

The Current Situation and Optimization Pathways of Vocational Education Training for Master's Students in Special Education: A Multi-Stakeholder Investigation Perspective

Lingbo Qiu^{1,a}, Juan Xu^{2,b,*}, Xuemei Fu^{3,c}

¹College of Special Education, Beijing Union University, Beijing, China

²College of Normal Education, Beijing Union University, Beijing, China

³Qingbaijiang Special Education School, Chengdu, China

^a20242045110705@buu.edu.cn, ^bsftxujuan@buu.edu.cn, ^cfuxuemei2023@163.com

*Corresponding author

Abstract: As China's economy develops, attention to children with special needs has grown. High-quality vocational education is critical for their social integration and independent living, with well-trained teachers playing a key role. Using questionnaires and interviews, this study finds that master's students in special education have only moderate attitudes toward vocational education, while their self-assessed satisfaction with professional knowledge, practical skills, and teaching competence remains low. Interviews also reveal a lack of systematic practical experience and concrete understanding of China's special vocational education. Recommendations include refining the curriculum system and optimizing supervisor guidance.

Keywords: special education; vocational education; postgraduate training

1. Introduction

Amid China's sustained socioeconomic development, special education has received growing attention from the Party and government. The "15th Five-Year Plan" identifies expanding higher education, advancing the modern vocational education system, and standardizing special education schools as key to building a high-quality education system^[1]. Promoting high-quality vocational education within special education is thus pivotal to "delivering education that satisfies the people." Furthermore, the "14th Five-Year Plan for the Advancement of Special Education" calls for strengthening the special education teacher workforce and increasing the cultivation of master's and doctoral talent in the field^[2].

At present, the development of vocational education within China's special education sector relies upon the "15-year" continuous education system implemented in special education schools. The vocational education stage involves not only the articulation between compulsory and post-compulsory education but also a fundamental shift in curricular content^[3]. Special vocational education in China faces multiple challenges, including insufficient educational opportunities for students, a "glass ceiling" obstructing their pathways to growth and accomplishment, and weak quality assurance mechanisms^[4]. These issues collectively impose heightened demands on the professional competencies of special education teachers in China.

With regard to vocational education, Guo Wenbin has explored the digital transformation of special vocational education, and Jian Congjin has examined the legal safeguards for individuals with disabilities receiving vocational education, both of which underscore the significance of special vocational education^{[5][6]}. Wang Tao and Tao Li have investigated instructional models for special vocational education from the perspectives of urban practice and sector-specific occupational characteristics, respectively^{[7][8]}.

Existing research indicates that the shortage and insufficient professionalization of vocational education teachers in special education schools is a critical bottleneck constraining the field's development. Regarding the cultivation of special education postgraduates, Liu Quanli found that China's special education has significant inter-institutional differences in curriculum design^[9].

A contradiction between academic curricula and real-world demands leads to postgraduates' low vocational awareness, new teachers' weak teaching skills, and poor university-enterprise communication. Thus, China has yet to establish a mature, systematic multi-stakeholder training system for special vocational education.

2. Research Subjects and Methods

2.1. Research Subjects

This study focuses on special education master's students, while also incorporating input from vocational teachers at special education schools, partner enterprises, and university program coordinators to better understand current postgraduate training in vocational education.

2.2. Research Instruments

This study employed a self-designed questionnaire and a semi-structured interview guide. Drawing on Li Shuqing's Special Education Teacher Competency Questionnaire^[10], the questionnaire was structured around four dimensions: attitudes toward vocational education, professional knowledge base, professional practical skills, and self-assessed satisfaction with vocational education teaching. A five-point Likert scale was used, with a Cronbach's α of 0.893 and a KMO value of 0.834, indicating good reliability and validity. The interview guide followed the same four dimensions and adopted a semi-structured format to allow respondents flexibility in their responses.

