

Mechanism and Strategy of Local Normal Universities Serving the Development of Rural Basic Education under the U-G-S Model

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Abstract: Against the backdrop of the country's comprehensive promotion of rural revitalization and education equity, higher normal universities shoulder the important mission of promoting the development of basic education and assisting in the revitalization of rural education. However, there is a problem of mechanism rupture in the service of rural basic education by local normal universities, with administrative dominance, resource dispersion, and cultural conflicts being the three major factors restricting the effectiveness of services. Hebei Minzu Normal University relies on the "U-G-S Teacher Education Collaborative Development Pilot Zone" platform to explore typical cases of serving basic education through institutional embedding, resource flow, operational mechanisms, curriculum co construction, and five learning exercises. Under the background of U-G-S, local normal universities need to support the development of rural basic education by constructing a collaborative governance framework of "government collaboration university support school subject", implementing a "demand coupling, two-way interaction" course co-construction mechanism, creating a full chain internship practice system, cultivating cultural identity, and enhancing emotional connections.

Keywords: U-G-S, Local Normal Universities, Demand Coupling

1. Introduction

The social responsibility undertaken by universities is not only reflected in providing services to society indirectly through talent cultivation and scientific research, but also in actively integrating and contributing to society through diversified direct channels. As an important base for cultivating future teachers, the core of higher normal universities in fulfilling their social service functions lies in effectively promoting the vigorous development of basic education. Rural education revitalization, as a key part of the rural revitalization strategy, is guided by the concept of modernization and committed to solving a series of problems faced by rural education in the process of national modernization, promoting the modernization of core elements such as rural education system, ideological concepts, content and governance system. In this process, normal universities play an important role as the "engine" of regional rural education development, and the steady progress of rural education revitalization cannot be separated from the strong support of local normal universities. Serving the revitalization of rural education has become a major mission and glorious task entrusted to normal universities in the new era. Therefore, local normal universities actively solve the practical problems in the development of rural education and carefully construct innovative models to serve the revitalization of rural education in the region. This is a powerful measure to transform the national rural revitalization strategy into concrete practical actions, and also opens up a stable and sustainable path for the future development of normal universities.

2. Research background and problem presentation

Against the backdrop of the country's comprehensive promotion of the rural revitalization strategy and vigorous promotion of educational equity, the state has successively introduced special educational policies such as "Free Normal Students", "Publicly Funded Normal Students", and "Outstanding Teacher Program", aiming to improve the quality of the rural teacher team from the source. Especially since the implementation of the "Outstanding Teacher Program" policy, a group of outstanding teachers who can "go down to the countryside, stay there and teach well" have been cultivated for rural areas, thereby promoting the sustainable development of rural education and providing solid talent support and intellectual guarantee for rural revitalization. This also requires local normal universities to deeply serve rural education, fully leverage their professional advantages in teacher training, educational research and

other aspects, and inject new vitality and impetus into rural education.

Although local normal colleges and universities have actively responded to the policy call and carried out a series of activities to serve rural education, there is often a problem of mechanism disruption in their service to rural basic education: First, the demand is misaligned. University courses focus on cutting-edge concepts, while rural teachers urgently need methods to tutor students with learning difficulties. The large gap between supply and demand affects the effectiveness of training. Secondly, resource fragmentation. The training content organized by the government, universities and schools is highly repetitive. The average annual number of training sessions for teachers is high, but the effective training hours are insufficient, resulting in a waste of resources and an increase in burden. Thirdly, professional autonomy has weakened. Teachers passively participate in training, lacking subjectivity and space for independent exploration. Some studies also show that the root cause of the disruption lies in the administrative dominance leading to the misalignment of goals [1], lacking long-term planning and systematic arrangements, which makes it difficult for service work to be carried out continuously and deeply. The "academic hegemony" in universities coexists with the "absence of practice" in primary and secondary schools [2]. As the recipients of services, rural schools, due to their own limitations in educational resources and management capabilities, often can only passively accept the services provided by universities and the government, lacking mechanisms for active participation and feedback. In addition, there are also many practical problems such as excessively high institutional transaction costs. Overall, there is a widespread phenomenon of "one-way output by universities as the main focus, misalignment of administrative leading goals, and passive acceptance by schools" [3-5].

