

Challenges and Breakthroughs in Conducting Secondary Vocational Education for People with Disabilities in Special Education Schools in China: A Survey Based on Western China

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ABSTRACT

Currently, secondary vocational education for people with disabilities in China primarily exists in three forms: inclusion in regular secondary vocational schools; special education departments (classes) within regular secondary vocational schools; and vocational education departments (classes) in special education schools. Special education schools, as the backbone of the special education service system promoting high-quality development, are essential venues for accommodating students with disabilities to receive secondary vocational education. This study, aligning with the new requirements of the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities," utilizes questionnaires and interviews to understand the current state of secondary vocational education in special education schools in Western China. The findings reveal that the foundations for vocational education in special education schools are weak; the scale of schooling is small, with severe professional homogenization and uneven regional development; and there are few types of disabilities among the enrolled students. It is recommended to improve institutional mechanisms and strengthen overall coordination, to continuously focus on developing high school special education with an emphasis on vocational education, to promote the integration of vocational and special education, and to support and encourage local universities to develop higher vocational education for people with disabilities.

Keywords: *Secondary vocational education, People with disabilities, Special education.*

1. INTRODUCTION

Vocational education for people with disabilities, as an essential component of the vocational and modern vocational education system, plays a crucial role in enabling the social integration and common prosperity of people with disabilities (China, Department of Education 2022). China places a high value on secondary vocational education for people with disabilities, enacting a series of policies to ensure its high-quality development. The "14th Five-Year Plan for the Protection and Development of People with Disabilities" calls for focusing on the development of high school education for people with disabilities with an emphasis on vocational education, ensuring

that adolescents with disabilities who have completed compulsory education and are willing to continue can receive appropriate secondary vocational education. The "14th Five-Year Special Education Development Enhancement Action Plan" states that by 2025, each province (autonomous region, and municipality) should have at least one well-established secondary vocational school for people with disabilities. The "Sichuan Province 14th Five-Year Special Education Development Enhancement Implementation Plan" also emphasizes that by 2025, the province should have at least one secondary vocational school for people with disabilities and high schools (sections) for the blind and deaf, with each city (prefecture) and eligible county (city, district) having a secondary

vocational education department (class) for people with disabilities. The newly revised 2022 "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" provides a fundamental basis for the establishment of new secondary vocational schools for people with disabilities and also standardizes existing ones (China, Department of Education 2022). Currently, secondary vocational education for people with disabilities in China mainly exists in three forms: inclusion in regular secondary vocational schools; special education departments (classes) in regular secondary vocational schools; and vocational education departments (classes) in special education schools. Special education schools, as the backbone of the special education service system promoting high-quality development, are essential venues for accommodating students with disabilities to receive secondary vocational education. Therefore, in light of the new requirements of the "Standards for the

Establishment of Secondary Vocational Schools for People with Disabilities," a comprehensive understanding of the specific situation of secondary vocational education in special education schools is essential for promoting the standardized construction of secondary vocational schools and strengthening the standardized, high-quality development of secondary vocational education for people with disabilities.

2. METHODS

2.1 Participants

This study employs cluster sampling to select 135 special education schools in Western China as the survey subjects. Among these, 22 special education schools that provide secondary vocational education for people with disabilities were chosen as the research subjects ("Table 1").

Table 1. Special education schools offering secondary vocational education for people with disabilities: programs and enrollment types

| No. | School Name | Offered Programs | Main Types of Enrolled Disabled Students |
|-----|---|--|---|
| 1 | Chengdu Special Education Secondary Vocational Technical School | Traditional Chinese Medicine Rehabilitation Technology | Visual impairment |
| 2 | | Chinese Cuisine Cooking | Intellectual disability Hearing impairment |
| 3 | | Traditional Folk Crafts | Hearing impairment |
| 4 | Qingyang District Special Education School, Chengdu | Tea Art and Tea Marketing | Intellectual disability |
| 5 | | Chinese and Western Pastry Making | Intellectual disability |
| 6 | | Landscape Gardening | Intellectual disability |
| 7 | Longquanyi District Special Education School, Chengdu | Western Cuisine Cooking | Intellectual disability |
| 8 | Xindu District Special Education School, Chengdu | Horticultural Technology | Intellectual disability |
| 9 | | Modern Domestic Service and Management | Intellectual disability |
| 10 | Shuangliu District Special Education School, Chengdu | Chinese and Western Pastry Making | Intellectual disability |
| 11 | | Traditional Folk Crafts | Intellectual disability |
| 12 | | Car Beauty and Decoration | Intellectual disability |
| 13 | Dujiangyan Special Education School, Chengdu | Gardening Technology | Intellectual disability |
| 14 | | Food Processing Technology | Intellectual disability |
| 15 | | Arts and Crafts | Intellectual disability |
| 16 | Dayi County Special Education School, Chengdu | Chinese Cuisine Cooking | Intellectual disability |
| 17 | | Modern Domestic Service and Management | Intellectual disability |
| 18 | Jinniu District Special Education School, Chengdu | Chinese and Western Pastry Making | Intellectual disability |
| 19 | | Modern Domestic Service and Management | Intellectual disability |
| 20 | Chenghua District Special Education School, Chengdu | Modern Domestic Service and Management | Intellectual disability |