2.3. Research Methods

The questionnaire was distributed via Wenjuanxing to participants in Beijing, Sichuan, Chongqing, Anhui, and other regions, yielding 54 valid responses analyzed with SPSS 25. Since only slightly over thirty universities nationwide enroll master's students in special education^{[11][12]}, the population is correspondingly limited. The investigation spans multiple cities and institutions, providing a reasonably generalizable overview, while multi-stakeholder interviews substantiate the findings and reveal deeper causes.

3. Results

The questionnaire covered demographics, vocational education training status, and self-evaluation of teaching competencies. In-depth interviews were conducted with three postgraduates at different stages, one vocational education teacher, and one university program coordinator.

3.1. Basic Information of the Surveyed Population

In the present survey, the proportion of female postgraduates was relatively high. In terms of grade distribution, third-year postgraduates accounted for the largest share. Among the surveyed participants, only a small proportion had no internship or seminar experience related to special education (Table 1).

Table 1 Basic Information

Demographic Variables	Basic Information	Number of Participants	Percentage (%)
Gender	Female	48	88.9
	Male	6	11.1
Grade Level	First-Year Postgraduate	16	29.6
	Second-Year Postgraduate	16	29.6
	Third-Year Postgraduate	22	40.7
Internship Experience Related to Special Education	yes	50	92.6
	no	4	7.4
Seminar Attendance Related to Special Education	yes	53	98.1
	no	1	1.9

3.2. Current Training Situation of Special Education Postgraduates in Vocational Education

Far fewer postgraduates participated in special vocational education internships and seminars than

in general special education ones, and only eight held relevant vocational qualifications. Nonetheless, participants showed strong interest in the top-level design, teaching and practical operation of special vocational education. These results indicate that although universities attach importance to special education students' practical training, targeted internship cultivation for special vocational education still needs substantial improvement (Table 2).

Table 2 Current Training Situation in Vocational Education

Statistical Variable	Basic Information	Number of Participants	Percentage (%)
Internship Experience in Special Vocational Education	yes	19	35.2
	no	35	64.8
Seminar Attendance in Special Vocational Education	yes	28	51.9
	no	26	48.1
Qualifications in Vocational Education in Vocational Education	yes	8	14.8
	no	46	85.2

3.3. Self-Evaluation of Special Education Postgraduates Regarding Their Vocational Education Teaching

The questionnaire assessed postgraduates from four dimensions: vocational education attitude, professional knowledge, practical skills, and teaching competency satisfaction. The 54 respondents scored generally low overall, especially in professional knowledge and practical skills. As high-level talents in special education, they show strong recognition of special vocational education in attitude but obvious deficiencies in practical ability and professional identity, forming a paradox of high recognition yet low competency (Table 3).

Table 3 Current Status of Self-Evaluation

Dimension	M±SD
Attitudes Toward Vocational Education	3.73±0.62
Professional Knowledge Base	2.77±0.80
Professional Practical Skills	2.78±0.70
Vocational Teaching Self-Satisfaction	2.99±0.83

3.4. Interview Results

3.4.1. Interview Results with Special Education Postgraduates

Postgraduates' perceptions of special vocational education varied by internship experience. Those without relevant experience held pessimistic views, while those with experience identified practical issues more objectively. All interviewees reported no systematic training in this area, describing their knowledge as fragmented and acquired by chance, with no concrete suggestions for improvement (Table 4).

Table 4 Survey on Interviewees' Attitudes toward Vocational Education

	Interviewee 1	Interviewee 2	Interviewee 3
	First-Year Postgraduate	Second-Year Postgraduate	Third-Year Postgraduate
Attitude Toward Vocational Education	It is vital for their future, but vocational education is only accessible to those with relatively higher abilities.	Important for their future, yet current vocational education provision cannot adequately meet students' needs.	It is important for the development of children with special needs, but its operability at the practical level is limited.
Internship Experience	Had internship experience in a special education school during undergraduate studies.	Had one-on-one training and home-delivered instruction, plus observations at a special education school's vocational department during postgraduate studies.	Had internship experience in a special education school during undergraduate studies and one-on-one training experience during postgraduate studies.
Vocational Education Knowledge Sources	Occasionally, instructors would briefly discuss vocational education in class if their research touched on it.	Through a school practicum, where I participated in a lesson on cake-making.	Through sharing by other classmates during class sessions.

