

Article

# Exploring University Teacher Construction for Higher Education Sustainability in China: Perspective from Policy Instruments

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**Abstract:** Teacher construction is a long-standing focus of global teacher governance. The construction of a highly qualified and professional higher education teaching force is a source of impetus for the sustainable development of higher education. In-depth systematic analysis of representative macro policies for Chinese university teachers is currently limited. Thus, this study employs the perspective of policy instruments and establishes a two-dimensional analytical framework to examine a key Chinese official teacher policy document to reveal the Chinese government's policy intentions and instrument use preferences for current higher education teacher development. The aim is to explore the improvement of policy instruments for higher education teacher construction to promote sustainable development in China's higher education institutions and to contribute Chinese experience to global teacher governance. The results indicate that the ratio of policy instrument use has structural disparities and insufficient appropriateness to the elements of the teacher management process. Environment-oriented policy instruments have been a critical thrust of the current Chinese government's reform of university teacher development. It is recommended to pay attention to the systemic character of teacher growth and the optimal coordination of content elements and policy instruments to form a governance synergy for the high-quality and sustainable development of higher education.

**Keywords:** China's university teachers; teacher construction; higher education sustainability; teacher policy; policy instruments



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## 1. Introduction

In modern, high-speed society, higher education has been contributing multiple resources and solutions for the sustainable development of society. University teachers are the primary implementers of higher education teaching and practice, which are of utmost importance to education, being an extremely critical human resource [1]. The construction state and development direction of university teachers determine the quality of higher education and affect the sustainable development of higher education in China [2]. In other words, university teachers are a core part of the sustainable development of higher education in China. The quality of university teachers is directly related to the orientation and quality of the sustainable development of universities. The teaching force received global attention in teacher governance as early as the 1960s. From its focus on teacher training as a starting point, the World Bank has gone through three periods of initial attention, gradual exploration, and intensive development [3]. The World Bank aims to ensure sustainable global education development by improving the quality of teachers in developing countries, thereby providing a critical boost to their economic growth [4]. It can be seen that the importance of the teacher workforce for economic growth and sustainable educational development is an imperative element in driving global teacher governance. In recent years, with the deepening of China's higher education modernization concept

and strategies, such as building world-class universities, the quality of China's higher education has been improving, and its international influence has been expanding [5]. The sustainable and healthy development of China's higher education plays a positive role in promoting the internationalization and globalization of education [6]. Meanwhile, the sustainable development of China's higher education provides positive support for the excellent global integration of the world pattern. In addition, in the past decade or so, the Communist Party of China (CPC) and the government have attached great importance to higher education and the construction of higher education teachers, promulgated a series of significant strategic policies, and promoted the development of higher education teachers from extensive development to connotative improvement [7]. The continuous increase in the number of higher education teachers, the dramatic improvement in their quality, and the in-depth optimization of their structure have all provided high-quality teachers for the high-quality and sustainable development of higher education in China and provided a strong guarantee of talent and intellectual support for the development of socialism with Chinese characteristics and the internationalization of higher education. According to the 2021 education statistics of China, there were 3012 higher education institutions in 2021, with 44.3 million students in higher education and 1,885,200 full-time teachers in higher education, and the gross enrollment rate of higher education was 57.8%. At this time in China, higher education has wholly entered the era of popularization and generalization. Against such a background, how to promote the prosperity and development of Chinese higher education in a better and sustainable way has become a massive question for the present time. As the internal driving force for the sustainable development of higher education, university teachers are moving in the same direction as the sustainable development of higher education. As close stakeholders in the development, university teachers are critical research subjects for exploring the sustainability of higher education in China as well as globally.

Meanwhile, examining the development of higher education through the lens of education policy has always been a valid entry point in international higher education research [8]. Education policy is part of public policy and has the general characteristics of public policy [9]. As a core part of education policy, teacher policy is a subordinate concept of education policy from the logical perspective of its conceptual definition. Its abstract order with public policy and education policy is: public policy, education policy, and teacher policy [10]. Broadly defined, teacher policy refers to the sum of policies formulated by the government or the political party in power for teachers in a specific period, based on the basic regulations of education, to achieve the goals and tasks of educational development and to solve problems in academic development [11]. As distinct from other public policy, teacher policy is aimed at people with autonomy and motivation. The quality, growth, and development of teachers are the cornerstones of the achievement of teacher policy goals. Teacher policy, as an integral and fundamental policy for the realization of the goals and essentials of education policy, is a powerful method for teacher development reform. The goals and concerns of teacher policies focus on the distribution of power to teachers and the distribution of benefits of teacher resources, which are significant factors affecting the implementation of teacher policies [12]. At the micro level, the reform policy of university teacher construction is to fundamentally solve problems in the education process through policy changes and institutional evolution. At the macro level, the reform policy of higher education teacher construction mainly considers whether it fulfills the development and reform demands through policy governance and provides a source of power for sustainable development. As an initiative to improve the efficiency of internal governance of national universities, the policy of higher education teacher construction provides endogenous power for sustainable development in the process of promoting the improvement of the national governance system and modernization of governance capacity.

