

# **Research on the High-Quality Development of Postgraduate Education from the Perspective of New Quality Productivity**

**Yue Zhao, Zhuang Ma, Xin Su\***

*School of Business, Guilin University of Electronic Technology, Guilin, Guangxi, China*

*\*Corresponding Author.*

**Abstract:** From the perspective of new quality productive forces, the high-quality development of graduate education has become a key driver of social progress and economic transformation. Characterized by technological innovation, digital empowerment, and high-end talent support, new quality productive forces impose higher demands on graduate education. Currently, issues such as uneven education quality, insufficient integration of industry, academia, and research, as well as misalignment with societal needs, have hindered the cultivation of high-level talent. To tackle these issues, this study suggests approaches to enhance the quality-driven development of postgraduate education. First, the curriculum system should be optimized by strengthening interdisciplinary integration and practice-oriented approaches to enhance students' innovation capabilities. Second, industry-academia-research collaboration should be deepened to improve the social adaptability of talent cultivation. Additionally, a robust teaching quality assurance system should be established, along with a diversified evaluation mechanism, to ensure continuous innovation and optimization of graduate education. Looking ahead, efforts should be made to strengthen collaboration among the government, universities, and society to drive educational reform. A diversified talent training system should be built to meet the demands of new quality productive forces, providing strong support for national technological innovation and socioeconomic development.

**Keywords:** New Quality Productivity; Graduate Education; Integration of Production, Education and Research; Talent Development; Interdisciplinary Education

## **1. Introduction**

As the world economy grows rapidly and technology continues to evolve, there is a growing need in society for highly skilled innovative professionals. As an important way to cultivate high - level talents, postgraduate education plays a crucial role in scientific and technological progress, social development, etc. Nonetheless, the education system, particularly postgraduate education, confronts challenges and opportunities that have never been seen before. Against this backdrop, as an emerging driving force for economic development, new - quality productivity is profoundly transforming the structure of traditional productivity and putting forward new requirements for all sectors, especially the higher education system.

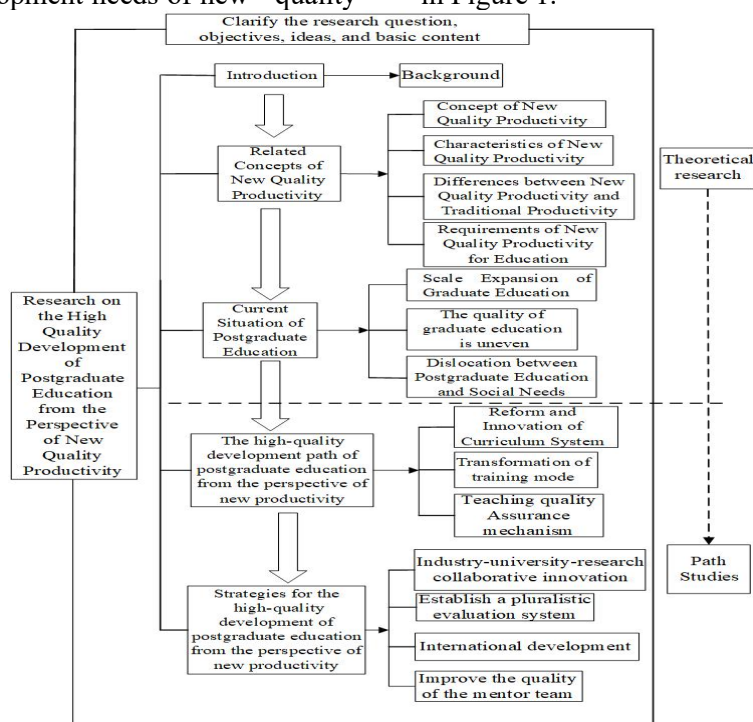
Compared with the traditional labor-intensive productivity, it is not only reflected in the improvement of productivity quantity, but also more importantly, the qualitative change of productivity, which is reflected in the substantial improvement of total factor productivity [1]. It relies more on innovation and knowledge application, and emphasizes the creativity and adaptability of high-end talents. The rise of new - quality productivity not only demands the transformation of industrial structure and economic models but also has a profound impact on the education system, especially postgraduate education. The social demand for talents is constantly changing with the development of new productive forces, and the traditional education model has been difficult to meet the current social demand for high-level talents. Postgraduate education is an important link to cultivate high-level talents and promote innovation-driven development. Adapting to these new development demands and enhancing education quality through reform have emerged as key topics in current educational discussions.

