

"Trinity and Four-Stage Progressive": Practice and Research on the School-Enterprise Cooperative Talent Training Model for Early Childhood Care Major in County-Level Secondary Vocational Schools

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Abstract: The contradiction between the rapid development of preschool education in counties and the insufficient supply and low quality of early childhood care talents has become increasingly prominent. The traditional training model of "valuing theory over practice" and the loose dual "school-enterprise" cooperation form in the early childhood care major of county-level secondary vocational schools are difficult to meet the industry needs. Focusing on the practical pain points of talent training in this major, this paper proposes the "Trinity and Four-Stage Progressive" school-enterprise cooperative talent training model - it constructs a collaborative education community with "secondary vocational schools (training subject), cooperative enterprises (practice subject), and students (growth subject)" as the core, and achieves a win-win situation for students' ability improvement, schools' professional development, and enterprises' talent adaptation through the progressive training of four stages: "Vocational Cognition → Skill Simulation → On-the-Job Observation Practice → Internship Training". Combined with the practical case of the early childhood care major in Rongxian Vocational Secondary School of Guangxi, this paper systematically expounds the construction logic and implementation path of the model, aiming to provide a reference practical paradigm for optimizing the talent supply system of county preschool education, promoting the connotative development of secondary vocational education, and deepening the school-enterprise collaboration mechanism.

Keywords: County-Level Secondary Vocational Schools; Early Childhood Care

Major; School-Enterprise Cooperation; Talent Training Model

1. Introduction

As an important part of the national education system, the development level of preschool education has a profound impact on children's early growth and lifelong development. With the in-depth advancement of the "14th Five-Year Plan for the Development and Improvement of Preschool Education"[1], preschool education resources in China's counties have expanded rapidly, and the problems of "teacher shortage" and "quality gap" have become increasingly prominent. Taking Rongxian County, Guangxi as an example, the shortage of full-time kindergarten teachers in the region reached 120 in 2024, and the proportion of teachers with "care + education" capabilities was less than 35%. This situation indicates that county preschool education has an urgent demand for compound early childhood care talents who are familiar with local conditions, master practical skills, and have professional stability, while the existing talent training system is still difficult to achieve effective supply. As the core position for cultivating early childhood care talents at the county level, the early childhood care major in county-level secondary vocational schools (hereinafter referred to as "county-level secondary vocational schools") is facing multiple dilemmas of the traditional training model, such as insufficient collaboration among "schools, kindergartens, and students" and disconnected capacity training.

In recent years, the vocational education policies issued by the state have provided an institutional orientation for solving the above dilemmas. The "National Vocational Education Reform Implementation Plan" clearly proposes to "establish and improve the school-enterprise

cooperative education mechanism and promote comprehensive strengthening of talent training cooperation between schools and enterprises", and the "Secondary Vocational Talent Training Program for Early Childhood Care Major" specifically requires to "strengthen practical teaching, ensure that the proportion of practical class hours is not less than 50%, and establish school-kindergarten cooperative practice bases". Against this background, this study focuses on the practical pain points of talent training in the early childhood care major of county-level secondary vocational schools, and proposes the "Trinity and Four-Stage Progressive" school-enterprise cooperative talent training model. "Trinity" refers to building a collaborative education community with secondary vocational schools, cooperative kindergartens (enterprises), and students as the main bodies: schools assume the responsibility of overall planning, cooperative kindergartens provide practical teaching support, and students actively participate as the main development subject, realizing resource sharing and responsibility sharing. "Four-Stage Progressive" is a training process that progressively improves students' professional quality and skills in stages based on the law of the development of early childhood care professional capabilities. It is divided into four stages: "Vocational Cognition (establishing post identity) → Skill Simulation (mastering core operations) → On-the-Job Observation Practice (transforming practical capabilities) → Internship Training (achieving post competence)", forming a systematic capacity development path. In addition, the school-enterprise cooperation in this study breaks through the boundaries of traditional school-enterprise cooperation, covering in-depth cooperation contents such as curriculum co-construction, teacher co-training, practical training co-sharing, and employment promotion, reflecting the breadth and depth of school-enterprise collaboration. This paper systematically discusses the construction logic and implementation path of the "Trinity and Four-Stage Progressive" model, verifies the model's effectiveness with the real case of the early childhood care major in Rongxian Vocational Secondary School of Guangxi, aiming to provide a theoretical reference and practical paradigm for improving the quality of preschool education talent supply at the county level, optimizing the professional construction

