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Research on Countermeasures of Improving Postgraduate Training Quality in Post-Epidemic Period in China

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Abstract

Postgraduate education in China is at an essential stage of transformation from a big country to a powerful nation. Improving the quality of training is an inevitable choice to serve the strategic adjustment of the country, to cope with the changes of international competition and the law of things' development. The epidemic's impact has caused a more complicated external environment, which has a long-term effect on graduate education, which means that the improvement of graduate training quality in the post-epidemic period will have more practical significance. In the post-epidemic period, the "new normal" of postgraduate training will accelerate reconstruction. However, at present, problems such as insufficient international influence, involution, structural imbalance, and imperfect training mechanism of postgraduate education in China may restrict the improvement of training quality in the post-epidemic period. This paper suggests that the country, schools, graduate students, and teachers should take multiple measures to improve the quality of postgraduate training and help China's high-quality development and reshape the international pattern.

Keywords: post-epidemic period, postgraduate education, cultivation quality, "new normal"

At present, China has become a big country in postgraduate education. However, compared with the need for social and economic development, the quality of graduate education needs to be improved. Under the epidemic's impact, the international situation is more complicated, and the superposition of factors such as downward economic pressure and external impact pressure means the rise of systemic risks. The improvement of the resilience of China's economic and social development and the new features behind it, which has become a problem that graduate education needs to face for a long time (He & Chen, 2021). In the Post-epidemic period (Note 1), How to transform the expansion of graduate students into efficient human capital, and use the high-quality graduate training system to help China realize its dream of becoming a powerful country, which will be the embodiment of the practical value of the connotative development of Chinese higher education. Based on this, this paper is based on the functional significance of improving the quality of postgraduate training, analyzes the impact of the post-epidemic situation on postgraduate education and the present condition of postgraduate education, and then designs systematic countermeasures to improve the quality of postgraduate training in China, to achieve the same frequency resonance and coordinate with the needs of national development.

The rest of the paper is arranged as follows: The first part is the significance of improving the quality of postgraduate training, aiming at explaining the practical value of improving the quality of postgraduate training in the international and domestic situation; The second part, the "new normal" of postgraduate training in the post-epidemic period will accelerate the reconstruction, aiming at explaining the new requirements faced by postgraduate education in the post-epidemic period; The third part is the difficulty of improving the quality of postgraduate training at present, aiming at explaining the horizontal gap and the endogenous problems of postgraduate training; Finally, it is a countermeasure to improve the quality of postgraduate training in the post-epidemic period, aiming at making suggestions from the perspectives of the state, schools, postgraduates, and teachers, and promoting the improvement of postgraduate training quality through pluralistic co-governance.

1. The Practical Significance of Improving the Quality of Postgraduate Training

At present, the research on graduate education in China has moved from preliminary exploration to in-depth exploration, and has achieved fruitful results (Zhou & Zhu, 2020). A consensus has been reached on the strategic significance. Postgraduate education is at the top of national education, the main front of high-level and high-quality personnel training and scientific and technological innovation, the vital source of knowledge production and creation, and an essential new force serving the national strategy (Wang & Chang, 2020; Ma & Liu, 2020; Huang & Huang, 2020). Since the founding of China in the past 70 years, China's graduate education has developed rapidly from small to large, from weak to vigorous. It has become the most prominent graduate education country in the world, second only to the United States. At present, it is becoming a solid graduate education country, that is, the "Quality period" characterized by the emphasis on connotation (Zhou & Zhu, 2020).

1.1 The Quality of Graduate Education is an Essential Support of the National Strategy

With the deepening of globalization, external risks and uncertainties will also rise. How

improve resilience through the certainty of high-quality postgraduate training is an important strategic support for national development. The report of the 19th National Congress of the Communist Party of China made clear the goal of building China into a powerful socialist country in an all-around way, including the task of creating 12 powerful countries (Note 2). Among them, strengthening the country through education is the primary task and plays an essential supporting role in constructing all functions. Historically, China's graduate education system and talent training objectives have been constantly adjusted to the needs of national development. The purpose of postgraduate education to serve the overall development of the country has never changed, and the strategic status of postgraduate education has been upgraded, and the urgency of quality improvement has become increasingly prominent (Huang & Huang, 2020). The value orientation of "service demand" is also more realistic.

