

# *The Current Status and Reflections on the Cultivation of Master's Degree Talents in Braille Education: A Case Study of Beijing Union University*

Geng Nan<sup>1,a</sup>, Zhang Luwen<sup>1,b,\*</sup>, Qiu Lingbo<sup>1,c</sup>

<sup>1</sup>Special Education College, Beijing Union University, Puhuangyu Lane2 No.1, Beijing, China

<sup>a</sup>gengnan52@163.com, <sup>b</sup>20232045110708@buu.edu.cn, <sup>c</sup>20242045110705@buu.edu.cn

\*Corresponding author

**Keywords:** Braille Education, Professional Master's Degree, Talent Training

**Abstract:** In 2023, Beijing Union University launched China's first Master's program in Special Education with a concentration in Braille Education. Through in-depth interviews, this study examines key dimensions of talent cultivation, including curriculum design, learning experiences, and career planning. The findings suggest that the curriculum requires a stronger focus on Braille education's core needs, professional development objectives must be reinforced through targeted vocational training and inclusive education needs further expansion and improvement.

## 1. Introduction

Professional Master's degree education primarily targets the needs of specific professional fields in society, aiming to cultivate high-level applied specialists with strong professional competence and occupational literacy who can engage in practical work creatively.<sup>[1]</sup> China established its professional degree education system in 1991. In April 1996, the Master of Education (M.Ed.) professional degree was established, with formal enrollment commencing in 1997<sup>[2]</sup>. In 2023, Beijing Union University pioneered China's first Braille education-focused master's program in special education.

Based on the *Beijing Union University Master's Degree Graduate Training Program (2024 Edition)*, this paper analyzes the curriculum design features of the Special Education (Braille Education Direction). The current status of talent cultivation in the Braille Education Direction is reflected through In-depth Interview with current graduate students. By exploring Curriculum Design, Learning Experience, and Career Planning in the cultivation of Master of Braille Education candidates, this paper aims to propose recommendations for further refining the professional master's degree program in Braille Education.

## 2. Analysis of curriculum design

Beijing Union University (BUU) offers two specializations within its Master's Program in Special Education: Special Education (general) and Special Education (Braille Education).

Applicants must possess an academic background in special education or related fields. The BUU Training Program for the Braille Education Specialization requires 42 credits: 24 credits in degree courses, 8 credits in non-degree courses, and 10 credits in practical training.

Table 1: Curriculum of the Master's Program in Braille Education at BUU

Category		BUU Curriculum Design
Degree Courses (24 credits)	1.Marxist Theory Courses (4 credits)	1. <i>Marxist and Social Science Methodology</i> (1 credit) 2. <i>Research on the Theory and Practice of Socialism with Chinese Characteristics in the New Era</i> (2 credits) 3. <i>Research on Xi Jinping's Important Expositions on Education</i> (1 credit)
	2.Public English (2 credits)	<i>Public English</i> (2 credits)
	3.Degree Foundation Courses (8 credits)	1. <i>Principles of Education</i> (2 credits) 2. <i>Curriculum and Instructional Theory</i> (2 credits) 3. <i>Educational Research Methods</i> (2 credits) 4. <i>Adolescent Psychological Development and Education</i> (2 credits)
	4.Professional Degree Courses (10 credits)	1. <i>Research on Subject Curriculum and Teaching Materials</i> (2 credits) 2. <i>Research on Teaching Materials and Methods for Blind Children's Schools</i> (2 credits) 3. <i>Research on Subject Teaching Design and Implementation</i> (2 credits) 4. <i>Teaching Design and Implementation in Special Education Schools</i> (2 credits) 5. <i>Subject-Specific Courses</i> (4 credits) ① <i>Principles of Special Education</i> (2 credits) ② <i>Inclusive Education Theory and Practice</i> (2 credits) 6. <i>Academic Ethics and Thesis Writing</i> (2 credits)
Non-Degree Courses (8 credits)	1.Elective Courses (Select at least 8 credits)	1. <i>Subject Literacy Courses</i> (2 credits available) ① <i>Application of Modern Educational Technology</i> (2 credits) ② <i>Research on Frontier Issues in Special Education</i> (2 credits) 2. <i>Educational Professional Courses</i> (optional 2 credits) ① <i>Education for Children with Visual Impairments</i> (2 credits) ② <i>Research on Frontier Issues in Language Education</i> (2 credits) 3. <i>Professional Characteristic Courses</i> (optional 4 credits) ① <i>Advanced Studies in Modern Chinese</i> (2 credits) ② <i>Chinese Pinyin Research</i> (2 credits) ③ <i>Braille Reading and Writing</i> (2 credits) ④ <i>Contemporary Frontiers in Linguistics</i> (2 credits)
	2.Make-up Courses (0 credits)	For normal students who change majors, those majoring in special education (Braille education) are required to make up the course " <i>Modern Chinese</i> " (32 class hours).
Compulsory Practical Links (10 credits)		1. <i>Practical teaching</i> (1) <i>On-campus training</i> (2 credits) ① <i>Microteaching</i> (Second semester, 32 class hours over 2 weeks, 1 credit) ② <i>Lesson example teaching</i> (Third semester, 32 class hours over 2 weeks, 1 credit) (2) <i>Off-campus practice</i> (6 credits) ① <i>Educational observation</i> (Third semester, 32 class hours over 2 weeks, 1 credit) ② <i>Educational practice</i> (Fourth semester, 128 class hours over 16 weeks, 4 credits) ③ <i>Educational seminar</i> (First, second, third, and fourth semesters, 32 class hours over 4 weeks, 1 credit) 2. <i>Academic activities</i> (1 credit) Academic activities will be conducted in the first, second, third, and fourth semesters, with at least 10 sessions in total, amounting to 32 class hours. 3. <i>Innovation and entrepreneurship education</i> (1 credit) Innovation and entrepreneurship education activities are conducted in the first semester, totaling 16 class hours.