3.4.2. Interview Results with Vocational Education Teachers at a Special Education School

To further explore the training of special education postgraduates in vocational education, this study interviewed a newly employed special education postgraduate teaching vocational courses at a special education school. The interviewee held a positive view of China's special vocational education development and, drawing on front-line experience, recommended strengthening research

competencies tailored to vocational teaching roles during postgraduate training, as well as adding vocational education-focused training and research tracks to broaden students' professional knowledge (Table 5).

Table 5 Interview Results with the Vocational Education Teacher

Dimension	Specific Question	Content
Attitude Toward Vocational Education	Vocational Education Engagement Motivation	Mainly based on the school's needs.
	Attitude Before Job Entry	Highly recognized the bridging role of vocational education in connecting compulsory education with real-life functioning.
	Attitude After Job Entry	I once thought China's vocational education was well-developed, yet practice revealed a stark gap with my postgraduate cognition.
Professional Knowledge	Contribution to Vocational Education	Acquire general knowledge, focus on developing research competencies, and possess the capacity for scientific inquiry and self-directed exploration.
	Vocational Education Required Knowledge	It is necessary to offer some general courses that explore vocational education.
Professional Skills	Contribution to Vocational Education	Research competencies have been of great benefit to my engagement in vocational education.
	Cultivating Vocational Education Competencies in Postgraduate Education	Offer courses and lectures related to other disciplines.
Self-Assessed Satisfaction with Vocational Education Teaching	Self-Reflections on Engaging in Vocational Education	Intellectual disability students face severely limited vocational education options; Vocational curricula differ greatly by region with unique local features; Localized, pragmatic planning and thorough research are indispensable. Implementation is difficult, long exploratory in nature, and imposes heavy pressure on teachers.
	Views on Current Postgraduate Training	Thesis research on special vocational education is scarce. Relevant curriculum provision can boost students' research confidence and deepen their understanding in this field.

3.4.3. Interview Results with the University Special Education Program Coordinator

Interviewees acknowledged that special vocational education boasts promising prospects driven by social demand, serving as a key support for disabled people's social integration and the improvement of special education quality. Meanwhile, they pointed out prominent flaws in current postgraduate training: insufficient relevant courses and professional teachers, disjointed curriculum content, rigid research frameworks, and the lack of a specialized training pathway for vocational education.

To address these issues, the respondent suggested inviting vocational education experts to participate in special education research, thereby breaking disciplinary barriers and broadening perspectives. Concrete implementation strategies included adding specialized courses, implementing modular instruction, and establishing micro-credentials. The respondent emphasized that vocational education training should "focus on the big picture while letting go of minor details"—prioritizing general knowledge and skills, school-enterprise cooperation, multi-institutional collaboration, multidimensional learning, and student motivation. Notably, Beijing Union University's Special Education College has already established an undergraduate micro-credential program titled "Special Vocational Education Support and Application," offering relevant experience for university-level training in China^[13] (Table 6).

Table 6 Interview Results with the University Faculty Member

Dimension	Specific Question	Content
Attitude Toward Vocational Education	Necessity at the Student Level	The state encourages the establishment and quality improvement of vocational education within special education, which is conducive to students' social integration and independent living.
	At the Special Education School Level	Required by policy and mandated by the "15-year" continuous education system.
	At the Postgraduate Level	Currently, there is a shortage of vocational education teachers in special education schools, and the employment prospects are promising.
Professional Knowledge	Training Orientation	1. Focus on vocational education for individuals with intellectual and developmental disabilities. 2. Emphasize knowledge in vocational competency assessment and employment transition. 3. Prioritize the cultivation of general knowledge and competencies in vocational education.
	Implementation Pathway	1. Add vocational education-related courses to the existing training program. 2. Introduce modular courses on vocational education knowledge.