| No. | School Name | Offered Programs | Main Types of Enrolled Disabled Students |
|-----|--|---|--|
| 21 | Chenghua District Special Education School, Chengdu | Car Decoration and Beauty | Intellectual disability |
| 22 | | Tea Art and Tea Marketing | Intellectual disability |
| 23 | Pidu District Special Education School, Chengdu | Handicraft Design and Production | Intellectual disability |
| 24 | | Chinese Cuisine Cooking | Intellectual disability |
| 25 | | Modern Domestic Service and Management | Intellectual disability |
| 26 | Jinjiang District Special Education School, Chengdu | Chinese and Western Pastry Making | Intellectual disability |
| 27 | Zigong Special Education School | Western Cuisine Cooking | Intellectual disability, Hearing impairment, Visual impairment |
| 28 | | Landscape Gardening | Intellectual disability, Visual impairment |
| 29 | Fushun County Special Education School, Zigong | Chinese Cuisine Cooking | Intellectual disability |
| 30 | | Car Beauty and Decoration | Intellectual disability, Hearing impairment |
| 31 | | Family Farm Production and Management | Intellectual disability |
| 32 | Deyang Special Education School | Chinese Cuisine Cooking | Intellectual disability |
| 33 | Shifang Special Education School, Deyang | Hairdressing and Image Design | Hearing impairment |
| 34 | Weiyuan County Special Education School, Neijiang | Fashion Design and Craftsmanship | Hearing impairment |
| 35 | | Fashion Design and Craftsmanship | Intellectual disability Visual impairment |
| 36 | | Fashion Display and Presentation Design | Hearing impairment |
| 37 | Nanchong Special Education School | Fashion Design and Craftsmanship | Visual impairment |
| 38 | | Art Design and Production | Visual impairment |
| 39 | | Chinese Cuisine Cooking | Intellectual disability |
| 40 | Yibin Special Education School | Modern Domestic Service and Management | Intellectual disability |
| 41 | | Painting | Hearing impairment |
| 42 | | Fashion Design and Craftsmanship | Hearing impairment |
| 43 | | Crop Production Technology | Intellectual disability |
| 44 | Ya'an No. 1 Special Education School | Chinese and Western Pastry Making | Intellectual disability |
| 45 | Renshou County Special Education School, Meishan | Horticultural Technology | Intellectual disability Visual impairment |
| 46 | | Chinese Cuisine Cooking | Intellectual disability |
| 47 | | Chinese and Western Pastry Making | Intellectual disability |
| 48 | | Car Beauty and Decoration | Intellectual disability |
| 49 | | Fashion Design and Craftsmanship | Hearing impairment |
| 50 | Wenchuan County Special Education School, Aba Prefecture | Chinese and Western Pastry Making | Intellectual disability |
| 51 | | Ethnic Art | Hearing impairment |
| 52 | Xichang Special Education School, Liangshan Prefecture | Horticultural Technology | Hearing impairment |
| 53 | | Western Cuisine Cooking | Hearing impairment |
| 54 | | Modern Domestic Service and Management | Intellectual disability |

a Note: In the context of China's classification of disabilities and actual living conditions, many students with autism are diagnosed with intellectual disability. Therefore, in this paper, intellectual disability includes students with autism in special education schools.

2.2 *Material and Methods*

Based on the requirements of the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" and the "Sichuan Province 14th Five-Year Special Education Development Enhancement Implementation Plan," a custom "Survey on the Implementation of Secondary Vocational Education for People with Disabilities in Special Education Schools" was developed. The questionnaire was revised by inviting relevant leaders from the Education Department and Provincial Disabled Persons' Federation, university professors, and principals of special education schools. Some school administrators filled out a pilot questionnaire, which led to the final version. The questionnaire dimensions include basic school information (campus area, building area, sports facilities, library and reading room), program development (offered programs, program establishment time, types of enrolled students with disabilities, number of students, class size, basic facilities and equipment for program support, and training bases), school leadership (teaching experience, specialization, professional titles), faculty development (staff information, full-time teachers, professional teachers), resource center (classroom) construction, and per-student funding standards, among eight dimensions with 25 items. The main content includes the secondary vocational education school's philosophy, curriculum and teaching reforms, faculty development, construction of experimental and training facilities, major issues encountered, and development suggestions.