In January 2018, the Central Committee of the Communist Party of China (CPC) and the State Council issued the *Opinions on Comprehensively Deepening the Reform of Teacher Construction in the New Era (Opinions)*. This education policy is the first landmark policy

document issued by the CPC since the founding of China specifically geared toward teacher construction, depicting a grand blueprint for teacher construction in China's new era and sounding a rallying cry to advance the reform of teacher construction [13]. It reflects the fact that building the teaching workforce has become a top priority in China's national agenda [14]. Following the release of the policy, it quickly became a hot topic for scholars at domestic and international levels to study education in China. In December 2020, China's Ministry of Education and six other departments jointly issued the *Guiding Opinions on Strengthening the Reform of College Teacher Construction in the New Era (Guiding Opinions)*. This policy is the implementation and refinement of the top-level macro education policy of China, pointing out the direction for the reform and development of college teacher construction in the new era, playing an important role in the path of college teacher construction in all regions of China. It also provides an essential leading and guiding role. It offers significant policy guidance for the sustainable development of higher education in China. However, while most of the studies on the development of China's teacher policies have been summarized and interpreted in multiple policy texts, in-depth and systematic analysis of important representative macro policies is rare. The *Guiding Opinions* as a macro top-level policy text of the Chinese government is representative of the development of Chinese higher education teachers and has theoretical and practical significance for in-depth study. Therefore, based on the explicit and authoritative validity of the policy text, this study provides an in-depth examination of the *Guiding Opinions* based on the perspective of policy instruments to better clarify the Chinese government's positioning, policy intentions, and instrumental preferences of university teacher development, which has far-reaching implications for promoting the sustainable development and internationalization of higher education in China and for providing Chinese experiences for global teacher governance.

Thus, this study is divided into the following parts: the first part discusses the selection of policy instruments to examine the importance of the *Guiding Opinions*; the second part elaborates on the sustainable development of education and the research status quo of China's higher teacher team construction; the third part establishes a two-dimensional analysis framework of policy text analysis; the fourth part includes the results and discussion from data analysis; and in the fifth part, conclusions and limitations are given.

## 2. Perspective of the Theory of Policy Instruments

Policy instruments, also known as governance instruments or government instruments, generally refer to the specific methods and approaches adopted by governments and related authorities to solve practical problems and achieve policy goals [15]. With the expansion of the field of policy science research itself and the tracing of the reasons for policy failures in Western countries, the study of policy instruments has become a focal issue in Western policy science since the 1990s. The enactment and issuance of policies do not represent the implementation of policy goals and policy values. As a link between the policy subject and the policy object, policy instruments play a strategic orientation role in facilitating the practice of the policy object [16]. Choosing the policy instrument needs to consider not only the characteristics of the policy instrument itself, but also the appropriateness of the policy instrument to the policy system. When formulating and implementing policies, rational policy instruments can better fit the policy content and achieve the policy effects, which have an important influence on the policy actors to achieve the intended policy objectives. With the wide application of policy instrument theory in policy science research, an increasing number of scholars have applied a policy instrument approach to the study of education policy. Regarding the research on the theory of policy instruments, there is no consensus in the academic community so far because the classification criteria are different and scholars both at home and abroad have expressed their own views on the classification of policy instruments. In the 1960s, German economist Kirschen was one of the first to attempt to classify policy instruments, focusing on the existence of a range of instruments for implementing economic policy to obtain optimal outcomes. He compiled 64 generalized instruments but did not classify them systematically. McDonell and

Elmore classified the policy instruments into four categories according to the objectives that the policy is intended to obtain, namely, mandate instruments, inducement instruments, capacity-building instruments, and system-changing instruments [17]. Canadian scholars Howlett and Ramesh classified policy instruments into voluntary, mixed, and compulsory instruments based on the degree of government involvement in public services [18]. Based on the goal-oriented character of policy instruments, Schneider and Ingram classified them into five categories: authoritative instruments, motivational instruments, capacity-building instruments, symbolic and exhortation instruments, and learning instruments [19]. Rothwell and Zegveld classified policy instruments into supply, environmental, and demand policy instruments based on the relationship between their effects [20]. When the three types of policy instruments are well-matched and acting together, the policy objectives can be achieved to the utmost extent. The richness and diversity of research on the classification of policy instruments provides multiple perspectives on public policy research. As a product of the integration of policy science theory and practice, policy instruments contribute significantly to the solution and optimization of public problems. Therefore, the perspective of the appropriately selected policy instrument to study the policy text has objective and important research value.