Despite China's significant progress in expanding postgraduate education in recent years, the overall quality still presents numerous

challenges. Amid rapid global advancements, the demand for high-level talent continues to grow. However, postgraduate education remains uneven and insufficient in its development. This contradiction has now become the key problem in postgraduate education. [2]. With the rapid expansion of postgraduate scale, a series of practical problems such as unbalanced resource allocation, unreasonable type structure, homogenization and involution of development have also appeared [3]. Specifically, it is manifested in problems such as the lag of the postgraduate education system, the traditional curriculum setup, the single - track training mode, the lack of practical abilities, and the mismatch between the postgraduate education and the employment market's demand for high - level talents. It is imperative to resolve these problems through educational reforms so as to adapt to the development needs of new - quality

productivity. This article intends to delve into how to propel the high - quality development of postgraduate education within the context of new-quality productivity. Specifically, it examines how to enhance the overall quality and social adaptability of postgraduate education via comprehensive reforms in curriculum innovation, the shift of training models, and the assurance of teaching quality. This study explores the interconnection between new-quality productivity and postgraduate education, proposing strategies to enhance the quality development of postgraduate programs in response to contemporary requirements. It is expected that this research will contribute theoretical foundations and practical recommendations to guide the future growth of China's graduate education.

The technology roadmap for this study is shown in Figure 1.



**Figure 1. Technology Roadmap**

## 2. Related Concepts of New Quality Productivity

### 2.1 Concept of New Quality Productivity

New productive forces, contemporary advanced productive forces spawned by revolutionary technological breakthroughs, innovative allocation of production factors and deep industrial transformation and upgrading [4], typically denoting contemporary manifestations of productive forces, these prioritize knowledge

innovation, technological advancement, and human capital development as fundamental drivers of economic growth and societal improvement. In contrast to conventional productive forces reliant on labor expansion, capital accumulation, and resource exploitation, these new forces underscore transformative shifts in production paradigms , industrial structures and social development models through the accumulation and application of innovation, science and technology and

knowledge. Driven by new productive forces, the efficiency of production and economic activities no longer depends solely on the accumulation of material capital, but through knowledge innovation, technological breakthroughs and the emergence of high-quality talents to enhance the quality and efficiency of economic growth. With the continuous advancement of informatization, digitalization, intelligence and globalization, knowledge and technology have become the main factors of productivity, and new productivity is gradually becoming the leading force of global economic development.

## **2.2 Characteristics of New Quality Productivity**

New quality productivity features characteristics such as knowledge economy, digitalization, intelligence, and networking; new - quality productivity is characterized by the fundamental driving force of high - tech innovation, the direct goal of high - quality development, and the forward - looking nature of empowering new industries in the future; new-quality productivity is guided by the new development philosophy, driven fundamentally by technological innovation, and emphasizes industrial cultivation as a key area of focus. Therefore, this paper holds that new - quality productivity has the following distinct characteristics: First, the core characteristic of new - quality productivity is innovation - driven. Propelled by new - quality productivity, innovation isn't confined to product R&D and technological advancement but also encompasses management innovation, model innovation, etc. The development of various industries increasingly relies on the improvement of innovation capabilities. In particular, it's extremely important for enterprises and educational institutions to cultivate and encourage innovative talents; Second, new productivity depends on the close combination of globalization and digitalization. The widespread adoption of digital technologies like the Internet of Things and artificial intelligence has not only facilitated the reconstruction of the global industrial chain but also freed talent and innovation from the constraints of specific regions or countries; Third, the development of new productive forces depends on a large number of high-quality talents, especially those with innovative thinking, interdisciplinary

knowledge, international vision and practical ability. The education system, especially higher education and postgraduate education, plays an indispensable role in cultivating innovative talents, providing knowledge support and technical guarantee. The improvement of education quality and the high-quality development of postgraduate education are important supports for realizing new productivity.