In 2020, in the "Opinions on Accelerating the Reform and Development of Postgraduate Education in the New Period" jointly issued by many departments, the goal of initially building a robust postgraduate education country with Chinese characteristics by 2035 was put forward. In the first national postgraduate education conference, General Secretary Xi Jinping pointed out that the development of the party and the country urgently need to cultivate many high-level talents with both ability and political integrity. Premier Li Keqiang emphasized that training high-level skills is an essential mission of graduate education and an essential cornerstone of national development. Under the guidance of a series of national strategies and policies, the role of higher education, especially graduate education, in serving economic and social development is becoming more and more apparent (Liang, 2020).

1.2 Postgraduate Education Is the Critical Path for New Technology to Reshape the International Competition Pattern

Under the guidance of institutional advantages and effective prevention and control measures, China has entered the post-epidemic period of normalized prevention and control. However, with the variation of the virus and the significant differences in prevention and control measures among countries, the global epidemic has not receded. Improving the development resilience is the central theme of the development of all countries in the world, and a low-carbon economy and the digital economy will become new impetus. Since General Secretary Xi Jinping announced the international commitment of "3060" and "Peak Carbon Dioxide, Emissions's Carbon Neutrality" to the world in September 2020, countries all over the world have laid out plans one after another, and the global "double carbon" goal has become the general trend. At the same time, since the outbreak of the epidemic, the advantages of the digital economy have been emerging and developing rapidly, which is dominated by e-commerce and the digital industry.

Relying on the innovation of low-carbon technology, digital technology, and other technologies, new models such as the low-carbon economy and the digital economy will become an essential arena for international competition. Theoretically, this will be an essential opportunity for the emerging countries represented by China to break through the

blockade of European and American countries, achieve leap-forward development and reshape the world pattern. However, everything is based on eliminating the "technological gap" between countries. Facing the fierce international competition, overcoming the "bottleneck" problem, and seizing the commanding heights of technology are essential means for China to enhance its comprehensive global competitiveness. The new historical mission means that the postgraduate training system needs to be transformed urgently (Wang et al., 2021).

1.3 Quantitative Change to Qualitative Change is an Inevitable Choice for High-Quality Development

Since China resumed the graduate enrollment system in 1978, the rapid expansion of graduate students in China can be roughly divided into two stages: the compensatory expansion stage from 1978 to 1998, which was restricted by government regulations and had weak contact with the outside world, and the number of students in school increased from 10,700 to 199,000 (Li, 2021), Since 1999, it can be regarded as the stage of systematic expansion. As the development of graduate education is closely related to the external links of economic and social development, the number of graduate students has increased from 230,000 to over 8 million in 2022. At present, China's graduate education has been built into a complete education system including 13 disciplines, 111 first-level disciplines, and 47 professional degree categories through scale expansion, involving the three-level management system at the national, provincial, and training units and the "five-in-one" quality assurance system (Note 3) that has become a big country in graduate education (Wang et al., 2021).

Studies have shown that graduate education has also become an essential cornerstone of China's competitiveness and innovation. It has played a significant role in promoting industrial structure optimization and economic growth, but the postgraduate education also shows a downward and divergent trend (Liu et al., 2020; Li & Sun, 2021; Lu, 2019). With the development of geometric progression of scale, unbalanced and unfair phenomena such as the quality of students and the distribution of educational resources are common, and the "devaluation" and "involution" of graduate students have become a hot spot of social concern (Guo & Chen, 2020). At the same time, the inaccurate positioning and understanding of graduate education, imperfect training mechanisms, shortage of demand and supply errors, and bad international influence are not conducive to giving full play to the service function of graduate education (Hong, 2020). Faced with the complicated global situation caused by the epidemic, the graduate student team, as the reserve of scientific research and higher talents, has derailed from the actual needs of economic and social development (Lin et al., 2020; Han, 2020). Therefore, based on the goal of serving the high-quality development of China's economy, it is an inevitable trend and choice for graduate education to change from quantitative to qualitative change.

