

Challenges and Improvement Strategies for Joint Cultivation Bases of Professional Degree Graduates in the Local Ordinary Universities

Fande Meng*, Qiuxiang Huang, Jinying Liu

College of Resource and Environment, Anhui Science and Technology University, Chuzhou, Anhui 233100, China;

*corresponding author: mengfd@ahstu.edu.cn

Abstract: Professional degree graduate education serves as a crucial pathway for cultivating high-level applied and interdisciplinary talents, with joint cultivation bases representing a key measure for achieving its educational objectives. The construction and development of these joint cultivation bases constitute an essential initiative for local ordinary higher education institutions to conduct orderly professional degree graduate education. This paper elucidates the core role and significance of joint cultivation bases in professional degree graduate education at local ordinary universities, while conducting an in-depth analysis of the prominent issues commonly prevalent in the current construction of such joint cultivation efforts. From dimensions including collaborative mechanisms, management models, mentor team development, evaluation systems, and guidance from government and industry sectors, this paper proposes systematic improvement strategies and recommendations to address the problems existing in graduate joint cultivation bases, thereby providing theoretical references for enhancing the quality of professional degree graduate training in local universities.

Key words: Local ordinary university; Professional degree graduate education; Joint cultivation base

Introduction

With the rapid development of the social economy and the transformation and upgrading of the industrial structure, the demand for high-level applied interdisciplinary talents is increasingly growing. Professional degree postgraduate education serves as a crucial pathway for cultivating such talents, emphasizing the development of practical innovation capabilities and professional competence. Its enrollment scale surpassed that of academic postgraduates in 2017, highlighting its rising status and role. The joint training base (hereinafter referred to as "the base") constitutes a key venue for the practical education of professional degree postgraduates, playing an essential role in bridging higher education institutions and industrial enterprises. The developmental orientation of local regular universities and colleges typically centers on serving regional economic growth and nurturing applied talents who are retainable and readily employable. Consequently, base construction is not only a necessary component for accomplishing the training objectives of professional degree postgraduates but also a strategic leverage point for showcasing the distinctive features of local universities, acquiring social resources, and enhancing core competitiveness. However, compared with nationally key universities, local institutions inherently lag in resources, influence, and research capacity, resulting in numerous challenges during base development that severely hinder the quality improvement of professional degree postgraduate training. Against this backdrop, systematically identifying the issues in base construction at local universities and exploring feasible improvement pathways hold significant theoretical value and practical relevance.

1. The Role and Significance of Joint Training Bases

The joint training base represents a graduate talent cultivation model collaboratively participated in by higher education institutions, research organizations, and enterprises. By jointly designing training programs and sharing educational resources, it integrates high-quality educational elements, promotes interdisciplinary integration and innovative development, and enhances postgraduates' academic proficiency and practical skills, thereby forming a multifunctional collaborative platform integrating

talent cultivation, technological research and development, and social services. This model plays a crucial role and holds significant importance for professional degree postgraduate education in local universities, primarily manifested in the following aspects:

1.1 Achieving Deep Integration of Industry and Education to Resolve the Disconnect Between Theory and Practice

Traditional graduate education often emphasizes theoretical research, which can lead to a detachment from practical applications. The base embeds real-world environments such as production, research and development, and management into the training process, enabling students to directly confront cutting-edge industry challenges and technological bottlenecks. Meanwhile, enterprises can provide practical problems to solve, research topics, project resources, and practical venues, thereby compensating for the lack of practicality and frontier quality in university education. This allows students to apply their knowledge systems effectively, integrating and promoting the combination of theory and practice^[1].

1.2 Ensuring the Quality of Practical Teaching and Enhancing Postgraduates' Professional Competence

The base serves as the core venue for practical teaching, not only honing postgraduates' professional skills but also subtly immersing them in corporate culture, industry standards, and professional ethics. By participating in actual projects at the base, postgraduates can comprehensively develop and enhance their project planning abilities, team collaboration spirit, communication skills, and comprehensive capacity to address complex engineering/management problems. This shortens the adaptation period from campus to workplace and enhances their core competitiveness for career development.

