2010, China per capita national income has reached \$1740 in which the per capita income of the urban households is 21,033 yuan, the average incomes of rural residents are only 5,919 yuan. In other words, for most Chinese families, supporting a child who study for postgraduate degree at his own expenses is a heavy burden, and the vast majority of rural households are simply unable to afford this expenditure. The lack of education investment and high learning cost will affect the choice of a part of high quality talents, which resulted in a decrease in the level of recruiting students of postgraduate education. Therefore, if we want to improve the quality of postgraduate education in China, raising the education investment firstly. On the one hand, government should increase the funds investment; on the other hand, colleges and universities should also adjust funding system of postgraduate. In order to increase funding and improve the postgraduate students research level, we should transform present system into new united government, schools and

mentors tripartite funding system which makes scientific research as the guide, mentor research project as the backing-up rather than depending on national funded simply.

Secondly, there should also be improved the student-faculty ratios in postgraduate education. In 1981, there were a total of 151 units became the first group of doctor degree-conferring unit, and it increased to 346 units in 2007, there were 1,739 doctor's degrees. The Chinese doctorate awarded numbers exceeded South Korea in 1996, exceeded India in 2000, exceeded Britain and Japan in 2002, and exceeded Germany in 2005, there are cumulatively 280,000 persons who be gave the doctor degree in China by 2008. In terms of the doctor quantity, China has entered the world's superpower of doctoral postgraduate education. But the doctoral mentor's scale has not been risen correspondingly with the expansion of postgraduate education. In the next 13 years after 1981, the state council and the academic degrees committee of the state council examined and approved 8,043 doctoral mentors. In 1981, there was 12.9% of the doctoral mentors whose age is under 55 years old, while the number reached 70.9% in 2006. Decentralized the right of approved doctoral mentor qualification in 1995, in 10 years from 1997 to 2006 the number of doctoral mentor expanded nearly 2 times. Due to the larger increase about the number of doctoral postgraduate students, the student-faculty ratios decreased obviously. According to the statistical data from the 'Doctor Quality report in China 2010', Chinese student-faculty ratios of doctoral education is far below the level of developed counties in the world, and more than half of the doctoral mentors' guidance frequency is no more than twice a month, and this situation in the humanities (57.8%) and management disciplines (55.2%) are prominent particularly. It influenced the training quality of doctoral students seriously. Therefore, there should be improved in the student-faculty ratios, the efficiency of postgraduate education, be attracted high-level teachers, and be strengthened the communication and guidance between mentors and students to improve the quality of postgraduate education in Chinese postgraduate students cultivation.

3. IMPLEMENTING THE MULTIVARIATE CULTIVATION MODE, AND PAYING ATTENTION TO THE PRACTICE ABILITY IN PROFESSIONAL DEGREE EDUCATION

In the present mode of postgraduate students cultivation in Chinese colleges and universities, both the academical degree and professional degree postgraduate student cultivation do not highlight their own characteristics;

there are no clear differences in training scheme, setting curriculum, training models and some other fields. That makes the 'two-way shortcoming of talents training' result, which means that the academical talents are lack of adequate academic training in cultivation mode, and the professional postgraduate students are lack of practicing. The questionnaire survey showed that there are 51.2% of doctoral mentors and 67.2% of master mentor being in favor of this claim. In my opinion, adopting the diversified training mode and focusing on practical ability training are not only the demands that promoting the professional degree education further development, but also the necessary means promoting the academical degree education development effectively.

First, the distinction between them is not obvious although there are academical and professional degrees in theory for current postgraduate education, the training mode is relatively single and the requirement of 'theory' and 'application' is such an ambiguous one. In order to solve this problem, our suggestion is drawing lessons from advanced experience of foreign postgraduate education, implementing the diversified training mode. On the one hand, the main cultivation mode of training academical postgraduate students could draw lessons from teaching style which is the main training mode of academical; controlling the enrollment quality of postgraduate strictly, setting curriculum should pay attention to the combination of basic theories and education goals, using teaching methods which stimulated students' self-study by discussing, improving the research ability by taking parts in practice projects, managing research process of postgraduate students by using laboratory, encouraging students to attend in academic conferences, and supervising quality of postgraduates by the strict supervision in order to obtain high-level academical talents. On the other hand, professional degree can use these several training mode at the same time: (a) the mode of apprentice, represented by Germany, emphasizes individual ability of mentor in cultivation postgraduate students and postgraduate students' direct practice of research and teaching; (b) the specialized type represented by the United States, pays attention on the diversification of training types and the standardization in the cultivation process, adopts flexible and elastic educational system, manages organization normatively, sets curriculum with outstanding professional characteristics, and 'steering group' trains students with industrial and commercial enterprise jointly. (c) the collaborative training model which is ubiquitous in the western countries. It emphasizes getting a degree by researching and studying courses, takes education type of wide-in and sever-out, focusing more on ability training than on teaching materials, attaches great importance to the research methods and first-hand investigation and study, adopts information teaching management system and flexible credit learning