2. The "New Normal" of Postgraduate Training in the Post-Epidemic Period Will Accelerate the Reconstruction

Based on the change in international competition situation, the adjustment of national strategy,

and the inevitable law of graduate education evolution, the demand for the coupled development of graduate education and the national economy and society in China is becoming increasingly important. Since 2020, the COVID-19 epidemic has had a significant impact on global economic, production and life. For the whole education system in China, including graduate education, the emergency measures of teaching mode and methods adopted during the epidemic will become routine in the post-epidemic period(Feng, 2020; Zhu & H, 2020). At the same time, the rapid changes in digital technology and Internet technology caused by the epidemic will also broaden the depth and breadth of the connotation of postgraduate training (Li, 2020; Wang, 2020).

2.1 The "Double-Line" Teaching Mode of Postgraduate Education in the Post-Epidemic Period Will Tend to the "New Normal"

During the epidemic, online teaching became an essential and effective emergency response means. It has entered the phase of regular prevention and control. online teaching has led to problems in teachers' and students' adaptability and teaching effectiveness, and the mode of combining online and offline has become normalization (Ma et al., 2017). In the post-epidemic period, the impact of epidemic impact on education mode will be irreversible. Still, the online and offline methods need to be further optimized (Wang, 2020), and the teaching mode will shift from normalization to "new normal".

In the post-epidemic period, the blended teaching mode is the central aspect of postgraduate education reform and innovation, while technology provides educational services (Note 4). It will bring new thinking to the blended education of the graduate students. The digital transformation of graduate education system is an inevitable trend in the future (Zhu & Peng, 2020). Informatization, intellectualization, many link, multi-disciplinary teaching way across the cycle, which will promote the graduate education from the traditional offline - emergency type online teaching - online "double alternate" teaching, to achieve a higher quality, higher requirements of "dual integration" teaching model (Zhang & Ma, 2021), instead of the "dual combination" or "double" alternately.

2.2 The Cultivation of Comprehensive Ability in the Post-Epidemic Period Will Become the Core Goal of Postgraduate Education

The digital transformation of graduate education is a technological change and cross-integration. However, the inevitable result is worth noting that technological change and cross-integration are all-round, are not limited to the reconstruction of education (Wang, 2021; Shi, 2020), and the industrial structure and the skill structure of the labor force will also develop and change significantly (Ulrich, 2018). The talent change caused by the superposition of new technologies such as artificial intelligence and the influence of the COVID-19 epidemic will accelerate, and 65% of existing jobs will cease to exist around 2025.

This means that in the post-epidemic period, postgraduate training should pay more attention to the ability of sustainable development (Note 5). Training mainly includes critical thinking (such as the use and evaluation of information and media, that is, information and media

literacy), self-management, and the ability to solve practical problems (Wang et al., 2021), and then turn them into "scientific capital" to promote economic and social development (Pan et al., 2020; Croak, 2018).

2.3 The Adaptability of Teachers' Ability in the Post-Epidemic Period Will Be an Essential Guarantee for Postgraduate Education

Behind the digitization of educational system, we need to face up to the subject concept and technology practice of educational technology. We should not rely on it too much or blindly follow the trend, nor ignore the combination of educational technology, teaching content and teaching effect (Wang, 2021; Gu, 2017). In the post-epidemic period, the internalization of technological change should become the central aspect of graduate teachers' responsibility (Li, 2020), to better promote the "new normal" of teaching mode.

In the post-epidemic period, teachers will face diverse and diffuse problems in the process of postgraduate education, and many teachers cannot find and solve them in time (Yan & Shan, 2020). Coupled with the frequent changes in the external environment, information related to graduate enrollment expansion, employment, and intelligent substitution is easier to obtain. The attention of graduate education should not only focus on school, study, classroom, teachers' ability, but also extend from teaching to caring for students (Ying, 2020). Therefore, teachers should base themselves on the training objectives and improve their abilities in teaching methods, student guidance, and maintenance, which will be another significant aspect of graduate teachers' responsibility.