## **2.3 Differences between New Quality Productivity and Traditional Productivity**

The difference between new productivity and traditional productivity lies in the different core elements and driving forces. The traditional productivity depends on natural resources and capital, and adopts the labor-intensive mode; The new production paradigm is fundamentally supported by advancements in science and technology, the accumulation of knowledge capital, and the cultivation of top-tier professionals, highlighting the synergistic integration of intellectual resources, technological capabilities, and human expertise. Traditional productive forces originated from the first industrial revolution, characterized by resource and material input and environmental consumption, expanding production scale through capital accumulation and improving resource allocation efficiency; New productivity is an advanced productivity driven by scientific and technological revolution and industrial transformation, which drives development with innovation and becomes a key force in the development of modern society.

In the traditional productivity model, the efficiency and benefit of production are usually limited by resource constraints and labor costs; In the model of new productivity, the efficiency of production depends more on technological progress, innovative application and innovative ability of talents. Therefore, the new productivity represents the transformation direction from traditional resource-based economy to knowledge-based and innovative economy.

## **2.4 Requirements of New Quality Productivity for Education**

The development of new productivity puts forward higher requirements for education, especially postgraduate education. The development direction and goal orientation of

new productive forces enable education to accelerate the reform process of realizing modernization in the information age. Education should go beyond cultivating workers with fundamental knowledge and skills; it must focus on nurturing high-caliber talents equipped with innovative capabilities, interdisciplinary perspectives, and a global vision. Postgraduate education, as an important channel for training high-level talents, should be closely connected with the development needs of new productive forces, improve the quality of education, and promote the innovation of personnel training mode and mechanism to meet the needs of future social and economic development.

### **3. Current Situation of Postgraduate Education**

As China's higher education advances rapidly, postgraduate education has emerged as a vital link in nurturing high - level innovative talents and driving social and economic development. The past few years have seen a steady growth in postgraduate enrollment and marked quality enhancements, largely due to the implementation of national policy measures. However, with the continuous development of new productivity and the intensification of global competition, the current situation of postgraduate education still faces many challenges. In this context, Examining the current state of postgraduate education and pinpointing its challenges and limitations is crucial for advancing its quality development.

#### **3.1 Scale Expansion of Graduate Education**

In recent years, the scale of graduate education in China continues to expand. With the implementation of postgraduate enrollment expansion policy, the scale of postgraduate education has increased year by year. Up to 2023, there were 3,882,900 graduate students in China, 229,300 more than the previous year, an increase of 6.28%, including 612,500 doctoral students and 3,270,500 master students [5]. Currently, the number of postgraduate students across the country has reached millions. As higher education becomes more widespread, the proportion of postgraduate education is also gradually rising.

At present, China's higher education is characterized by a large scale and a huge student population, yet it also faces some practical issues that need to be urgently addressed. For

example, in terms of education level and discipline structure layout, there are still unbalanced and insufficient development contradictions [6]. Some scholars have measured the development index of postgraduate education from four dimensions: scale, structure, quality, and efficiency. They've concluded that the quality of postgraduate education is higher in the eastern region than in the central region, and higher in the northeastern region than in the western region. [7]. In a word, although the expansion of postgraduate education has promoted the popularity of educational resources, it has also caused the imbalance of educational quality in some regions and fields. Postgraduate education resources in some universities are relatively scarce, and the course content and teaching quality are difficult to meet the needs of society for high-level talents. Secondly, behind the rapid enrollment expansion, the lag of education system, teaching staff and scientific research resources has led to the deviation of education quality and training objectives.

#### **3.2 The Quality of Graduate Education is Uneven**

Despite the rapid expansion of postgraduate education, there are great differences in the quality of its education. It is mainly manifested in the following aspects: First, the curriculum is single and the cultivation of innovative ability is insufficient. The postgraduate curriculum in many universities still focuses on imparting theoretical knowledge, emphasizes the training of traditional academic research methods too much, and lacks the cultivation of practical ability, innovative ability and interdisciplinary thinking. Second, there is an insufficient cultivation of interdisciplinary knowledge and innovation abilities. Modern society demands a large number of high - level talents with interdisciplinary perspectives. An interdisciplinary training model can stimulate postgraduate students' innovation abilities and accelerate the achievement of the country's modernization goals [8]. However, the existing postgraduate education system relies too much on the traditional division of disciplines, which limits the interdisciplinary exchanges and cooperation of graduate students and reduces the efficiency of cultivating innovative ability. Third, Lack of scientific research training and practical ability: Some graduate programs pay



too much attention to theoretical research and neglect the training of scientific research practice. Many graduate students face great employment pressure and adaptation difficulties after graduation, one of the main reasons is the lack of sufficient practical experience and practical operation ability. In particular, some social application-oriented graduate students are often difficult to transform academic achievements into actual productivity, which affects their competitiveness in practical work.

