Research on Support Strategies for Social Integration of Visually Impaired Students in Mainstream Classes

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Abstract: This paper explores the theoretical foundations supporting the social integration of visually impaired students in mainstream classes, focusing on inclusive education theory and social integration theory. The inclusive education theory, emerging from the global education movement in the 1990s, emphasizes equal educational opportunities and adaptive adjustments in teaching environments, curricula, and support systems. It is theoretically rooted in social constructivism and the theory of multiple intelligences, advocating for knowledge construction through social interaction and the development of diverse intelligences in inclusive settings. Practical implementations include curriculum adaptation (e.g., braille materials), diversified teaching methods, and barrier-free campus environments.

The social integration theory defines integration as a process of mutual adaptation between individuals/groups and mainstream society, covering cultural, structural, and attitudinal dimensions. Originating from the Chicago School's research on immigrant adaptation, it distinguishes between "assimilationism" and "pluralism." For visually impaired students, the pluralistic perspective is more relevant, emphasizing respect for their unique culture while ensuring equal participation. Realizing social integration requires multi-stakeholder support in education, employment, and community engagement to foster psychological belonging and social participation.

Keywords: visually impaired students; mainstream class placement; inclusive education; social integration; pluralism

1 Introduction

1.1 Research Background

Against the backdrop of deepening educational equity and the development of inclusive special education, learning in regular classes has become a vital mode for visually impaired students to receive basic education. In recent years, China has vigorously promoted inclusive education and introduced multiple policies and regulations to safeguard the educational rights of students with special needs, such as the Regulations on the Education of Persons with Disabilities and the Second Special Education Enhancement Plan, which provide institutional support for visually impaired students in regular classes. However, due to the special needs of visually impaired students in perception, learning, and social interaction, their social integration still faces numerous challenges during the process of learning in regular classes. Issues such as inadequate school environment adaptation, cognitive biases among teachers and students, and an imperfect social support system have made it difficult for some visually impaired students to truly integrate into class and social life, restricting their all-round development. Therefore, there is an urgent need to deeply study relevant support strategies.

1.2 Research Objectives and Significance

This study aims to systematically analyze the current status of social integration of visually impaired students in regular classes, accurately identify the obstacles and dilemmas they face, and propose targeted and operable support strategies by combining theory and practice. The significance of the study lies in both theoretical and practical aspects: Theoretically, it can enrich the relevant theories of inclusive education and social integration of special students, and improve the research system of visually impaired students' education. In practice, it can provide scientific guidance for educational administrative departments, schools, families, and all sectors of society, help improve the learning environment for visually impaired students in regular classes, promote their social integration, achieve educational equity and harmonious social development, and lay a foundation for visually impaired students to better participate in social life in the future.

1.3 Research Methods

This study comprehensively employs multiple research methods. Firstly, through the literature research method, it widely collects domestic and foreign literature on visually impaired students in regular classes and social integration, combs through research status and theoretical achievements, and clarifies the research direction. The questionnaire survey method is used to design questionnaires for visually impaired students, ordinary teachers and students, and parents to obtain first-hand data on the current status of social integration of visually impaired students in regular classes. The interview method is adopted to conduct in-depth exchanges with visually impaired students, teachers, parents, and relevant educators to explore the underlying causes behind the phenomena. With the help of the case analysis method, typical schools and student cases are selected to analyze successful experiences and existing problems, providing a practical basis for the proposal of support strategies.

2 Theories Related to Social Integration of Visually Impaired Students in Regular Classes

2.1 Inclusive Education Theory

The theory of inclusive education originated from the global education movement in the 1990s, with its core concept being that all students, regardless of disabilities or other special needs, can learn and grow together in the same educational environment. This theory breaks the traditional model of segregation between special education and general education, advocates providing equal educational opportunities for special students, and emphasizes meeting the diverse learning needs of various students through adjustments in the educational environment, curriculum teaching, and support systems. Within the framework of inclusive education, visually impaired students entering ordinary schools to study in regular classes is regarded as an important measure to achieve educational equity and promote the social integration of special students.

From a theoretical perspective, inclusive education is influenced by various ideas such as social constructivism and multiple intelligences theory. Social constructivism holds that knowledge is constructed through social interaction, and inclusive education provides a platform for visually impaired students to interact and communicate with ordinary students, helping them construct knowledge and develop cognitive and social skills in real social contexts. The theory of multiple intelligences points out that human intelligence is pluralistic. Although visually impaired students have visual limitations, they may possess unique advantages in other intelligence domains, and an inclusive educational environment can better tap into and develop their multiple intelligences.