		3. Offer optional micro-credentials in vocational education. 4. Increase financial support for special vocational education.
Professional Skills	Training Orientation	The focus should be on cultivating general vocational skills (not occupation-specific ones like Chinese cuisine or Western pastry), facilitating students' enterprise integration, and acquiring relevant teaching strategies.
	Implementation Pathway	1. Invite leaders from relevant enterprises to give lectures. 2. Arrange internships at the vocational education departments of special education schools.
Postgraduate Vocational Education Training	In Terms of Curriculum	1. Relevant knowledge lacks systematic organization. 2. There is a shortage of specialized course instructors.
	In Terms of Postgraduates	There is a lack of attempts related to vocational education in dissertation topics.

In summary, universities see the potential of special vocational education but lack systematic curricula and specialized faculty. Front-line teachers need vocational training and value research skills, yet lack concrete teaching competencies. Enterprises have clear skill requirements but no communication with universities or special education schools. Postgraduates desire vocational knowledge but face scarce practical opportunities and guidance.

Overall, the three-stakeholder interviews reveal a fundamental contradiction between the current postgraduate disciplinary system and real-world demands, resulting in insufficient awareness of special vocational education, new teachers' lack of essential teaching skills, and communication barriers among universities, special education schools, and enterprises. A mature, systematic, multi-stakeholder collaborative training system for special vocational education has yet to be established in China.

4. Discussion

4.1. The Impact of the Lagging Development of Vocational Education within the Special Education System on Postgraduate Training

China's special education system began relatively late. Current programs at institutions like Beijing Normal University and Southwest University remain focused on foundational education and rehabilitation, with teacher preparation concentrated on school-based knowledge and scant attention to long-term employability^{[14][15]}. In contrast, the UK and the US adopt a holistic approach applicable across family, learning, and community settings while emphasizing future employmen^{[16][17]}. China's lack of such a multi-setting perspective overlooks both graduates' transition from student to teacher and the critical issue of employment transition at the end of compulsory education.

4.2. The Influence of Supervisors' Academic Orientation on the Vocational Education Competency Development of Special Education Postgraduates

Through in-depth interviews, Wang Jun found that supervisors' personal research interests and mentoring styles greatly shape special education postgraduates' career development and knowledge structure^[18]. This reflects that in the postgraduate mentorship model, supervisors are not only academic guides, but also key influencers of students' professional vision and capabilities.

China's postgraduate training system suffers from outdated concepts and a shortage of quality faculty^[19]; a supervisor's academic orientation shapes students' skills, yet without supervisors engaged in special vocational education, postgraduates cannot receive systematic training or deep participation opportunities in this field.

5. Recommendations

5.1. Refining the Vocational Education Curriculum System for Special Education Postgraduates and Strengthening the Practical Teaching Component

Colleges should adopt a dual-track model combining classroom case learning and on-site practical immersion. Teachers can select typical cases from special schools' vocational programs to guide postgraduates in analyzing curriculum design, teaching delivery and student evaluation, cultivating their problem-solving capacity. Meanwhile, case analysis helps students grasp core knowledge and skills of special vocational education and supports systematic professional learning.

5.2. Optimizing the Supervisor Guidance System and Research Orientation

To address the finding that special education postgraduates predominantly conduct case studies and that supervisors' roles remain underutilized, a cross-disciplinary, multi-stakeholder supervisory system integrating on- and off-campus resources should be established to optimize the guidance mechanism.

Specifically, universities can pursue this through two dimensions: resource support and environment cultivation. First, special funding should be allocated preferentially to supervisors and postgraduates engaged in special vocational education research, encouraging systematic empirical research on the long-term career development of students with special needs. Second, universities should establish a regular mechanism for inviting off-campus experts—two to three per semester from vocational education or partner enterprises—to deliver thematic lectures on the latest developments and practical challenges in employing individuals with special needs.

