

Research on the Graduate Education Quality Assurance Based on Disciplines

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Abstract: *By analysing the current situation and establishment of guarantee systems for the degree and graduate education quality both domestically and internationally, combined with the characteristics of the discipline and the evaluation index system, in this article, the relevant issues related to the establishment of the graduate education quality assurance system based on discipline are discussed, with the aim of contributing to the research work on the degree and graduate education quality assurance system in China.*

Keywords: *Discipline, graduate education, quality assurance*

1. Introduction

China has entered the period of rapid development in graduate education, and the scale of graduate students is constantly expanding. Therefore, ensuring the quality of graduate education has become the primary task of China's degree and graduate education. The establishment of the scientific and standardized quality assurance system is the fundamental guarantee for the sustainable development of degree and graduate education.

2. Research overview of the graduate education quality assurance system

As for the graduate education quality assurance system abroad, there is the process from theoretical exploration to practical application. Although there are different levels, stages, and scales of graduate education in various countries, many governments have realized that it is necessary to establish clearer quality assurance to meet the challenges of today's social development. In terms of policy orientation, governments of various countries have established education system inspection mechanisms ^[1] that are suitable for their own characteristics to protect their reputation. For example, for a long time, the United States has relied on private certification agencies, and educational institutions voluntarily conduct certification. The acceptability of this method has given the institution the characteristics of its public role: In contrast, the supervisory system in the Netherlands is completed under the control of the universities themselves. From the perspective of the UK's higher education quality assurance system, the self-government and autonomous management system is implemented by universities and colleges in the UK, with each institution responsible for awarding graduate degrees and setting standards and quality for its courses. In the graduate education quality assurance system in the United States, there are not only traditional self-evaluation centered on self-protection within higher education institutions, but also the evaluation of the social intermediary nature conducted by various associations, academic groups, and professional associations (mainly various academic institutions) established within higher education, as well as rankings organized by private groups, news media for universities and graduate schools, and government evaluations organized by state governments. Although there are certain differences in the quality assurance systems of various countries, there are common characteristics in terms of the framework of quality assurance, that is, quality assurance is centered around teaching institutions, driven by external inspection and supervision, and achieved through the implementation of quality assurance systems to consolidate and improve quality ^[2].

With the development of graduate education, research and practice on the graduate education quality assurance system in China are constantly deepening. Since the early 1980s, China's degree regulations have been implemented, and various degree awarding institutions have formulated and continuously improved rules and regulations related to enrollment, training and management, and degree theses, in order to ensure the quality of graduate education ^[3]. After 1998, China has initially formed the institutionalized and standardized graduate education evaluation system. With the reform of

government institutions and the transformation of functions in China, there are already professional education evaluation institutions established by more than 10 provinces and cities. However, the graduate education evaluation system cannot be equated with the graduate quality assurance system. At present, China has not truly and systematically established the quality assurance system for graduate education. Although theoretically, China is actively exploring how to establish the efficient quality assurance system for graduate students, some schools are also actively practicing and exploring the school centered quality assurance supervision system for graduate students, and taking a series of effective measures to ensure the quality of graduate education. However, overall, China is currently continuously exploring and improving the theory and practice of graduate quality assurance systems. It is necessary not only to learn from successful experiences abroad, but also to ensure consistency with internationally recognized quality to make China's higher education and graduate education align with international standards and have international competitiveness. At the same time, it is necessary to explore the graduate quality assurance system that is suitable for the Chinese characteristic based on China's own characteristics and existing educational experience. However, in terms of the current situation, China has not formed the relatively mature system and process for the graduate quality assurance system. It is necessary for government departments to establish a standardized graduate quality standard and operable process to provide quality assurance and supervision mode for each training institution. It is necessary for each training institution to establish a set of graduate quality assurance system suitable for its own characteristics and make it standardized and institutionalized [4].

3. Research on degree and graduate education quality assurance system based on discipline

It is very important to construct a degree and graduate education quality assurance system based on the characteristics of the discipline, which is in line with the characteristics of Chinese universities, including the discipline self-construction and development and the quality assurance from the discipline evaluation system.