of secondary vocational colleges, and improving the school-enterprise collaborative education mechanism.

2. Current Status of School-Enterprise Cooperation in Early Childhood Care Major of County-Level Secondary Vocational Schools

As an important carrier of county-level secondary vocational education, Rongxian Vocational Secondary School added the early childhood care major to the Preschool Education Department in 2021 in response to the demand for preschool education talents in the county. Since its establishment, the major has adopted the traditional school-enterprise cooperation model of the preschool education major. By actively connecting with kindergarten (enterprise) resources within the county, it has established cooperative relations with 18 kindergartens (enterprises), initially forming a cooperation framework of "schools connecting with enterprises and enterprises undertaking practice". However, from the perspective of actual operation effects, restricted by the traditional training model and county-level resource conditions, the current school-enterprise cooperation is still in the stage of "superficialization and formalization", with insufficient collaboration among "schools, kindergartens and students" and obvious disconnection in the capacity training system.

2.1 Initial Cooperation Foundation Established, but Operational Mechanism Not Yet Sound

The early childhood care major of Rongxian Vocational Secondary School takes 18 cooperative kindergartens in Rongxian urban area and 5 surrounding towns as the main practice bases, organizing 2-3 batches of students to carry out graduation internships and on-the-job observation practice every semester on average. Most of the internship positions are concentrated in auxiliary work such as "basic living care", with a single practice cycle of generally 1-4 weeks. The form of kindergartens' participation is relatively limited: about 2-3 backbone teachers are invited to give lectures on child care experience or assist in completing students' internship evaluations every academic year. Overall, the cooperation content is still dominated by internship arrangements, failing to expand to in-depth areas such as curriculum

co-construction, teacher co-training, and quality co-evaluation. The operational mechanism is not sound, showing the characteristics of being internship-oriented with other links being loose.

2.2 Lack of Tripartite Collaborative Mechanism, Difficulty in Unifying Interest Demands

As a core shortcoming of the traditional school-enterprise cooperation model, the early childhood care major of Rongxian Vocational Secondary School has not yet constructed a trinity collaborative framework of "secondary vocational schools, kindergartens and students". The responsibilities and rights of the three parties are vague, and their interest demands have not been effectively aligned. Schools expect kindergartens to provide sufficient practice positions and professional guidance, but due to financial constraints and other limitations, it is difficult for them to provide equivalent resource feedback and teacher support to cooperative kindergartens. Kindergartens, especially private ones, are under operational cost pressure. Participating in cooperation requires investing human and venue resources, but it is difficult to select qualified teachers from interns in the short term, leading to insufficient motivation to participate. Some kindergartens only regard cooperation as fulfilling social responsibilities. As key subjects, students have not participated in the formulation of cooperation plans and training programs throughout the process, and the practice content is mostly arranged unilaterally by schools and kindergartens. Surveys show that students' satisfaction with "practice position matching degree" and "targeted skill training" is only 55%, and more than 30% of students believe that the theoretical knowledge they have learned is difficult to apply in practice, which affects their professional identity and participation initiative.