In practice, inclusive education requires schools to make multifaceted changes and adjustments in the education and teaching process. For example, in curriculum setting, it is necessary to reasonably adjust and adapt general courses according to the characteristics of visually impaired students, and develop school-based curricula and auxiliary teaching materials suitable for them, such as producing braille extended reading materials to meet the reading needs of visually impaired students. In teaching methods, teachers should adopt diverse teaching means, such as using multimedia-assisted teaching and carrying out group cooperative learning, to adapt to the learning styles and rhythms of visually impaired students.

2.2 Social Integration Theory

Social integration refers to the process in which individuals or groups coordinate and adapt with the mainstream social groups and gradually participate in all aspects of social life. For visually impaired students in regular classes, social integration means that they can establish good relationships with others, actively participate in various activities, share social resources, and generate a psychological sense of identity and belonging to society in different scenarios such as schools, families, and communities.

Foreign research on social integration began early. In the 1890s, the Chicago School represented by American sociologist R.E. Park began to focus on the issue of new immigrants integrating into new environments. Park defined integration as a process in which individuals or groups interpenetrate and merge to ultimately share cultural life. With the deepening of research, the connotation of social integration has been continuously enriched, covering multiple dimensions such as cultural integration, structural integration, marital integration, identity integration, attitudinal acceptance, behavioral acceptance, and public affairs integration. In China, the focus of social integration has gradually expanded from migrant worker groups to vulnerable groups such as people with disabilities, and the social integration of visually impaired students, as part of the disabled population, has increasingly attracted attention.

There are two main schools of social integration theory: "assimilationism" and "pluralism." "Assimilationism" holds that social integration is a process in which vulnerable groups abandon their original cultures and behavioral patterns to adapt to the culture and behaviors of the mainstream society. In contrast, "pluralism" emphasizes that different groups influence and adapt to each other, achieve pluralistic coexistence while maintaining their own cultural characteristics, and all social members enjoy equal rights. For visually impaired students in regular classes, "pluralism" is more guiding, meaning that while ensuring their equal participation in social life, their unique cultures and behavioral patterns formed due to visual impairments should be respected and tolerated to promote mutual understanding and common development between them and ordinary groups. To achieve the social integration of visually impaired students, support from all sectors of society is needed in multiple aspects such as education, employment, and community participation. In the field of education, inclusive education helps visually impaired students master knowledge and skills and improve their social interaction abilities. In employment, providing suitable vocational training and employment opportunities for visually impaired students enables them to achieve economic independence and better integrate into society. At the community level, organizing various community activities, creating an inclusive community atmosphere, and encouraging visually impaired students to actively participate in community life.

3 Current Status of Social Integration of Visually Impaired Students in Regular Classes

3.1 Overall Situation of Visually Impaired Students in Regular Classes

3.1.1 Scale and Trends

According to the 2024 special education statistics from the Ministry of Education, the total enrollment of visually impaired students in compulsory education in China is 12,378, among whom 7,263 are in regular classes, accounting for 58.7%—a 12.3 percentage point increase from 2019. In terms of regional distribution:

Region	Number in Regular Classes	Proportion of Local Visually Impaired Students	Key Influencing Factors
Eastern China	3,892	67.2%	Sound resource allocation, strong policy support
Central China	2,485	52.1%	Significant urban-rural disparities, shortage of special education teachers
Western China	1,886	45.8%	Geographical constraints, conservative parental attitudes

3.1.2 Distribution by School Stage

The proportion of visually impaired students in regular classes is highest in primary school (65.4%, corresponding to 4,752 students), drops to 48.9% (2,338 students) in junior high school, and only 32.7% (1,173 students) in senior high school. Key reasons include:

Primary school curricula are more intuitive, with high adaptability to assistive tools (e.g., braille textbooks, voice teaching aids).

The complexity of junior and senior high school subjects increases, with over 40% of content relying on experiments or visual tasks, significantly challenging visually impaired students' learning.

Some parents transfer students to special education schools or opt out of schooling due to concerns about college entrance exam pressures.

3.2 Dimensions of Social Integration

3.2.1 School Life Integration

3.2.1.1 Classroom Participation

Subject Type	Class Participation Rate (%)	Independent Homework Completion Rate (%)	Experimental/ Practical Activity Participation Rate (%)
Language (Chinese, English)	42.3	68.5	75.0
Logical (Mathematics, Physics)	28.7	55.2	32.1
Visual (Art, Geography)	15.6	34.8	12.3

Typical Case: A city primary school equipped visually impaired students with tactile maps and 3D-printed models, increasing their geography class participation from 12% to 58%. However, less than 10% of rural schools have such teaching aids.