### **3.3 Dislocation between Postgraduate Education and Social Needs**

Maghamil believes that with the economic transformation, industrial restructuring and rapid development of science and technology, the qualifications, conditions and abilities required for people to join the labor market have also changed, and it is necessary for graduate students to keep up with the needs of the times [9]. Great changes have taken place in the social demand for high-level talents. Especially with the rise of emerging industries, there is an increasingly urgent demand for talents with innovative thinking, interdisciplinary background and practical operation ability. However, there is a certain mismatch between the training model and orientation of postgraduate education in China and social needs. In some universities, the postgraduate training orientation is unclear, still emphasizing the cultivation of academic talents while neglecting the demand for applied and composite talents. Consequently, while many graduate students demonstrate strong academic research capabilities, their insufficient practical experience and limited innovation skills often leave them ill-prepared to meet the varied talent requirements of businesses and society.

### **4. The High-Quality Development Path of Postgraduate Education from the Perspective of New Productivity**

Driven by new-quality productive forces, postgraduate education must not only address the need for advanced professionals in socioeconomic progress, but also persistently reform and refine its training models, academic programs, and instructional standards to facilitate high-caliber educational advancement. Continuously cultivating high-quality innovative talents with interdisciplinary knowledge structures, innovative thinking, and

the ability to take on important responsibilities is not only a major issue in the field of education but also crucial for China to maintain high - quality innovative development [10]. Collaboration among industries, universities, and research institutes forms a crucial partnership model for innovation and development. These cooperations not only provide valuable practical opportunities for graduate students, but also provide them with multi-subject support. Higher education institutions play a crucial role in promoting in - depth industry - university - research collaboration and comprehensively cultivating talents for new - quality productivity. New - quality productivity highlights the core roles of innovation, knowledge, technology, and talent. Hence, the high - quality development of postgraduate education should center around these key elements. This study explores pathways to enhance the quality development of postgraduate education through reforming curriculum structures, innovating training approaches, and improving teaching quality assurance systems.

### **4.1 Reform and Innovation of Curriculum System**

The curriculum system of postgraduate education is the foundation of talent cultivation and the key to improving educational quality. From the perspective of new productivity, the reform of curriculum system should focus on the cultivation of innovation ability, interdisciplinary integration and practical skills. The specific path is as follows: First, strengthen the interdisciplinary curriculum. Many problems in modern society have interdisciplinary characteristics and need compound talents. To cultivate postgraduate students with innovation ability and the ability to solve complex problems, the intersection and integration between disciplines should be promoted, and interdisciplinary courses should be added. Second, update and optimize the course content. The content of postgraduate courses should be advance with times, closely tracking the frontier of disciplines and industrial needs. Third, enhance curriculum design with a focus on innovation and practical application to better align with societal demands. Postgraduate education should not only focus on the depth of academic research. It's also necessary to cultivate students' practical and innovative

thinking through practical courses, project - based learning, and enterprise cooperation. Through industry - university - research collaboration, real - world enterprise needs can be incorporated into teaching, promoting a close connection between academic research and social practice.

#### **4.2 Transformation of Training Mode**

In the context of new - quality productivity, it is necessary to transform the training model of postgraduate education so as to better satisfy the demands of social and technological development. The current training model overly relies on academic and theoretical research, making it difficult to meet society's demand for innovative and applied talents. Therefore, innovation in the training model must be promoted. The specific path is as follows: First, Cooperation between schools and enterprises, along with the combination of industry, academia, and research, promotes collaboration between universities and businesses. By building a collaborative innovation platform integrating industry, academia, and research, postgraduate students can engage in practical projects in enterprises, facilitating the transformation of scientific and technological achievements and enhancing their practical operation and innovation abilities. Through school-enterprise cooperation, graduate students can be more directly exposed to social needs, improve practical skills and enhance the application value of academic research. Second, international cooperation and cross-cultural training. With the in-depth development of globalization, international vision and cross-cultural communication skills are becoming more and more important. Colleges and universities should promote cooperation and exchange with foreign universities, set up joint training programs and international courses, etc., in order to improve the internationalization level of graduate students and cultivate innovative talents with global competitiveness.