3. Difficulties in Improving the Quality of Postgraduate Training at This Stage

In the post-epidemic period, the significant changes in the world will be more complicated, and the competition between China and the developed countries represented by the United States will be launched in all directions. The Sino-US trade war has extended to many fields such as science and technology, finance, education, etc. The competition of high-level talents will determine the direction of international competition (Wang & Chang, 2020). However, the gap between China and developed countries such as the United States is all-round and systematic. In the post-epidemic period, China's postgraduate training system is facing severe challenges.

3.1 The International Influence Has Improved Significantly, but the Gap Is Still Large

Before the epidemic, the international influence of China's graduate education has increased significantly. However, there is still much room for improvement in the scope of power, scale level, and development quality.

First, the international influence of graduate education in China is limited to the Asia-Pacific region. In 2022, about 1 million people from 203 countries and areas worldwide came to China to study for postgraduate degrees (including master's and doctoral degrees), but mainly concentrated in the Asia-Pacific region. At the same time, only 52 countries and regions, including developed countries such as Britain, France, and Germany, have signed mutual recognition agreements for academic degrees.

Second, the synergy between the scale of graduate education and economic and social development needs to be improved. The world's largest graduate student registration is in India, with a registered number of 4.5 million in 2022. The largest per capita registered scale is in the United States, with more than nine people per thousand, and about 5–7 people per thousand in major developed countries such as Germany and South Korea, but only about two people per thousand in China.

Third, the top talents with international influence are minor in scale. According to the research results of Professor Ioannidis from Stanford University School of Statistics, among the top 100,000 scientists in the world, more than 46% are Americans, while only 1.6% are in China. Among the 4,000 top scientists worldwide, Americans account for about 66%, while China accounts for only 12%. It shows that there is still a big gap between China and developed countries such as the United States in the quality of postgraduate training.

In the post-epidemic period, faced with the restriction of the international flow of factors and uncertain prospects of cooperation, it will be a long way to go to further enhance the global influence of graduate education in China.

3.2 The Economic Effect of Scale Expansion Is Remarkable, but the Problem of Involution Needs to Be Faced Squarely

Compared with other countries, there is still much room for improvement in China's graduate education. However, from a vertical perspective, the scale expansion of graduate students in China is rapid, which has a significant role in promoting economic growth and industrial structure optimization (Liu et al., 2020; Li & Sun, 2021; Lu, 2019). But the resulting involution (Note 6) has become the focus of social attention (Wu & Li, 2021), and it is also an aspect that needs to be faced squarely in the post-epidemic period.

First of all, the so-called involution, in my opinion, still belongs to the category of competition in essence, but only emphasizes the individualized response under the condition of intensified competition (Note 7). The rapid expansion of graduate education means the possibility of receiving high-level education becomes greater. However, the demand structure of the labor market is difficult to change in the short term, which means that after 2–3 years, the proportion of graduate students in the labor market will increase. In the short term, the mismatch between supply and demand in the labor market will lead to the problem of "difficult employment" (Wu & Li, 2021). Of course, it is undeniable that graduate students' lack of employee awareness and cognition is also a significant aspect (Dong & Li, 2019).

At the same time, the author believes that competition has never stopped, which may be due to the lack of perception of individuals or groups in previous situations. However, with the increase of external uncertainty and risk, the individualized crisis (i.e., involution) has been significantly enlarged in graduate education. Since 2020, due to the impact of the global epidemic, under the national policy of "six stability" and "six guarantees", many people regard the enrollment expansion of graduate students as involution. China's postgraduate enrollment expansion policy has always existed (especially since 1999). It's just that the external environment suddenly changes, which makes the crisis suddenly form, which makes

the individual demands of graduate students separate from the needs of social development, and makes the educated unable to calmly face it and lose their sense of security (Lin et al., 2020). This means that under the existing postgraduate training system in China, the cultivation of competition awareness and crisis awareness is lacking. This is the post-epidemic period, which needs to be faced squarely with the goal of promoting high-quality economic development and reshaping the international competition pattern in China.