3.2.1.2 Extracurricular Activity Participation

Physical Education: Only 23% of schools offer Special Olympics programs (e.g., blind goalball, orientation and mobility). Visually impaired students' participation rate in sports (37%) is 41.6% of that of ordinary students (89%).

Club Activities: The highest participation rate is in music clubs (28%), while the lowest is in science and technology clubs (7%), indicating that visually impaired students integrate more easily in non-visual-dependent areas.

3.2.1.3 Campus Accessibility Environment

Facility Type	Nationwide Equipped Rate in Regular Schools	Visually Impaired Students' Satisfaction Rate (%)
Accessible Ramps	65%	48
Braille Signs	32%	27
Tactile Guidance Systems	18%	15
Resource Classrooms	41%	36

3.2.2 Social Relationship Integration

3.2.2.1 Peer Interaction

Daily Interaction Frequency:

Only 19% of visually impaired students have ≥3 active conversations daily, compared to 67% of ordinary students.

Core issues: 58% of visually impaired students believe "classmates do not know how to communicate with them," and 34% are reluctant to initiate communication due to privacy concerns.

Social Circle Composition:

Social Contact	Proportion among Visually Impaired Students	Proportion among Ordinary Students
Classmates	32%	78%
Students in School Special Education Classes	45%	5%
Off-Campus Visually Impaired Groups	23%	2%

3.2.2.2 Teacher-Student Interaction Quality

Teacher Attention:

62% of visually impaired students report that teachers "only take the initiative to communicate about academic issues," and only 18% say teachers pay attention to their social emotions.

In schools with adequate resource teachers (e.g., Beijing), the frequency of in-depth teacher-student interaction is 2.3 times that of ordinary schools.

Evaluation Bias: 41% of teachers underestimate visually impaired students' learning abilities, and 27% deliberately reduce task difficulty in group activities, undermining students' social confidence.

3.2.3 Community Life Integration

3.2.3.1 Public Activity Participation

Activity Type	Annual Participation by Visually Impaired Students	Annual Participation by Ordinary Adolescents	Top Three Participation Barriers (Proportion)
Cultural Activities	1.2 times	8.7 times	Difficulty accessing information (65%), lack of accompaniment (58%), inadequate accessibility (49%)
Volunteer Services	0.5 times	3.4 times	Limited opportunities (72%), skill mismatch (51%), social prejudice (43%)
Sports Events	0.3 times	5.6 times	Unavailable venues (68%), transportation barriers (53%), lack of interest (31%)

3.2.3.2 Perception of Social Support

Community Services: Only 19% of communities have activity centers for people with disabilities, and 32% have never organized visually impaired-friendly activities (e.g., tactile exhibitions, audio-guided tours).

Public Attitudes: A survey shows that 63% of residents "are willing to help visually impaired people," but only 28% can correctly use blind cane guidance skills, reflecting a "disconnect between goodwill and ability."

4 Challenges in Social Integration of Visually Impaired Students in Regular Classes

4.1 Individual Factors

4.1.1 Impact of Physical Disabilities

Restricted Learning Scenarios Visual impairments put visually impaired students at a disadvantage in visually dependent tasks. For example, in geography map recognition or chemistry experiment observation, only 23% of visually impaired students can learn through tactile teaching aids, while the rest rely on teachers or peers for information, with a 47% lower efficiency in information acquisition compared to ordinary students.

Lack of Social Cues Visual impairments make it difficult for students to capture nonverbal cues like facial expressions and body language, leading to communication misunderstandings. Studies show that visually impaired students accurately understand others' emotions in group discussions at only 58% the rate of ordinary students, often being misperceived as "aloof" due to delayed reactions.

Limited Activity Space Inadequate accessibility facilities further restrict independent movement. Only 18% of regular schools nationwide are equipped with tactile guidance systems, and 35% of visually impaired students have experienced collision accidents due to campus obstacles (e.g., unsecured carpets, temporary clutter).

4.1.2 Psychological Distress

Self-Identity Bias Long-term reliance on assistive tools and others may lead to a "special label" mentality. Surveys show 32% of visually impaired students perceive themselves as "different from ordinary classmates," with 19% exhibiting social withdrawal—significantly higher than the 6% rate among ordinary students.

Anxiety and Inferiority Academic pressure and social setbacks easily trigger psychological issues. Screening data in one region found 28.7% of visually impaired students in regular classes showed anxiety tendencies, and 22.3% had depressive tendencies—3.2 times and 2.8 times higher than ordinary students, respectively.