1.3 Promoting the Implementation of the Dual-Supervisor System and Optimizing the Structure of the Teaching Faculty

The base establishes a stable cooperative bridge between universities and enterprises, providing a communication link for academic and industrial supervisors. Academic supervisors can engage in solving actual technical challenges faced by enterprises, accurately grasp industry trends, and thereby enrich classroom teaching and scientific research. Industrial supervisors, in turn, bring rich practical experience into the training process, offering guidance that cannot be provided within the university, thereby enhancing students' practical abilities. Thus, the base fosters the practical literacy of university faculty, breaks the closed loop of theoretical research, promotes the transition of university teachers into "dual-qualified" instructors, and forms a supervisory team where theoretical and practical strengths complement each other.

1.4 Serving Regional Development and Strengthening the Social Service Function of Universities

The construction of the base provides a crucial link for the close alignment between universities and local enterprises, enabling universities to more accurately understand societal talent needs. It also offers technical services such as consulting, employee training, and joint research and development for enterprises, thereby becoming an important node in the regional innovation system. The establishment of the base not only supplies high-quality talent to the region but also enhances the influence of universities and gains support from social resources, thus creating a mutually beneficial and symbiotic relationship.

2. Major Issues in Joint Training Bases

Despite the significant role and importance of base construction, several prominent problems are commonly encountered in practice:

2.1 Formalistic Collaboration and Superficial Cultivation

Superficial Coordination Mechanisms and Hollowed-Out Training Processes

This represents the primary issue currently plaguing these bases. Many bases are established due to administrative directives or personal relationships, lacking solid common interests and long-term

cooperation mechanisms. This is mainly reflected in:

2.1.1 Superficial Level of Cooperation:

Collaboration often remains superficial, with enterprises viewing postgraduates as low-cost labor rather than "jointly cultivated talents" or "strategic resources," failing to involve them deeply in key research and development or core business activities^[2].

2.1.2 Hollowed-Out Training Process

Training programs are mostly formulated unilaterally by universities, with low participation from enterprises. Activities for postgraduates at the base lack systematic planning and effective supervision, often involving simple observation or repetitive tasks with low relevance to their degree theses, resulting in insufficient academic rigor and innovation in practical training.

2.1.3 Weak Alignment of Shared Interests

The goals pursued by universities and enterprises differ significantly; for instance, universities focus on talent cultivation and social reputation, while enterprises prioritize economic benefits and technological breakthroughs. If the two parties cannot identify mutually beneficial synergies, such as shared intellectual property, outstanding students, or joint problem-solving, the internal motivation of enterprises will be unsustainable, and the talent cultivation objectives of universities will not be effectively achieved.

2.2 Inadequate Management Mechanisms and Blurred Boundaries of Rights, Responsibilities, and Benefits

Sound management mechanisms are the foundation for ensuring the smooth operation of the base, but in reality, many loopholes exist. These include:

2.2.1 Loose organizational structure

The management bodies of most bases are often led by the graduate student administration department of the university in liaison with a specific department of the enterprise, but this connection is unable to achieve whole-process and refined management.

2.2.2 Lack of institutional safeguards

There is an absence of binding and detailed cooperation agreements, with unclear stipulations on key matters such as the rights and obligations of both parties, ownership of intellectual property, treatment and safety security of postgraduates, and responsibilities of supervisors, leading to mutual buck-passing when problems arise

2.2.3 Inadequate process monitoring

On-campus supervisors provide "remote guidance," while enterprise supervisors "have no time to attend," resulting in insufficient guidance and management for postgraduates. Additionally, the university lacks an effective tracking and feedback mechanism for the learning, research, and living conditions of postgraduates at the base.

2.3 Imbalance in the Supervisor Team and Insufficient "Dual-Qualified" Competence

Supervisors bear primary responsibility for postgraduate cultivation, yet the "Dual-Supervisor System" in the bases often fails to be effectively implemented. This primarily includes:

2.3.1 Difficulties in selecting and motivating enterprise supervisors

The relatively lower platform of local universities makes it challenging to attract the already scarce enterprise experts with rich practical experience and mentoring skills. Meanwhile, the lack of incentive mechanisms for enterprise supervisors within universities results in insufficient guidance from off-campus mentors^[3].

2.3.2 Lack of practical competence among academic supervisors

Many young faculty members at local universities focus on theoretical research and lack industrial practical experience, making it difficult for them to provide in-depth guidance on students' practical training.

