



# Research on Career Development of Young Teachers in Universities Under "Pre-Employment System": The Perspective of Cooperative Game

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**Abstract.** The extensive implementation of "pre-employment-long employment system" has brought a complex and far-reaching influence on the career development of young teachers in colleges and universities. Research through constructing cooperative game model, the "pre-long system" affect the key factors of college young teachers career development model deduction, discuss colleges and teachers as the subject of the game interests and behavior strategy, research Suggestions from the safeguard status equality, maintain academic independence, improve the advance period support to optimize the system implementation and promote the career development of young teachers in colleges and universities.

**Keywords:** "pre-employment-long employment system", young teachers in colleges and universities, career development, cooperative game

## 1 Introduction

Compared with the traditional personnel management of university teachers, the "pre-employment-long employment system" brings higher expected benefits to young university teachers, which is more conducive to their independent and personalized development, and then accumulate more academic capital. However, young teachers are also faced with the pressure of less academic opportunities and increasing survival pressure. They also need to weigh the relationship between work input and personal life, family and other aspects<sup>[1]</sup>. The contradictions revealed by cooperative game theory share similarities with the dilemmas faced by teachers under the "pre-tenure and tenure-track system." The allocation of resources, evaluation criteria, and risks of dismissal in universities are significant factors influencing faculty decisions.

Returning to the essence of the system, the reform of the appointment system is a redistribution process for the interests of all teachers. Therefore, only by strengthening institutional innovation, improving the management system, unimpeded rights protection channels, building a modern teacher development support system, and taking multiple measures to promote the high-quality specialization of teachers.

## **2 Research Background**

### **2.1 "Pre-Employment-Long Employment System" Brings Difficulties to the Development of Young Teachers in Colleges and Universities**

In recent years, the instability of international environment and the downward pressure of domestic economy lead to severe access to social resources; Chinese universities are mainly public, and their development funds mainly come from government funding. In recent years, the government tightening pressure to obtain government funding. In the process of implementation and improvement of "pre-employment-long employment system", multiple subjects form balance and coordination through game, which not only pays attention to the needs of universities to focus on efficiency and financial balance, but also pays attention to the needs of teachers to pursue career development and stable life, two-way rush, and strive for win-win situation. In such a time background, "pre-employment-long employment system" has shown a large area in China. The original intention of "pre-employment-long employment system" is to form high task pressure through high target in the pre-employment period and high salary standard, and stimulate the enthusiasm and creativity of university teachers to devote themselves to academic work and climb the peak of science and technology in the environment of both pressure and incentive. In short, the academic vitality of the teachers is stimulated through the high pressure and high incentive of the pre-employment period, so as to improve the efficiency of talent use.<sup>[2]</sup> The purpose of. In essence, the policy of "pre-employment-long employment system" is like the warrior. Young scholars with determination, vitality and responsibility are brave enough to accept challenges and take high risks in order to obtain high returns. However, the inherent strong assessment pressure in the system, as well as the lack of academic resources support, fuzzy assessment standards, lack of fairness and other places to be improved, will restrict the development of young teachers to a large extent.

### **2.2 The Development of Young Teachers in Colleges and Universities is of Great Significance**

On April 30, 2019, Chinese President Xi Jinping pointed out at the conference commemorating the centenary of the May 4th Movement that "youth are the most active and dynamic force among the whole social force. The hope of the country lies in the youth, and the future of the nation lies in the youth. When the young generation has ideals, skills and responsibility, the country will have a future and the nation will have hope." In any country, the future of the youth determines the future of the country, and the development of the youth determines the pattern of the nation. With the expansion of the scale and number of higher education, the structure of teachers in universities in China has undergone great changes. The proportion of young teachers under the age of 40 is getting higher and higher, and young teachers have gradually become the main body of college teachers. Young teachers are faced with high intensity of work tasks and regular evaluation requirements. However, the salary and work rewards of this group are not competitive enough, and the career development of young teachers has

been concerned by the academic circle. The young generation of college teachers is brave enough to take on responsibilities and face up to difficulties. They are also bold and culturally confident. They have infinite possibilities and are creating infinite possibilities." New era of youth facing a rare achievements life opportunities, also faces the 'day will fall in the era mission", college young teachers facing the rapid development of higher education in life, also faces the "born, khalid ents" era mission, teachers are the core of higher education system, the future affects the future of higher education, young teachers' professional growth, academic level and academic emotion affect the colleges and universities and the future education quality, talent training and academic research, the development of young teachers about the development of higher education.