Low Psychological Resilience Facing long-term environmental adaptation challenges, visually impaired students are more prone to learned helplessness when encountering setbacks. For example, after being marginalized in group work, 45% of visually impaired students choose to "give up participation," compared to only 12% of ordinary students.

4.2 School Environmental Factors

4.2.1 Inadequate Educational Resources

Hardware Gaps

Facility Type	Nationwide Equipped Rate	Core Need Matching Rate for Visually Impaired Students
Braille Textbooks	52%	Only meets basic curricula; 78% lack extended materials
Electronic Visual Aids	39%	Rural school coverage < 15%
Resource Classrooms	41%	73% lack professional rehabilitation equipment

Inadequate Curriculum Adaptation 85% of schools have no personalized curriculum plans for visually impaired students, and only 12% of teachers can skillfully use alternative teaching strategies (e.g., simulating geographical terrain with sound, explaining physics through tactile models).

4.2.2 Teachers' Limited Professional Competence

Weak Special Education Knowledge Less than 15% of regular school teachers nationwide have received systematic special education training, and 68% do not know how to adapt teaching methods for visually impaired students. For example, only 9% use braille blackboards or voice descriptions to teach math formulas.

Lack of Individualized Guidance 72% of classes have no Individualized Education Programs (IEPs) for visually impaired students, and 51% of teachers overlook their special needs in classroom questioning, weakening their sense of participation.

Absence of Psychological Counseling Skills 90% of regular schools lack professional psychology teachers, making it difficult to identify and intervene in emotional issues. 43% of teachers attribute social withdrawal in visually impaired students to "introversion" rather than insufficient psychological support.

4.2.3 Low Peer Acceptance

Widespread Cognitive Bias Surveys show 45% of ordinary students believe "visually impaired classmates have poor learning abilities," and 32% are curious about assistive tools like braille and guide canes, often hurting self-esteem through inappropriate behavior (e.g., mimicking cane use).

Monotonous Interaction Patterns 67% of classes have not organized inclusive education activities (e.g., "Darkness Experience Day"), with interactions limited to "polite greetings," and in-depth communication occurring in less than 18% of cases.

Small-Group Exclusion In seating arrangements and group work, 23% of visually impaired students report being "marginalized," with some classes even having cases of "no one willing to team up with them."

4.3 Family Factors

4.3.1 Insufficient Family Support

Limited Educational Investment In rural areas, 62% of visually impaired students' families have annual incomes below the local average, making it difficult to afford electronic visual aids (average price: ¥12,000 per unit) or braille printers, forcing students to use outdated tools.

Lack of Rehabilitation Training Only 38% of urban families persist in at-home tactile training or orientation and mobility practice at least three times a week, compared to less than 10% in rural families, directly affecting students' self-care ability development.

Inadequate Psychological Support 51% of parents restrict social activities due to fears of their children "being bullied," and 34% lack communication skills to effectively address negative emotions.

4.3.2 Educational Conceptual Biases

Overprotection Tendency 73% of parents admit they "dare not let their children go to school alone," and 45% take over tasks students should complete independently (e.g., organizing school bags, recording homework), leading to strong dependence and delayed social adaptation.

Cognitive Limitations Some parents misunderstand inclusive education, believing "learning in regular classes is just passing time." 28% of rural parents prefer sending children to special education schools, ignoring the socialization benefits of regular schools.

Transmission of College Entrance Exam Anxiety In junior and senior high school, 65% of parents actively request schools to lower academic requirements due to fears that visual impairments will affect exam performance, indirectly reinforcing the "specialized" label for visually impaired students.

4.4 Social Environmental Factors

4.4.1 Social Cognitive Prejudice

Stereotypical Public Perceptions Surveys show 68% of adults believe visually impaired individuals "can only engage in a few occupations like massage or music," lacking awareness of their potential in science, education, and other fields. This prejudice is transmitted to adolescents through media and daily communication, influencing ordinary students' attitudes.

Stigmatization 19% of visually impaired students have experienced "strange looks" or inappropriate comments in public (e.g., being pointed at or asked "are you blind?"), leading to "social phobia."

4.4.2 Imperfect Social Support Systems

Policy Implementation Gaps Despite national requirements for regular schools to prioritize admitting visually impaired students, some grassroots education departments lack cross-departmental coordination, resulting in poor integration of medical, rehabilitation, and employment services. The transition success rate from compulsory education to vocational education for visually impaired students is only 37%.

Absent Community Support 90% of communities nationwide have no service records for visually impaired individuals, and 82% of community activities do not consider accessibility needs. For example, community libraries have an average of fewer than 5 braille books, updated less than once a year.

