# Research Hotspots, Evolution, and Prospects of Work-Study Schools in the Past 30 Years-A Visualization Analysis Based on CNKI Source Journals

#### Shirong Luo\*

School of Law and Humanities, Zhejiang Sci-Tech University, Hangzhou 311100, China \*Corresponding email: 1403029708@qq.com

#### **Abstract**

As a career of educational correction, work-study schools play a role in educating and guiding minors who have made mistakes. A comprehensive review of research on China's work-study schools over the past 30 years is conducive to deepening theoretical and policy research and better guiding educational practice. Using the Cite Space bibliometric tool, a visual map of the evolution of research fields related to work-study schools can be constructed, intuitively presenting core authors and major research institutions in China's work-study school research. Through keyword clustering, co-occurrence, and burst knowledge map analysis, researchers can clearly grasp the main content, hot topics, and cutting-edge trends of China's work-study school research over the past 30 years.

### Keywords

Work-study school, Research hotspots, Knowledge graph, Visual analysis

#### Introduction

Work-study schools were founded in the early days of the People's Republic of China, drawing on the experience of the "Poltava Work-Study Colony for Juvenile Offenders" initiated by Soviet educator Anton Makarenko. They gathered homeless orphans, street children, and minors with minor illegal behaviors or those who severely disrupted the normal educational order of ordinary schools, establishing special schools with a part-work and part-study nature [1]. Later, work-study schools evolved into institutions that provide special protection and compulsory education for underage students with behavioral deviations (who have not committed crimes) and are unsuitable for studying in ordinary middle schools. They aim to prevent juvenile delinquency through the paths of control, correction, and cultivation.

With the promulgation of the \*Compulsory Education Law\* (1986) and the \*Law on the Protection of Minors\* (1991), the central government finally designated work-study schools

as "schools undertaking compulsory education tasks," gradually transitioning to the track of specialized school education, and a few work-study schools were renamed "specialized schools." To eliminate social misunderstandings, relieve parents' worries, and protect minors' privacy, the 2012 amendment to the \*Law on the Protection of Minors\* changed the term "work-study schools" to "specialized schools," and the newly revised \*Law on the Protection of Minors\* in 2020 retained the name "specialized schools." In 2021, China abolished the system of detention and reeducation for minors, and work-study schools with a partwork and part-study nature withdrew from the historical stage. Instead, specialized schools took over the task of educational correction for eligible delinquent minors.

Against the backdrop of rapid economic and social development over the past 30 years, what remarkable achievements have been made in domestic research on work-study schools?

How has research evolved? What main themes has it focused on? What are the cutting-edge trends in work-study school research? This paper intends to systematically sort out these issues using the Cite Space bibliometric tool, thereby providing some ideas for the in-depth development of research and innovation on China's work-study schools.

#### **Research Foundation**

#### Data Source

This study uses the academic journal database of China National Knowledge Infrastructure (CNKI) as the data source. The data acquisition process is as follows: Open the new version of CNKI, click "Advanced Search" and select "Academic Journals". Enter the subject "work-study school", set the time range from 1994 to 2024, and select "Peking University Core" and "CSSCI" as the source categories. After obtaining the search results, manually screen them to remove announcements, reports, and data with low relevance to the subject, resulting in 145 valid documents. These valid documents are exported in "RefWorks" format and used for visual research on work-study school literature with the Cite Space 6.3R1 (64-bit) knowledge mapping tool.

#### Research Tool

Cite Space uses core methods such as co-citation analysis and pathfinder to explore citation coupling relationships between data. It presents such analysis results visually, making research findings more vivid and intuitive. The size of nodes and the thickness of connecting lines directly reflect the importance of various elements (such as authors, institutions, or keywords) and the degree of their connections. In addition, the knowledge maps drawn by Cite Space can reflect the current research status of a certain topic, which is conducive to summarizing the research hotspots, evolution, and cutting-edge trends of a research topic, and is expected to predict new directions for future research.

The research tool used in this paper is Cite Space 6.3R1 (64-bit), which conducts visual research on

work-study schools over the past 30 years, presenting the basic research content, research hotspots, and future development directions of China's work-study schools since 1994.

# **Analysis of Research Overview on China's Work-Study Schools in the Past 30 Years**

#### **Publication Trend and Analysis**

The number of publications serves as a key indicator to measure research progress and hotspots in a field. Based on valid data from Peking University Core and CSSCI academic journals spanning 1994 to 2024, an annual publication trend chart was plotted by categorizing the number of annual publications (Figure 1). Overall, research on "work-study schools" over the past 30 years has followed a trajectory of "growth-decline-fluctuating growth-mild recovery." It began to rise rapidly in 1992, reaching 11 points in 1994, and rebounded in 1996. From 2001 to 2017, the number of articles related to "work-study schools" showed a fluctuating upward trend, followed by another phase of recovery. The topic of "work-study schools" is closely intertwined with national policies, juvenile delinquency rates, and juvenile judicial practices.