2.3.3 Poor communication between the dual supervisors

The absence of stable communication platforms and mechanisms between academic and enterprise supervisors leads to isolated efforts and communication barriers. This results in a lack of consensus on the training objectives, content, and methods for postgraduates, preventing the formation of a synergistic educational force.

2.4 Misalignment in the Evaluation and Incentive System, Leading to Ineffective Guidance

The current evaluation systems for the bases, supervisors, and postgraduates are misaligned and lack directive function. Specific manifestations include:

2.4.1 Emphasis on "quantity" over "quality" in base evaluation

At the university level, there is often greater focus on "tangible" indicators such as the number of signed bases and the scale of hosted students, while lacking an effective assessment system for "intangible" indicators like operational quality, training outcomes, and depth of cooperation.

2.4.2 Prioritization of "research" over "teaching/practice" in supervisor evaluation

In university professional title evaluations and performance assessments, research outputs such as projects, publications, and awards remain the primary currency, whereas the substantial efforts invested in practical guidance and base construction are often difficult to quantify and recognize, dampening the enthusiasm of academic supervisors.

2.4.3 Focus on "outcomes" over "process" in student evaluation

Evaluations of postgraduates predominantly rely on final degree theses and research outcomes, while systematic assessment of their competency development and professional enhancement during practical training at the bases is lacking. This easily leads students to undervalue the practical training component.

3. Solutions and Recommendations for Improving the Construction of Joint Training Bases

In response to the aforementioned issues, systematic reforms and innovative measures must be implemented to promote the transformation of base construction from "formal collaboration" to "substantive integration."

3.1 Deepening Collaborative Mechanisms to Build a Community of Shared Destiny

3.1.1 Demand-oriented precise alignment

Local universities should conduct thorough preliminary research and proactively select enterprises, particularly "specialized, refined, unique, and innovative" ones, that align with their disciplinary strengths and demonstrate strong innovation needs and talent demand within the regional industrial landscape. This ensures a solid cooperative foundation in areas such as technological research and development and talent reserve.

3.1.2 Innovating cooperation models to achieve mutual benefits

Promote the transformation and upgrading of cooperation models from "internship hosting" to "project-driven" and "entity co-establishment." For instance, jointly established "R&D centers" can be created, organized around specific product development tasks, forming research teams that include both academic and enterprise supervisors along with postgraduates. The economic benefits or intellectual property generated from research outcomes would be shared according to agreements, forming stable interest linkages^[4].

3.1.3 Co-developing training programs and embedding enterprise courses

Invite enterprise experts to deeply participate in the entire talent cultivation process, fully incorporating industry perspectives. Simultaneously, locate some highly practical professional courses directly at the bases, taught by enterprise experts with content closely integrated with real enterprise cases.

3.2 Innovating Management Models to Achieve Whole-Process Refined Management

3.2.1 Establish dedicated management entities.

Create management bodies led by senior executives from both universities and enterprises, which will convene regular meetings to make major decisions, coordinate resources, and evaluate performance. Each base will be assigned full-time or part-time liaison officers responsible for communication, support services, and process monitoring.

3.2.2 Improve institutional systems and clarify rights, responsibilities, and benefits

Sign detailed Joint Training Agreements that explicitly define the rights and obligations of all parties. Develop a series of relevant rules and regulations to ensure standardized management procedures.

3.2.3 Strengthen process monitoring and information system support

Establish an information management platform requiring postgraduates to regularly submit practice logs, while academic and enterprise supervisors periodically complete guidance records. The management bodies can conduct dynamic supervision and issue alerts, thereby achieving comprehensive whole-process management of postgraduate practical training.

3.3 Strengthening the Development of Supervisor Teams to Build High-Level "Dual-Qualified" Teams

3.3.1 Implement strict selection and systematic training for enterprise supervisors

Establish clear, systematic, and standardized criteria for supervisor selection, emphasizing professional expertise, work experience, as well as mentoring willingness and communication skills. After appointment, they should receive pre-service training to familiarize them with the program's training objectives, processes, and mentoring methods, and be awarded formal appointment letters to enhance their sense of honor and responsibility.

3.3.2 Promote the "outbound mobility" of academic supervisors

Encourage and support young faculty members to engage in full-time or part-term training at partner enterprises, participate in corporate research and development, and accumulate practical experience, with such engagements serving as important references in professional title evaluations and performance assessments^[5].