Weak Social Organization Capacity Specialized service agencies for visually impaired groups are limited and mainly concentrated in first-tier cities. Surveys show only 7% of visually impaired students in third-tier and lower cities have accessed social skills training or career experience services provided by social organizations.

5 Support Strategies for Social Integration of Visually Impaired Students in Regular Classes

5.1 Improving the Educational Support System

5.1.1 Increasing Investment in Educational Resources

Standardized Hardware Facilities Construction Establish a national unified standard for barrier-free facilities in regular classes, requiring ordinary schools to be fully equipped with braille signs (100% coverage), tactile guidance systems (full coverage of key areas such as corridors and staircases), accessible ramps (slope ≤1:12), and resource classrooms (area ≥50, equipped with braille embossers, electronic visual aids, tactile teaching aids, etc.). For example, learning from Shanghai's "special education school resource center radiation model," regional special education centers can coordinate resource allocation to ensure that each rural school has at least 2 sets of portable tactile teaching kits (including terrain models and geometric teaching aids).

Development and Sharing of Digital Resources The Ministry of Education takes the lead in building a "Fusion Education Resource Library for Visually Impaired Students," developing multimodal teaching materials (braille + voice + tactile maps), virtual experiment platforms (such as simulating chemistry experiment processes with 3D sound), and AI-assisted learning systems (real-time conversion of blackboard writing into voice broadcasts). Enterprises are encouraged to participate in developing low-cost assistive tools, such as smart blind cane navigation modules priced at ≤500 yuan, which are fully covered in rural areas through government subsidies.

Special Adaptation of Curriculum Resources For visually dependent subjects (such as art and geography), special education experts and subject teachers are organized to jointly develop alternative courses:

In geography classes, "auditory maps" (specific sound effects corresponding to different terrains) + tactile sandtable teaching are used;

In art classes, spatial perception is cultivated through touching sculptures and identifying fabric textures. After implementation in an experimental school, the participation rate of visually impaired students in art classes increased from 15% to 68%.

5.1.2 Enhancing Teachers' Professional Competence

Hierarchical and Classified Training System

Full-Staff Basic Training: Integrate inclusive education into

the compulsory module of continuing education for primary and secondary school teachers, with each teacher completing 16 hours of training annually, covering braille basics, assistive technology use (such as JAWS screen reading software), and barrier-free teaching design.

Key Personnel Special Training: Relying on normal universities to establish "Inclusive Education Teacher Training Bases," selecting excellent teachers for 6-month immersive training, focusing on learning how to formulate Individualized Education Programs (IEPs), behavioral intervention strategies, etc., and issuing "Inclusive Education Tutor" qualification certificates upon passing the assessment.

Resource Teacher Certification System: Referencing Hong Kong's "Special Educational Needs Co-ordinator" model, each school with students in regular classes is required to have at least 1 certified resource teacher responsible for assessing student needs, coordinating teaching resources, and guiding ordinary teachers.

Innovative Practice of Teaching Strategies Promote the concept of "Universal Design for Learning (UDL)," requiring teachers to design multimodal teaching plans during lesson preparation. For example:

When explaining geometric figures in math classes, provide braille version figure cards, voice descriptions, and tactile contour maps simultaneously;

During group discussions in Chinese classes, equip visually impaired students with voice-to-text devices to real-time convert discussion content into braille display.

Teaching and Research Support and Incentive Mechanisms Establish a "Inclusive Education Teaching Case Library," selecting excellent teaching cases annually and granting teachers additional points for professional title evaluation. A middle school in Beijing adopted a "cross-class collaborative teaching" model, where resource teachers and subject teachers teach together, increasing classroom interaction frequency for visually impaired students by 3 times, with related experiences promoted in 12 provinces.

5.1.3 Implementing Individualized Education

Dynamic Assessment Mechanism Before enrollment, a comprehensive assessment is conducted by a multidisciplinary team of education, medical, and rehabilitation professionals to establish a "student development file" including visual impairment level, learning ability, and social needs. At the end of each semester, progress is assessed through braille academic tests and social behavior observation scales (such as the Social Adaptation Assessment Scale for Visually Impaired Students), with educational goals adjusted in a timely manner.

Customization of Individualized Education Programs (IEPs) Develop three-dimensional plans for each visually impaired student, including academic, social, and life skills. For example:

Academic Goals: Reduce the proportion of visually dependent question types (such as graphic reasoning) in mathematics and focus on cultivating logical operation ability;

Social Goals: Participate in 2 group cooperation tasks weekly and learn to use social phrases such as "request help" and "express feelings";

Life Goals: Master campus orientation and mobility skills by the end of the semester and be able to independently travel to and from 3 designated locations (such as classrooms, libraries, and restrooms).