In 1991, the \*Law of the People's Republic of China on the Protection of Minors\* was enacted to safeguard minors' physical and mental health, protect their legitimate rights and interests, and promote their all-around development in morality, intelligence, physical education, aesthetics, and labor. Consequently, juvenile delinquency and work-study schools gained public attention, leading to an increase in articles on work-study schools.

However, by 1996, discussions on work-study schools began to wane. In the late 1990s, some provinces and cities (such as Guizhou and Guangzhou) increased research and investment in work-study schools (specialized schools), driving their development.

Nevertheless, flaws in the work-study education system gradually emerged. Simultaneously, the number of juvenile offenders in China continued to rise from 1997 to 2008 (Figure 2), making the prevention and correction of juvenile delinquency an urgent task. This further stimulated reflections and explorations on work-study schools and juvenile justice. Starting from 2012, the state intensified efforts to promote educational development and prevent juvenile delinquency.

The 2012 amendment to the \*Law on the Protection of Minors\* renamed "work-study schools" as "specialized schools," and practices in juvenile justice and juvenile crime governance imposed higher demands on the education provided by work-study schools (specialized schools), once again drawing widespread attention to these institutions. From 2008 to 2017, the number of juvenile offenders in China decreased for nine consecutive

years. In March 2019, the General Office of the Central Committee of the Communist Party of China issued the \*Notice on Strengthening the Construction of Specialized Schools and Specialized Education Work\*, officially renaming work-study schools as specialized schools.

As "work-study schools" were gradually replaced by "specialized schools," they faded from public discourse. In 2021, China abolished the juvenile detention and reeducation system, and work-study schools with a part-work and part-study nature withdrew from history, with specialized schools taking over the educational correction of eligible delinquent minors. As a result, from 2018 onward, there has been a noticeable decline in articles related to "work-study schools."

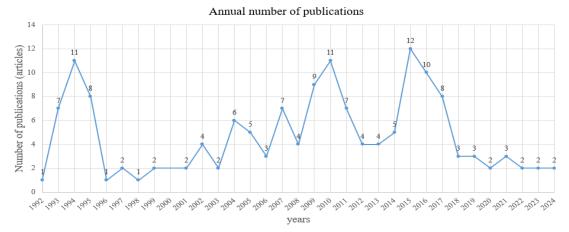


Figure 1. Trend of annual publications on research related to China's work-study schools from 1992 to 2024.

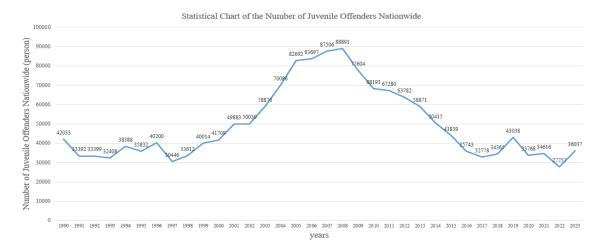


Figure 2. Number of juvenile offenders nationwide from 1990 to 2023.

(Data Source: Compiled by the author based on the Communique of the Supreme People's Court of the People's Republic of China).

#### Core Author Analysis

The author network map generated by Cite Space 6.3R1 (64-bit) illustrates the core authors researching the topic of "work-study schools" and their collaborative relationships. From 1994 to the present, among authors who have published articles on "work-study schools" as first authors, Scholar Zhang Fujuan has the highest number of publications (Figure 3 and Table 1). Authors with three or more publications are: Zhang Fujuan (6), Shi Jun (5), Chen Fuxia (4), Chen Chen (3), Lin Danhua (3), Li Xiaofeng (3), and Qu Zhiyong (3). In the map, each node represents an author, and

connecting lines indicate collaborations between authors, with thicker lines signifying more frequent collaborations.

Overall, authors publishing "work-study schools" are relatively scattered, with few collaborative publications. Specifically, Zhang Fujuan collaborated with Chen Fuxia, Liu Xinxue, and other scholars; Lin Danhua has worked with

He Liqun, Hu Wei, and others; Zhou Shijie, Chen Zhe, Cai Rong, and Peng Yongmei have collaborated in pairs; and Qu Zhiyong has partnered with Zou Hong, while Bai Chunyu has collaborated with Zhang Di.