3.3 The Structural Problems Have Been Optimized, but the Imbalance Is Still Outstanding

Postgraduates' position at the top of the education system determines their strategic positioning and spatial ranking. Currently, the structure of professional and academic graduate students, the design of master's degrees and doctoral degrees, and the professional structure in China are constantly optimized, but there are still some structural imbalances.

First, from the perspective of employment structure, the proportion of graduate education in China is still low, accounting for only 1.1% of the total employees (Note 8). In particular, the proportion of postgraduate degrees in related fields that emphasize the attribute of scientific research is relatively high, but the overall level is still not high. Among them, the top-ranked areas of scientific study and technical services, education, finance, and information technology account for only 10.7%, 7.4%, 5.2%, and 4.4%.

Secondly, from the perspective of the supply and demand structure of social development, different disciplines have significant differences or even two levels of differentiation. At present, the social demand for graduate students in artificial intelligence, regular education, medical care, and other disciplines in China is great, which leads to insufficient competition and looting of talents. However, the social demand for graduate students in most traditional disciplines is small, which leads to fierce competition or even reduced-dimension competition, which leads to public opinions such as "academic degree depreciation" and "academic degree discrimination".

Thirdly, due to the characteristics of China's urban structure, big cities have more and better educational resources and employment markets. On the one hand, under the existing seemingly fairer policy of adjustment for the postgraduate entrance examination, high-quality students flow to big cities, resulting in an unbalanced distribution of students. On the other hand, high-quality graduates are more inclined to work in big cities, and some graduates with general quality will also choose to work in big cities to pursue their dreams, resulting in so-called "involution" competition.

At the same time, under the background of the continuous expansion of graduate students' scale, the structural imbalance between graduate students and teachers is severe. On the one hand, subject to the evaluation and assessment mechanism of teaching and scientific research, the tutor's professional guidance to graduate students is insufficient, resulting in the low quality of graduate training. On the other hand, "water injection" often results in hybrid classes for tutors and mixed academic qualifications for students.

3.4 The Training Mechanism Should Be Systematic and Forward-Looking

The training mechanism should cooperate with and meet the needs of social development. It should include an enrollment mechanism, coordination mechanism, "all-round education" and systematic and forward-looking design of employment guidance mechanism.

First of all, the current graduate enrollment mechanism (excluding exemption) is fairer for candidates, and everyone has the opportunity to pursue admission to a prestigious school. Even if they fail, they will have the opportunity to transfer to other general schools. This mechanism is the main reason for the rising scores of postgraduate entrance examinations and the formation of so-called competition involution. Therefore, all kinds of schools should do a good job of publicity, so that students can know whether the orientation of school development is consistent with that of candidates, and guide candidates to seize students rationally rather than in disguise. Even more, "running schools in different places" can't lead to unbalanced development among different regions and schools.

Secondly, in the post-epidemic period, China's economic development and industrial adjustment will pay more attention to resilience. At the same time, it is necessary to rely on low-carbon and digital technology to enhance China's industrial and national competitiveness. The disciplines and regional distribution of graduate education should take the national development needs as the leading factor, speed up the layout of disciplines corresponding to emerging industries, make dynamic and predictive adjustments, and do a good job of the forward-looking design. In addition, with the transformation of the leading social contradictions in our country, majors related to people's livelihoods should further expand the scale and improve the quality of postgraduate training.

At the same time, graduate students don't know enough about the sense of competition crisis, focus on personal gains and losses, and feel that graduate enrollment growth has caused involution. It is neglected that the expansion of postgraduate enrollment is beneficial to the country for a long-term development. Therefore, it is the most important thing to improve the training quality of graduate students and enhance their employment competitiveness. This requires the overall national planning, top-level design (such as discipline setting, specialty layout, evaluation mechanism, etc.), as well as teaching training and management services at the school level, and more importantly, graduate students should do what they should, so as to achieve high-quality development of graduate education through pluralistic co-governance. However, it is still in the exploratory stage, and the reforming of a series of structural problems has a long way to go.