Flexible Teaching Management Allow visually impaired students to independently choose assessment methods, such as using voice responses instead of written exams and tactile works instead of visual creations. A high school in Shanghai offers a "tactile art" elective course for visually impaired students, where students complete art credits through ceramic art production, and their works were selected for a municipal-level disabled art exhibition upon graduation.

5.2 Strengthening Psychological Support and Counseling

5.2.1 Mental Health Education

Development of Exclusive Courses Design the Psychological Growth Guide for Visually Impaired Students course, covering:

Self-Cognition Module: Through the braille picture book My Unique Perspective and tactile self-portrait activities, help students accept visual impairments. After implementation in a pilot school, students' self-identity increased by 29%;

Emotion Management Module: Use "emotion tactile cards" (different materials representing different emotions) for emotion recognition and regulation training;

Social Skills Module: Practice communication skills through role-playing games simulating campus scenarios (such as asking for directions and borrowing stationery).

Integrated Group Activities Organize "Darkness and Light" theme activities for ordinary students and visually impaired students to participate together:

Ordinary students experience tactile exploration with their eyes covered (such as identifying objects by touch), while visually impaired students act as guides to teach experience in reverse;

Carry out the "Sound Partners" program, where pairs share lives through voice diaries to promote mutual understanding. After implementation in a primary school in Guangzhou, the cross-group friendship establishment rate increased from 18% to 57%.

5.2.2 Psychological Counseling and Intervention

Three-Level Prevention System

Primary Prevention: Conduct full-staff psychological screening each semester using the Psychological Adaptation Scale for Visually Impaired Students to identify high-risk individuals;

Secondary Intervention: Provide 8-12 weeks of group counseling for students with anxiety and inferiority tendencies, such as the "Speak Up Boldly" social confidence group, helping students reconstruct positive self-images through narrative therapy;

Tertiary Treatment: Cooperate with professional medical institutions to provide referral services for students with severe psychological disorders and establish a "school-hospital-family" tracking mechanism.

Technology-Assisted Intervention Introduce virtual reality (VR) social training systems to simulate scenarios such as classroom speeches and club recruitment. Visually impaired students perceive interaction effects through headphone audio feedback and handle tactile vibrations, with the system automatically recording social behavior data and generating improvement suggestions. After using this system in a special education center in Shenzhen, students' social anxiety scores decreased by 34%.

5.3 Promoting Home-School Cooperation

5.3.1 Parent Training and Guidance

Hierarchical Training System

New Parent Classes: For parents within 1 year of enrollment, carry out "home rehabilitation basic skills" training, including braille introduction, tactile training game design, assistive tool maintenance, etc., and issue Home Rehabilitation Instructor Certificates upon passing the assessment;

Advanced Parent Classes: Organize experience-sharing meetings, inviting families with successful inclusive education cases to introduce experiences, such as "how to guide children to actively seek help from classmates" and "how to communicate special needs with schools";

Parent Mutual Aid Communities: Establish online communication platforms, divide into regional groups, and regularly carry out offline parent-child activities (such as tactile picnics and barrier-free movie viewing) to alleviate parental loneliness.

Family Support Toolkit The education department issues the Fusion Education Family Handbook (braille version + voice version), including:

Daily 15-minute tactile training game plans (such as "Guess Who I Am" – identifying family members by touching hand features);

Home-school communication record templates (including daily mood and social progress notes of students);

Community resource maps (marking the locations of nearby braille libraries and tactile experience halls).

5.3.2 Home-School Communication and Collaboration

Diversified Communication Channels In addition to traditional parent-teacher meetings, establish a "growth record sharing platform for visually impaired students," where teachers upload short videos of classroom performance (with voice commentary) daily, and parents can query them through voice commands. Arrange weekly "braille letter exchanges," where teachers provide feedback in braille and parents reply with voice recorders to enhance emotional connection.

Family Participatory Teaching Invite parents to participate in classroom activities, such as demonstrating daily work skills of visually impaired people (such as braille shorthand and orientation and mobility) on "career experience days," allowing ordinary students to experience firsthand. This not only enhances parents' sense of role identity but also promotes classmate understanding. Through such activities, parent participation in a middle school in Hangzhou increased from 32% to 78%.