arrangements, strengthens the university and enterprise Joint-Supervision. University can use these different types of training modes according to their own conditions and the independent professional degree, and explore the creative professional degree postgraduate training mode with own characteristic actively.

Secondly, professional degree postgraduate education should pay attention to the cultivation of practice ability and promotes postgraduate students' innovation ability especially. Professional degree designed to train applied talents, should emphasize the study and discussion of related courses and cases, improve students' ability of solving practical problems, as for the academical and knowledgeable of course study and the theory of dissertation can decrease the requirement properly. There should change concepts, strengthen the objective orientation, set up a new mode of professional degree postgraduate education and corresponding course system, teaching method, dissertation standard, and assessment method, increase the proportion of practice teaching in education process firstly. Then, there could implement 'double tutorial system' which trains postgraduate students by united industry and university, introduce high-level and extensive experience professionals come from practice areas for half of professional course teaching to carry out the innovation plan of professional degree education and match the needs of applied talents from development of national and social economic.

CONCLUSION

With development of economic and social in China, the demands of both scale and quality for high-level and applied talents are increasing and improving, and Chinese government has also made some positive efforts to solve this demands. According to the latest Chinese postgraduate education reform, after 2009, except the master of business administration (MBA), master of public administration (MPA), and a few other professional unsuitable degrees for graduate study, there enrolled full-time training professional postgraduate students. The postgraduate student education in China will implement the strategic shift that changed from cultivating academical talents mainly to cultivate professional talents preferentially in 2015, the level of master degree category will be doubled. In 2020, the professional degree and academical degree will reach 1:1 level basically, and implement the transition from cultivating the academical mainly to cultivate

academical with professional. At that time, professional degree education system will be improved basically, and the structure of postgraduate education will further be optimized, training quality will be increased obviously. Overall, the transformation reform of Chinese postgraduate education from academical to professional has promoted gradually, and will develop further. But at the same time we should also focus on a new problem that the rationality of government promoting the development of professional degree. At present, the number of Chinese professional master degree has increased to 36, and number of doctor have increased 5. There are 19 species new professional postgraduate degrees in 2010 what is the equivalent of the past 30 years. Western countries have a long history of higher education, and it is different from China. Setting up professional postgraduate degree in China is not according to the characteristic of degree formed naturally, but it is a form of 'menu' from government. This professional degree establishment and development of government leading remain to be further observation and verification of its rationality and feasibility.

REFERENCE

- Chen, H., & Hu, T. Q. (2010). Professional degree education: Problems and solutions. *Journal of Zhejiang Normal University: Social Sciences*, (2), 88.
- Chen, X. F., & Jin H. M. (2006, March 23). *The quality, training mode, and problems of graduate education in China*. Retrieved from <http://www.china.com.cn/chinese/zhuanti/05jybg/1163249.htm>
- Huang, B. Y. (2007). Reflections on the development of professional degree education in China (part 2). *Academic degrees & graduate education*, (6), 4-8.
- Li, Y., & Chen, X. F. (2008). Reflection on the scale expansion of graduate education in China. *Higher education research*, 16.
- Wang, B. Y., Chen, G. P., & Qiu, J. P. (2010). Study of the quality of master's programs. *Education and Modernization*, (1), 80.
- Wang, H. N. (2008, May 21). Foreign graduate students training mode analysis and reference. *Guangming Daily*.
- Yang, D. P. (2006). *2005: China education development report* (p.19). Beijing, China: Social Sciences Academic Press.
- Zhu, J. H. (2010, Decedmber 7). *The doctor quality report in China released, faculty student ratio affected the quality*. Retrieved from <http://www.ce.cn/xwzx/kj/201012/07/t20101207 22028492.shtml>