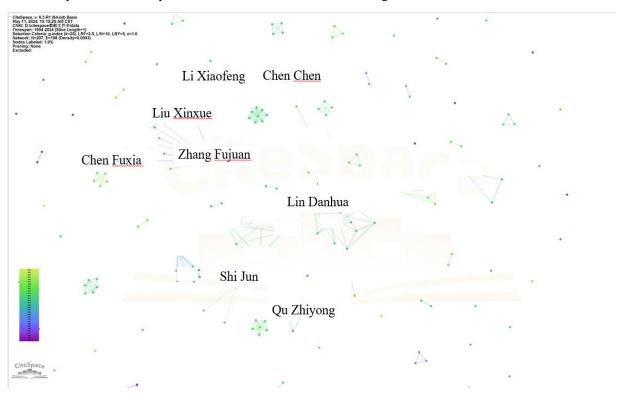


Figure 3. Visualization map of author collaboration network in research on China's work-study schools over the past 30 years.

Table 1 is a separate table compiling authors with three or more publications on the topic, along with their corresponding institutions, based on data analyzed by Cite Space 6.3R1 (64-bit). As shown in Table 1, the research themes of Zhang Fujuan and Chen Fuxia lean toward the psychology and intervention of students in work-study schools; Shi Jun and Chen Chen mainly focus their publications on "work-study education" and "adolescents"; Lin

Danhua and Qu Zhiyong primarily study adolescents' delinquent behaviors and their influencing factors; Li Xiaofeng's research focuses on the fields of problematic street children, social services, and social work. This distribution of research interests reflects the diverse but interconnected perspectives scholars adopt when examining the educational and social development of adolescents.

Global Education Bulletin 2025,1(2):9-23

Table 1. High-yield authors with 3 or more publications on work-study schools and their affiliated institutions.

Number of Publications (articles)	Author	Research Direction/Theme	Affiliation	
6	Zhang Fujuan	Mental health, work-study school students, personality traits, educational intervention	College of Special Education, East China Normal University	
5	Shi Jun	Work-study schools, China's work-study education, problem students, adolescents	School of Education Science, Nanjing Normal University	
4	Chen Fuxia	Work-study school students, community intervention, self- concept, stigmatization of problem students	Department of Special Education, East China Normal University	
3	Chen Chen	Adolescents, work-study education, work-study schools, minors	China Youth Research Center	
3	Lin Danhua	Adolescents, smoking behavior, social adaptation, drug use behavior	Institute of Developmental Psychology, Beijing Normal University	
3	Li Xiaofeng	Troubled street children, social services, social work, anti-drug social work	Wuhan University	
3	Qu Zhiyong	Left-behind children, juvenile delinquency, primary and middle school students, problem behaviors	Institute of Social Development and Public Policy, Beijing Normal University	

#### Analysis of Research Institutions

The knowledge map of research institutions shows 131 nodes (N=131) and 67 connections (E=67) (Figure 4), indicating that research institutions focusing on work-study schools have some interactions but still need to strengthen collaboration. Among them, normal universities such as East China Normal University and Nanjing Normal University only have 2 collaborating institutions; the China Research Association for the Prevention of Juvenile Delinquency, the Party Committee of the China Youth Research Center, the

Juvenile Law Research Institute of the China Youth Research Center, and the Work-Study Education Branch of the Chinese Society of Education all collaborate; the Jilin Provincial Party School has copublished articles with the Quality Development Training Department of Jilin Provincial Youth League School, Mishan No.4 Middle School of Heilongjiang Province, Changchun Chenguang School, the Youth Theory Teaching and Research Department of Jilin Provincial Youth League School, Jilin Provincial Youth League School, Jilin Provincial Youth League School, and \*Changbai Journal\*.

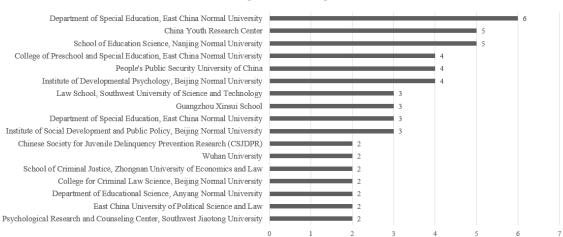


Figure 4. Visualization map of the network of publishing institutions in research on China's work-study schools over the past 30 years.