### 3. Current Status of Research Related to Teacher Construction in China

Since the 1990s, the expression “teacher construction” has frequently appeared in the discourses of Chinese educational and public policy scholars and has received much attention. Scholars have continued to explore and discuss how to improve teacher construction by proposing a series of effective strategies and policy recommendations from a theoretical perspective combined with practical processes. The research on teacher construction ranges from macro to micro, covering different perspectives, regions, stages, institutions, and disciplines, reflecting the richness and diversity of teacher construction research. The representative results include: Wang D. elaborated on the current situation of China’s university teacher workforce construction in the new era and pointed out the practical problems in the development of practice [21]; Han J. et al. sorted out and summarized the development trajectory and historical experience of China’s university teacher team construction in the past 70 years in new China, which has important insights for teacher workforce construction [22]; Qu T. et al. discussed the history and logical reasoning of the evolution of rural teacher force policy since the founding of new China [23]; Yu F. constructed a three-dimensional analytical framework to quantify the macro-level teacher policy texts at the central level in China [24]; Yang J. et al. conducted an econometric analysis of early childhood teacher workforce construction policies based on a policy instrument perspective [25]; Qi Z. et al. analyzed the preferences for the selection of policy instruments for higher vocational education in China and suggested improvement strategies [26]; Chen Y. et al. conducted a quantitative analysis of policy texts related to China’s special education policies of learning in regular classrooms [27]; and Guan Z. analyzed China’s education evaluation policy in the new era [28]. As seen above, scholars have discussed the historical evolution of faculty development, existing problems, and analytical methods from different perspectives. The existing results have provided references for this study and ideas for the construction of the analytical framework. However, an in-depth research into the governmental macro policy text *Guiding Opinions* on higher education teacher construction from the perspective of selecting appropriate policy instruments has not been carried out yet. The research needs to be centered on the construction of university teachers, based on the vision of sustainable development of higher education and the ambitious goal of globalization of Chinese higher education.

### 4. Methods and Theoretical Framework

#### 4.1. Policy Text Selection and Research Methodology

This study selects an important macro policy text collected from Chinese official websites, namely *Guiding Opinions on Strengthening the Reform of College Teacher Construction*

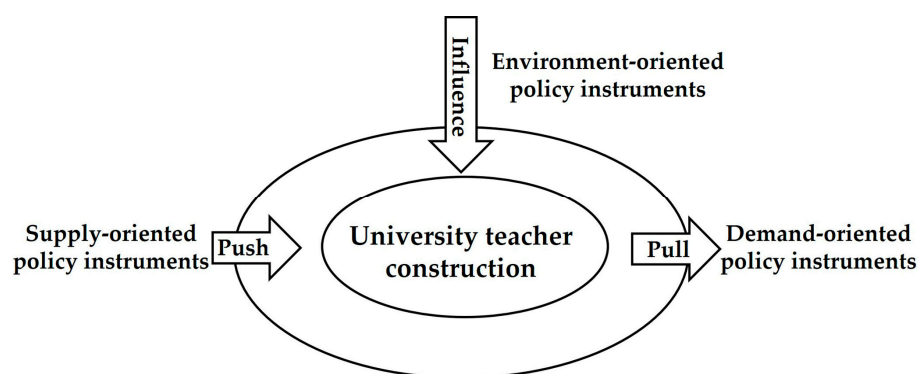
in the New Era (*Guiding Opinions*), which was promulgated by six departments, including the Ministry of Education of China, in December 2020. This policy is the implementation and refinement of national top-level education policy, which indicates the direction for the reform and development of higher education teachers in the new era, playing an important leading and guiding role in all regions of China and providing critical support for the sustainable development of higher education in China. It is a clear reflection of the Chinese government's intention and strategic goal for developing higher education teachers, with substantial research value and authoritative representation.

This study uses textual content analysis (TCA), a scientific research method that analyzes the content of the research object in depth and figures out the essence through the phenomenon, emphasizing the content text, using statistical analysis methods and tools to process the content text [29]. The results are based on qualitative conclusions obtained from the analysis of the data. In this study, the main purpose of the TCA is to provide a statistical and categorical analysis of the content of the policy text.

#### 4.2. Establishing a Two-Dimensional Analysis Framework

##### 4.2.1. X Dimension: Policy Instruments Dimension

Based on the characteristics and properties of the policy text itself and the effects of the application and use of the classification of policy instruments in the academic community, this study uses the ideas of Rothwell and Zegveld and the classification method of policy instruments [20]. This study classifies the policy instruments into supply, environmental, and demand categories. Such policy instruments are more appropriate to the current objectives and orientation of sustainable development of higher education in China and to the study of teacher policies in Chinese higher education institutions. Moreover, they are suitable for the modernized and connotative development of Chinese higher education in the new era, revealing the influence and role of educational governance agents in the reform and development of higher education teaching personnel. Among them, supply-oriented policy instruments can directly push the effective implementation of higher education teacher construction policies by supporting growth, providing resources, and expanding supply; environment-oriented policy instruments can indirectly stimulate the enforcement of higher education teacher construction policies by creating a favorable policy environment; and demand-oriented policy instruments can positively pull the execution effectiveness of higher education teacher construction policies from the level of expanding demand to improve policy performance (Figure 1).