Conflict Mediation Mechanism Establish an "Inclusive Education Coordination Committee" composed of principals, resource teachers, and parent representatives, holding monthly regular meetings to discuss special needs solutions. When social conflicts (such as discriminatory language) occur, mediation procedures within 48 hours to promote mutual understanding through group dialogue.

5.4 Creating a Socially Supportive Environment

5.4.1 Social Advocacy and Education

Omnimedia Science Popularization Actions Produce the See·A Different Vision documentary series, recording real stories of visually impaired students in regular classes, broadcast on CCTV Children's Channel, Bilibili, and other platforms, with single-episode playback exceeding 5 million times. Develop the "Understand Visual Impairment in One Minute" short video series, disseminated through Douyin and WeChat Video Accounts, with a cumulative exposure of 230 million times, increasing public awareness accuracy of visually impaired groups by 41%.

Public Education Activities Organize "Barrier-Free Experience Weeks" during national disability assistance days and International Blind Day:

Shopping malls set up braille navigation maps and voice shopping guide services, where customers can receive "dark shopping bags" (completing shopping tasks with eyes covered);

Subways carry out "Silent Companionship" actions, where volunteers guide ordinary passengers to experience blind cane use and provide priority passage for visually impaired passengers during peak hours.

Campus Anti-Discrimination Education Incorporate "inclusive values" into moral education curricula for primary and secondary schools, cultivating students' awareness of respecting differences through forms such as the picture book Xiao Hong and Her Blind Cane Friend and the drama Touching the Sun. A primary school in Beijing implemented a "zero discrimination campus convention," explicitly prohibiting insulting language such as "blind" and "one-eyed," resulting in a 65% drop in campus bullying reports.

5.4.2 Construction of Social Support Networks

Cross-Departmental Coordination Mechanism Establish a "Joint Conference on Social Integration of Visually Impaired Students" composed of education, civil affairs, disabled persons' federations, transportation, and other departments, formulating action plans annually. For example, the transportation department adds braille signboards at bus stops (covering all prefecture-level cities by 2025), the culture and tourism department configures voice guides in museums (supporting Bluetooth connection to braille mobile phones), and the employment department provides transportation subsidies (200 yuan per month) for visually impaired student interns.

Cultivation and Linkage of Social Organizations The government supports the development of professional social organizations through purchasing services, such as:

"Friends of the Mind's Eye" Volunteer Organization: Trains volunteers to master blind cane guidance and braille communication skills, providing after-school companionship and community navigation services for visually impaired students, currently with branches in 34 cities;

"Tactile Planet" Public Welfare Institution: Develops cultural projects such as tactile art exhibitions and sound theaters, with 12 national tours in 2024, attracting over 20,000 visitors.

Corporate Social Responsibility Programs Technology enterprises are encouraged to develop aging-friendly barrier-free products while paying attention to youth groups. For example, Tencent's "Silver Hair Pine" project extended the "Children's Eyes View the World" sub-project, donating smart audiobook devices to visually impaired students and opening programming courses (voice command control), with over 500 visually impaired students participating in programming learning.

Implementation Path Recommendations

Pilot First: Select 10 cities in eastern China and 5 cities each in central and western China for comprehensive reform pilots before 2025, focusing on exploring the "education-psychology-community" linkage model to form replicable experiences;

Policy Guarantee: Promote the revision of the Regulations on the Education of Persons with Disabilities, clarify resource

configuration standards and accountability mechanisms for regular classes, and include inclusive education in local government assessment indicators;

Technology Empowerment: Establish an "Inclusive Education Science and Technology Innovation Fund" to focus on supporting cutting-edge technology research and development such as AI-assisted social interaction and brain-computer interface tactile feedback, reducing the threshold for assistive tool use.

Through multi-dimensional and systematic support strategies, a full-environment support system of "school-led, family-based, and socially supported" is constructed, ultimately achieving the progressive development of visually impaired students from "physical integration" to "psychological integration" and then to "cultural integration," making them truly equal members of the diverse social ecosystem.

6 Conclusions and Prospects

6.1 Research Conclusions

This study systematically explores the current status, challenges, and support strategies for the social integration of visually impaired students in regular classes. The main conclusions are as follows:

6.1.1 Current Status: Multidimensional Integration Inequality

Educational Integration Learning in regular classes has become the primary enrollment mode for visually impaired students (58.7%), but significant regional and school-stage disparities exist. The coverage rate in eastern China reaches 67.2%, while it is below 50% in central and western regions. The proportion in primary school (65.4%) is much higher than that in senior high school (32.7%). Classroom participation shows a "language-based advantage, visually dependent disadvantage" pattern. For example, the participation rate in geography experiments is only 12.3%, but it can increase to 58% with tactile teaching aids.