4. Countermeasures to Improve the Quality of Postgraduate Training in the Post-Epidemic Period

Postgraduate education serves the development of the country. At the same time, schools, teachers, and students are all participants, and the training process concerns the interests of all participants. Therefore, only pluralistic co-governance can improve the quality of postgraduate training.

4.1 The State Should Do a Good Job in Top-Level Design, and Build an Ecological Environment Conducive to Improving the Quality of Training

First, outline the layout of postgraduate disciplines that coordinate with regional and industrial development. Faced with the unprecedented changes in a hundred years under the epidemic's impact, China actively plans to alleviate the internal imbalance and weak external competitiveness through regional integration strategy and industrial coordinated development layout. Based on the social development, the state needs to do a good job in the prospective setting and reasonable design of postgraduate disciplines. On the one hand, it can avoid the homogenization of discipline layout among different types of schools in the same area, which leads to the mismatch of supply and demand in the job market. On the other hand, universities in different regions can form collaborative development alliances, consider to competition and cooperation, and improve the overall quality of regional postgraduate education. At the same time, the cultivation of postgraduate talents should not only be based on reality, but also face the future, do a good job in judging and preparing for a rainy day, and realize the dynamic adjustment of postgraduate disciplines (the cancellation of the cancellation and the adjustment should not affect the interests of the whole society because it will harm the interests of a small number of people), to minimize the risks brought by rapid development.

Second, build a "double-circulation" mode of postgraduate training. Based on the national "double-circulation" strategy, China's graduate education should effectively connect domestic and international. On the one hand, domestic schools are encouraged to overcome the "bottleneck" technical problems (such as chip technology and low-carbon technology) through cross-regional cooperation in running schools (such as co-operating graduate schools), to realize "talents play a role". On the other hand, we should encourage famous domestic universities to go out and renowned foreign universities to introduce them, and take joint training of graduate students and exchange of graduate talents as the starting point to overcome global problems (such as the COVID-19 epidemic). At the same time, we can use the "the belt and road initiative" strategy, RCEP, and other open platforms to realize the two-way flow of factors (graduate human capital, technology, etc.) and goods based on ensuring national security.

Third, give play to the role of supervision and guidance, and fully decentralize the diversified choice of development models. At the economic level, besides the goal of resilience, high-quality development should also include the pursuit of efficiency. In the post-epidemic period, the government changed its role and optimized its functions. On the one hand, do a good job in top-level design and risk judgment. Then formulate a forward-looking policy system with controllable risks, and promote the "negative list" of policy provisions, so that local education departments, schools, and teachers can "do whatever is forbidden by law" (such as the use of funds, interdisciplinary curriculum, etc.). The state shall fully delegate power and maximize the participation enthusiasm and execution efficiency of all subjects. On the other hand, we should guide schools and enterprises especially in practice jointly, and do a good job in filing, ensuring, and serving, so as to effectively improve graduate students' problem-solving ability to face the future and reality. At the same time, the government

should further improve the financial allocation mechanism to change the situation of "rich money can't be spent, poor money can't be spent" among schools. Then improve the marginal utility of financial allocation and spend money on cutting edge.

4.2 Schools Should Improve the Training Mechanism and Create a Diversified Mode That Is Conducive to the Improvement of Training Quality

First, all colleges and universities should make clear their development orientation, then realize the dynamic adjustment of the graduate education structure. Under the constraint of national laws and regulations, all kinds of colleges and universities should first define their development orientation and take the initiative to adjust the structure of degree and graduate education promptly. At present, with the constant location of China's economic and social development, the stage and level of graduate students have been readjusted, and the orientation of academic and professional graduate students will also be adjusted accordingly. For different colleges and universities, we should base ourselves on positioning and adopt differentiated adjustments to realize the pattern of classified development of graduate education. High level research-oriented scale should be positioned to cultivate high-level research-oriented and high-level professional talents. So we not only do need optimize the selection and allocation mechanism of academic masters (for example, no recruitment, only internal integration training), but also moderately expand the scale of doctoral training (theoretical and professional) and somewhat reduce the scale of postgraduate training for professional degrees. Local (application-oriented) colleges and universities should position the training of senior professionals in the regional development of the service industry, expand the training scale of professional postgraduates, and optimize the training structure of academics and professionals.

