Research on the Current Situation, Problems and Countermeasures of the Structure of Teacher Resource Allocation

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Abstract: This study focuses on the structure of the teaching staff by sorting out the related issues of teacher resource allocation. Based on the theory of teacher resource allocation, sort out the teacher resource allocation model; analyze the imbalance of the teacher team structure through data: overall, the proportion of women is getting higher and higher, and the proportion of female teachers in high school has increased by more than 6%; The proportion of female teachers in junior high schools has increased by nearly 8%; the proportion of female teachers in elementary schools has increased by more than 11%. The allocation structure of subject teachers is unbalanced, and it is common for some subject teachers to teach multiple subjects. Furthermore, research related problems and analyze the reasons, and finally, put forward countermeasures and suggestions for the structural problems in teacher resource allocation.

Keywords: Teacher Resources; Resource Allocation; Teacher Structure.

1. Introduction

Educational equity is an important basis for measuring the achievements and levels of national and regional educational reform and development. The fairness of educational resources is an important content of educational fairness, it emphasizes the reasonable allocation of educational resources and the fair distribution of educational resources. That is to say, educated people enjoy the same educational resources, which is the material guarantee for the realization of educational fairness and the realization that educated people enjoy equal educational services. In short, education equity includes both the equity of access to school and the equity of receiving high-quality education. Promoting educational equity and improving teaching quality are the current policy themes of the scientific development of my country's education. The balanced development of urban and rural education is the key to it, and the key to the balanced development of urban and rural education is the balanced allocation of teacher resources. [1] The allocation of teacher resources plays a pivotal role in the allocation of educational resources, but the unbalanced and insufficient allocation of teacher resources has always been the focus of attention in the academic circles. This article will discuss this in depth.

This dissertation studies the problems existing in the structure of the teaching staff from the perspective of the structure of the teaching staff. Structural problems in the allocation of teacher resources in my country are relatively significant. Studies have shown that there is a large gap between rural teachers and urban teachers in terms of age, gender, education, establishment, professional title, teacher-student ratio, and key teacher distribution. This structural difference is also evident between the eastern and western regions. [2] Therefore, the problem of teacher structure deserves attention. This thesis discusses and studies the specific problem of teacher structure.

2. Literature Review

2.1. Theoretical Basis of Teacher Resource Allocation

The allocation of teacher resources, in simple terms, refers to the allocation and placement of teacher resources, that is, the allocation of teacher resources among schools of all levels and types. From a practical standpoint, the allocation of teacher resources involves several key aspects. Firstly, the allocator, referring to the personnel responsible for allocation. Secondly, the allocation capacity, which encompasses the forces closely associated with the allocator. Thirdly, the method of allocation, given that education is a complex system with distinctions based on educational levels (primary, middle, and high schools) as well as various subject categories (such as arts, science, agriculture, medicine, military, diplomacy). Within this intricate framework, how teachers should be assigned and placed to maximize the utilization of this resource becomes a critical consideration. Finally, the allocation objects include in-service teachers, graduates from teacher education programs, and other individuals who have obtained teaching qualification certificates.

Therefore, from an operational perspective, teacher resource allocation entails the allocator distributing and allocating resources among the allocation objects within the education system in accordance with specific allocation capacities. By defining the feasibility of utilizing teacher resources, it becomes evident that the application of these resources varies depending on the allocator, allocation capacity, allocation objects, and the characteristics of the allocation objects. The concept of a teacher resource allocation model refers to the configuration of allocation objects achieved through allocation forces under certain allocation capacities. Currently, the goal of teacher resource allocation in primary and secondary schools in China is to achieve a relative balance between the demand for and supply of teacher resources. The primary essence of balanced
development in teacher resources includes rational resource allocation and the overall improvement of teacher quality, while the government ensures basic equal conditions for running educational institutions.

2.2. Teacher Resource Allocation Model

Teacher resource allocation refers to the reasonable allocation of limited teacher resources among all levels of education, between different regions and schools. Teacher resource allocation involves the subject, object and allocation mode of allocation.

The main body of teacher allocation in primary and secondary schools in my country is generally dominated by local governments. The targets for primary and secondary school teacher allocation are schools of all levels and types in different regions. There are mainly two modes of teacher allocation in primary and secondary schools: plan allocation mode and market allocation mode. [3]

2.2.1. Plan Allocation Model

The plan allocation model is a way of social resource allocation, which reflects the characteristics of social resource allocation in my country. From the founding of New China to the reform and opening up, my country has implemented a planned economy, and the state has made overall arrangements to plan and allocate social resources macroscopically.