2.3 *Measures and Statistical Analysis*

The questionnaire was sent by the Sichuan Provincial Federation of Disabled Persons in Western China to the Federations of Disabled Persons in 21 cities (prefectures). Each city (prefecture) federation organized special education schools to complete the questionnaire, which was then submitted to the Sichuan Special Education Resource Center for compilation and analysis. A total of 21 questionnaires were distributed and 21 were returned, resulting in a 100% response rate. The questionnaire data were primarily analyzed using frequency statistics, while the interview results were organized and analyzed using the inductive method.

3. RESULTS

By analyzing the questionnaire and comparing it with the "Announcement by the Sichuan Provincial Department of Education and the Sichuan Provincial Department of Human Resources and Social Security on the Schools and Programs Qualified for Secondary Vocational Education Enrollment in Sichuan Province in 2023," it was found that governments and educational administrative departments at all levels attach great importance to vocational education for people with disabilities. They actively support the development of secondary vocational education for people with disabilities by implementing the policies of the Party and the state on special education and vocational education. Currently, there are no independently established secondary vocational schools for people with disabilities in Sichuan Province. Secondary vocational education for people with disabilities is primarily conducted through special education schools and regular secondary vocational schools. There are 135 special education schools in the province, among which 22 offer secondary vocational education for people with disabilities, with 54 programs (Table 1), enrolling 994 students. The types of disabilities among students mainly include hearing impairments, visual impairments, and intellectual disabilities.

3.1 *Basic Information on Schools*

As of 2023, Sichuan Province has established 22 special education high schools focusing on vocational education for students with disabilities, offering 54 different programs. Among them, there are 11 schools in Chengdu, 2 in Zigong, 2 in Deyang, and 1 each in Neijiang, Nanchong, Yibin, Ya'an, Meishan, Aba Prefecture, and Liangshan Prefecture. The earliest schools to offer secondary vocational education for students with disabilities were Chengdu Special Education School, which in 2014 launched Traditional Chinese Medicine Rehabilitation Technology for students with visual impairments, Chinese Cuisine Cooking for those with intellectual disabilities and hearing impairments, and Traditional Folk Crafts for those with hearing impairments. In 2016, Yibin Special Education School introduced Painting and Fashion Design and Craftsmanship for students with hearing impairments and Crop Production Technology for those with intellectual disabilities.

Regarding campus area, the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" requires that "the campus area (excluding staff dormitories and relatively independent auxiliary facilities) should be no less than 30,000 square meters." The survey found that among the 22 schools offering secondary vocational education for students with disabilities, only one school (Nanchong Special Education School) has a campus area exceeding 30,000 square meters. Two schools, Dujiangyan Special Education School and Longquanyi Special Education School in Chengdu, have areas between 20,000 and 30,000 square meters. Eight schools have areas between 10,000 and 20,000 square meters, and 11 schools have areas less than 10,000 square meters, including three with less than 5,000 square meters. Among the 22 special education schools, the largest campus area is 42,688 square meters, and the smallest is 4,474 square meters.

Regarding the building area, the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" requires that "the building area (excluding staff dormitories and relatively independent auxiliary facilities) should be no less than 16,000 square meters." The survey found that among the 22 schools offering secondary vocational education for students with disabilities, only two schools, Nanchong Special Education School and Chengdu Special Education School, have building areas exceeding 16,000 square meters. Three schools, Longquanyi Special Education School, Qingyang District Special Education School, and Jinniu District Special Education School in Chengdu, have areas between 10,000 and 16,000 square meters. Nine schools have areas between 5,000 and 10,000 square meters, and eight schools have areas less than 5,000 square meters. Among the 22 special education schools, the largest building area is 18,000 square meters, and the smallest is 1,984 square meters.

Regarding sports facilities, the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" requires "an athletics field with a circular track of at least 200 meters, and other facilities and spaces that meet the needs of disabled students for teaching and sports activities." Among the 22 schools, 18 meet the requirements, while 4 schools do not have an athletics field with a circular track of at least 200 meters. Interviews revealed that the main reason is the limited campus area, which is not suitable for construction, but relevant sports facilities and equipment have been installed in other areas of the school.

Regarding the construction of libraries and reading rooms, the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" requires "libraries and reading rooms that are appropriate for the size of the school and meet teaching needs." The survey found that among the 22 schools offering secondary vocational education for students with disabilities, 20 meet the requirements. Two schools have not built libraries or reading rooms due to limited building area and tight classroom usage, but reading areas have been set up in some public spaces and classrooms.

Regarding the construction of accessible environments, the campus construction of all 22 schools complies with the standards and regulations of the "Regulations on the Construction of Accessible Environments" and the "General Code for Accessibility in Building and Municipal Engineering." The schools have also promoted the construction of a humanistic accessible campus environment, focusing on aspects such as school organization structure, peer assistance, the cultivation of students' self-determination abilities, and home-school co-education. These efforts aim to create a warm campus where all students feel a sense of belonging, self-esteem, and happiness.