#### **4.3 Teaching Quality Assurance Mechanism**

As the fundamental metric for assessing graduate education standards, teaching quality serves as the cornerstone for achieving excellence. To enhance postgraduate program quality, the following quality control measures should be implemented: First, Refine the assessment and feedback mechanism, and

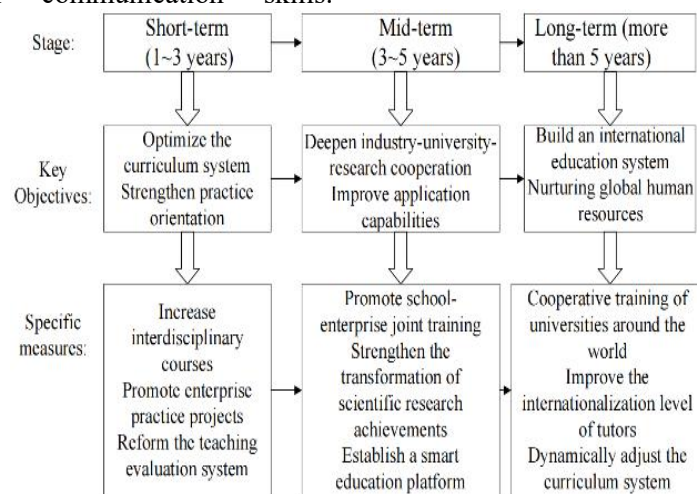
establish a diversified teaching evaluation system, including course evaluation, tutor evaluation, student self-evaluation and peer review, so as to ensure all-round monitoring of teaching quality. The assessment results shall be fed back to teachers and administrators on a regular basis for teaching improvement and curriculum optimization. Second, build a teaching staff and an incentive mechanism. A top-tier faculty team is fundamental to maintaining educational excellence. Universities should enhance teaching and research standards by recruiting and developing outstanding educators, while fostering international collaboration, academic exchange, and cross-disciplinary research. Concurrently, establish a sound faculty incentive mechanism to enhance teaching engagement and innovation. Third, optimize the allocation of instructional resources. Ensuring educational quality requires adequate provision of teaching resources, including research equipment, laboratory facilities, and practical training bases. Colleges and universities should increase investment in teaching resources, especially in emerging disciplines and cutting-edge technology fields, to ensure that graduate students can obtain modern and innovative teaching tools and practical platforms. In addition, we should promote resource sharing among universities, improve the efficiency of resource allocation, avoid redundant construction and reduce resource waste.

#### **5. Strategies for the High-Quality Development of Postgraduate Education in the Context of New-Quality Productivity**

Powered by new productive forces, graduate education must align with the demands of contemporary development and implement comprehensive strategies to elevate educational standards, strengthen societal relevance, and nurture top-tier talents capable of spearheading social innovation and technological advancement. To realize this vision, this study proposes the following approaches: First, enhance industry-academia-research collaborative innovation and deepen university-enterprise cooperation. As a vital bridge between graduate education and societal demands, such collaboration should be further strengthened under the impetus of new productive forces, where innovation serves as the core driver of economic growth. Universities

should proactively forge long-term partnerships with enterprises and research institutions, enabling graduate students to engage in real-world projects and corporate R&D initiatives. Second, Improving the quality of education and establishing a diversified evaluation system. The existing academic evaluation system focuses too much on academic papers and research results, ignoring the assessment of students' comprehensive ability. Graduate education in the perspective of new productivity should focus on the cultivation of innovative ability, interdisciplinary ability and practical ability, and establish a diversified evaluation system. Third, Deepening International Cooperation and Enhancing Global Competitiveness With the development of globalization, international education has become an important factor to enhance the competitiveness of graduate students. Postgraduate education should focus on international cooperation and exchanges to enhance students' international understanding and cross-cultural communication skills.