In response to this practical predicament, existing studies have conducted in-depth analyses from various perspectives, pointing out that administrative dominance, fragmented resources, and cultural conflicts are the three chronic problems that restrict local normal universities from effectively serving rural education. Under the administrative-led model, local normal colleges and universities often receive excessive administrative intervention in the process of serving rural education, lacking autonomy and flexibility, and thus find it difficult to adjust service strategies and contents in a timely manner according to the actual needs of rural education. The problem of fragmented resources is manifested in the scattered and isolated resources held by local normal universities, the government and rural schools respectively, lacking effective integration and sharing mechanisms, which leads to low resource utilization efficiency and the inability to form a joint force to serve rural education. Cultural conflicts are mainly manifested in the differences and estrangement between the urban culture represented by local normal universities and the rural culture where rural schools are located. Such cultural conflicts not only affect the communication and cooperation between the two sides of the service, but also to a certain extent reduce the recognition and acceptance of rural teachers towards the service content. Although existing studies have conducted a relatively comprehensive analysis of the issue of local normal colleges and universities serving rural education, the research on the micro-mechanism of the U-G-S local area is still relatively weak. In particular, the central and western regions, as key and difficult areas for rural revitalization, have unique geographical, economic, cultural and social backgrounds for the development of rural education, which are significantly different from those in the developed eastern regions. Therefore, an in-depth study of the micro-mechanism by which local normal universities provide content services for the professional growth of rural teachers within the regional scope holds significant theoretical and practical value.

3. The natural principles of the U-G-S model in promoting the development of rural basic education

It is widely believed domestically that China's U-G-S model is a Chinese transformation of the American PDS model. In the 1960s, UNESCO initiated the process of teacher professionalization, which went through multiple stages. The PDS model is a product of the crisis in teacher education and basic education in the United States. In 2001, Capital Normal University established the Teacher Development School, and in 2010, Northeast Normal University pioneered teacher education reform under the U-G-S concept. Subsequently, various forms of cooperation emerged, with the core being partnerships between universities, governments, and secondary schools to promote the reform of teacher education talent training models and achieve coordinated development. The greatest value lies in innovating the talent cultivation mode of university teachers, improving the professional level of teachers, promoting the quality of basic education reform, alleviating the problem of separation between higher education and basic education, and enhancing the effectiveness of administrative measures. Overall, there are three main principles for the coordinated development of "U-G-S": firstly, to carry out "organic collaboration" based on "native advantages". Universities take the lead, grasp the forefront, and coordinate resources;

The government plays a coordinating role to ensure the implementation of reform measures and expand school local cooperation; Middle school is the main battlefield, guided by the challenges of basic education. Demonstration of high-quality urban middle schools and provision of practical bases for rural middle schools. The three should gradually improve their relationship. The second is to follow the "task oriented" and "collaborative group style" models, based on clarifying collaborative tasks, decomposing them into specific plans, establishing collaborative groups, and breaking down original work relationships among members to establish task role relationships. The third is to follow the evaluation method based on the "dual student" learning effect, from the perspective of higher education to see normal students, and from the perspective of basic education to see middle school students, in order to avoid superficial reforms and truly achieve the coordinated development of teacher education and basic education.

4. The operation mechanism of the "Collaborative Experimental Zone for Teacher Education Development" of Hebei Minzu Normal University

The key to transforming the U-G-S framework from policy discourse into perceptible daily practice lies in whether universities, governments and primary and secondary schools can reshape power relations and resource flows in a collaborative field. Since Hebei Minzu Normal University launched the "Collaborative Experimental Zone for Teacher Education Development" project in 2019, after five consecutive rounds of agreement iterations, a relatively stable operation mechanism has gradually been formed. Adhering to the concept of "truth-seeking education", the school fulfills the mission of "Five Truths" for normal students, practices the quality goals of "benevolence, simplicity, responsibility and excellence" for normal students, and has established and improved a training system for rural basic education aimed at cultivating high-quality rural "new teachers" that meet the requirements of the new era. It has trained tens of thousands of educators who are rooted in rural areas and dedicated to the front line for the Chengde area. This study takes the period from 2020 to 2024 as the observation window, integrating policy texts, participatory observations and semi-structured interviews to deeply describe the institutional logic of the experimental area and analyze its internal mechanism of action on the professional growth of rural teachers.

4.1 Institutional embedding: The manifesting of government dominance

Traditional internships for normal school students are often arranged unilaterally by universities, with local governments only performing the function of filing. In 2019, the Chengde Municipal Government, for the first time, signed a tripartite agreement with universities and primary and secondary schools as the "Party A", including "receiving interns, organizing teacher training, and providing financial support" in the assessment list, and introduced a "benchmark - incentive" clause: if the benchmark is not met, the funds for the next year will be deducted. The fiscal leverage embedded in the administrative sequence has significantly enhanced the willingness of county and district education bureaus to fulfill their obligations. Grassroots governments have transformed from "bystanders" to "responsible parties", and the collaborative relationship has gained institutional rigidity for the first time.

4.2 Resource flow: Gradient sinking of platform nodes

The experimental zone has formed a three-level node system of "university - county and district teaching and research office - experimental school" in physical space. Resources flow through two institutionalized channels: the first is "personnel on-site", where university teachers must complete on-site guidance for a specified number of days each year and be included in the professional title evaluation. The second is "digital diagnosis". The classroom behavior data collected by the smart space station is automatically pushed to the county and district teaching and research offices for precise guidance by teaching and research staff. Platform governance not only compresses information asymmetry but also provides measurable output forms for the social services of colleges and universities, thereby alleviating the institutional contradiction that "serving basic education does not constitute scientific research achievements".