As shown in Table 1, the degree courses are structured into four modules: Marxist theory, public

English, degree foundation courses and professional degree courses. The curriculum combines core special education courses (e.g. *Principles of Special Education, Inclusive Education Theory and Practice, Teaching Design and Implementation in Special Education Schools*) with specialized Braille education courses (e.g. *Research on Teaching Materials and Methods for Blind Children's Schools*). Furthermore, it also includes courses designed to enhance students' academic research skills (e.g. *Academic Ethics and Thesis Writing*).

In the non-degree courses, elective courses highlight the distinctive focus on Braille education. Specifically, courses in the education and specialized tracks are designed around the core requirements of Braille education and literature disciplines, offering courses such as *Education for Children with Visual Impairments, Braille Reading and Writing, Advanced Studies in Modern Chinese, Chinese Pinyin Research, Contemporary Frontiers in Linguistics* and so on. Students can select courses based on their interests.

The practical training component is designed to cultivate students' competencies in special education teaching. This component features a comprehensive management and evaluation system, along with secured funding, ensuring its structured integration throughout the entire training program. The duration of practical training is typically no less than one academic year, including a minimum of one semester of off-campus intensive practice. For special education practicums, a strict dual-supervision system is implemented, involving both on-campus and off-campus supervisors. The university provides well-equipped laboratory and training facilities on-site, while off-campus practice bases are established to guarantee the effective delivery of practical training activities.

### 3. Interview Survey

We interviewed two Braille Education graduate students from the Special Education College of BUU. The collected interview data were then analyzed.

#### 3.1. Interview Outline

Table 2 presents the interview outline, which consists of four parts: personal background, application choices, professional studies and career plans.

Table 2: Interview Outline

Interview Direction	Interview Questions
Personal Background	1. Please briefly describe your educational background. 2. What was your undergraduate major? Do you have a background in Braille learning?
Application Choice	1. How did you first hear about the Braille education master's program? 2. What motivated you to pursue a master's degree in Braille education?
Professional Learning	1. Compared to general teacher education, what makes Braille education's curriculum unique? 2. What courses do you think are must-haves in a Braille education master's program? 3. What challenges did you run into during your studies, and how did you handle them? 4. Could you briefly introduce the examination details, such as the types of exams and the requirements for the final assignment? 5. In terms of practice, what have you learned from your experiences? Can you tell me about one impressive practical activity that stood out to you?
Career Planning	1. After graduation, what are your career plans or professional goals? 2. Are you thinking about further studies or going into a Braille education-related career after this? 3. What professional certifications do you plan to earn while in school to support your future career?