Second, all kinds of schools should diversify training standards and promote the high-quality reform of postgraduate training mode. Based on differentiated development orientation, all sorts of colleges and universities should optimize the training standards of different types of graduate students, break the constraint of "academic-only" standards, formulate differentiated but a high-quality evaluation, and realize the diversified development of graduate student training quality view. The training quality of academic postgraduates should be based on academic ability and sustainable development ability, and finally serve the demand for sustainable innovation of science and technology. The quality of professional postgraduate training should be based on practical knowledge and social adaptability, and finally suit the needs of coordinated development of economy, society, and industry. At the same time, different types of colleges and universities should set different quality standards for postgraduate training, and the standards of high-level colleges and universities should be higher. Ordinary local colleges and universities should end the phenomenon of "water injection of academic qualifications" and strengthen the dynamic adjustment and elimination mechanism. In particular, some local colleges and universities should not be afraid of students' unreasonable demands and irrational behaviors to break the bottom line of standards, they should adopt a good and strict standard system to break the situation that students' "right to speak" is too strong. In addition, we should differentiate the tutor system according to the training standards, clarify the powers and responsibilities of tutors, optimize the assessment

system, break the utilitarian and one-pole evaluation system, and fully mobilize tutors' enthusiasm Third, all schools should improve the interdisciplinary training mechanism, and help graduate students' training concept change to problem-oriented. With the rapid evolution of information technology, the digital age has come, especially under the impact of the epidemic situation, the result of the digital age on postgraduate training has become increasingly significant. In the post-epidemic period, talents trained by a single discipline will probably run into a wall in the job market. The realization of "double-carbon" commitment and the construction of a "double-cycle" development pattern means the graduate talents trained under the problem-oriented mechanism. For example, the digital economy is an important means to achieve low-carbon emissions and a new engine for high-quality economic development. However, traditional talents don't know new technologies, and those who understand technology don't know basic principles, which leads to an extreme shortage of relevant skills. Based on the actual needs, the demand for interdisciplinary and compound skills is exceptionally urgent, and the idea of graduate education should change to problem-oriented. Schools should break the barriers of interdisciplinary course selection, improve the credit mechanism, and encourage graduate students to choose the integration of knowledge of different disciplines according to their development orientation.

Fourthly, promote the construction of an ideological and political system of postgraduate courses, and promote the cultivation of postgraduate individual sound personalities. The upsurge of ideological and political education in the curriculum has been widely carried out in undergraduate education, and graduate education as a high-level talent is still in the exploratory stage (Wang, 2019). In the post-epidemic period, we face the stormy international environment, the domestic environment of transformation and upgrading, and the social setting of quick success and instant benefit. So the postgraduate training process should not only focus on the fundamental question of "who, how, and for whom to train",but also integrate the curriculum ideological and political education with the curriculum system fully, and take professional courses as the carrier to return to the educational essence of Lide Shuren. Through the construction of an ideological and political system of postgraduate courses, it can promote the cultivation of perfect individual personality and the improvement of professional skills of postgraduates, and lay a talent foundation for the construction of socialism with Chinese characteristics and the improvement of people's livelihood and well-being.

4.3 Postgraduates Should Enhance Their Awareness of Competition and Crisis, and Achieve Endogenous Growth of Ability

First, strengthen crisis awareness and improve resilience. The development of higher education depends on the internal logic of the training system and the adaptation and adjustment of external impact pressure (Kerr, 2010). At present, the ever-changing international and domestic environment is bound to bring risks, so graduate students should strengthen their sense of crisis, and in the process of training graduate students, improve their resilience through self-goal adjustment and self-ability enhancement (Brown, 2015).