The top research institutions by the number of publications are listed as shown in Figure 5. It can be seen from the figure that, first, in terms of the number of publications, the top six institutions are the Department of Special Education of East China Normal University, the China Youth Research Center, the School of Education Science of Nanjing Normal University, the College of Special Education of East China Normal University, the People's Public Security University of China, and the Institute of Developmental Psychology of Beijing Normal University. It is evident that the

education departments (colleges) of normal universities, academic institutions specializing in adolescent and youth work research, political and legal universities, university-affiliated research institutes and law schools, public security colleges, and specialized schools are the backbone forces in the research on work-study schools.

Second, in terms of the administrative divisions where the publishing institutions are located, the publishing provinces are mainly concentrated in Beijing, Shanghai, Jiangsu Province, Guangdong Province, and Hubei Province.



Institutions with the highest number of publications

Figure 5. Number of publications by relevant institutions on the theme of "work-study schools" in China over the past 30 years.

#### **Keyword Clustering Analysis**

Keyword clustering analysis can summarize research issues in a specific field over a certain period and then infer research hotspots and directions within that period from the aggregated keywords.

The software Cite Space 6.3R1 (64-bit) was used to cluster "work-study schools" (Figure 6). Each cluster consists of related keyword groups, named in the format of "Number Cluster Name", where the number represents the concentration degree-the smaller the number, the higher the concentration. As shown in Figure 6, the Modularity Q value is

0.7363, and the Weighted Mean Silhouette S value is 0.9468, indicating that the data community structure is significant and the clustering is reasonable and efficient. Generally, the Q value ranges from [0, 1); a Q value >0.3 means the obtained network community structure is significant, and an S value >0.5 indicates the clustering result is reasonable. A total of 7 main keyword clusters were generated, as shown in Figure 6. and Table 2.

They are #0 work-study education, #1 guardians, #2 minors, #3 work-study students, #4 social work, #5 school bullying, and #6 work-study pupils.

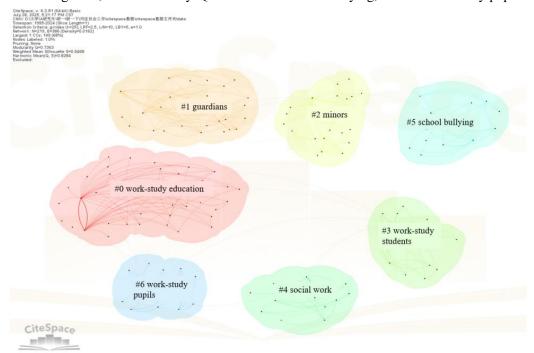


Figure 6. Keyword clustering map of work-study schools.

Table 2. Clustering high-frequency keywords in research on work-study schools.

Cluster ID	Size	Silhouette	Label	Top Terms
0 27			Work-	Work-study education, work-study schools, de-work-
	0.846	study	study orientation, school-running model, alternative	
			Education	schools
1 26	0.957	Guardians	Guardians, educational correction, detention and	
			reeducation, specialized schools, protection of	
				minors
2 24	0.833	Minors	Minors, Law on the Prevention of Juvenile	
	0.833		Delinquency, criminal system, correction programs	
3 21		21 0.941	Work-	Work-study students, personality traits, social
	21		study	personality, personality counseling, middle school
		Students	students	

Cluster ID	Size	Silhouette	Label	Top Terms
4 18	0.958	Social	Social work, prevention of juvenile delinquency and	
		Work	crimes, adolescents, abuse, aggression	
5 15	0.937	School	School bullying, campus violence, criminal	
		Bullying	subculture, public security studies, victim rescue	
6 14	1	Work-	Work-study pupils, coping styles, health education, life events, investigation reports	
		study		
		Pupils		
Total=8	158	MD=0.92575	Q=0.7329	S=0.9118

Guardians and Social Work, as forces that function alongside work-study schools, provide new perspectives for giving full play to the correctional role of work-study schools. In 2024, the \*Law of the People's Republic of China on the Protection of Minors\* was revised for the third time and came into effect on April 26, 2024. The law further emphasizes that "guardians are the first responsible persons," stipulating that guardians should "set an example," guide and respect minors, and adopt a multi-party guardianship approach to protect leftbehind minors. If a guardian fails to fulfill their guardianship responsibilities or even infringes on their children's rights and interests, and the circumstances are serious, their guardianship qualification may be deprived. Through the education and upbringing of the guardians of workstudy students and the practical intervention of social work, services such as educational correction, life adaptation, and psychological intervention are provided to work-study students outside of their work-study education hours. At the same time, efforts are made to actively publicize and apply the detention and reeducation system and the \*Law on the Protection of Minors\*, creating an accepting and external environment, friendly reducing stigmatization, enabling work-study students to gain social tolerance and respect, and cooperating with the internal education of work-study schools to complete the educational correction work, avoid the marginalization of work-study students, reduce the risk of crime or recidivism, and achieve the goal of educational correction. Work-study education. Work-study education and work-study schools are

two key components in the operation of work-study schools. The former is a soft system, and the latter is a hard carrier. Work-study education also provides conditions and directions for the research on work-study schools. Work-study schools provide a venue for middle school students with illegal and minor criminal behaviors to receive work-study education, enabling the implementation and development of work-study education. As the core of work-study schools in exerting their educational correction function, work-study education affects the actual operation effect of work-study schools. A reasonable work-study education can unite the internal forces of work-study schools, gain the support of teachers and students within the schools, and jointly promote the development and renewal of work-study schools and work-study education.