2.3 Disconnected Capacity Training, Low Degree of Integration of Theory and Practice

Restricted by teaching resources and the traditional curriculum system, the major has not formed a systematic and progressive capacity training path, which is specifically manifested in excessive emphasis on theory and insufficient practice. The existing courses are mainly theoretical subjects such as "Early Childhood Pedagogy" and "Early Childhood Psychology", with the proportion of practical class hours less

than 30%. The on-campus training facilities are relatively simple, lacking training modules that are close to actual job requirements, such as "infant first aid simulation", "home-kindergarten communication scenario drills", and "special needs child care". As a result, students can only master basic skills such as feeding and dressing, and lack the ability to deal with typical job problems such as fussy eating intervention, allergy management, and parent communication. There is a disconnect between theoretical teaching and practical links: more than 60% of students "cannot independently complete basic child care work" at the initial stage of kindergarten internships. Kindergartens need to carry out additional 1-2 weeks of pre-job training, which not only increases their burden but also prolongs the students' job adaptation cycle.

2.4 Formalized School-Enterprise Cooperation, Insufficient Depth of Kindergarten Participation

Although cooperative relations have been established with 18 kindergartens, the cooperation content is still dominated by short-term internships, and a deep collaborative education mechanism has not yet been formed. About 90% of the cooperation is concentrated on graduation internships carried out in the sixth semester, with a duration of about 4-8 weeks. During the internship, students mainly undertake auxiliary work such as observation and living care, and their participation rate in core tasks such as "infant health monitoring", "educational activity design" and "home-kindergarten communication" is less than 20%. In terms of participation depth, only 4 public kindergartens participate in the student internship evaluation link, and other cooperative units basically do not intervene in key processes such as the formulation of talent training programs and curriculum development; some private kindergartens even shorten the students' practice duration many times due to the increased workload of teachers, resulting in poor cooperation stability. Overall, the two parties have not formed a long-term mechanism for curriculum co-construction, teacher co-training, and resource sharing. Schools have not co-built training bases with kindergartens, nor have they jointly developed characteristic textbooks that meet the needs of preschool education in Rongxian. Cooperation has not effectively promoted professional construction and talent

quality improvement.

2.5 Lack of Students' Subject Status, Training Programs Disconnected from Regional Needs

Since the training program is formulated unilaterally by the Preschool Education Department of the school without incorporating surveys on students' needs and kindergarten job requirements, there is a deviation between the program and students' growth and industry needs. On the one hand, students lack the right to speak in curriculum settings: about 45% of students hope to "add first aid practical courses" and "extend on-campus training time", but these cannot be implemented due to teacher and resource limitations. On the other hand, the curriculum content fails to reflect the county characteristics of Rongxian, such as the high proportion of rural children and a large number of left-behind children. There is a lack of localized characteristic courses such as "rural children's behavior guidance" and "psychological support for left-behind children". When students graduate and work in township kindergartens, their adaptability to the needs of rural early childhood education is low. 35% of graduates report that "what they learned at school is disconnected from the work needs of township kindergartens", which restricts their career growth and development potential.

3. Construction of the "Trinity and Four-Stage Progressive" School-Enterprise Cooperative Talent Training Model for Early Childhood Care Major in County-Level Secondary Vocational Schools

The early childhood care major in county-level secondary vocational schools is the core carrier for meeting the demand for preschool education talents at the county level. However, its traditional school-enterprise cooperation model generally faces problems such as loose collaboration, disconnected practice, and lack of main-body participation[2]. Taking Rongxian Vocational Secondary School as an example, it is necessary to focus on the core of the "trinity collaborative education" of "secondary vocational schools - kindergartens (enterprises) - students", combined with the four-stage progressive training logic of "Vocational Cognition → Skill Simulation → On-the-Job Observation Practice → Internship Training", to construct a school-enterprise cooperative talent training model suitable for county realities and

job requirements. The specific practice and research are as follows:

3.1 Consolidate the Foundation of Collaboration: Sign School-Enterprise Contracts and Co-Compile Training Programs

3.1.1 Sign school-enterprise contracts to build a trinity collaborative framework

Break the limitations of the traditional dual "school-kindergarten" cooperation model, formally incorporate students as collaborative subjects, and sign the "Tripartite Cooperation Contract for School-Kindergarten-Student in County-Level Secondary Vocational Early Childhood Care Major" to clarify the three parties' rights, responsibilities, and interest balance mechanism. As the training subject, the school is responsible for overall planning the entire talent training process, including formulating talent training programs, jointly developing courses and textbooks, controlling the proportion of theoretical class hours to no more than 40%, organizing teachers to conduct practice in kindergartens for no less than 1 month every academic year, promoting teachers to obtain childcare worker skill level certificates, collecting students' feedback every semester to adjust courses, and co-building on-campus simulation training bases with kindergartens to provide theoretical and practical support. As the practice subject, cooperative kindergartens need to provide job demand data, allocate exclusive internship positions, implement an enterprise tutor system where 1 tutor guides 2-3 students, undertake no less than 32 class hours of practical courses every semester, and participate in formulating practical ability evaluation standards represented by the qualification rate of child care and parent satisfaction. As the growth subject, students participate in curriculum adjustments by joining the student committee for professional construction, complete the four-stage training tasks and submit reflection reports, provide feedback on teaching or practical suggestions at least once a month through the collaborative platform, abide by kindergarten systems and accept tutors' guidance, and feed back employment status after graduation to help optimize the model.

To ensure the effective operation of the collaborative mechanism, the contract clarifies three major collaborative paths and risk sharing: hold 1-2 tripartite joint meetings every semester

to coordinate and solve program adjustments and practical issues; build an online collaborative platform with modules such as "curriculum resources" and "practical tasks" to realize real-time information sharing among the three parties. Construct a two-way "interest-resource" feedback mechanism: the school conducts 2 training sessions such as "early childhood psychological counseling" for enterprise employees every semester; enterprises provide industry cases for the school (e.g., transforming the case of "dealing with children's separation anxiety" into teaching content) and assist in building training bases; enterprises provide internship subsidies for outstanding students and give priority to employing qualified students, while the school provides career planning guidance for students. In terms of risks, the school purchases practice insurance for students, and kindergartens are responsible for on-site safety management, forming a collaborative closed loop with clear rights and responsibilities and win-win interests.

3.1.2 Co-compile talent training programs to accurately meet industry needs

Abandon the school's one-sided formulation model and set up a tripartite working group consisting of school professional teachers, kindergarten backbone teachers, and student representatives [3]. Combined with the characteristics of preschool education in Rongxian (such as 80% of rural children and a large number of left-behind children) and job requirements such as "cultivating rural children's hygiene habits" and "psychological care for left-behind children", the talent training program is formulated. The program clarifies the training goal of "care + education" compound capabilities, and decomposes the four core capabilities (child life care, health care, educational assistance, and home-kindergarten communication) into the "four stages": the vocational cognition stage focuses on establishing post identity, the skill simulation stage focuses on mastering core operations, the on-the-job observation practice stage focuses on practical transformation, and the internship training stage aims to achieve post competence. At the same time, it aligns with the "National Vocational Standard for Childcare Workers" and incorporates the acquisition of the "Intermediate Childcare Worker Certificate" into the training requirements, ensuring that the program not only meets county-level needs but also complies with

industry standards.

3.2 Optimize Training Content: Reconstruct Curriculum System and Innovate Teaching & Evaluation

3.2.1 Curriculum system optimization and textbook development to fit county and job requirements

To address the problem of "excessive emphasis on theory and insufficient practice" in traditional courses, construct a "three-level module" curriculum system and increase the proportion of practical class hours to more than 50%[4]. The vocational foundation module retains core theoretical courses such as "Early Childhood Pedagogy" and "Early Childhood Psychology" but integrates county-level cases (e.g., "Analysis of Behavioral Characteristics of Rural Children in Rongxian"); the core skill module adds practical courses such as "Practical Infant First Aid", "Home-Kindergarten Communication Skills", and "Care for Special Needs Children" to ensure targeted skill training through "course-job alignment"; the county characteristic module develops courses such as "Cultivating Rural Children's Hygiene Habits" and "Psychological Care for Left-Behind Children" to meet the special needs of county preschool education. Simultaneously, jointly compile the "Practical Manual for County-Level Early Childhood Care" with cooperative kindergartens, collecting real cases from Rongxian kindergartens (e.g., "First Aid Process for Children's Pesticide Ingestion" and "Winter Warmth Program for Rural Children") to ensure the textbooks are practical, localized, and operable.