4.3 Operating mechanism: A micro-transformation from "teaching delivery" to "co-research"

First of all, we collaborate on teaching and research to support the development of rural teachers. University teachers and primary and secondary school teachers formed a "dual-responsible" research

team to conduct case studies on real issues such as the design of review classes and intervention for students with learning difficulties. In the interview, a rural mathematics teacher described: "After the university teacher finished my lecture on 'Fractional Equations', he immediately drew a distribution map of students' mistakes. For the first time, I knew where the 'loopholes' in my class were." Secondly, mutual employment of teaching staff: Universities hire their presidents as "practical mentors". Primary and secondary schools hire subject teaching theory teachers as "academic advisors", and the two-way flow breaks the identity boundaries, enabling the integration of "theory and practice" at the individual level. Secondly, job exchange: University teachers are seconded to rural primary and secondary schools as vice principals. Key teachers from primary and secondary schools go to universities to teach the course "Subject Teaching Theory". The temporary role swap has enabled university teachers to confront the complexity of rural classrooms directly and has also provided primary and secondary school teachers with institutionalized channels for academic discourse.

4.4 Co-construction of courses

Universities and base schools jointly develop the "Three Hometowns" courses of hometown sentiment, hometown essence and hometown ability. Colleges and universities will embed modules such as "learning diagnosis", "intangible cultural heritage education", and "family education guidance" for rural contexts into the courses of normal students, and jointly develop teaching cases with rural experimental schools to achieve the synchronous update of pre-service training programs and post-service training needs.

4.5 Internship outreach

The "Five Practices" practice platform for two-way empowerment. Internships for normal school students are no longer arranged in a "point-to-point" manner, but are uniformly allocated by the u-g-s Teacher Education Collaborative Development Experimental Zone platform to ensure the alignment of disciplines and the continuity of guidance. The internship period lasts for four years, forming a gradient experience of "observation - exercise - internship - study", enabling normal school students to have a complete understanding of the rural education ecosystem and reserving suitable teachers for rural schools who can start working immediately after graduation.

5. The internal logic of local normal universities serving basic education under the u-g-s model

The continuous operation of the experimental zone relies on dual legitimacy: first, administrative legitimacy, which means that the government incorporates collaborative work into county-level education governance through finance and assessment; The second is professional legitimacy, which means that universities provide perceived growth benefits for rural teachers through data and evidence. When dual legitimacy is met simultaneously, a symbiotic relationship is formed between universities, governments, and primary and secondary schools: universities receive measurable social service output, governments receive measurable performance indicators, and primary and secondary schools receive applicable professional support. Once this symbiotic relationship receives positive feedback in a certain round of evaluation, it will be locked down through the path of "agreement renewal resource addition trust accumulation" and become a new stable state for county-level teacher education governance. Although the mechanism is generally stable, it still faces two types of tension: one is spatial gradient, where schools in county towns with convenient transportation receive much more guidance from universities per year than remote teaching sites; The second is the disciplinary gradient, with the main subject occupying the vast majority of projects, while music, sports, aesthetics, science, and psychology are still on the periphery.

6. Conclusion

Firstly, it is crucial to establish a collaborative governance framework of "government collaboration university support school entity" in this study. The explicit embedding of administrative power is key. Local governments need to break through the role of "filers" and make grassroots governments "responsible persons" and participants. Universities are supported by professional strength and fully utilize professional strength to serve rural society. Primary and secondary schools, as the main body, integrate theory and practice through a two-way mutual employment mechanism. Secondly, implementing a curriculum co construction mechanism of "demand coupling and two-way interaction"

can solve the problem of curriculum disconnection. The experimental zone innovates the development model of "Three Villages Curriculum", coupling university resources with rural scenes, and developing courses on rural situation, rural connotation, and rural energy. Universities transform demand into teacher training modules, while primary and secondary schools transform problems into teacher training topics, forming a dynamic iteration. Once again, we establish a comprehensive internship practice system throughout the entire chain. We can solve the problems of short internship period and guidance gap. The experimental zone will establish a "Five in One" practical platform for teacher trainees, from freshman cognitive internship to senior on-the-job internship, with follow-up guidance after graduation, to enable teacher trainees to form a complete cognition. We enable the teacher trainees trained in the experimental zone to better serve rural schools after employment. Finally, cultivate cultural identity, enhance emotional connections, and collaborate in a symbiotic ecosystem to break down cultural barriers. Through value resonance, identity construction, and symbol co construction, we aim to develop a cultural community and elevate the collaborative relationship from "institutional constraints" to "cultural consciousness". The effective operation of the U-G-S model essentially involves the reconstruction of the power relationship and resource flow between administrative power, professional strength, and educational practice. Only when the government, universities, and primary and secondary schools form a symbiotic relationship can they achieve mutual empowerment. In the future, we can further explore the deepening role of digital technology in collaborative mechanisms and the adaptive adjustment of models under different regional cultural backgrounds, providing theoretical references for the governance of rural teacher education.

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