Minors, Work-study students, and #6 Work-study pupils. They are the potential or actual target groups of work-study schools and are roles that can receive work-study education and express subjective perceptions. When innovating work-study schools, it is necessary to start from the rigid rules and regulations of the schools, and at the same time pay attention to the specific implementation process and effects, understand the subjective feelings and suggestions of work-study students and teachers in work-study schools, grasp the psychology of workstudy students as having the dual identities of "minors" and "work-study students". Through methods such as questionnaires and interviews, research is conducted on the status and influencing factors of work-study students in daily life, personality traits, etc., to gain enlightenment,

provide a direction for the improvement of workstudy schools, and serve as a warning for the prevention of juvenile delinquency.

School bullying. School bullying has always been an undeniable danger within schools. It can cause severe psychological burdens on the bullied students and even lead them to engage in illegal and criminal activities. School bullying provides a way of thinking for studying the internal hidden dangers of work-study schools-that school bullying may occur throughout the entire process of work-study students' schooling.

When a work-study student enters a work-study school, after entering the school and being influenced by other work-study students, or after leaving the work-study school and entering a new campus, they may be subjected to visible or invisible school bullying due to the identity and label of "work-study student" and may even become perpetrators of school bullying Therefore, every school, especially work-study schools, needs to be vigilant against the occurrence of school bullying and pay attention to the criminal subculture within the school.

## Analysis of Research Hotspots and Cutting-**Edge Trends**

#### Analysis of Research Hotspots

In the keyword co-occurrence map, there are 219 nodes (N=219) and 386 connections (E=386), where larger nodes indicate more frequent occurrences. Based on the frequency of keywords, the hot keywords in the research field of work-study schools are: work-study school (35), work-study education (22), work-study student (13), workstudy pupil (11), minor (11), detention and reeducation (6), educational correction (5), juvenile justice (4), adolescent (4), specialized school (4), abuse (3), personality trait (3), school bullying (3), specialized education (3), protective sanction (3), family environment (3), delinquent behavior (3), and guardian (3).According to the betweenness centrality, the research hotspots in the field of workstudy schools focus on the following keywords: work-study school (0.46), work-study student (0.26), minor (0.22), work-study education (0.22), work-study pupil (0.19), delinquent behavior (0.14), juvenile justice (0.12), and social work (0.11). The research results are shown in Figure 7.

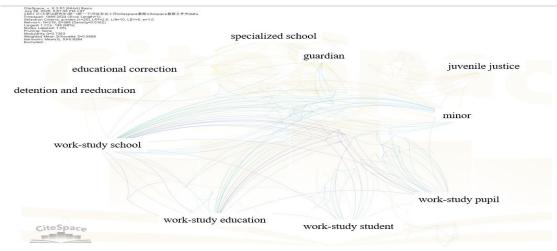
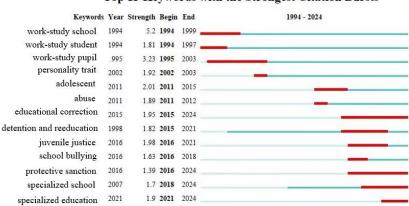


Figure 7. Visualization map of keyword co-occurrence in work-study schools.

#### Analysis of Cutting-Edge Trends

In keyword burst analysis, which considers intensity and duration, burst words extracted from CiteSpace 6.3R1 help identify cutting-edge research directions on work-study schools in China over the past 30 years.

As shown in Figure 8, the burst word visualization highlights 13 high-intensity keywords, including work-study school, adolescent, juvenile justice, educational correction, school bullying, abuse, and protective sanctions.



Top 13 Keywords with the Strongest Citation Bursts

Figure 8. Knowledge map of burst keywords in research on China's work-study schools over the past 30 years.