3.2.2 Teaching method innovation to achieve integration of theory and practice

Break the fragmented model of "teaching theory in class and practicing skills during internships" and promote "scenario-based + project-based" teaching [5]. In the skill simulation stage, when teaching "infant first aid" in an integrated theory-practice class, first analyze theoretical key points in the classroom, then conduct practical operations such as "choking and scalding treatment" with mannequins in the training room; when teaching "home-kindergarten communication", kindergarten backbone teachers play the role of "parents", and students simulate scenarios such as "feedback on children's status" and "handling complaints" with real-time error correction and guidance. In the on-the-job observation practice

stage, implement task-driven teaching and formulate a "On-the-Job Task List" for students (e.g., assist in feeding children 3 times a week and independently design a 10-minute game). Double tutors (school teachers + kindergarten teachers) review the completion of tasks every week, integrating theoretical knowledge into practical application to avoid the disconnection between learning and use.

3.2.3 Evaluation method innovation to build a diversified and three-dimensional evaluation system

Break the limitations of single school evaluation and one-time final evaluation, and establish a tripartite-participated, process-oriented evaluation mechanism. In terms of evaluation subjects: the school evaluates students' theoretical performance and on-campus training performance; kindergartens evaluate students' practical skills and job adaptability [6] (e.g., child care qualification rate, parent satisfaction); students conduct self-evaluation and mutual evaluation to reflect on skill shortcomings and learning attitudes. In terms of evaluation content: not only assess skill levels but also incorporate professional qualities such as sense of responsibility and communication ability, quantified through indicators such as "whether children are willing to get close" and "teamwork performance". In terms of evaluation cycles: set phased evaluations corresponding to the "four stages"—evaluate "post cognition reports" in the vocational cognition stage, "practical assessments" in the skill simulation stage, and "task completion" in the on-the-job observation and internship training stages. The evaluation results serve as the access basis for the next stage (e.g., supplementary training for those who fail the skill simulation), ensuring the gradual improvement of capabilities [7].

3.3 Improve Supporting Conditions: Co-Build Training Rooms and Strengthen Teachers' Team

3.3.1 Co-construction of training rooms and optimization of management systems to simulate real job scenarios

To address the lack of on-campus training resources, schools and kindergartens jointly build county-level early childhood care simulation training rooms, divided into: a life care area equipped with children's beds, tableware, and changing tables; a health care area with first aid mannequins and temperature

monitoring equipment; a home-kindergarten communication area simulating kindergarten parent reception rooms; and an educational activity area with toys and picture books commonly used by county children. Kindergartens donate idle teaching aids such as old toys and picture books, and the school invests funds to purchase first aid equipment and simulation tools, ensuring that the training scenarios are consistent with real jobs in Rongxian kindergartens. Simultaneously formulate the "Training Room Management System" to clarify usage specifications: students need to make appointments in advance and operate according to job processes; inspect equipment daily and conduct safety training before training; schools and kindergartens jointly inspect and maintain equipment monthly to improve the efficiency and safety of training room use.