### **3 Cooperative Game Analysis of Young Teachers in Universities under "Pre-Employment System"**

Cooperative game reveals the collective irrational phenomenon that may be caused by individual rational choice, which is similar to the challenges faced by teachers in the implementation of "pre-employment-employment system", such as short-term academic evaluation and long-term academic development.

#### **3.1 Cooperation and Game of Young Teachers in Colleges and Universities**

As a kind of the reform of university teacher employment system, "pre-employment system" aims to maximize the optimal allocation and academic function of teachers through the selection and incentive mechanism. However, teachers may face the contradiction of cooperation and competition in the process of pursuing personal career development. On the one hand, they need to work together to improve the overall level of the discipline and the college; on the other hand, in order to stand out from the fierce competition, they may have to devote their limited resources (such as time, energy, research funds, etc.) to personal development rather than the overall development of the team or discipline. This contradiction is similar to the game between cooperation and betrayal. Teachers choose to cooperate to jointly improve the subject level but may sacrifice part of their personal interests, or choose to betray to maximize their personal interests but may affect the harmony and overall development of the team. In the long run, this dilemma will not only limit the personal development of teachers, but may also may adversely affect the overall progress in the academic field.

In the "pre-employment-long employment system", teachers obtain long-employment positions by achieving certain academic achievements, which is also their duty under the framework of this system. Under the pressure of "pre-employment-long employment system", teachers pursue too much short-term achievements and benefits in the future, which brings the utilitarian tendency of teachers' work input. Young teachers are faced with the choice of whether to pursue utility. If all teachers pursue utilitarian (i. e., "cooperative" strategies), then everyone will fall into a competitive environment, ignoring the nature and quality of academic research. However, if some teachers choose

not to pursue utilitarian, but to focus on high-quality academic research (i. e., "betrayal" strategy), they may face pressure for evaluation due to the insignificant results in the short term. Therefore, most teachers will choose "cooperation", that is, the pursuit of utility, thus forming the dilemma of utilitarian cooperation game. The utilitarianism of teachers leads to impetuous and shallow academic research, and may even lead to academic misconduct.

### **3.2 Cooperation and Game Between Colleges and Universities**

Under the "pre-employment-long employment system", the evaluation standards of colleges and universities tend to converge, leading to the pursuit of similar research directions and achievements. At this time, colleges and universities are faced with the choice of whether to follow the mainstream evaluation standards. If universities choose to follow the mainstream criteria (namely "cooperation" strategies) and prefer the same and widely accepted criteria, they will lack innovation and diversity. However, if some universities choose not to follow the mainstream, but to pursue their own evaluation criteria (i. e., "betrayal" strategy), they may face some risks, because it may not conform to the existing evaluation system. Therefore, most colleges and universities will choose "cooperation", that is, to follow the mainstream evaluation standards, which forms the dilemma of homogenization of evaluation. The homogenization of evaluation limits the diversity and innovation of academic research, and poses a threat to the healthy development of the whole academic ecology.

In the dilemma of cooperative game, the choices made by individuals to pursue the maximization of their own interests often lead to the damage to the overall interests. But if the two sides can build trust and believe that the other side will choose to cooperate, then they could achieve a good result for both sides. This reveals the importance of system design for guiding individual behavior. A reasonable system design can promote individuals to maximize their collective interests while pursuing their own interests. The dilemma of cooperative game reveals the dilemma that colleges and teachers may face under the "pre-employment system", which affects the teachers' academic behavior and the academic ecological environment of colleges and universities.