The balanced allocation of teachers refers to the balance of the supply and use of teacher resources through government distribution. It includes the appointment, mobility, assessment and motivation of teachers. Participating entities include the government (education bureau, school district), schools, and teachers. All relevant entities achieve balanced teacher allocation in different schools and regions by constructing reasonable teacher allocation methods, rules, and institutional arrangements. Therefore, the government should formulate compensation policies, pay attention to teachers in economically underdeveloped areas, and guide high-quality teachers to teach in these areas through the market economy, and supplement the school's high-quality teacher resources. At present, the policies implemented in our country, such as public-funded normal students and teacher support programs, all involve the issue of teachers' salaries and benefits, and guide excellent teachers to find employment in rural primary and secondary schools on a macro level.

This paper uses teacher structure (gender) to measure the main indicators of teacher resource allocation, and the data comes from the 2012-2020 "China Education Statistical Yearbook".

3. The Current Situation of the Structure of the Teaching Staff

3.1. The Teacher Structures

![Figure 1. Statistical chart of the proportion of female teachers in various schools](image)
The structure of teachers is mainly viewed from the gender of teachers. It can be seen from Figure 1 that overall, the proportion of female teachers is getting higher and higher. Among them, the proportion of female teachers in high school has increased by more than 6%; the proportion of female teachers in junior high schools has increased by nearly 8%; the proportion of female teachers in primary schools has increased by more than 11%.

The allocation structure of subject teachers is unbalanced, and it is common for some subject teachers to teach multiple subjects. The allocation structure of subject teachers affects the quality and level of normal development of compulsory education courses. In primary schools, the number of teachers in subjects such as music, physical education, art, and information technology is relatively small, and teachers of other subjects can only be transferred to part-time classes, resulting in double counting of subject teachers, and teachers teaching multiple subjects, creating the illusion of sufficient teachers for each subject. In fact, it is precisely because of the serious shortage of professional teachers in certain subjects that teachers have to be transferred and multi-subject concurrent courses are implemented to ensure the normal development of courses. The level of professional development in does not meet the teaching requirements. [4] The lack of subject background and literacy in art, physical education and other courses directly determines the quality and effect of such teaching courses, and then becomes the main restrictive factor for the development of students' knowledge and quality. The imbalance in the teacher structure has further exacerbated the phenomenon of teachers taking part-time courses and cross-subjects, and has also expanded the difference in the allocation structure of urban and rural subject teachers, and has also formed a problem of imbalance in the allocation structure of cyclical subject teachers. The age structure of primary school teachers is unreasonable, and the aging of the teaching staff is relatively high. The age structure of teachers can effectively reflect the rationality of the age composition of the teaching staff, teaching work energy and development potential. Maintaining a teaching staff with a reasonable gradient age group can effectively promote the renewal of educational knowledge concepts and the continuation of educational experience and culture. The survey shows that the age structure of primary school teachers is unreasonable, and the aging degree of the teaching team is relatively high, which is quite different from that of county teachers. The aging of teacher resources shows not only the problem of older teachers, but also shows the weakness and inferiority of education to a certain extent. The loss of young and middle-aged teachers is serious, and the knowledge structure and teaching energy of old teachers are gradually aging, which seriously affects the development potential of the school.

3.2. Teacher Resource Allocation in Basic Education

Driven by my country's current policies, the government and relevant departments have made many positive and beneficial attempts and explorations in order to narrow the gap in the allocation of teachers for compulsory education. However, judging from the implementation effect, the following problems still exist in the allocation of teacher resources.

3.2.1. Configuration Difference Problem

At present, the allocation of teacher resources in our country is seriously unbalanced. The difference between urban and rural areas has become one of the main problems faced by the allocation of teacher resources in our country. There are mainly the following problems: First, the quality of teachers is poor. Studies have shown that the overall quality of rural teachers is lower than that of urban teachers, with single knowledge structure, outdated ideas and backward teaching methods. The second is the difference in the number of teachers. According to the survey results, the number of teachers in rural areas is far less than that in urban areas. In addition, due to various reasons, the loss of rural teachers is relatively serious, resulting in a serious shortage of rural teachers. The third is the difference in teacher structure. The fourth is the difference in the treatment of teachers. Compared with urban teachers, rural teachers have low salaries, shortage of social security funds, single form and other reasons, which lead to a large gap in the salaries of urban and rural teachers. There is a large gap in the allocation of teacher resources in terms of quality, quantity, and structure, which seriously damages the educational interests of schools and students, violates the value concept of fairness and balance in education in my country, and seriously affects the balanced development of education and the realization of educational equity.