3.3.2 Strengthen teachers' team construction to build a "dual-qualified" teachers' team

Aim to "improve teachers' practical, professional, guiding, and research capabilities" and construct a "school-kindergarten teacher co-training" mechanism. On the one hand, promote school teachers to practice in kindergartens: require professional teachers to practice in cooperative kindergartens for no less than 2 months every academic year, participate in child care and educational activity design, obtain childcare worker certificates, and transform practical cases into teaching resources (e.g., integrating the case of "dealing with children's fussy eating" into the course "Child Life Care"). On the other hand, recruit kindergarten teachers to teach in the school: hire principals and backbone teachers of cooperative kindergartens as "part-time teachers" to undertake no less than 32 class hours of practical teaching every semester (e.g., "infant first aid" and "game design") and participate in curriculum design and textbook compilation. Meanwhile, rely on the Lin Hua Famous Teacher Workshop to carry out monthly teaching and research activities (e.g., "Seminar on County-Level Early Childhood Care Curriculum Development" and "Backbone Teacher Training Program"), cultivate 2-3 "dual-qualified" teachers every year, improve teachers' research and guiding capabilities, and build a high-quality "dual-qualified" teachers' team.

3.4 Enhance Training Effectiveness: Empower Students' Growth and Serve County

Development

3.4.1 Improve students' comprehensive capabilities and enhance admission and employment rates

Centered on the "four-stage progressive" training logic, improve students' capabilities in layers: in the vocational cognition stage, enhance professional identity through kindergarten visits and special lectures; in the skill simulation stage, ensure the qualification rate of core skills exceeds 85% through intensive practical training and skill competitions; in the on-the-job observation practice stage, enable students to master initial practical capabilities through task-driven teaching and double-tutor guidance; in the internship training stage, achieve "internship leading to employment" through independent post work and employment connection[8]. For students with further education needs, set up college entrance examination tutoring courses (e.g., theoretical review and skill enhancement for preschool education majors) to connect with preschool education majors in colleges and universities in Guangxi and improve the admission rate. For students directly entering employment, cooperative kindergartens give priority to employment, aiming to increase the employment rate to over 90% and the one-year job retention rate to over 75%.

3.4.2 Carry out "training, certification, and teaching delivery" to promote the development of county preschool education

Rely on professional resources [9] to feed back county preschool education and build a trinity county-level service system of "training - certification - teaching delivery". In terms of training: conduct 2 free training sessions for township kindergartens in Rongxian every semester (e.g., "Cultivating Rural Children's Hygiene Habits" and "Psychological Counseling for Left-Behind Children"), training no less than 200 people annually; in terms of certification: carry out "1+X" skill level certification no less than 2 times a year, enabling students to obtain skill certificates such as early childhood care and childcare worker, and providing certification services for in-service kindergarten teachers and graduates to improve the certification rate of county childcare personnel; in terms of teaching delivery: form a "school-kindergarten teaching delivery team" to go deep into remote township kindergartens (e.g., Shitou Town and Licun Town in Rongxian) to carry out demonstration

classes and equipment use guidance, solving problems such as weak teachers and insufficient resources in township kindergartens. Through the "training + certification + teaching delivery" service system, it not only improves the quality of county preschool education but also enhances the professional social influence, striving for more policy and resource support for school-enterprise cooperation.

3.4.3 Rely on the famous teacher workshop to lead the deepening and promotion of the model
Take the Lin Hua Famous Teacher Workshop as the core platform for professional construction, give play to the leading role of famous teachers, take the lead in researching the county-level early childhood care school-enterprise cooperation model, summarize practical experience to form the "Model Implementation Plan"; develop shared teaching resources (e.g., "practical videos of infant first aid" and "courseware of county characteristic courses") for reference by Rongxian and surrounding county-level secondary vocational schools; organize model promotion seminars, invite secondary vocational schools and kindergartens from surrounding counties to participate in exchanges, and promote the "Trinity and Four-Stage Progressive" model to other counties in Yulin City (e.g., Beiliu City and Luchuan County), creating a "model for school-enterprise cooperation in early childhood care major of county-level secondary vocational schools".