**Figure 1.** The role of policy instruments in building university teacher construction.

The X dimension is the X axis of the two-dimensional analysis framework. The supply-oriented policy instruments provide an important impetus for the development of university teacher construction, which mainly suggests that the policy subjects offer many resources for the development of university teacher construction through talent training, scientific and technological information support, financial investment, and increasing the building of higher education infrastructure, etc., supplying continuous development boosts

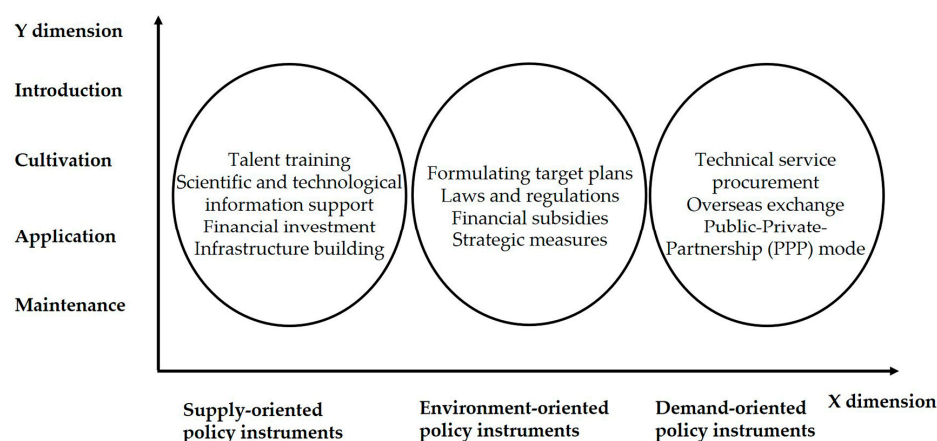


and enhancing the professional attractiveness of university teachers. Environment-oriented policy instruments show that policy subjects provide a strong policy environment for the construction of university teachers by formulating target plans, laws and regulations, financial subsidies, and strategic measures, which have an indirect but not negligible influence. Demand-oriented policy instruments show that policy subjects expand demand through technical service procurement, overseas exchange, and the public–private partnership (PPP) mode, reducing the uncertainty of university teacher construction in the development of the market economy, actively adapting to the education market, and playing a vital role [30].

#### 4.2.2. Y Dimension: The Whole Process Dimension of University Teachers Management

With the emergence of modern human resource management theory, the development of democratic and humane management systems has become a central issue in contemporary management, as the people-centered management model gradually replaced the traditional matter-centered management model. The core of this topic is how to increase human engagement, creativity, and dignity by tapping into human ingenuity, not just leading from the technical function side. The goal is to both increase the productivity of the organization and help people develop to their full potential simultaneously [31]. As the endogenous driving force of sustainable development and the most important strategic human resource in the practice of higher education management, the series of activities of planning, organizing, commanding, controlling, and coordinating their acquisition, development, maintenance, and utilization plays a key role in achieving the strategic goals and sustainable development of higher education. The exploration and management of university teachers' abilities are carried out through the four aspects of introduction, cultivation, application, and maintenance, or the whole process of university teachers' management. Therefore, based on the concept of the entire process of growth and lifelong learning of university teachers and combined with the policy text of the *Guiding Opinions*, this study identifies the Y dimension of the two-dimensional analysis framework, which is the Y axis, as four aspects, namely, attracting talents, cultivating talents, applying talents, and retaining talents. Among them, "attracting talents" refers to promulgating guiding policies to select high-level talents or educators with firm ideal beliefs and excellent professional skills, who have the goal of teaching and educating people to fill the teaching team of colleges and universities; "cultivating talents" refers to continuously strengthening the construction of teachers' moral and instruction style, optimizing the allocation of education and teaching resources, improving the professional quality and ability of college teachers, and enhancing the practical knowledge of college teachers in teaching management; "applying talents" refers to standardizing the assessment and appointment of teachers, deepening the reform of the assessment and evaluation system of college teachers, enhancing the attractiveness and honor of college teachers, highlighting the quality-oriented role of teachers in educating people, and resolutely reversing the tendency of neglect teaching and neglect educating people, etc.; "retaining talents" refers to doing an excellent job in the policy of guaranteeing the development of university teachers' team construction, promoting the reform of the salary system, implementing the income distribution policy oriented to increasing the value of knowledge, making an honor incentive system, title evaluation, distribution incentive mechanism, reasonable flow of talents, and other measures to be targeted in policy implementation.

In summary, this study constructs a two-dimensional analysis framework based on the dual perspectives of policy instruments and the whole process of modern university teachers' management where the X axis is the policy instrument dimension and the Y axis is the whole process dimension of university teachers' management (Figure 2).