References

- [1] Xinhua News Agency. *Outline of the 15th Five-Year Plan for National Economic and Social Development of the People's Republic of China*[EB/OL]. (2026-03-13)[2026-03-24]. https://www.gov.cn/yaowen/liebiao/202603/content_7062633.htm.
- [2] General Office of the State Council. *Notice of the General Office of the State Council on Forwarding the "14th Five-Year Plan for the Advancement of Special Education Development" Issued by the Ministry of Education and Other Departments* [EB/OL]. (2022-01-25)[2026-03-24]. https://www.gov.cn/zhengce/content/2022-01/25/content_5670341.htm.
- [3] Li Tianshun & Yang Xijie. The historical mission, major challenges, and key tasks for the high-quality development of special education during the "15th Five-Year Plan" period [J]. *Chinese Journal of Special Education*, 2026, (01): 3–11.
- [4] Zhao Xiaohong. Opportunities, challenges, and pathways for the high-quality development of vocational education for individuals with disabilities from the perspective of building a leading country in education [J]. *Modern Special Education*, 2025, (17): 4–9.
- [5] Guo Wenbin & Wang Qin. The value, logic, and strategies of digital transformation empowering the high-quality development of vocational education for individuals with disabilities [J]. *Journal of South China Normal University (Social Science Edition)*, 2025, (06): 103–114+207.
- [6] Jian Congjin & Huo Guangqing. The theoretical logic and systematic safeguarding of the "three-dimensional" rights and capacities of the right to vocational education for individuals with disabilities [J]. *Journal of Beijing Union University*, 2025, 39(06): 70–76.
- [7] Wang Tao & Xiang Zhijie. Equity, inclusiveness, quality expansion, and improvement: The construction and refinement of a high-quality regional special education system during the "15th Five-Year Plan" period [J]. *Modern Special Education*, 2026, (03): 6–9.
- [8] Tao Li. A study on the integration of pastry and food instruction with career planning education in special education [J]. *China Food Industry*, 2026, (01): 155–157.
- [9] Liu Quanli. The curriculum design of master's programs in special education in China and suggestions for reform [J]. *Journal of Teacher Education*, 2022, 9(04): 85–93.
- [10] Li Shuqing. The influence of special education teachers' competency level on job performance and occupational burnout: The mediating effect of work engagement [D]. *Fujian Medical University*, 2019.
- [11] China Graduate Admissions Information Network. 2026 master's program directory: Special Education (045119) [EB/OL]. [2026-04-23].
- [12] China Graduate Admissions Information Network. 2026 master's program directory: Special Education (040109) [EB/OL]. [2026-04-23].
- [13] Mao Rongjian. Discussion on the construction of the micro-credential "Special Vocational Education Support and Application" expands interdisciplinary integration and innovative models [EB/OL]. *Beijing Union University News Network*, 2025-09-24 [2026-03-24]. https://news.buu.edu.cn/art/2025/9/24/art_38208_812772.html.
- [14] Faculty of Education, Beijing Normal University. Postgraduate courses [EB/OL]. [2026-03-24]. <https://fe.bnu.edu.cn/html/page03.html>.
- [15] Graduate School, Southwest University. Full-time professional master's degree training program [EB/OL]. (2023-12-08)[2026-03-24]. <https://jysygyb.swu.edu.cn/info/1023/6247.htm>.
- [16] Council for Exceptional Children. Initial practice-based professional preparation standards for special educators [EB/OL]. (2020-11-09)[2026-04-23]. <https://exceptionalchildren.org/standards/initial-practice-based-professional-preparation-standards-special-educators>.

- [17] Department for Education & Department of Health and Social Care. *SEND code of practice: 0 to 25 years* [EB/OL]. (2014-06-11)[2026-04-23]. <https://www.gov.uk/government/publications/send-code-of-practice-0-to-25>.
- [18] Wang Jun, Huang Bifeng, Zhu Liping, et al. *Blurred boundaries: Why do university postgraduates have neither research nor life?* [J]. *Education Academic Monthly*, 2025, (05): 15–24.
- [19] Du Xiaoyi & Yuan Ziming. *Realistic dilemmas and innovative pathways for improving the quality of postgraduate training in the new era* [J/OL]. *Journal of Liaoning University (Philosophy and Social Sciences Edition)*, 1–11 [2026-04-23].