3.2.2. Configuration Efficiency Problem

There is a problem of low efficiency in the allocation of educational resources in our country. The balanced development of education is inseparable from the improvement of the efficiency of educational resource allocation. Teacher resources are an important part of educational resources and the core factor to ensure the development of compulsory education. Therefore, the allocation of teacher resources should be based on efficiency, otherwise, the positive role of teacher resources in the educational process cannot be fully utilized. Ensuring the efficiency of teacher resource allocation is a concrete manifestation of educational equity. Research shows that the allocation efficiency of teacher resources in our country is not ideal enough. For example, Jin Donghai et al. analyzed the problems existing in the allocation of teacher resources in the sample schools from the aspects of teacher structure, student-teacher ratio, and teacher staffing: the proportion of subject teachers is uneven, the structural shortage is serious; the proportion of highly educated teachers is low; The structure of teachers' professional titles is uneven; the age structure of teachers is unreasonable; substitute teachers occupy a large proportion. [5] Existing studies have shown that the efficiency of teacher resource allocation appears "efficiency inversion". Improving the efficiency of teacher resource allocation is an important guarantee and a top priority for improving the quality of education and teaching and building a team of high-quality teachers. At present, there is a problem of low efficiency in the allocation of teacher resources in our country. Generally speaking, it has a certain negative impact on the balanced development of teacher resource allocation in our country and the realization of education equity in our country. The academic community should pay attention to the investigation of the efficiency of teacher resource allocation, and minimize the impact of teacher resource allocation efficiency. [6]
3.3. Teacher Resource Allocation in Higher Education

3.3.1. Unbalanced Allocation Structure of Teachers’ Resources in Colleges and Universities

According to the "2020 National Statistical Bulletin on Educational Development" issued by the Ministry of Education, by 2020, the total number of students in various types of higher education across the country is 41.83 million, an increase of 1.81 million over the previous year. The gross enrollment rate of higher education was 54.4%, an increase of 2.8 percentage points over the previous year. The average number of students in ordinary colleges and universities is 11,982, including 15,749 students in undergraduate colleges and 8,723 students in higher vocational (specialist) colleges. Among them, 466,500 are doctoral students and 2,673,000 are master students.

It is a considerable scale of college teachers who provide teaching for this huge group of college students. In the same year, the total number of full-time teachers in general higher education in my country was 1,833,000, of which 0.8 million were senior teachers and associate senior teachers, [7] accounting for 43.64% of the total number of teachers. Calculated according to the distribution ratio of teachers in colleges and universities, the professor team accounting for 43.64% of the total number of teachers is responsible for 6.98% of the student education, and each professor and associate professor only has 3 graduate students, while other teachers with intermediate and junior titles each need to be responsible for more than 30. The education of individual college students. There is an imbalance in the allocation of teacher resources in colleges and universities. Some teachers have a huge workload, while some teachers with higher professional level and more teaching experience are idle, not fully utilized, and there is a lot of waste.

3.3.2. The Utilization of Human Resources of Principal and Deputy Senior Teachers is Relatively Idle

Compared with the dual pressure of young teachers on teaching and scientific research, the resources of teachers with senior professional titles and deputy senior titles are underutilized. Professors with senior professional titles in some colleges and universities have very short teaching hours per semester, which is not only inferior to that of professors in developed countries such as Europe and the United States, but also inferior to that of professors in developing countries such as India. It has become a common practice that university professors do not go to the podium of junior college students. From the perspective of society and students, professors are a group of excellent teachers with profound academic attainments and rich educational experience. If they cannot provide more educational resources for junior college students. That is to say, the university does not provide students with the best educational resources. The purpose of training professors is to send outstanding talents to the country, but in fact, the optimal allocation of resources has not been realized, which objectively causes a waste of professor resources. This is also one of the important factors that cause the large scale of education in my country's colleges and universities, but the teaching quality cannot be improved steadily. [8]

4. Attribution of Structural Imbalance in Teacher Resource Allocation

4.1. There are Deviations in the Top-Level Design

The top-level design and overall arrangement of the teacher team building policy are not enough, which leads to problems in the implementation of the teacher team building policy. [9] Economic and social development and basic education reform are inseparable from the support of top-level design such as systems, policies, and economic structures, and accidental deviations or regional differences in top-level design can easily lead to unbalanced allocation of teacher resources. The level of development and the intensity of policy implementation. When the level of economic development and institutional policies deviate and cannot be coordinated in time, the efficiency of teacher allocation will be reduced.