3.2 Program Construction Status

Regarding enrollment targets and types, reviewing the 2023 secondary vocational education enrollment brochures of each school, it was found that the enrollment targets for secondary vocational education for students with disabilities in all 22 schools are "primarily graduates of junior high school or individuals with equivalent educational levels with disabilities." The main types of disabilities enrolled are hearing impairment, visual impairment, and intellectual disability. Four schools enroll students with all three types of disabilities (hearing impairment, visual impairment, and intellectual disability): Nanchong Special Education School, Chengdu Special Education School, Zigong Special Education School, and Weiyuan County Special Education School. Five schools enroll students with intellectual disability and hearing impairment: Fushun County Special Education School, Zigong; Yibin Special Education School; Renshou County Special Education School, Meishan; Wenchuan County Special Education School, Aba Prefecture; and Xichang Special Education School. Shifang Special Education School, Deyang, enrolls only students with hearing

impairment. The remaining 13 special education schools enroll only students with intellectual disability.

Regarding enrollment scale, the survey found that as of December 2023, the 22 special education schools had enrolled a total of 994 students, with more than 60% being students with intellectual disabilities. Nanchong Special Education School and Chengdu Special Education School each have an enrollment exceeding 100 students. This is a significant gap compared to the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities," which require an enrollment of at least 300 students in academic programs. Interviews revealed that most special education schools are primarily for compulsory education, with student populations typically between 100 and 500. In recent years, they have gradually extended special education to higher levels. The main sources of secondary vocational students are graduates from the compulsory education stage within the school or students from nearby cities (prefectures) where secondary vocational education needs are not met. Consequently, the scale of secondary vocational education is relatively small but is planned to increase annually.

Regarding program offerings, the survey found that the 22 special education schools have set up 54 programs (including the same programs offered by different schools) based on social needs and the physical and mental characteristics of people with disabilities. According to the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities," which require "generally no fewer than four permanent programs," three schools meet this standard: Nanchong Special Education School, Chengdu Special Education School, and Renshou County Special Education School. The programs mainly focus on Modern Domestic Service and Management, Landscape Gardening, Chinese Cuisine Cooking, Western Cuisine Cooking, Car Beauty and Decoration, Traditional Folk Crafts, Fashion Design and Craftsmanship, Fashion Display and Presentation Design, Traditional Chinese Medicine Rehabilitation Technology, Crop Production Technology, Painting, and Ethnic Art.

Regarding class sizes, the survey found that out of the 54 programs in the 22 schools, 50 programs meet the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities," which require class sizes to be

"generally 8-20 students." The programs that exceed the class size requirements are a horticulture program at a special education school with 26 hearing-impaired students and a Chinese Cuisine Cooking program at another special education school with 22 hearing-impaired students. Interviews revealed that these two special education schools are city-level institutions that enroll hearing-impaired students from the entire city and even nearby cities (prefectures). The proportion of hearing-impaired students is relatively high, especially at the high school level, where vocational education is the focus. The other schools primarily enroll hearing-impaired or intellectually disabled students who graduated from the compulsory education stage within the school, resulting in fewer students.

In terms of facilities, equipment, resource centers (classrooms) and practical training bases, 22 schools have built relevant facilities and equipment according to their specialties, but the level of construction varies. Except for two district-level special education schools that have not established resource centers (classrooms) for the time being, the rest of the schools have built basic facilities, equipment, corresponding resource centers (classrooms) and practical training bases to ensure the development of their specialties. Interviews revealed that the lack of resource centers (resource classrooms) is mainly due to the shortage of classrooms in the schools, and insufficient local policies, personnel and financial support for the establishment of resource centers. According to the requirement of "realizing the full coverage of special education resource centers" in the Implementation Plan for the Development and Improvement of Special Education in Sichuan Province in the 14th Five-Year Plan, the principals all said that they would actively strive for resources, overcome difficulties, and apply for resources while constructing the centers, so as to do a good job of guaranteeing secondary vocational education for people with disabilities. The principals all said that they would actively strive for resources, overcome difficulties, apply for resources while building, and do a good job of guaranteeing secondary vocational education for the disabled.

