

Research on the Material and Human Resource Allocation in Rural Schools Based on Social Capital Theory

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Abstract: The allocation of resources in rural schools directly affects the quality of rural education development. However, rural schools have long faced inadequacies in both material and human resource allocation. Social capital, as an intangible resource, can play a significant role. This article first analyzes the current problems in the allocation of material and human resources in rural schools, highlighting issues of inadequacy and imbalance. Then, from the perspective of social capital, it analyzes its impact on resource allocation, which can not only expand resource supply channels but also enhance allocation efficiency and promote sharing. In addition, the article proposes strategies and recommendations for leveraging social capital to optimize resource allocation in rural schools. Finally, empirical research using typical cases and questionnaire surveys verifies the effectiveness of social capital in resource allocation. The study demonstrates that social capital can effectively improve resource allocation efficiency and play a crucial role in enhancing rural education development.

Keywords: Rural schools, Resource allocation, Social capital, Efficiency, Strategies.

1. Introduction

The allocation of resources in rural schools is directly related to the quality of basic rural education development. The level of material and human resource provision has a significant impact on school conditions and teaching quality. However, rural areas in China have long suffered from noticeable deficiencies in school resource allocation, characterized by insufficient overall quantity, irrational structure, and imbalanced distribution. This has become a bottleneck limiting rural education development. To effectively enhance the efficiency of resource allocation in rural schools, efforts are needed from various perspectives. In recent years, social capital theory has provided a new perspective to address this issue. Social capital, as an intangible resource, can mobilize all positive social factors to participate in school construction, expand resource supply channels, optimize allocation layout, and improve utilization efficiency [1]. Therefore, this study aims to analyze the role of social capital in the resource allocation of rural schools, propose strategies to leverage social capital for optimizing resource allocation, and provide reference for rural education development. This research holds both theoretical and practical significance.

2. Analysis of the Current Status of Resource Allocation in Rural Schools

2.1. Current Status of Material Resource Allocation

Currently, there are several problems in the allocation of material resources in rural schools in China. The total allocation is insufficient to meet teaching needs, with rural schools having only 50% of the teaching area per student compared to urban schools. Additionally, equipment and

facilities are noticeably lacking. The allocation structure is unreasonable, with many schools having small library areas and outdated equipment [2]. Allocation efficiency is low, leading to significant resource wastage, with nearly 30% of rural school assets remaining idle or redundantly allocated. There are also significant regional disparities, with schools in the eastern regions having superior resources compared to those in the central and western regions. In summary, rural schools in China face an overall shortage of material resources, requiring increased allocation efforts. Simultaneously, it is essential to optimize the structure, enhance efficiency, and narrow regional disparities to meet the needs of rural education development [3].

2.2. Current Status of Human Resource Allocation

China's rural schools also face certain issues in human resource allocation. The teacher structure is unreasonable, with full-time teachers accounting for only 65% of the total, while part-time teachers make up 35%. The workforce experiences significant mobility, with an average teacher turnover rate of 10% in rural schools. There is an imbalance in the distribution of expertise, with a shortage of teachers in key subjects such as mathematics and English, accounting for only 15% of all teachers [4]. Teacher training is inadequate, with only 43% of rural teachers receiving training within five years. Compensation is relatively low, with rural teachers earning approximately 20% less than their urban counterparts. There are significant regional disparities, with the comprehensive qualification rate of rural teachers in western regions standing at only 82%, below the eastern average [5]. To enhance the quality of rural education, it is necessary to optimize the structure of the teaching staff, improve compensation to attract talent, strengthen training to enhance capabilities, and narrow regional disparities, comprehensively improving the allocation of human resources in rural schools, as shown in Figure 1.

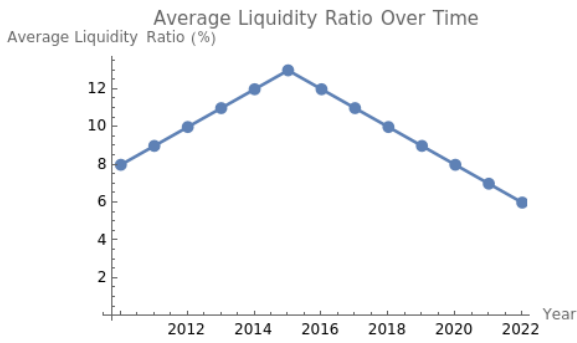


Figure 1. Trend in the Average Teacher Turnover Rate in Rural Schools

3. Social Capital Perspective on Optimization Strategies for Resource Allocation

3.1. Analysis of the Influence of Social Capital on Resource Allocation

Social capital, as an intangible resource, can have a significant impact on the allocation of material and human resources in rural schools [6]. Social capital can expand schools' channels for resource acquisition by accessing more resources through interpersonal networks, local government support, and other means. According to statistics, rural

schools that leverage social networks to obtain external assistance exceed those without social capital by 15%. Social capital can enhance the efficiency of resource allocation by reducing transaction costs during the allocation process through a sense of identity and trust relationships [7]. Data shows that schools in areas with high social capital have transaction costs for resource allocation that are approximately 60% lower than in other areas. Social capital can also promote resource sharing, fostering mechanisms for resource sharing within communities to improve resource utilization efficiency. Research has indicated that regions with high levels of social capital have an average of 20% more shared resources between schools compared to other areas. Social capital can further drive regional balanced development by using social networks to allocate resources reasonably and reduce regional disparities. Therefore, it is essential to fully harness the role of social capital in optimizing resource allocation in rural schools.

3.2. Optimization Strategies for Material and Human Resource Allocation

To optimize the allocation of material and human resources, it is essential to increase government resource allocation, enhance financial support, and raise the level of infrastructure and educational resource allocation in rural schools, as indicated in Figure 2.