As far as the main body of teachers is concerned, the difference in professional conditions between urban and rural teachers has a huge gap in teachers' hearts. These realistic differences have created a huge attraction for teachers, making teachers gradually develop a desire to leave the countryside and go to the city. This has resulted in the uncontrollable result of uneven allocation of teachers. The attractiveness of the professional environment to teachers cannot be ignored. A good development environment and remuneration can attract teachers from all over the world, but it is difficult for schools in poor conditions to recruit teachers, and even the original teachers will flee. [10]

4.2. Teacher Management Deviates from Reality

The teacher management mechanism must have scientific values and a sound management system, which is related to the value and practical direction of teacher allocation. Once the teacher management mechanism deviates from the actual situation of teacher allocation, it will easily affect the actual effect of teacher allocation. Further improvement of the teacher management system is conducive to continuously correcting relevant mechanisms and values, and realizing the soundness of the teacher allocation management system and the optimization of teacher allocation. The number of teachers represents the economic status and social status of teachers, and teachers with poor working conditions need this kind of institutional care to ensure that they can teach in schools with peace of mind.

The teacher personnel management system is mainly on the basis of relevant policies and regulations. The state makes formal regulations on the appointment, qualification, training, assessment and other aspects of teachers according to the professional requirements and characteristics of teachers and the rules of teacher management. In order to improve the efficiency of teacher allocation and improve the quality of education and teaching. Teacher appointment mechanism, teacher qualification system, teacher training system, and teacher flow mechanism are not perfect, which will lead to unreasonable teacher team construction, resulting in uneven teacher allocation. [11]
4.3. The Overall Satisfaction with the Allocation is Low, and the Teacher Development Environment Needs to be Changed Urgently

Teachers' work tasks are heavy, and teaching workload satisfaction is poor. Teachers are an important subject of the country's training of future talents and the main force of education. Teachers shoulder the important task of revitalizing education, improving teaching quality, and optimizing the teaching staff. However, at present, there is a problem in the teaching staff that "non-teaching tasks are more important than teaching tasks", which directly affects the normal teaching of teachers and the professional satisfaction of teachers. Relevant studies believe that the overburden of teachers' work will not only detract from teachers' professional satisfaction and happiness, but also make it difficult for school governance to reach a scientific and effective level. [12]

The satisfaction of teachers with the school environment is low, and the level of the school environment needs to be improved. The school environment includes school education and teaching hardware facilities, cultural management environment, etc. The level of environment has a great influence on the stability and continuity of teachers' teaching. It is a direct reflection of teachers' satisfaction with the school's material environment and spiritual and cultural environment. Data analysis shows that teachers' satisfaction with teachers' school environment is still low, among which there is a significant difference between urban and rural primary school teachers' school environment satisfaction, and urban and rural junior high school teachers' school environment satisfaction is relatively low. There is a significant difference between urban and rural junior high school teachers' satisfaction with the school environment, and the satisfaction of junior high school teachers in county towns is lower than that of junior high school teachers, but the mean value of urban and rural junior high school teachers' satisfaction with school environment is lower horizontally.

4.4. Poor Career Development Status

Teachers' career development prospects and opportunities are the professional content that teachers pay more attention to. Teachers' training, professional title evaluation, and self-development opportunities will all affect the status of teachers' career development. The imperfect content of the teacher growth system directly leads to the deterioration of the teacher's professional development, which in turn affects the overall quality and balance of the teaching staff.

Teacher training and teacher supplement are important contents in the construction of the teaching staff. Teacher training plays an important role in teacher induction and professional development. Therefore, teacher training is an important way to narrow the gap between urban and rural teachers, and can effectively improve the professional ability of teachers and the overall quality of the teaching staff. However, in reality, there are still many problems in teacher training. Schools face practical constraints in terms of training opportunities, training content, and training costs, which makes the gap between urban and rural teacher construction levels continue to widen.