## 3.2. Interview Content and Analysis

### 3.2.1. Personal Background and Application Choice

Interviewee 1 is a second-year master's student in Braille education, with an undergraduate degree in Special Education from a normal university in western China. During her junior year, she completed a compulsory course titled *Fundamentals of Braille*, which consisted of both theoretical and practical training components. When choosing a graduate program, she considered factors such as career prospects, geographical location, and personal aptitude before deciding to apply to BUU.

Interviewee 2 is a first-year master's student in Braille education, who graduated with a degree in Educational Rehabilitation from another normal university in western China. Although she had not studied Braille during her bachelor's degree, she learned about the graduate program in Braille Education through the graduate admissions website. She chose to study at BUU primarily because of its location in the capital and her career aspiration to become a Braille teacher.

### 3.2.2. Professional Learning

Professional learning encompasses four areas: curriculum design, learning experience, examination requirements and internships. Through interviews, we find four main characteristics:

First, curriculum design integrates general and specialized education for targeted training. The curriculum design for Braille Education is more targeted compared to that of Special Education (general). The curriculum plan encompasses not only basic general courses but also introduces specialized courses in visual impairment education and Braille. Furthermore, linguistics courses are a prominent feature of the Braille education curriculum, providing a robust foundation in linguistic theory for Braille teaching and research.

Second, the learning process requires bidirectional efforts and individualized instruction to address challenges. Interviewee 1 (who has learned Braille) found linguistic knowledge challenging, noting that *"linguistic content is highly theoretical, the knowledge is abstract and difficult to understand, and learning effectiveness is low in a short period."* Interviewee 2 (who has not learned Braille) faced the main challenge of memorizing and mastering Braille dot positions, believing that *"learning Braille mainly relies on rote memorization."*

Third, the examination demands the integration of theoretical knowledge and practical skills. For theoretical courses, a course-related paper must be submitted following the prescribed format. For practical courses, students must submit either a lesson plan or a teaching video as required.

Fourth, during the internship, the focus is on enhancing students' professional skills. Interviewee 1 stated that her internships at the school for the blind and a Braille publishing house enhanced her Braille teaching skills and broadened her horizons.

### 3.2.3. Career Planning

Both interviewees expressed a strong desire to obtain relevant certifications, including the Braille skills certificate, the special education teacher qualification certificate and subject-specific teaching qualification certificates. They both aimed for Braille-related professions such as Braille instruction or Braille editing. Interviewee 1 further noted: *'I would also consider positions in inclusive education or schools for students with intellectual disabilities as alternative career paths.'*

## 4. Conclusion

First, the curriculum should be further focused on the core needs of Braille education. While current courses reflect Braille-specific features, the linguistics courses need better alignment with

actual Braille teaching scenarios. It is recommended to integrating Chinese phonological rules, lexical patterns, and syntax systematically with Braille pedagogy. Additionally, developing a Braille teaching case database which would significantly improve knowledge transfer efficiency.

Second, vocational skills training requires significant reinforcement. This program aims to cultivate advanced applied professionals who serve visually impaired students as special education teachers, administrators or engage in Braille - related applied research fields. As one researcher emphasized: *'Talent cultivation should be oriented towards improving professional competence by effectively connecting professional degree awarding with the acquisition of teacher qualifications and industry certifications, thereby further enhancing the professional competence of graduate students.'*<sup>[3]</sup>

Third, inclusive education needs further expansion and improvement. The application of Braille extends beyond the education sector to encompass assistive device research and development, social services, and other fields. Therefore, educators should cultivate students' ability to solve complex problems and promote Braille education's expansion from on-campus classrooms to social services, enhancing the profession's social recognition.

## Acknowledgement

This paper is supported by the China Disabled Persons' Federation research project "Study on the Support System for Inclusive Education for Persons with Disabilities" (Grant No. 24&ZC0017) and National Language Promotion Base (Beijing Union University) research project "Current Status and Strategies for the Writing Proficiency of Chinese Common Braille" (No. YW202507).

## References

- [1] Huang, B. Y. (2010). *The new era of professional degree graduate education in China. Degree and Graduate Education*, (10), 1-7.
- [2] Guo, Y. R., & Zhan, B. (2019). *A comparative study of the training models of education master's students in China, the UK, and the USA. Western Quality Education*, 5(10), 10-12.
- [3] Dunrong, B., & Xuewen, T. (2009). *Reflections and innovations on the quality assurance system of professional degree graduate education in China. Journal of Higher Education Research*, 30(3), 42-48.