**Figure 2.** Two-dimensional analysis framework of university teacher construction policy.

#### 4.3. Data Analysis Process

In this paper, the *Guiding Opinions*, after eliminating the introduction, is taken as the primary content analysis unit. The division of appropriate analysis units is crucial for the numerical transformation of policy texts. Based on the repetitive studies and comprehension of the *Guiding Opinions*, the policy text was coded in three paragraphs according to the principle of semantic integrity and inseparability of whole sentences, namely primary paragraph number–secondary paragraph number–single sentence number. It was split into 97 analysis units, which were ultimately formed into a table of analysis of the content of the *Guiding Opinions* (Table 1). Moreover, the 97 units of analysis were matched with the constructed two-dimensional analysis framework, with multiple rounds of discussion and debate to ensure validity, to form a frequency table for the distribution of policy instruments in the X dimension (Table 2) and a frequency table for the distribution of elements of the whole process of university teacher management in the Y dimension (Table 3).

**Table 1.** The 97 Units for Content Analysis of Policy Texts.

Primary Paragraph	Secondary Paragraph	Single Sentence	Code
Accurately grasp the requirements of the reform time for the construction of the university teaching force and implement the fundamental task of establishing moral education.	Guiding Ideology	Guided by Xi Jinping’s thought of socialism with Chinese characteristics in the new era, implement the fundamental task of establishing moral education and focus on the internal development of colleges and universities . . . to serve the national economic and social development to provide a strong guarantee of faculty.	1-1-1
	Target Mission	Through a series of reform initiatives, the university faculty development support system is more complete, the management and evaluation system are more scientific, the treatment guarantee mechanism is more perfect, and the faculty governance system and governance capacity are modernized.	1-2-1
		The professional attractiveness of university teachers has been significantly enhanced, and the ideological and political quality, business ability, education level, and innovation ability of teachers have been significantly improved . . . high quality professional and innovative university teachers.	1-2-2
...	...	...	...

Table 1. Cont.

Primary Paragraph	Secondary Paragraph	Single Sentence	Code
Strengthen work security to ensure that the policy initiatives are effective on the ground.	Sound Organization and Protection System	The construction of high-quality teachers as the basic work of university construction and the strengthening of the main responsibility of the school ... collaborative working mechanism.	8-1-1
		Establish a system for leading administrators to contact teachers and listen to their opinions and suggestions regularly.	8-1-2
		...	... ..
		Strengthen the propaganda of outstanding teachers and typical work and safeguard the legitimate rights and interests of teachers ... form a good atmosphere of respect for teachers and education in the whole society.	8-1-6

Table 2. Distribution of Policy Instruments in the X Dimension.

Instrument Type	Instrument Name	Code	Number	Percentage
Supply-oriented (27) 27.84%	Talent training	2-1-3, 2-1-4, 2-1-6, 2-2-1, 3-1-1, 3-1-4, 4-1-4, 4-1-7, 4-1-9, 4-5-4, 5-2-3, 7-1-4, 7-1-5, 7-2-4	14	14.43%
	Scientific and technological information support	2-2-7, 2-2-8, 2-3-6, 3-1-2, 3-2-1, 4-4-5, 5-2-2, 6-1-3, 6-2-4, 7-2-3	10	10.31%
	Financial investment	3-2-2, 5-1-2, 5-1-4	3	3.09%
	Infrastructure building	/	0	0
Environment-oriented (59) 60.82%	Formulating target plans	1-1-1, 1-2-2, 2-2-3, 2-3-3, 4-1-2, 4-2-4, 4-3-1, 4-3-3, 4-4-1, 4-4-4, 4-5-1, 4-5-2, 4-5-6, 5-1-1, 5-2-1, 5-2-4, 6-1-1, 6-1-4, 6-2-1, 8-1-1, 8-1-5, 8-1-6	22	22.68%
	Laws and regulations	2-1-5, 2-3-1, 2-3-2, 2-3-4, 4-1-1, 4-1-3, 4-2-2, 6-1-2, 6-1-5, 6-2-3, 7-1-6, 8-1-3, 8-1-4	13	13.41%
	Financial subsidies	5-1-3, 7-2-1, 7-2-2	3	3.09%
	Strategic measures	1-2-1, 2-1-1, 2-1-2, 2-2-2, 2-2-4, 2-2-5, 2-3-5, 3-1-5, 3-2-4, 4-1-5, 4-2-1, 4-2-3, 4-3-2, 4-4-2, 4-4-3, 4-4-6, 4-5-3, 4-5-5, 4-6-2, 6-2-2, 8-1-2	21	21.65%
Demand-oriented (11) 11.34%	Overseas exchange	3-1-3	1	1.03%
	PPP mode	2-2-6, 3-2-3, 4-1-6, 4-6-1, 5-1-5, 7-1-3	6	6.19%
	Technical service procurement	4-1-8, 4-6-3, 7-1-1, 7-1-2	4	4.12%