3.3 Leadership Situation

The "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" requires that "principals should have at least five years of experience in education and

teaching, and both principals and vice principals for teaching should hold senior professional technical positions." The survey found that among the 22 principals, 20 hold senior professional titles. This includes 4 with senior-level professional titles (from Chengdu Special Education School, Chenghua District Special Education School, Weiyuan County Special Education School, and Wenchuan County Special Education School) and 16 with deputy senior-level professional titles, while 2 have primary and secondary school level professional titles. The teaching experience of the 22 principals ranges from a maximum of 38 years to a minimum of 5 years (due to administrative reassignment), with an average teaching experience of 26.8 years. Among the 22 principals, 4 (from Xindu District Special Education School, Fushun County Special Education School in Zigong, Yibin Special Education School, and Xichang Special Education School) have a background in special education. Interviews revealed that the principals are passionate about the cause of people with disabilities, familiar with the patterns of vocational education for people with disabilities, and have a clear and accurate understanding of school positioning and development strategies. They possess high political literacy and strong management skills.

3.4 Faculty Development

The 22 special education schools have 176 professional teachers dedicated to vocational education, including 32 dual-qualification teachers, 51 teachers with master's degrees, and 52 part-time teachers from outside the schools. According to the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities," which stipulates that the ratio of staff to students should be no less than 1:5, building a robust faculty for secondary vocational education for students with disabilities presents significant challenges for these schools. Interviews revealed two main issues: first, the long-standing shortage of teacher staffing in these schools, resulting in student-teacher ratios that do not meet the required standards. Second, the late start in offering secondary vocational education for students with disabilities, inadequate training of vocational education teachers in higher education institutions, difficulty in recruiting professional teachers, and reliance on reassigning compulsory education teachers and hiring part-time teachers from outside the school as the core faculty.

3.5 Per-Student Funding

The survey found that 17 of the 22 schools follow the per-student funding standards approved by their respective districts or counties for the compulsory education stage. Among these, the highest funding is at Chenghua District Special Education School in Chengdu at 17,000 yuan per student per year, and the lowest follows the national compulsory education per-student funding standard of 6,000 yuan per student per year. Four schools follow the local secondary vocational education per-student funding standards, with the highest being 4,000 yuan per student per year and the lowest being 1,900 yuan per student per year. Regarding funding guarantees, the "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" stipulates that "local governments should fully consider the small class sizes, high education and teaching costs, and significant expenses for accessibility construction and maintenance in vocational schools for people with disabilities. They should establish per-student funding standards (comprehensive allocation standards or public expenditure standards) for these schools, ensuring timely and full disbursement of funds to continuously improve school conditions" (China, Department of Education 2022). Interviews revealed that special education schools mainly follow the per-student public expenditure standards of the compulsory education stage for secondary vocational education for students with disabilities. In some regions, they refer to the local ordinary secondary vocational education per-student funding standards. However, principals commonly expressed that the costs of secondary vocational education for students with disabilities are high, resulting in significant funding gaps. They mainly rely on other school funds or apply for special subsidies from the government, highlighting the urgent need to establish per-student funding standards that meet the requirements for the standardized construction of secondary vocational schools for people with disabilities.

4. MAJOR ISSUES

4.1 Weak Foundation for Vocational Education

The "Standards for the Establishment of Secondary Vocational Schools for People with Disabilities" introduces new requirements for the construction of such schools. These include increased quantitative standards for student

enrollment, campus area, building area, per-student library resources, and the number of seats in reading rooms for teachers and students. Clear requirements are also set for faculty development, school resource centers, facilities and training bases, specialized classrooms, accessibility, and information technology. The survey found that none of the 22 schools in the province offering secondary vocational education for students with disabilities fully meet the requirements set by the "Standards." Issues include insufficient student enrollment, campus area, and building area; inadequate faculty development; and insufficient ratios of dedicated vocational education teachers and dual-qualification teachers. Interviews revealed that funding and faculty issues are the two fundamental problems limiting the development of secondary vocational schools for people with disabilities. The primary reasons are: first, the funding guarantee mechanism for secondary vocational education for people with disabilities is still incomplete. There is no established special funding system for vocational education for people with disabilities, nor are there per-student funding standards that match the local economic level. Schools also face practical issues such as small class sizes, high education and teaching costs, and significant expenses for accessibility construction and maintenance. The current per-student funding is insufficient to meet the continuous improvement needs of the school's operating conditions. Second, the faculty strength is weak, with an insufficient number of dedicated teachers and a need for quality improvement. The faculty for vocational education for people with disabilities in China has long faced issues such as overall weakness, a lack of specialized structure, and insufficient market practice, which limit the high-quality development of vocational education for people with disabilities (Chen, 2023). Teachers in special education schools for secondary vocational education need to master the basic knowledge of special education theory, follow the principles of special education, and address the unique and general patterns of students' physical and mental development. They must use the basic principles and methods of special education to analyze and solve practical teaching problems. Additionally, they need to grasp the basic knowledge of vocational education theory, follow the principles of vocational education, consider the cognitive development characteristics of secondary vocational school students, and use vocational education principles and methods to analyze and solve educational practice problems (China, Department of Education 2021). There is a high

demand for dual-qualification and applied teachers with high standards. However, currently, teachers specifically dedicated to secondary vocational education in special education schools mainly come from subject teachers at the original special education schools or are part-time teachers hired from outside. The number of teachers is insufficient, and their professional levels need significant improvement. Fourth, general secondary vocational schools with relatively better educational conditions remain hesitant to enroll a large number of students with disabilities. They only enroll a small number of students with physical disabilities and hearing impairments, which limits the scale and high-quality development of secondary vocational education for students with disabilities.