Using Cite Space's burst term history curves, this study identifies evolving research trends in workstudy schools since 1994. From 1994 to 2003, studies focused on "work-study schools," "workstudy pupils," and "work-study students," examining their development, functions, limitations, and improvement strategies. The term "work-study schools" peaked between 1994-1999 with 18 occurrences but declined thereafter, falling below 18 every six years and becoming scarce after 2018. A review of secondary literature identified 43 relevant studies. "Work-study pupils" appeared 6 times from 1994-1999, with lower frequency in subsequent periods and no publications after 2016. "Work-study students" emerged in 1995 and disappeared after 2012, with 13 related studies.

Lingling's survey of students in a Zhejiang workstudy school highlighted issues such as poor mental health, low academic performance, and inadequate family education, suggesting stronger counseling, curriculum improvements, and home-school communication [2].

Zhang Fujuan analyzed work-study students' personality and behavioral traits, proposing correction methods such as reinforcement and cognitive-behavioral therapy [3], and compared them with regular middle school students [4]. Lin Yuping surveyed 63 work-study students, noted widespread behavioral issues, and recommended improving the school environment and

extracurricular activities to enhance resilience [5]. (Figures 9 and 10).

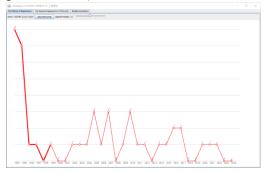


Figure 9. Historical curve graph of "work-study schools".

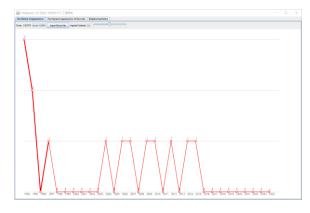


Figure 10. Historical curve graph of "work-study students".

Second, from 2011 to 2015, the research hotspots were "abuse" and "adolescents". Both "abuse" and "adolescents" emerged as burst keywords in 2011, but research on "abuse" was concentrated in 2011-2012, with no relevant studies after 2013, while research on "adolescents" focused on 2015.

During this period, with the amendment of the \*Law of the People's Republic of China on the Protection of Minors\* in 2012, the first paragraph of Article 56 was revised to: "When interrogating or trying juvenile criminal suspects or defendants, or questioning juvenile witnesses or victims, their legal representatives or other relevant personnel shall be notified to be present in accordance with the provisions of the Criminal Procedure Law." Incidents related to adolescent abuse once again came into public view. Zou Feng et al. analyzed the relationship between aggressive behaviors of male work-study students and childhood abuse as well as parenting styles, finding that male work-study students suffered more physical abuse from their parents, and proposed that parents of work-study students, especially fathers, should give their children more care and encouragement [6]. There is also a view that factors such as schools, peer groups, social work institutions, and work-study schools play a role in consolidating adolescent deviant behaviors, and the formation of adolescent deviant behaviors thus undergoes a process "disembodying-integration-reconstruction" [7].

Third, from 2015 to 2021, "detention and reeducation" and "juvenile justice" were the main research objects. Discussions on the two focused in 2015 and 2016. Juvenile justice aims to reduce the negative impact of criminal labels on juvenile offenders and promote their better adaptation to society. Detention and reeducation, as administrative measure of mandatory reform for those who have committed crimes but are under 16 years old and not subject to criminal punishment, involves detaining and centrally educating and managing them. The reform of the detention and reeducation system is conducive to protecting the legitimate rights and interests of minors. Some views hold that China should formulate a \*Detention and Reeducation Law\* to stipulate the establishment, conditions, places, approval procedures, methods, duration of detention and reeducation, and the age of those subject to detention and reeducation [8].

It is also possible to establish an independent juvenile judicial system according to the characteristics of China's juvenile justice and promote the reform and development of juvenile justice through special legislation, treatment, procedures, and institutions [9].

The research results are shown in Figure 11.

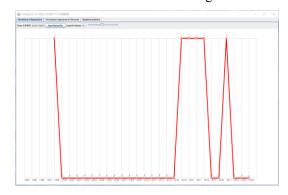


Figure 11. Historical curve graph of " detention and reeducation ".

Fourth, from 2016 to 2018, the research frontier was "school bullying". A total of three articles related to "school bullying" were retrieved, mainly focusing on how school bullying occurs and how to address it. Yin Li found that in recent years, school bullying incidents were associated with issues such as a lack of relevant laws, weak educational correction and punishment, and inadequate legal education in schools.

Therefore, it is necessary to reduce school bullying incidents by improving laws and regulations for preventing and treating school bullying, rationally applying detention and reeducation, educational correction, and juvenile justice systems, and promoting the linkage between public security departments and schools [10].