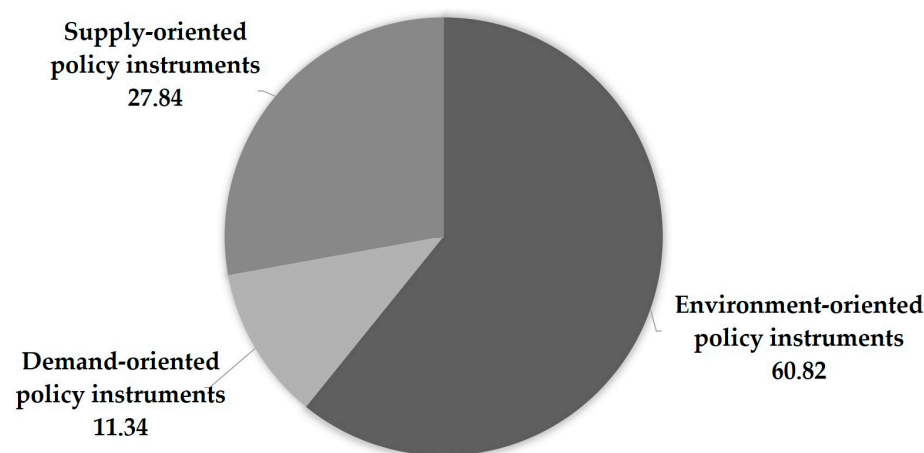
**Table 3.** Distribution of Elements of the Whole Process of UTM in the Y Dimension.

Elements	Code	Number	Percentage
Attracting talents	1-1-1, 2-3-1, 2-3-2, 4-1-1, 4-1-2, 4-1-3, 4-1-4, 4-1-6, 4-1-8, 5-1-5, 6-1-1, 6-1-2, 6-1-5, 7-1-1, 7-1-2	15	15.46%
Cultivating talents	1-2-2, 2-1-1, 2-1-5, 2-1-6, 2-2-1, 2-2-3, 2-2-4, 2-3-4, 2-3-5, 2-3-6, 3-1-2, 3-1-3, 3-2-1, 3-2-2, 4-1-5, 6-1-3, 6-2-2, 7-1-3, 7-2-4	19	19.59%
Applying talents	1-2-1, 2-1-2, 2-1-3, 2-1-4, 2-2-2, 2-3-3, 3-1-4, 3-2-3, 3-2-4, 4-1-7, 4-1-9, 4-2-1, 4-2-2, 4-2-3, 4-3-1, 4-3-2, 4-3-3, 4-4-1, 4-4-2, 4-4-3, 4-4-5, 4-4-6, 4-5-4, 4-5-5, 4-6-1, 4-6-2, 4-6-3, 5-2-2, 5-2-3, 6-2-1, 6-2-3, 7-1-4, 7-1-5, 7-1-6, 8-1-1, 8-1-2, 8-1-3, 8-1-5	38	39.18%
Retaining talents	2-2-5, 2-2-6, 2-2-7, 2-2-8, 3-1-1, 3-1-5, 4-2-4, 4-4-4, 4-5-1, 4-5-2, 4-5-3, 4-5-6, 5-1-1, 5-1-2, 5-1-3, 5-1-4, 5-2-1, 5-2-4, 6-1-4, 6-2-4, 7-2-1, 7-2-2, 7-2-3, 8-1-4, 8-1-6	25	25.77%

## 5. Results and Discussion

### 5.1. X Dimensional Policy Instruments

According to the statistical results (Figure 3), supply-oriented policy instruments account for 27.84%, environment-oriented policy instruments account for 60.82%, while demand-oriented policy instruments account for 11.34%. Overall, all three types of policy instruments are comprehensively configured and involved. Still, different proportions reflect the Chinese government's preference for the use of policy instruments in the reform and development of university teacher construction in the new era at the national governance level, which shows the government's internal logic and dynamic mechanisms for university teacher construction in the process of promoting sustainable development of education against the background of China's new era.

**Figure 3.** The percentage distribution of policy instruments.

The frequency of supply-oriented policy instruments is 27 times, accounting for 27.84%. Within the supply-oriented policy instruments, the frequency of talent cultivation policy instruments was used 14 times, accounting for 14.43%; the frequency of information support policy instruments was used 10 times, accounting for 10.31%; the frequency of capital