4.2 Small Scale of Schools, Serious Homogeneity of Programs, Uneven Regional Development

On one hand, compared to regular secondary vocational schools, special education schools offering vocational education for people with disabilities are fewer in number, offer fewer programs, and have fewer students. In 2023, there were 428 schools in the province qualified to enroll students in secondary vocational education, offering 387 programs (China, Department of Education 2023). However, out of the 135 special education schools in the province, only 22 offer secondary vocational education for students with disabilities, with 54 programs and a total of 994 students. Among these students, 87 have visual impairments, 290 have hearing impairments, and 617 have intellectual disabilities (including autism). These programs cover major categories such as tourism, transportation, culture and arts, agriculture, forestry, animal husbandry and fishery, light industry and textiles, and public management and services. However, among the 54 programs, there is significant homogeneity, with only 14 distinct programs available to students after merging identical programs. The severe convergence in program offerings leads to an increase in graduates from the same programs while job positions are insufficient, increasing competition among students and potentially causing difficulties in employment channels. This also tends to obscure the distinctive and differentiated talent cultivation characteristics of schools (Su, Zhao, & Shi, 2017). Reviewing the literature reveals that there are 19 major categories and 358 programs in secondary vocational education in mainland China (China, Department of Education 2023). Schools offering secondary

vocational education for students with disabilities can choose appropriate programs based on their development and the needs of their students. In Taiwan, vocational education for students with disabilities includes five major functional curricula: agriculture, industry, commerce, home economics, and services, with 49 different programs. Schools can choose suitable courses as vocational education content based on their circumstances and the characteristics of their students (Du & Zhang, 2021). Comparatively, the special education schools in Sichuan Province offer fewer vocational programs for students with disabilities and operate on a smaller scale. On the other hand, the development of secondary vocational education for students with disabilities varies greatly across different cities (prefectures). Among the 21 cities (prefectures) in the province, only 10 have special education schools that offer vocational education for students with disabilities, while the remaining 11 have not yet initiated such programs. Among the 10 cities (prefectures) that have initiated such programs, Chengdu has 11 schools (50%), Zigong has 2 schools (1%), and Deyang has 2 schools (1%), while the remaining 7 cities (prefectures) each have only 1 school. The uneven regional development makes it difficult for students with disabilities to conveniently access suitable secondary vocational education after graduating from compulsory education, potentially losing the opportunity for further education. This is detrimental to the self-esteem, confidence, self-reliance, and self-sufficiency of students with disabilities, limiting their potential to grow into useful talents for the country. Li Yun and colleagues believe that according to the new requirements for constructing a modern vocational education system, while further expanding the scale of secondary vocational education for students with disabilities, more attention should be paid to balanced regional development. This will ensure that more people with different types of disabilities have equal rights to receive vocational education (Li, Wang, & Li, 2015).

4.3 Limited Types of Disabilities Enrolled

The survey found that the 22 special education schools qualified for secondary vocational education enrollment primarily admit students with hearing impairments, visual impairments, and intellectual disabilities, with relatively few other enrollment types. Interviews revealed that, first, with the intrinsic development of inclusive education in China, students with mild disabilities

can enter regular schools for study and advancement. Second, at present, special education schools primarily enroll students with moderate to severe hearing impairments, visual impairments, and intellectual disabilities at the compulsory education stage, as these students cannot easily enter inclusive education schools. Consequently, secondary vocational education mainly consists of graduates from these schools, leading to a concentration of these three types of students. Third, special education schools have relatively better foundations for providing vocational education for students with intellectual disabilities, visual impairments, and hearing impairments. Guo Wenbin and colleagues suggest expanding the enrollment targets from the three groups of visual impairment, hearing impairment, and intellectual disability to include more diverse groups such as autism, learning disabilities, and multiple disabilities (Guo & Lin, 2022).

In China, common enrollment types for secondary vocational education include hearing impairment, visual impairment, physical disabilities, speech disabilities, and intellectual disabilities. In the United States, there are 19 categories of disabilities for students entering secondary vocational education; in Taiwan Province, there are 16 categories; and in Hong Kong, there are 9 categories (Hong Kong Special Administrative Region Government Education Bureau, 2021). As long as the disability type is legally recognized, students can apply for admission.