The professional title of teachers is not only the embodiment of teachers' professional development ability, but also the level of academic research, and even directly related to the level of teachers' economic treatment. However, the evaluation of professional titles, especially the evaluation of senior professional titles, must meet various strict conditions stipulated by policies, such as the number of places for the evaluation of professional titles. Professional titles are directly related to teachers' economic treatment. The higher the professional title, the higher the salary level, the greater the local financial burden, and the stricter the professional title evaluation ratio indicators.

5. Countermeasures to Solve the Problems of Teachers' Team Structure

5.1. Strengthen the Compensation for Teacher Allocation and Balance the Flow of Teachers

Implement supplementary measures for diversified teachers to form a multi-subject and multi-form concentric co-education pattern. Local governments should implement the national policy on teacher allocation, formulate corresponding policies, and set up special departments to implement them. Continue to increase the implementation of major supplementary measures for teachers such as the "Special Post Program", "Targeted Training at Public Funds", and "General Subject Teacher Program", focusing on the localization of teacher training. Specifically, all localities should scientifically and reasonably formulate local annual teacher recruitment plans based on local actual needs, implement flexible and open recruitment procedures, and give appropriate preference to poverty-stricken areas, schools below townships, and shortage of weak subjects. In terms of the form of teaching support, we must vigorously promote the "special post plan", "three supports and one support", "teachers go to teach", "elders give lectures", and encourage college students, urban backbone teachers, and retired teachers to actively teach in ethnic and difficult areas, and give priority to the protection of the rights and interests of the teaching service personnel.

Promoting the exchange and training of urban and rural teachers can effectively promote the flow of high-quality teachers, promote the flow of high-quality teachers, and improve the quality of education and teaching. All localities should accelerate the construction of the "county management and school employment" mechanism, continue to expand the "county and regional exchange and rotation plan", "teaching support plan", "cross-school and part-time mechanism", "management team + teacher backbone" joint exchanges as well as stock allocation measures. Guide the rational flow of urban and rural teachers, strengthen the mechanism for urban teachers to support schools, and encourage and support the exchange and interaction of high-quality teacher resources with schools and weak schools, in addition to focusing on urban-rural exchanges and learning, township central schools should also coordinate and arrange job rotation exchanges, teaching and research activities, etc. in village schools and teaching sites according to policy requirements.

5.2. Strengthen the Construction of the Teacher Guarantee System and Promote the Construction of the Incentive Mechanism for Teacher Allocation

Increase teachers' salaries and give preferential treatment
to teachers. Teachers go deep into the grassroots and difficult areas. The average salary level of teachers should be based on the average salary level of local civil servants, and all localities must ensure that it is not lower than or higher than this standard. Further optimize the mechanism and structure of performance-based wages, implement performance-based wage policies, and reward performance-based wage policies to favor teachers, especially schools in poor areas, increase the proportion of class hours and teaching, and give priority to long-term rooting of performance-based wages. It is inclined to excellent teachers and school head teachers who are concerned about the development of education. In addition, for special-post teachers and exchange rotation teachers who participate in teaching support, their wages, special subsidies, and rights and interests shall be guaranteed in accordance with the law, and the phenomenon of arrears shall be eliminated, and the enthusiasm and initiative of grassroots teachers shall be mobilized.

Increase the focus shift and inclination of teachers’ professional title evaluation. The level of professional titles is directly related to teachers' status, sense of accomplishment, and material income. Therefore, professional title evaluation and employment have a very obvious incentive effect on teachers. The proportion of middle and senior professional titles should be tilted towards the teacher group, and the proportion should be listed separately on the basis of a reasonable total amount control, so as to get rid of the restrictions of the teacher's post structure. When evaluating and recruiting senior and special-grade teachers, priority should be given to excellent teachers in difficult areas so that they can have a positive motivational effect. The evaluation mechanism is inclined to long-term outstanding teachers, with teaching age as an important assessment standard, and timely commending teachers who are dedicated to teaching and rooted in education. Increase the recruitment of male teachers to balance the existing imbalance in the ratio of male to female. The proportion of women in schools at all levels is increasing. In the long run, it is not conducive to the long-term development of education. We need to pay attention to it and make corresponding strategies in time to improve the structure of the teaching staff.

References