investment policy instruments was used only 3 times, accounting for 3.09%; and the frequency of facility construction policy instruments was used 0 times, accounting for 0. As the leading promoter of sustainable development of higher education, it is especially critical that the personal professionalism of university teachers is appropriate for the development of higher education. As the supply-oriented policy instruments that provide direct impetus, talent cultivation and information support policy instruments are still the most direct and effective power supply. However, there are structural differences in the frequency and proportion of talent development policy instruments and information support policy instruments in the overall use of policy instruments. In the face of the challenges posed by the globalization of technology on talent development, the enhancement of teachers' IT capabilities to cope with teaching and learning is not adequately supported by supply-oriented policy instruments [32]. Against the background of a sustainable and internationalized higher education era, the transmission, change, and interaction of information are becoming more frequent. The communication function of big data information technology has gradually transformed the traditional training mode of university teachers into a diversified and multi-dimensional information education and training method, and the use of policy instruments as a direct driving force should be highly valued. The frequency of using policy instruments for facility construction is 0, which fits with the connotative and sustainable development of Chinese higher education at this stage. In the new era, the construction goal of China's higher education teachers has moved from quantitative increase to qualitative improvement, i.e., the development of teachers has gradually moved from externality to internal content [33]. The external environment and infrastructure construction for teachers' growth have been relatively complete. In China, however, the national financial investment in education as a percentage of national GDP has remained above 4% for 10 consecutive years, making education the top expenditure in the general public budget. The inadequate use of financial investment policy instruments indicates that the current sustainable development of China's higher education teaching force still lacks a stable and comprehensive financial supply, which will have a slowing effect on the distribution of salaries and the promotion of the reform of the remuneration system.

The frequency of use of environment-oriented policy instruments is 59 times, and the ratio of use is 60.82%. The use of environment-oriented policy instruments is considerably higher than supply-oriented policy instruments and demand-oriented policy instruments. This reflects that the Chinese government has created a favorable policy environment to promote the sustainable development of higher education teachers. At the same time, it has taken on the role of a policy service provider and given more autonomy to universities.

Within the environment-oriented policy instruments, 37.29% and 35.59% of the instruments were used for target planning and strategic measures, respectively. The guiding role of target planning and the specific details of strategic measures indicate that the government is eager to accelerate the reform of university teachers' construction through target planning and strategic measures. By laws and regulations, target planning, and strategic measures, the external environment is improved and regulated to create a more positive external environment and indirectly influence the achievement of policy goals.

The demand-oriented policy instruments were used 11 times, accounting for only 11.34%. Among them, the overseas exchange policy instruments, PPP model policy instruments, and service procurement policy instruments account for 1.03%, 6.19%, and 4.12%, respectively, of the overall policy instruments usage percentages. This use shows marginalized characteristics. It indicates that the government is not inclined to resort to pulling demand to stimulate momentum, which still needs to be explored in the search for a fit between demand-based policy instruments and teacher development. The key to gaining advantages and resources in the competition in the knowledge economy lies in the possession and transformation of knowledge, which is essentially the result of teachers' continuous exploration, practice, and long-term accumulation and is the core competitiveness of universities. The demand-oriented policy instruments should play a driving role in the construction of university teachers, maintain the stability of university teachers

in the market, and play a demand-oriented function. The current state of insufficient appropriateness presented may be challenging to stimulate social demand, which is not conducive to pulling up the endogenous power of higher education and playing a delaying influence on the realization of the policy goal of sustainable development of the university teaching team.

## 5.2. Y Dimensional UTM (University Teacher Management) Whole Process

Examining the policy of *Guiding Opinions* from the whole process of university teachers' management, the frequency of attracting talents involved is 15 times, accounting for 15.46%; the frequency of cultivating talents is 19 times, accounting for 19.59%; the frequency of applying talents is 38 times, accounting for 39.18%; and the frequency of retaining talents is 25 times, accounting for 25.77%. In general, all the stages involved in the management process of university teachers are included, with more comprehensive coverage. Although the proportion is uneven, they all account for more than 10%, reflecting the importance of government agencies on the strategic resource management of talents in the construction of university teachers. The two aspects of attracting talents and cultivating talents reveal a trend of parallel progress. They all take the ideological leadership and teacher moral construction as their primary task. Since the 18th National Congress of the CPC, President Xi Jinping has attached great importance to the construction of teacher morals as the primary task to improve the quality of teachers, develop high-quality education, and provide good education to the satisfaction of the people. The establishment of moral education as the fundamental key to the construction of college teachers fully reflects the educational concept and value of "teachers educate people." In terms of attracting talent, the continuous improvement of the quality of talent cultivated in standard institutes and universities, and the continuous strengthening of professional ability and ideological and political quality have contributed to the advancement of the overall quality of university teachers. The introduction of talent from multiple perspectives to enrich the quantity and quality of higher education teachers is more oriented toward implementing policies. For a long time, the talent cultivation aspect of college teachers has been the focus and concern of higher education work. However, the policy support and inclination toward talent cultivation and talent application and retention have long constituted a weak link. The frequency of talent application and retention is much higher than talent attraction and cultivation, reflecting that in the process of reforming the higher education teachers' team in China, talent application and retention have been highly valued by top-level design and governance institutions, which are also difficult points for the sustainable development of higher education in China in the longer term. In terms of applying talent, the talent management mechanism has been improved and refined from the top design level. In addition to the necessary salary and treatment, the establishment position management has been scientifically optimized, tilting to key disciplines, special disciplines, and important positions. The evaluation and incentive mechanism has been deepened and promoted, and talents are used scientifically and reasonably to give full play to the role of strategic resources and adhere to the correct guidance of talent use. Regarding talent retention, the governing authority accurately grasps Maslow's hierarchy of needs theory. This theory divides human needs into five levels, from low to high: physiological, security, social, respect, and self-actualization. Therefore, for the extraordinary human resources of university teachers, there is not only the motive of seeking material wealth, but also the motive of pursuing non-material wealth [34]. At the same time, it is important for satisfying the basic treatment of talent, scientific research platforms, and other material wealth; for providing corresponding policy support for the demand of non-material wealth of talents; for providing a good academic environment and accelerating their career development; and for stimulating the endogenous motivation for the development of talents of university teachers, which provides important support for the sustainable development of higher education.