5. RECOMMENDATIONS FOR DEVELOPMENT

5.1 Improving Institutional Mechanisms and Strengthen Coordination

The education department should proactively coordinate with relevant government agencies to streamline the work of secondary vocational education for people with disabilities, enhance the multi-department collaborative mechanism to advance the education of people with disabilities, and strengthen the institutional framework for secondary vocational education for people with disabilities (Deng & Shen, 2022). This will ensure the implementation of related policies and promote the establishment of at least one secondary vocational school for people with disabilities, as well as high schools for the blind and deaf in each province by 2025. Increase financial support and per-student funding to ensure the development of

programs, courses, academic research, teacher training, student assistance, quality evaluation of education, and other aspects of vocational education for people with disabilities. This will continuously improve the conditions for secondary vocational education for people with disabilities and strengthen the construction of training bases.

5.2 Continuously Focusing on Developing High School Special Education with an Emphasis on Vocational Education

There will be a must to support and promote the establishment of vocational education departments (classes) in special education schools, and the addition of special education departments (classes) in regular secondary vocational schools to enroll students with disabilities, and give support to regular high schools and secondary vocational schools in accepting students with disabilities to study alongside their peers, ensuring that each city (prefecture) and qualified county (city, district) has a secondary vocational education department (class) for students with disabilities. The government should coordinate and plan to support the establishment of a provincial model secondary vocational education school for students with disabilities. There will also be a must to utilize opportunities such as the construction of Nanchong City's economic sub-center and the establishment of the Southern Sichuan Special Education Center in Yibin City, and conduct thorough research and analysis to promote the city-level special education schools to become provincial model and standardized secondary vocational education schools for students with disabilities, leading and driving the development of secondary vocational education for students with disabilities across the province. Faculty development should be strengthened to ensure that the ratio of staff to students in secondary vocational schools for students with disabilities is no less than 1:5, and that there is one related auxiliary professional for every 15 students, in accordance with the requirements. Fully equip and optimize the teaching staff. Additionally, secondary vocational education for students with disabilities demands higher composite requirements for teachers. They need to possess knowledge and abilities in both special education and vocational education, as well as general education and rehabilitation skills. Therefore, it is essential to strengthen the cultivation and training of "dual-qualification" teachers, especially in the application of digitalization, intelligence, and networking in

education, rehabilitation training, and vocational training.

5.3 Promoting the Integration of Vocational and Special Education

Schools should enhance the construction of vocational education programs, focus on the cultivation of vocational skills for students with disabilities, and promote the simultaneous improvement of education, rehabilitation, and vocational skills for students with disabilities, equipping them with professional skills for future employment and entrepreneurship (China, Department of Education 2021). It is quite necessary to improve the construction of the secondary vocational education curriculum system, and support special education school vocational education departments (classes) in offering programs that cater to the physical and mental characteristics of students with disabilities and meet market demands. Course design should combine individualization with diversity, set scientifically reasonable course objectives matching the developmental characteristics of special students, and establish appropriate curriculum standards that align with students' abilities and meet job requirements (Du & Zhang, 2021). Relying on local industries, there is a necessity to develop diversified school-based courses and vocational courses that match local characteristics, tailored to the conditions of each school and region (Guo & Lin, 2022), and support relevant units and research institutions in developing and constructing high-quality textbooks suitable for vocational education for individuals with disabilities, enhancing digital teaching resources, and promoting educational and teaching reforms to transition from traditional to informational and specialized teaching modes. Incentives should be provided to promote school-enterprise cooperation, support vocational training institutions in offering vocational skills training for students with disabilities, actively conduct career planning and employment guidance, and ensure a smooth transition from education to employment for students with disabilities. It will be necessary to support vocational education internship and training bases that are open to students with disabilities (Sichuan Provincial Government, 2022), ensuring that program offerings, professional courses, practice systems, and vocational standards are interconnected, and establishing a comprehensive curriculum articulation system (Huang, 2019).

5.4 Supporting and Encouraging Local Colleges to Develop Higher Vocational Education for People with Disabilities

Wang Jingbo believes that the lack of a good educational articulation mechanism in secondary vocational education for people with disabilities forces them to choose from a few specialized higher education institutions if they want to continue their studies, which is unfair compared to the educational resources available to regular students(Wang, 2019). It is recommended to enhance the articulation between secondary and higher vocational education for people with disabilities under the concept of integrated development of knowledge and skills. This includes supporting regular colleges in establishing relevant programs suitable for students with disabilities, optimizing the curriculum system based on students' interests and market demands, and creating an integrated curriculum for secondary and higher vocational education for people with disabilities. It will be of great significance to expand enrollment, improve measures for students with disabilities to attend regular colleges, increase opportunities for them to receive higher-level education, and support regular colleges, open universities, and adult colleges in offering continuing education for people with disabilities, as well as improving and streamline lifelong learning pathways for people with disabilities. Vocational colleges should be encouraged to collaborate with existing independent special education institutions in joint education efforts, including joint enrollment, mutual recognition of credits, and shared course selection to jointly train students with disabilities. This will promote the maximum development of students with disabilities, striving to help them grow into useful talents for China (China, Department of Education 2018).