Especially driven by new productivity, internationalization is not only the promotion of academic level, but also the globalization of innovation ability. Fourth, Improve the quality of tutors and optimize the structure of teachers. Tutor is the core strength of postgraduate education, and its scientific research level and teaching ability directly affect the quality of education. Under the background of new productivity, tutors should not only have solid academic research ability, but also have interdisciplinary comprehensive quality, and be able to guide students to carry out innovative research and practical exploration. Therefore, colleges and universities should establish a diversified tutor training mechanism, encourage the construction of interdisciplinary tutor team, form a compound tutor team, broaden the academic vision of graduate students, and improve their interdisciplinary research ability. The specific measures and approximate time plan for the high-quality development of postgraduate education are shown in Figure 2:



**Figure 2. Specific Measures for the High-Quality Development of Graduate Education**

## 6. Conclusion

In the era of new productive forces, advancing the high-quality development of graduate education serves as both a critical driver for socioeconomic transformation and a foundational pillar for enhancing national innovation capacity and scientific progress. The continuous innovation and development of postgraduate education can be realized by optimizing the curriculum system, transforming the training mode, perfecting the teaching quality assurance mechanism, deepening international cooperation and other strategies.

The high-quality development of postgraduate education needs the joint efforts of universities, government and society. Colleges and universities should adjust the training direction through reform and innovation, enhance the fit with social needs, and improve students' innovative ability, practical ability and international vision; The government should provide policy support and resource guarantee for education reform; All sectors of society should provide more practical platforms and development opportunities for postgraduate education. In the future, with the continuous evolution of new productive forces,

postgraduate education will continue to deepen reform and innovation, cultivate more innovative and applied talents with global competitiveness, and make greater contributions to the country's economic and social development.

### Acknowledgments

This paper is supported by 2025 District level Degree and Graduate Education Reform Project “High quality Development of Graduate Education from the Perspective of New Quality Productivity: Education Model Reform and Innovation”, and the National Natural Science Foundation of China under contract no. 72464008, 72364008, Guangxi Project of Philosophy and Social Science for Planning no. 24JYF027, 22BJY002.

### References

- [1] Liu Shouying, Huang Biao. From traditional productivity to new qualitative productivity. *Journal of Renmin University of China*. 2024, 38 (4): 16-30.
- [2] Hu Dexin, Liu Chang. The spatial and temporal pattern and evolution characteristics of the scale of postgraduate education in China. *Higher Education Development and Evaluation*. 2025, 41 (1): 107-118.
- [3] Ma Yonghong, Yu Yan. Innovative Choice for High Quality Development of Postgraduate Education in the Age of Mathematics and Intelligence. *Tsinghua University Educational Research*. 2025, 46 (1): 40-47.
- [4] Zhao Feng. The fiscal policy in the new era promotes the cultivation and development of new productivity by improving quality and efficiency. *Financial Research*. 2024 (3): 27-32.
- [5] Wang ZJ, Wang J, Yu Y. Research on spatial distribution of graduate education resources and its spillover effect on regional innovation. *Education Development Research*. 2024, 44 (19): 1-9.
- [6] Wang Xiaoqian, Zhang Jue. The theoretical meaning and practical approach of high-quality development of higher education. *Higher Education Management*. 2023, 17 (3): 21-31.
- [7] Zhiqi H, Fan S, Yangmei Z, et al. The development of graduate education and high economic quality and its dynamic evolution forecast. *Heliyon*. 2023, 9 (11): e 21438.
- [8] Ji Y. Cultivation of innovative postgraduate students with interdisciplinary approach: essentials, obstacles and countermeasures. *Heilongjiang Higher Education Research*. 2024, 42 (9): 89-94.
- [9] Maghamil C W. Graduate Education and Educational Influence on Employment and Career Progression: A Tracer Study of La Salle University School. *Asian Journal of Education and Social Studies*. 2025, 51 (1): 70-78.
- [10] Liang ZH, Lu YH, Ai YB. Research and practice on cultivation of innovative postgraduate interdisciplinary talents relying on major science and technology infrastructure. *China University Teaching*. 2024, 2025 (3): 18-24.