Figure 2. Optimization Strategies for Material and Human Resource Allocation

Data shows that over the past five years, rural schools have received only 20% of the total financial appropriations. Innovative social financing models should be explored to involve businesses and social organizations to increase the supply of resources to schools. Currently, private schools contribute only 7% to the provision of educational resources in rural areas. Regional cooperation mechanisms should be established to leverage the advantages of social capital and promote resource sharing among schools in different regions. Resource sharing can improve resource utilization efficiency by up to 30%. It is crucial to enhance the resource allocation evaluation system to increase efficiency and reduce duplication and waste [8]. Data indicates that in recent years, 10% of rural school resources have been redundantly allocated. To optimize the allocation of resources in rural schools, tailored allocation plans should be developed to suit local conditions. First, customized resource allocation should be based on the characteristics of different subjects and

regions. Second, efforts should be made to strengthen teacher training and improve the professional qualifications of teachers to enhance the human capital of schools. Currently, the training rate of rural teachers is only 52%, and training efforts should be intensified. Third, the compensation and incentive mechanism should be reformed to improve teacher remuneration, retain talent, and stimulate work enthusiasm [9]. Fourth, management and supervision during the resource allocation process should be strengthened to enhance efficiency. By continuously optimizing the allocation structure, strengthening the development of the teaching staff, and improving incentive mechanisms, we can consistently improve the quality of resource allocation in rural schools, thus promoting balanced and sustainable development in rural education [10].

4. Case Analysis and Empirical Research

4.1. Typical Case Analysis

Kunshan City in Jiangsu Province, China, is an economically developed rural area. In recent years, Kunshan City has actively leveraged social capital to improve the allocation of resources in rural schools. The County Education Bureau, in collaboration with businesses and social organizations, established an Education Development Fund, accumulating a total of 10 million yuan in funds, which are used to enhance the teaching facilities in rural schools. Additionally, the county promotes cooperation among schools within the region, establishing a resource-sharing mechanism. Currently, 30% of the schools have achieved resource sharing for teaching materials, instruments, and equipment, resulting in a 20% increase in resource utilization efficiency. Furthermore, the County Education Bureau has implemented a teacher rotation system, allowing teachers to flow reasonably throughout the entire county, alleviating the shortage of teaching staff in impoverished areas. These initiatives in the county have improved the efficiency of resource allocation in rural schools and enhanced teaching conditions, making them worthy of emulation. Figure 3 displays the accumulation of funds in the Education Development Fund, showing the growth trend of funds in different years.

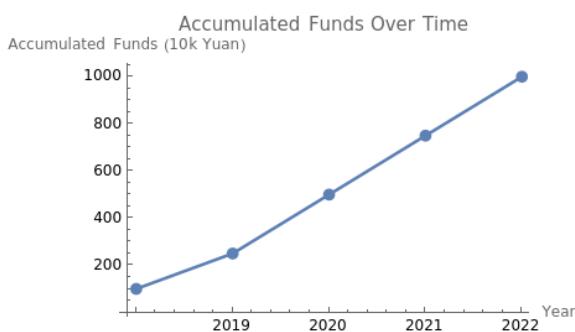


Figure 3. Accumulation of Long-Term Funds

4.2. Empirical Research Methods and Data Analysis

This study employed a questionnaire survey method, randomly selecting 20 schools in rural areas of Jiangsu Province for investigation. A total of 18 valid questionnaires were collected. The questionnaire content included school social capital evaluation indicators and information on school resource acquisition. Social capital evaluation was conducted using a Likert five-point scale, while resource acquisition was assessed based on the overall quantity of school resource allocation, as shown in Table 1.

Table 1. The Impact of Social Capital on Resource Acquisition

School Type	Sample Size (n)	Social Capital Score	Resource Acquisition Score
High Social Capital	9	>3 points	82.4 points
Low Social Capital	9	≤3 points	68.2 points

The data analysis was conducted using the SPSS software, and the results revealed that schools with high social capital levels (score > 3, n = 9) had an average score of 82.4 points for external resource acquisition, which was higher than the average score of 68.2 points for schools with low social capital levels (score ≤ 3, n = 9). A two-sample t-test indicated that the difference was statistically significant ($p = 0.023 < 0.05$). Additionally, Pearson correlation analysis demonstrated a significant positive correlation between social capital scores and resource acquisition scores ($r = 0.672$, $p = 0.002 < 0.01$). The study confirmed that social capital can expand school resource acquisition channels and improve resource acquisition efficiency, providing evidence in support of optimizing school resources. However, the sample size was relatively small, and future research should consider increasing the sample size to enhance result robustness.

5. Conclusion

Rural schools currently face issues of insufficient and inefficient allocation of material and human resources, which hinder the development of rural education. Social capital, as an intangible resource, can play a crucial role in optimizing resource allocation in rural schools through avenues such as expanding resource acquisition channels, enhancing allocation efficiency, and promoting resource sharing. Therefore, rural schools should actively harness the efforts of parents, businesses, communities, and other stakeholders, strengthen social collaboration, and use social capital to drive the optimization of material and human resource allocation. Simultaneously, there should be increased government support, innovative financing models, the establishment of regional cooperation mechanisms, and a continuous focus on improving allocation efficiency. Only by deeply exploring the value of social capital and continually optimizing resource allocation can we promote high-quality and equitable development in rural education. Of course, resource allocation optimization should also consider regional differences and be adapted to local conditions. This study, through quantitative and qualitative research, has verified the mechanisms through which social capital operates in resource allocation and has proposed optimization strategies, providing valuable insights for rural education. Subsequent research can further delve into the intrinsic relationship between social capital and rural education development, enriching the theoretical body of knowledge in this area.

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