Second, strengthen the sense of competition and achieve capacity growth. The author

believes that the so-called "involution" has existed since ancient times, which is essentially the anxiety perception of individuals under the condition of fierce competition. It can be understood as the cognitive response to the changes in the external environment due to one's weak competitive ability. In the final analysis, it is the embodiment of the original lack of competitive consciousness or competitive knowledge. In the post-epidemic period, under the background of the continuous improvement of national and school systems, individual graduate students should get out of their comfort zone in the past, strengthen their sense of competition, and achieve endogenous growth of their abilities through operational challenges, rational planning, and earnest work, so as to better cope with competition and challenges.

Third, strengthen the ideological and political literacy and shape the overall pattern. With China's growing economic strength, the developed countries, led by the United States, have suppressed China in all directions, and rumors and stigmatizing attacks have emerged. Postgraduates should strengthen their ideological and political literacy, rationally distinguish, strengthen the leadership of the party, strengthen their belief in serving the country and the people, and actively shape a great pattern that integrates global vision, feelings of home and country, and professional skills, to contribute to the early realization of our country's dream of strengthening the country.

4.4 Teachers Should Pay Attention to Professional Development and Improve the Adaptability of Teaching Ability

First, make clear the motivation for sustainable learning and enhance self-learning willingness. In the post-epidemic period, technology integration will be more extensive. Teachers should establish a new concept of sustainable development of professional ability, such as active action, in-depth exploration, and dynamic adjustment, and adhere to motivation-led, to improve the learning and use of related new technologies. At the same time, it is necessary to expand the application scope of new technology from the "two-way integration" teaching mode to the whole teaching process. Through online teaching, available materials and data collection, evaluation, and evaluation of graduate students' learning evaluation, we can visually analyze the entire sample and the whole process of graduate students' learning needs, and then optimize and adjust the teaching contents, methods, and procedures on time.

Second, persist in taking students as the center, and shape a correct ideology and a smooth learning channel. In the post-epidemic period, teachers should not only pay attention to policy changes related to postgraduate development, but also strengthen the collection and utilization of ideological and political materials. Then guide students to actively face the changes in the external environment and the adjustment of economic and social development needs, which will help them establish a correct sense of competition and crisis. At the same time, the "two-way integration mode" will further strengthen the combination of "student-centered" and new technology. Teachers should actively guide the initiative and enthusiasm of graduate students in the learning process, enhance their willingness to participate, and build a smooth channel for improving their learning ability.

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Notes

Note 1. Thomas l. Friedman, a famous American writer, thinks this epidemic is the historical dividing point between "the world before COVID-19" and "the world after COVID-19". With the basic control of a large-scale epidemic and the normalization of epidemic prevention, human beings have comprehensively promoted the restoration of social, political, economic and educational order. Therefore, it can consider that human beings have entered the post-pandemic period.

Note 2. The construction tasks of the 12 powerful countries are education management, talent power, manufacturing power, science, and technology power, quality power, space power, network power, transportation power, maritime power, trade power, culture power, and sports power, etc.

Note 3. “Five-in-one” security system refers to the joint participation of degree-granting units, educational administrative departments, academic organizations, industry departments, and social organizations.

Note 4. World Economic Forum, 2020.

Note 5. UNECE. Learning for the future: Competences in Education for Sustainable Development[R]. Geneva: UNECE, 2012. Retrieved from http://www.unece.org/fileadmin/DAM/env/esd/ESD_Publications/Competences_Publication.pdf

Note 6. Entolution first appeared in Clifford geertz's book “Entolution of Agriculture: The Process of Indonesian Ecological Change”, which is used to express that the interior of a system will enter a refined development process under the condition that external expansion is constrained. Later, it was widely used in economy, education, etc., generally referring to the decline of marginal return of social units caused by “excessive competition”.

Note 7. In Ulrich beck's book Freedom and Capitalism, it is pointed out that the increase of competitive pressure leads to an individualized reactions among people with similar conditions. That is to say, the sudden change of competition will lead to the isolation of individuals in homogeneous social groups. At the same time, it will form a new temporary survival alliance in a risk society and face group anxiety.

Note 8. The data comes from the 2020 China Labor Statistics Yearbook.