3.1. The prerequisite for building the degree and graduate education quality assurance system is to strengthen the discipline self-construction

Discipline construction is not only the core issue of school development, but also the prerequisite and foundation for improving quality education, which can provide strong guarantees for improving the quality of graduate education. With the transformation of social and economic structure and fierce competition in higher education, the role of discipline construction has been clearly demonstrated. It is necessary for universities to cultivate talents who meet the needs of the times and strengthen discipline construction to provide the good discipline environment for graduate students. Only high-level disciplines can help cultivate high-level talents. A low level of discipline will constrain the overall development of teaching, research, and schools, affect talent cultivation, and lead to the decline in educational quality.

3.1.1. It is necessary to strengthen the construction of discipline teams and build the degree and graduate education and training system

The construction of discipline talent echelons is the key to discipline construction, so it is necessary to adhere to the people-oriented concept, vigorously strengthen the construction of teaching staff, commit to introducing high-level talents, expanding knowledge structure, enhancing team spirit and innovation awareness, and strive to build a discipline team with high professional research level, solid basic theory, and reasonable structure, thereby promoting innovation and development of the discipline. It is necessary to follow the discipline construction layout, take research directions and research topics as references, fully tap into the potential of existing discipline talents, build the high-level talent training system, formulate practical and feasible training plans based on the training capabilities of the discipline, actively carry out educational and teaching reforms, and fully play the guiding role of the discipline team in cultivating graduate students of different levels, specifications, and types [5].

3.1.2. It is necessary to improve the level of scientific research and build the platform for degree and graduate education and training

The quality of graduate education and other higher education is determined by the level of scientific research. A high-level discipline platform is the foundation, and graduate students not only need to exercise in scientific research, but also form the main force of scientific research activities. The development of graduate education is supported by high-level research projects and a certain

proportion of research funding. Without high-level scientific research, there can be no high-quality graduate education. The discipline has advantages in talent and scientific research, which lays the good foundation for cultivating high-quality talents. It is necessary to develop incentive policies to encourage cross-discipline innovation and management measures to break down discipline and laboratory barriers, and achieve resource sharing. It is necessary to fully utilize doctoral programs, postdoctoral moving stations, and various engineering technology research centers to build the platform foundation for cultivating graduate students' innovative qualities, and to include graduate practical training as the compulsory course in credits to facilitate the construction of graduate innovation bases. It can create the relaxed and harmonious research environment for the cultivation of high-level talents [6].

3.1.3. It is necessary to integrate discipline resource allocation to create the new starting point for graduate education and training

After experiencing the process from extensive unification to fine differentiation, the development of various disciplines is increasingly intersecting and integrating. New interdiscipline and interdisciplinary are constantly emerging, and knowledge is combined to form the development pattern of interdisciplinary integration. It is necessary for higher education institutions to stand at the forefront of discipline development, solve social needs, and cultivate high-quality talents who are versatile and innovative. The reallocation of discipline resources is imperative [7]. It is necessary to continuously cultivate new growth points and development directions of disciplines, while promoting sustainable development of disciplines in innovation. The integration of discipline resources is conducive to the derivative development of interdisciplines in practice, and the innovative characteristics of interdisciplines can cultivate the scientific innovation spirit of graduate students, assist them in forming knowledge and technological innovation capabilities, and thus enable the talents trained in graduate education to better serve society. In the process of graduate education, it is relatively easy to form the new mechanism that is conducive to the development of the discipline, to create a good academic platform for the cultivation of innovative talents. In cultivating scientific innovation among graduate students, research on interdisciplinary and emerging disciplines plays the important role and significance, and interdisciplinary integration provides opportunities for graduate students to seize innovation points.

3.1.4. It is necessary to attach importance to the quality of talent cultivation and create the academic atmosphere for degree and graduate education and training

There must be the strong academic atmosphere in cultivating first-class graduate students. It is necessary to regularly conduct academic exchanges within the discipline, encouraging students to participate in various academic activities to enable graduate students to understand the cutting-edge work in their field, broaden their horizons, and broaden their knowledge. It is necessary for discipline mentors to guide students to pay attention to the forefront of the discipline and research hotspots, encourage the discipline to invite renowned experts and scholars to hold high-level academic conferences, and encourage graduate students, especially doctoral students, to attend large-scale, high-level domestic and international academic conferences. It is necessary to establish the graduate scholarship system and increase funding and policy support for excellent papers, especially those participating in the national selection of excellent hundred doctoral papers. It is necessary to strengthen academic requirements by creating the academic atmosphere, enhance graduate students' interest in scientific research, and encourage them to sprout and improve innovative ideas [8].