## **4 Conclusion and Recommendations**

### **4.1 Guarantee the Equality of Status and the Supporting System**

To ensure the equal status and mutual respect between colleges and teachers, and to form a "multi-polarization" strength balance system between colleges and universities. In the actual operation of "pre-employment-long employment system", different teachers' personality status, social structure, cultural environment and other factors differ, the negotiating position of different game parties is not equal, and there are many practical activities outside the model, so the model needs to accept the reality and judge from the social perspective; the effective implementation of "pre-employment-long employment system" depends on the consensus of mutual respect and coordination, teachers, as a weak party, can form a "multi-polarization" strength balance system between

colleges and universities<sup>[3]</sup>. This system to efficient, stimulate teachers 'scientific research enthusiasm and academic vitality, create the academic atmosphere conducive to teachers' lifelong growth, will really interested in academic talent retention, with good, need to solve the teacher employment system reform process supporting measures to keep up with, the labor market is not open talent flow, thus the current situation determines the university teachers appointment system reform in a single university alone, need to internal and external combination, open inclusive environment, different levels of universities to form a "multi-polarization" strength equilibrium system, more need to follow up a series of system supporting support measures.

#### **4.2 Young Teachers Should Maintain Academic Independence, Rational and Objective**

Respect the identity of young teachers as independent scholars, and young teachers view the "pre-employment-long employment system" rationally and objectively. Compared with other professions, college teachers have received good higher education, are more professional in research or teaching fields, usually have higher internal work motivation and "scientific taste", are more willing to accept relatively lower wages, and attach more importance to relatively independent and flexible working conditions. Young teachers should be given full academic autonomy, a relatively free working environment to give full play to their strengths, and respect the status of independent scholars. To change the step-by-level dependence of teachers as the vassal of colleges and universities and universities as the vassal of the government, expand the autonomy of colleges and universities in running schools and give teachers the right of free mobility. For young teachers, it is necessary to rationally judge the fit between the system and their own academic career development, rationally view the "pre-employment-long employment system", clarify the welfare benefits of "entry" and "exit" compensation, arrange the teaching and research, work and life, correct the attitude of the preemployment period as the foundation stone for the future development, rather than a stumbling block to the development.

#### **4.3 Improve the Support of the Advance Employment Period, and Explore the Localized Teacher Employment Mechanism**

The core of the "pre-employment-long employment system" is not "pressure", but "support" for young teachers. The purpose of the tenure system in the United States is to identify, not to be eliminated at the bottom, and has abundant and high-quality teaching source mechanism, strong professional growth support mechanism, perfect academic consciousness mechanism, smooth talent flow channel and cultural recognition mechanism<sup>[4]</sup>. The fundamental role of the "tenure track system" in developed countries is to ensure the occupational safety of academic researchers, so that they can settle down and concentrate on academic research, which can be called the "ballast stone" to guarantee the academic freedom of teachers<sup>[5]</sup>. At present, the academic circle recognize that the "pre-employment-permanent employment" system originated in the United States, but it often ignores the fact that American private universities are the main driver

for the implementation and reform of the policy. The operation of the system is only within the framework of contract law, without being bound by federal and state laws and relevant administrative laws<sup>[6]</sup>. The relationship between public universities and teachers is relatively complex, including constitutional or administrative law relationship and private law contract relationship. The "rise or go" system in the United States has been accompanied by the fierce game between schools and teachers since the beginning of its birth. The system of tenure standard is also the result of the game and compromise between labor and management<sup>[7]</sup>. In the absence of a lack of labor-management game mechanism, teachers' legitimate interest demands may be covered up, and under the fixed term employment system, academic freedom cannot be fully guaranteed. Simply transplanting the American model, it is inevitable to adapt to the social environment of China's current academic tradition, especially the political tradition. National conditions determine that we cannot mechanically copy the western system. The society needs more patience to wait for university teachers to accept the new personnel management system, allow universities to correct deviations and solve problems, and gradually establish a teacher personnel system that is in line with China's reality and the future development trend of China's higher education.

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