### 5.3. X and Y Dimensional Intersection

Supply-oriented, environment-oriented, and demand-oriented policy instruments are involved in talent attraction, talent cultivation, talent application, and talent retention, which are used comprehensively. There is variability in the use of ratio institutions. Regarding the cultivation of talent, the use of supply-oriented and demand-oriented policy instruments is relatively small, indicating that the influence and supply power in policy implementation is insufficient. Increasing the participation of social forces and overseas exchange is one of the most effective ways to improve the cultivation aspect of teacher construction, as well as to promote the globalization of education and cultural integration. In terms of talent application, environmental policy instruments are sufficiently used, reflecting the need to strengthen the internal and external institutional environment for the sustainable development of higher education teachers in China. In the process of talent application, which requires the use of policy instruments such as laws and regulations, target planning and strategic measures are used to create a good policy implementation environment. Regarding talent attraction, the insufficient use of demand-oriented policy instruments has resulted in a lack of market pull for the construction of higher education teachers, resulting in stability between the attractiveness of the higher education teaching force and the market being affected.

## 6. Conclusions

China is in the new knowledge economy era of building a country with strong education in all aspects. Promoting the sustainable development of Chinese higher education institutions with the construction and reform of college teachers is the educational mission and strategic goal of university teacher construction and development [35]. The purpose of this study was to explore higher education teacher construction in China through the lens of policy instruments for sustainable development of education and to provide Chinese experiences. The following conclusions were drawn from the analysis. In the use of policy instruments, there is variability in the proportion of policy instruments used. Environment-oriented policy instruments have become the main driving force for government governance to carry out the reform of China's university teachers' construction. Although environmental policy instruments play an indirect influence in the achievement of policy goals, the use of environmental policy instruments plays the main driving role at this stage, which reflects the policy preferences of the Chinese government at this stage. However, the structural differences in the combination of policy instruments are not conducive to the sustainable development of policies and have lagged effects. Chinese educational governance agents should use policy instruments rationally, adjust the structure of policy instruments, and optimize the combination of policy instruments. Each policy instrument has its unique attributes and characteristics and needs to be reasonably structured for use through rational analysis. The logical structure of policy instruments is conducive to giving full play to the advantages of various policy instruments to produce scientific and effective policy effects. Adjusting and optimizing the policy instrument structure of university teachers' construction policy is the key to maximizing the effectiveness of policy instruments, which is also the basis and prerequisite for realizing policy goals.

The whole process of university teachers' management is generally covered, but the structure shows an uneven pattern. There is a lack of relevance in policy instruments and content. The whole process of higher education teachers' management shows a preference for the use of environment-oriented policy instruments and a marginalization of the use of demand-oriented policy instruments, with an overall lack of matching and low synergy. Management is service, which is a requirement for the modernization of national governance capacity [36]. Chinese education policymakers should focus on the whole process of higher education teachers' growth, coordinate all aspects of management, and pay particular attention to the synergistic effectiveness of supply-oriented and demand-oriented policy instruments so as to promote the maximum joint force of internal and external pull, create a favorable education market environment, and achieve the overall

goal of global teacher governance, which is to attract, retain, train, and motivate excellent teachers. It is important to promote the flourishing of higher education with a high-quality teacher workforce, thus achieving comprehensive support for the sustainable development of global education.

This study is exploratory research and has certain limitations. On the one hand, policy instrument theory research is diverse, and so far, there is still no consensus on the selection criteria of policy instrument classification; researchers have started from their own research fields to provide convenient perspectives for theoretical deepening and practical exploration. Although this study selects policy instrument theories based on the characteristics of the time and the needs of social development and carries out a qualitative study with data as indicators, the different policy classification criteria have limitations on the research objects and research conclusions. On the other hand, higher education teacher construction is a complicated and changing social field, which is characterized by changes and expansions, and exploring it from the perspective of policy instruments provides a research perspective on teacher governance and contributes some experiences. Future research will combine multiple perspectives and synthesize changes in the field, balancing quantitative analysis and qualitative research to explore in-depth the path of higher education teacher development in China.

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