Discipline is the comprehensive construction of discipline team, scientific research, platform foundation, and talent cultivation. The construction of disciplines through the scientific development concept is conducive to forming discipline advantages, conducting high-level scientific research, and forming the atmosphere for talent growth. The integration of discipline and major settings is the form of development. Therefore, it is necessary to unify the ideas of discipline construction with the scientific development concept to adapt to the development of the new situation, strengthen discipline construction to form sustainable discipline advantages, and establish the reliable degree and graduate education quality assurance system [9].

3.2. Strengthening the discipline evaluation and inspection is the guarantee for the construction of degree and graduate education quality assurance system

Discipline construction has played the important role in the construction and development of higher education institutions. As the important component of discipline construction, discipline evaluation plays the commanding and motivating role in discipline construction. The state will conduct regular

and regular evaluations, which become the necessary means to ensure and improve the quality of graduate education. The Degree Center of the Ministry of Education adheres to the principles of "objectivity, fairness, rigor, standardization, and openness and transparency" in conducting discipline evaluation work, aiming to identify the advantages and gaps of various discipline points through scientific and objective evaluation, promote discipline construction, and improve the quality of graduate training and degree awarding; It is necessary to enhance the international competitiveness of China's graduate education; It is necessary to provide information for social talent mobility, student selection of disciplines and majors, and employment; It is necessary to provide decision-making reference for the government education regulatory department ^[10].

3.2.1. Discipline evaluation is the effective guarantee for cultivating high-quality talents

The basic purpose of discipline evaluation work is to ensure the quality of cultivating high-level talents, especially graduate students, improve China's higher education level, cultivate high-level talents, accelerate national economic construction, promote scientific, technological and cultural development, and enhance international competitiveness, which is of great significance. The selection and evaluation of disciplines is also the qualified evaluation of the discipline. The evaluation results have the significant impact on the development of the discipline, which will affect the level of social reputation, the quality of student resources, and the matching of funds in discipline construction to varying degrees. Discipline evaluation can effectively promote the development of graduate education, teaching, and research activities. Talent cultivation and scientific research can be mutually beneficial and reinforcing. The cultivation of high-level talents and numerous scientific research achievements can support key disciplines, which in turn provide the foundation for high-level talent cultivation.

3.2.2. The interaction between discipline evaluation and degree and graduate education evaluation

Discipline evaluation is regarded as an important component of degree and graduate education evaluation ^[3]. The evaluation for disciplines is an important measure for implementing macro guidance and management of discipline points, and it is also an important measure to enable discipline points to gain greater vitality, motivation, and pressure in comparison and competition, and to promote their reform and development to be built as soon as possible to approach or reach international level disciplines. One of the main purposes of evaluation is to promote the adjustment of discipline structure and the enhancement of educational efficiency, improve the quality of education and scientific research level, and gradually enhance the comprehensive advantages of key disciplines in higher education institutions in terms of high-quality and high-level talent cultivation, scientific and technological innovation, and high-tech industrialization.

Degree and graduate education evaluation is the evaluation activity of degree and graduate education implemented according to certain evaluation principles and methods. It is necessary to check the suitability and effectiveness of degree and graduate education connotation construction, training quality, and relevant regulations, systems, and methods through the systematic evaluation of certain links or entire processes of the institution's degree and graduate education, and promptly identify and solve problems, so that the degree awarding work and graduate education activities meet the requirements of society. Evaluation work is conducive to promoting comparisons between disciplines. It is possible to conduct horizontal comparison and analysis through evaluation, guide the construction of relevant disciplines, increase necessary investment in certain links, support key points to avoid average investment without key points, and play the important role in monitoring the construction of academic teams, scientific research level, graduate training conditions, etc. thereby providing effective basis for improving graduate education, which is an important means to improve the quality of graduate training and degree awarding ^[11].