4. Practical Effects of the "Trinity and Four-Stage Progressive" School-Enterprise Cooperation Model

Taking the early childhood care major of Rongxian Vocational Secondary School as the practical object, after two years of model implementation and systematic promotion, the "Trinity and Four-Stage Progressive" school-enterprise cooperation model has achieved remarkable results in students' growth, professional construction, kindergarten development, and regional services.

4.1 Synchronous Improvement of Students' Comprehensive Quality and Employment Quality

After the implementation of the model, students' professional identity increased from 62% at the time of admission to 91%, and 89% of students could systematically elaborate on the core responsibilities and competency requirements of

childcare positions. In terms of skills, the passing rate of core skill assessments such as first aid and home-kindergarten communication rose from 58% to 88%, and students achieved historic breakthroughs in competitions: in 2023, 2 students won the first prize in the Yulin City Secondary Vocational Early Childhood Care Skills Competition; in 2024, a team of 6 students won the first prize in the provincial vocal music and instrumental performance group competition, 2 students won the first prize in the provincial secondary vocational vocational English skills (service category) competition, and another 2 students won the third prize in the provincial early childhood care competition and the first prize in the municipal equivalent competition in the same year, demonstrating solid professional foundation and continuously improving practical ability. In terms of employment quality, the employment rate of the 2023 graduates increased from 75% under the traditional model to 92%, the one-year job retention rate rose from 45% to 78%, and the average salary also increased significantly. Most graduates chose to work in county kindergartens, initially realizing a virtuous cycle of "training leading to adaptation and employment leading to retention".

4.2 Continuous Optimization of Professional Construction and Teacher Structure

The attractiveness of the early childhood care major has been significantly enhanced, and the enrollment scale has expanded steadily since 2022. The curriculum system is more in line with county needs: 1 "Practical Manual for County-Level Early Childhood Care" and 15 school-based textbooks have been developed, 3 characteristic courses such as "Cultivating Rural Children's Hygiene Habits" have been added, and the proportion of practical class hours has increased from less than 30% to more than 50%. The teacher team has transformed into a "dual-qualified" team [10]: all 28 professional teachers have completed kindergarten practice and obtained intermediate childcare worker certificates, 21 have become "dual-qualified" teachers, and parents' satisfaction with the major has increased from 70% to 93%.

4.3 Improved Benefits and Influence of Cooperative Kindergartens

Kindergartens have reduced recruitment and training costs, and the pass rate of new

employees during the probation period has increased. The quality of childcare services has been continuously improved, and parents' satisfaction with childcare services has risen. 3 deeply cooperative kindergartens have been awarded the title of "County-Level Early Childhood Care Practice Demonstration Base", having received more than 10 visits and exchanges from surrounding kindergartens. Enterprise tutors have participated in 4 county-level childcare teacher training sessions, and their industry influence has been significantly enhanced.

4.4 Effective Improvement of the Talent Supply Structure for County Preschool Education

In two years, nearly 500 qualified childcare talents have been transported to the county, effectively alleviating the teacher shortage in township kindergartens. The proportion of teachers with "care + education" compound capabilities in the county has been greatly increased, and the overall satisfaction of parents with preschool education has improved, realizing the in-depth adaptation of vocational education to local industrial development. It has achieved the in-depth connection between secondary vocational education and the county preschool education industry, providing a model for county vocational education to serve local economic and social development.

5. Summary

Taking secondary vocational schools, kindergartens (enterprises), and students as the trinity, the "Trinity and Four-Stage Progressive" school-enterprise cooperative talent training model is constructed through four major paths: collaborative framework construction, training content optimization, supporting condition improvement, and effectiveness and service enhancement, along with four stages of vocational cognition → skill simulation → on-the-job observation practice → internship training. This model not only solves the problems of "superficialization and disconnection" in the traditional cooperation of early childhood care majors in county-level secondary vocational schools but also achieves a multi-win situation including students' ability improvement, schools' professional development, kindergartens' talent adaptation, and county preschool education quality improvement. It also

provides a replicable and promotable practical paradigm for county vocational education to serve local industrial development.

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