Fifth, from 2015 to 2024, the latest research hotspots were related to "educational correction", "protective sanctions", "specialized schools", and "specialized education", mainly revolving around the functions of specialized schools, the reform of specialized schools and specialized education, the protection of minors, and crime prevention.

Educational correction, as an important part of the social support system for juvenile prosecution, is a

practical measures to correct illegal and criminal acts in a "suitable and appropriate" manner.

In October 2020, the draft of the 11th Amendment to the Criminal Law proposed lowering the age of criminal responsibility for minors to 12 years old under specific circumstances and through specific procedures and required specialized education for these delinquent minors. Paragraph 5 of Article 17 of the Criminal Law stipulates that "if a person is not given criminal punishment due to being under 16 years old, his parents or other guardians shall be ordered to discipline him; when necessary, specialized correctional education shall be carried out in accordance with the law". Such educational correction measures are essentially important protective sanctions, and specialized schools are specific places for implementing protective sanctions.

Therefore, the nature of specialized schools has gradually evolved into places for correcting and educating juvenile delinquent behaviors, integrating early intervention, educational correction, and crime prevention, embodying the concept of "combining education and protection" in preventing juvenile delinquency. Issues related to educational correction, the construction of specialized schools, and the implementation of specialized education have become new hotspots.

However, although the Law of the People's Republic of China on the Prevention of Juvenile Delinquency was revised and improved in 2012 and 2020, its provisions still need to be refined, and there are many problems in specific practice. In addition, specialized schools face difficulties such as vague legislative norms, improper resource allocation, and social stigmatization. Traditional specialized education also needs to be innovated due to economic and social development.

Xiao Ling believes that juvenile delinquent behaviors are related to the decline of work-study education, the lack of operability of the Law on the Prevention of Juvenile Delinquency, and the lack of corrective effects of other relevant laws [11].

Regarding specialized schools and specialized education, Lu Qi pointed out that current students in China's specialized schools face problems such as cross-infection, inadequate policy and legal guarantees, a lack of unified evaluation standards for education and management, and insufficient educational correction measures [12].

Mei Jin found that the current specialized education system has deficiencies in education fees, application right subjects, evaluation methods, and correction content, and proposed optimization paths for the specialized education system for delinquent minors [1]. Guo Kaiyuan proposed the realization paths of the functions of specialized schools from the perspectives of compulsory education, specialized education, and specialized correctional education [14].

In 2021, China abolished the juvenile detention and reeducation system, and work-study schools with a part-work and part-study nature withdrew, replaced by specialized schools for the educational correction of delinquent minors.

In 2024, the Law of the People's Republic of China on the Protection of Minors was revised for the third time, placing greater emphasis on the protection of minors and crime prevention. Against this background, the innovation and implementation of educational correction, protective sanctions, specialized schools, and specialized education will become research frontiers in the future. (Figure 12-14).

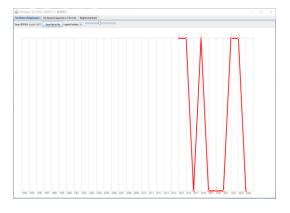


Figure 12. Historical curve of "educational correction".

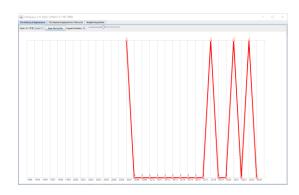


Figure 13 Historical curve graph of "specialized schools".

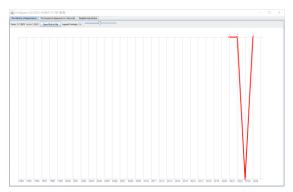


Figure 14. Historical curve graph of "specialized education".

#### **Summary and Outlook**

Over the past three decades, fruitful achievements have been made in research on China's work-study schools. This paper conducts a visual analysis of such research over the past 30 years using Cite Space 6.3R1 (64-bit), with the following conclusions.

First, in terms of the number of publications in core journals and CSSCI, "work-study schools" were a popular topic before 2017. Research on "workstudy schools" is closely linked to juvenile delinquency in China and national legal provisions on juvenile education and protection. "specialized schools" replaced "work-study schools" in performing educational correction functions, research on "work-study schools" gradually diminished.

Second, regarding authors and institutions, there are numerous contributing authors and institutions, with normal universities, political-legal universities, public security colleges, and specialized research institutions being the main forces in "work-study school" research. However, collaboration among authors and institutions is limited, with most research conducted independently.

Additionally, there is a regional concentration of authors and institutions, primarily in developed areas in the eastern and southern regions, which may be related to the distribution of educational resources, economic development levels, and labor migration.