3.3.3 Establish regular communication mechanisms

Organize periodic supervisor seminars and joint university-enterprise project review meetings to create opportunities for face-to-face exchanges between academic and enterprise supervisors. Establish stable online communication platforms to facilitate timely discussions on postgraduate training progress and encountered challenges

3.4 Restructuring the Evaluation and Incentive System to Foster Correct Guidance

3.4.1 Establish a multidimensional performance evaluation system for the bases

Shift from singular, simplistic quantitative assessments to comprehensive indicators including talent cultivation quality, research collaboration outcomes, and social service benefits. Implement dynamic adjustment and exit mechanisms for the bases, issuing warnings or revoking underperforming bases.

3.4.2 Reform the faculty evaluation mechanism to recognize practical contributions

In faculty professional title evaluations, appointments, and performance distributions, recalibrate the value of achievements such as supervising professional degree postgraduates, constructing joint training bases, obtaining industry-academia collaboration projects, and achieving technological commercialization, or establish separate evaluation channels to fully acknowledge faculty contributions in applied talent cultivation and social services.

3.4.3 Enhance postgraduate assessment methods with focus on value-added competencies

Develop an evaluation model combining process assessment and outcome assessment. Process assessment includes evaluations from enterprise supervisors, practice reports, and project defenses;

outcome assessment emphasizes the application orientation of degree theses, requiring topics to originate from practical applications and demonstrate students' comprehensive ability to apply theories and methods in solving real-world problems^[6].

3.5 Strengthening Government and Industry Guidance to Optimize the External Policy Environment

3.5.1 Secure policy and financial support from local governments

Local universities should actively seek support from local governments by incorporating the construction of postgraduate joint training bases into regional talent policies and industrial support plans. Providing financial subsidies or project priority to enterprises participating in base construction will help stimulate their enthusiasm.

3.5.2 Leverage the bridging role of industry associations

Proactively collaborate with industry associations, enabling them to organize collective engagement between enterprises within the industry and universities, establish industry talent standards, and certify a group of high-level joint training bases to create a cluster effect.

Conclusion

Postgraduate joint training bases serve as the primary venues for practical education of professional degree postgraduates, yet face non-negligible issues and challenges in their development, particularly prominent in local regular universities and colleges. While opportunities and challenges coexist, practical and feasible solutions can be proposed based on the identified problems. By analyzing the actual problems existing in joint training bases and putting forward effective methods and measures, we can promote the development of these bases, thereby assisting decision-makers and administrative departments in adjusting and improving joint training bases for professional postgraduate education.

Fund Project

Anhui Province New Era Education Provincial Quality Engineering Project (Postgraduate Education) (2023jyxggyjY235, 2024dshwyx035); Anhui Provincial Four New Initiatives Project (2023sx084).

References

- [1] Wang Yuzhen, Tian Maozhong, Wang Shangzhi, and Wang Yanfeng. Construction and Evaluation of Joint Postgraduate Training Models in Applied Local Universities. *Journal of Higher Education*, 2025, 11(24): 160-163.
- [2] Liu Fei, Li Yanlin, and Qu Jingjing. Exploration of Long-Term Development Mechanisms for Postgraduate Joint Training Bases. *Science and Education Guide*, 2025, (24): 13-15.
- [3] Wang Handong and Liu Weixing. Research on Innovative Paths for Joint Postgraduate Training Models in Universities. *Journal of Jilin Institute of Chemical Technology*, 2024, 41(12): 10-13.
- [4] Li Mengmeng, Bian Ke, Zhao Renyong, Wei Min, and Meng Jun. Discussion on the Construction of Practical Bases for Joint Training of Professional Degree Postgraduates. *Farm Products Processing*, 2022, (04): 118-120.
- [5] Liu Pinglei and Zhao Qian. Management Issues and Countermeasures for Joint University-Enterprise Training Bases of Engineering Masters. *Contemporary Education Research and Teaching Practice*, 2019, (08): 116-117.
- [6] Huang Yipeng, Zheng Xiaoqi, and Liu Dongning. Exploration of Training Models in Joint Training Bases for Professional Degree Postgraduates: A Case Study of Guangdong University of Technology. *Educator (Higher Education Forum)*, 2018, (21): 41-43.