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REFERENCES

- [1] Chen, L. Standardized configuration of professional faculty to ensure the high-quality development of secondary vocational education for people with disabilities. *Modern Special Education*, 2023(5), 6-7.
- [2] Deng, P., & Shen, R. Research hotspots and frontier evolution of secondary vocational education for people with disabilities in China - A knowledge mapping analysis based on CNKI (2005-2021) literature. *Journal of Suihua University*, 2022: 42(10), 6-11.
- [3] Du, F., & Zhang, L. Vocational education for students with disabilities in Taiwan and its implications. *Modern Special Education*, 2021(01), 75-79.
- [4] Guo, W., & Lin, L. Research hotspots and frontier trends in secondary vocational education for people with disabilities in China - A visual analysis based on Citespace. *Journal of Yan'an University (Social Sciences Edition)*, 2022: 44(4), 104-111.
- [5] Huang, W. Four points of consideration for secondary vocational education for people with disabilities. *Chinese Disabled Persons*, 2019(2), 64-65.
- [6] Li, Y., Wang, Y., & Li, K. The current situation, problems, and countermeasures of secondary vocational education for people with disabilities - Based on data analysis from 2008-2013. *Chinese Special Education*, 2015(7), 10-17.
- [7] Ministry of Education of the People's Republic of China. Several opinions on accelerating the development of vocational education for people with disabilities by four departments including the Ministry of Education. (2018, July 4). http://www.moe.gov.cn/srcsite/A07/zcs_zhgg/201807/t20180718_343400.html
- [8] Ministry of Education of the People's Republic of China. Notice on issuing the "Vocational Education Professional Catalogue (2021)". (2021, March 17). http://www.moe.gov.cn/srcsite/A07/moe_953/202103/t20210319_521135.html
- [9] Ministry of Education of the People's Republic of China. Notice of the General Office of the Ministry of Education on issuing the "Standards for the Professional Competence of Secondary Education Teacher Education Students (Trial)" and four other

- documents. (2021, April 2). http://www.moe.gov.cn/srcsite/A10/s6991/202104/t20210412_525943.html
- [10] Ministry of Education of the People's Republic of China. Notice on the action plan for the improvement of special education development during the 14th Five-Year Plan. (2021, December 31). http://www.moe.gov.cn/jyb_xxgk/moe_1777/moe_1778/202201/t20220125_596312.html
- [11] Ministry of Education of the People's Republic of China. Notice on issuing the "Standards for the Establishment of Secondary Vocational Schools for the Disabled". (2022, November 15). http://www.moe.gov.cn/jyb_xxgk/moe_1777/moe_1779/202211/t20221123_1001342.html
- [12] Ministry of Education of the People's Republic of China. Seven departments jointly promote the high-quality development of secondary vocational education for the disabled. (2022, November 23). http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/202211/t20221123_1001374.html
- [13] Ministry of Education of the People's Republic of China. Improving the standards for the establishment of secondary vocational schools for the disabled and accelerating the development of vocational education for the disabled. (2022, November 30). http://www.moe.gov.cn/jyb_xwfb/s271/202211/t20221130_1009227.html
- [14] Sichuan Provincial Department of Human Resources and Social Security. Announcement on the schools and programs qualified for secondary vocational education enrollment in Sichuan Province in 2023. (2023, May 16). <http://rst.sc.gov.cn/rst/gsgg/2023/5/16/6cd927b2ff2b411d91e7140c05783b5b.shtml>
- [15] Sichuan Provincial People's Government. Notice on issuing the "14th Five-Year Plan for the Development and Improvement of Special Education in Sichuan Province" by seven departments including the Sichuan Provincial Department of Education. (2022, December 26). <https://www.sc.gov.cn/10462/c109823/2023/1/28/a17cc86d580e40e2914335972b99bc52.shtml>
- [16] Su, H., Zhao, C., & Shi, W. Research on the professional setting of vocational education in special education schools under the new normal - Based on the practice of ten secondary vocational schools for people with disabilities. *Modern Special Education*, 2017(4), 60-64.
- [17] Wang, J. Research on secondary vocational education for people with disabilities from the perspective of social inclusion. *Modern Vocational Education*, 2020(25), 128-129
- [18] Hong Kong Special Administrative Region Government Education Bureau. Types of special educational needs. (2021, August 27). <https://sense.edb.gov.hk/tc/types-of-special-educational-needs/index.html>