Therefore, discipline evaluation interacts with degree and graduate education evaluation, and discipline evaluation has the significant impact on ensuring the quality of graduate education and improving the level of degree awarding.

4. Reflections on the establishment of degree and graduate education quality assurance system

4.1. The guiding significance of the evaluation value indicators of disciplines and the establishment of degree and graduate education quality assurance system

The quality of education is the lifeline of degree and graduate education. It is crucial to establish the discipline evaluation system and carry out evaluation work based on the actual situation of each

university. In terms of establishing the evaluation index system for discipline direction, faculty conditions, supporting facilities, scientific research level, laboratory construction, and talent cultivation, the evaluation index system for discipline evaluation shares common goals with degree and graduate education.

4.2. The comprehensiveness of disciplines has led to regional imbalance in the quality of graduate education

In recent years, the management system and layout structure of higher education in China have been reformed and adjusted, there has been the trend of "comprehensive" development in higher education, and the comprehensiveness of disciplines is increasing. Due to geographical advantages and the famous brand effect of universities, the traditional advantageous discipline influence of some relatively remote areas' universities is being weakened, the number of mentors and students is gradually decreasing, and talent loss is intensifying. Degree authorization points have uneven quality, and the number of degree authorization points can be appropriately reduced through discipline evaluation to ensure fairness in the quality of graduate education and eliminate regional differences.

5. Conclusions

Due to word count limitations, the enrollment quality, teaching quality, curriculum design, thesis quality, and employment status of graduate students in graduate education in this article have not been elaborated in detail. In fact, similarly, the construction of disciplines includes the construction of the above issues, which have the impact on the establishment of the degree and graduate education quality assurance system.

Based on the above research, it is possible to draw on the successful experience of foreign graduate education research for China's degree and graduate education quality assurance system, and construct the degree and graduate education quality assurance system based on discipline on the basis of thorough research. At the same time, it is necessary to cultivate high-level talents with innovative spirit and ability that meet the needs of the times in China.

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References

- [1] Zheng Zhicong. *Research on the Quality Evaluation System of Graduate Education in China [D]*. Nanjing: Nanjing Normal University, 2020.
- [2] Wang Zhanjun. *Degree and Graduate Education Evaluation Technology and Practice [M]*. Higher Education Press, 2000.
- [3] Ren Shiwei. *Analysis of the Evaluation System for Graduate Education Quality [J]*. *Education Forum*, 2021 (21): 173-176.
- [4] WANG S, LI C, DING S, et al. *Research and exploration of graduate education quality evaluation and monitoring system[J]*. *International Journal of Social Sciences in Universities*, 2020, 3(3): 224-226.
- [5] Lin Xiao, Shen Yujie. *Comparative Study on the Quality Evaluation System of Graduate Education [J]*. *Education Forum*, 2021 (07): 1-4.
- [6] Zhan Chunyan, Wu Yingying. *The Construction of Quality Evaluation System for Graduate Education: The Experience of the UK and Its Reference [J]*. *Journal of South China Normal University (Social Science Edition)*, 2010(6): 150-154.
- [7] Lin Xiao, Shen Yujie. *Comparative Study on the Quality Evaluation System of Graduate Education [J]*. *Education Forum*, 2021(7): 1-4.
- [8] Pian Jinxiang, Pu Chunyu, Sun Huanliang, et al *Research on the Quality Evaluation System of Graduate Education in the Era of Big Data [J]*. *Education Forum*, 2016(26): 75-76.
- [9] Wang Yongsheng. *Comparative Study on the Graduate Education Development between China and the United States [J]*. *Comparative Education Research*, 2000 (3): 30-33.

[10] Tan Huan. *Research on the Master Graduate Education Quality Assurance System in the United States [D]*. Hunan: Hunan Normal University, 2007.

[11] Zhao Shunbo, Jia Yanchang, etc. *Research on Quality Control of Master's Thesis [J]*. *Journal of North China University of Water Resources and Electric Power: Social Science Edition*, 2022, 38(1): 26-31.