Third, research in the field of "work-study schools" has consistently centered on the self-improvement of work-study schools and work-study education, as well as the protection of work-study students. From early focus on the functions and innovation of work-study schools and education to later emphasis on the personality psychology and health education of work-study students, research has evolved with the times to prioritize judicial protection and educational correction for adolescents, especially work-study students.

It advocates for collaboration among guardians, work-study schools, related systems, and social work to reduce the marginalization of work-study students and achieve educational correction goals. In 2021, China abolished the juvenile detention and reeducation system, and work-study schools withdrew from history, replaced by specialized schools responsible for educational correction of eligible delinquent minors.

With "specialized schools" and "specialized education" replacing "work-study schools" and "work-study education," it is predicted that topics such as "minors," "specialized schools," and "specialized education" will gain significant research attention in the future.

For the future development of China's work-study schools (specialized schools), the author proposes the following expectations.

Domestic researchers and institutions should strengthen communication and collaboration, compare the status of work-study (specialized) schools and education across regions, and summarize common conclusions. This will help form a more unified understanding and provide references for improving educational policies and practices.

- (2) Scholars in this field should increase exploration of the interactions between factors such as social environment, internet development, situational crime prevention, population mobility, family education, school education, criminal policies, and minors themselves-particularly research on peer groups and harmful social interactions.
- (3) From the perspective of academic institutions and professional backgrounds, scholars and institutions outside normal universities, politicallegal universities, public security colleges, and specialized research institutions should pay more attention to work-study (specialized) schools and education.
- (4) Comparative research on international educational correction systems-such as alternative schools in the United States and promotion centers in Germany-should be further deepened. This can provide valuable references for research on work-study (specialized) schools and facilitate exchanges and collaboration between domestic and foreign researchers.

#### **Funding**

This work was not supported by any funds.

#### Acknowledgements

The authors would like to show sincere thanks to those techniques who have contributed to this research.

#### **Conflicts of Interest**

The authors declare no conflict of interest.

#### References

- [1] You, W. Q., Wang, L. P. (2022) Evolution and Advancement: The Dilemma and Reconstruction of the Special-School Education System. *Journal of Yunnan Normal University (Philosophy and Social Sciences Edition)*, 54(6), 70-78.
- [2] Ruan, L. L., Yang, X. H. (2019) A Survey of the Current Situation of Special (Reform-

- School) Schools in Zhejiang Province. Shanghai Research on Education, (6), 56-59.
- [3] Zhang, F. J. (2002) Causes of the Formation of Delinquent Personality and Behavior of Reform-School Students and Educational Countermeasures. *Psychological Science*, 25(4), 468-469.
- [4] Zhang, F. J. (2002) A Comparative Study on the Personality Traits of Middle-School Students and Reform-School Students. Journal of East China Normal University (Educational Sciences Edition), 20(4), 78-83, 89.
- [5] Lin, Y. P. (1997) Analysis of the Sociopsychological Factors of Reform-School Students. *Chinese Journal of School Health*, (1), 77.
- [6] Zou, F., Li, H., Wang, J. X., et al. (2012) The Relationship between Aggressive Behavior of Boys in Reform Schools and Childhood Abuse and Parenting Styles. *Chinese Journal of School Health*, 33(9), 1077-1079.
- [7] Liu, J. (2015) The Formation and Re-creation of Adolescent Deviant Behavior: Resistance and Adaptation in Daily Social Interaction. *Contemporary Youth Research*, (4), 102-107.
- [8] Xue, X. W. (1998) On the Perfection of the Legislation of Custodial Education. *Ornal of Shanxi University (Philosophy and Social Sciences Edition)*, (4), 28-31.
- [9] Yao, J. L. (2017) The History, Current Situation and Future of Chinese Juvenile Justice. *w Application*, (19), 2-11.
- [10] Yin, L. (2017) The Institutional Deficiency and Perfection of Campus Bullying Governance in China. *Tsinghua Journal of Educational Research*, 38(4), 101-107.
- [11] Xiao, L. (2016) On the Construction of the Juvenile Delinquency Prevention System. *Jiangxi Social Sciences*, 36(8), 145-150.
- [12] Lu, Q., Guo, K. Y., Liu, Y., et al. (2018) Research on the Development of Special School Education in the New Era. *China Youth Study*, (5), 103-109.

- [13] Mei, J. (2024) The Deepening Direction of the Special Education System for Delinquent Minors. *Journal of Southwest Minzu University (Humanities and Social Sciences Edition)*, 45(3), 77-84.
- [14] Guo, K. Y. (2023) The Function of Special Schools and Its Realization from the Perspective of the Rule of Law. *Journal of Chinese Youth Social Sciences*, 42(3), 127-133.