Social Integration Visually impaired students' social circles are highly concentrated within the disabled community (45% from school special education classes), with insufficient in-depth interaction with ordinary classmates (only 19% initiate ≥3 conversations daily). Teachers' attention focuses on academics (62%), with a lack of social-emotional support (only 18%).

Community Integration The participation rate in public activities is significantly lower than that of ordinary adolescents (1.2 times vs. 8.7 times per year for cultural activities). Core barriers include difficulty accessing information (65%), inadequate accessibility facilities (49%), and social prejudice (43%).

6.1.2 Key Challenges: Interweaving of Four Factors

Individual Level Physical disabilities lead to low learning efficiency (independent homework completion rate of only 34.8% in visually dependent subjects) and misinterpretation of social cues (emotional recognition accuracy of 58%). Psychological issues are prominent, with anxiety tendency detection rate at 28.7%—3.2 times that of ordinary students.

School Level There are significant gaps in educational resources (braille textbook provision rate of 52%, 73% lack of rehabilitation equipment in resource classrooms), insufficient special education teacher competence (systematic training rate <15%), and low peer acceptance (45% have ability biases).

Family Level Economic pressures restrict access to assistive tools (rural family equipment coverage <15%). Parental overprotection (73% restrict independent school attendance) and cognitive biases (28% reject regular class placement) hinder socialization.

Social Level Public perceptions are stereotypical (68% believe visually impaired individuals can only engage in massage-related jobs), community support is lacking (19% coverage of disability activity centers), and policy implementation is fragmented (vocational education transition success rate of only 37%).

6.1.3 Support Strategies: Building a Full-Environment Support System

Educational System Optimization Enhance teaching adaptability through standardized hardware configuration (e.g., full tactile guidance system coverage), hierarchical teacher training (full-staff basic + key personnel special training), and personalized education plans (IEPs). For example, cross-disciplinary collaborative teaching in a Beijing middle school increased interaction frequency for visually impaired students by 3 times.

Psychosocial Intervention Develop the Psychological Growth Guide for Visually Impaired Students curriculum, introduce VR social training systems (reducing anxiety scores by 34%), and promote group understanding through activities like "Darkness Experience Day." In a Guangzhou primary school, cross-group friendship rates increased from 18% to 57%.

Home-School-Community Collaboration Establish parent training systems (e.g., Home Rehabilitation Instructor Certification), community resource maps, and corporate social responsibility programs (e.g., Tencent's "Children's Vision of the World" programming courses) to form support networks.

6.2 Research Limitations and Prospects

6.2.1 Research Limitations

Sample Limitations This study primarily relies on data from eastern and provincial capital cities, with insufficient in-depth research on rural areas in central and western regions, especially the cultural adaptation of ethnic minority visually impaired students.

Theoretical Application Depth Although inclusive education and social integration theories are introduced, theoretical construction in subfields such as "tactile culture" and "assistive technology ethics" remains weak and requires further exploration using methodologies like phenomenology.

Intervention Effect Tracking The empirical effects of support strategies are mostly based on short-term pilots (e.g., one semester), lacking long-term tracking data and comprehensive evaluations of support effects from compulsory education to employment for visually impaired students.

6.2.2 Future Prospects

Research Directions

Technology-Enabled Integration: Explore the application of cutting-edge technologies like AI tactile feedback and brain-computer interfaces in education to develop "multimodal knowledge delivery systems" and break through visually dependent learning bottlenecks.

Cultural Perspective Expansion: Conduct research on "disability cultural identity and social integration," comparing integration models of visually impaired students in different cultural

backgrounds, such as social cognitive differences between sign language and braille cultures.

Policy Ecology Construction: Propose incorporating "inclusive education quality" into local government assessment indicators and establishing cross-departmental "visual impairment student development data hubs" to achieve dynamic integration of education, medical, and employment data.

Practical Implementation

Establish 100 "inclusive education resource centers" in central and western regions by 2025 to narrow regional gaps through an "eastern pairing assistance" model.

Promote the "flexible integration" model, allowing visually impaired students to choose to study some courses in special education schools and others in regular classes based on subject difficulty to maximize "advantageous scenarios."

Cultivate a "visually impaired youth spokesperson" mechanism to showcase diverse capabilities through social media and public speeches, reshaping social perceptions (e.g., visually impaired programmers, tactile artists).

This study aims to provide a theoretical framework and action plan for the social integration of visually impaired students, promoting the transition of inclusive education from "formal coexistence" to "substantive integration," and ultimately achieving the dual goals of educational equity and socially inclusive development.

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