

# Basis Theories and Principles of College Faculty Compensation Design

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**Abstract:** College faculty's compensation system becomes more and more important to support the strategic objectives of college. Based on the demand and supply theory, efficiency wage theory, human capital theory, equity theory and related research put forward the strategic, equitable, competitive, incentive principles of compensation design combined with the college faculty's characteristics such as high educated and high invested, complex work, work is difficult to calculate, with strong innovation, diverse need hierarchy and so on.

**Keywords:** College faculty; compensation design; human capital theory; efficiency wage theory; equity theory

#### 1 Introduction

Due to the change of market environment, the traditional income distribution system of higher education can't meet the diversified needs of college faculty. With the change in the practice of the payment management, the scientific system of salary incentive which is used to attract, retain and motivate talented people, is playing an increasingly important role and also being a major concern in the colleges. According to the characteristics of college faculty, this article tries to discuss the compensation design principles of college faculty on the basis of demand and supply theory, efficiency wage theory, human capital theory, equity theory and related research.

#### 2 Characteristics of college faculty

#### 2.1 High educated and high invested

College faculty is unique group that almost everyone in this group is highly educated. Most teachers in a college have master degree and doctor degree. Doctorates even earn more than 40% in some better college.

Due to the requirement of high degree, teachers in college spent a lot of time, energy and money on high education. Normally, it will take one 16 years to earn a bachelor degree, 19 years a master degree and 22-25 years a doctor degree. Compare to other professions, college faculty devoted more energy on learning. According to the consumption level of our country people at present, if you want to earn a master degree, you' re expected to invest 240000 RMB and a doctor degree 360000 RMB while many other professions invest much less [1]. Although usually have much free time, college faculty have to devote more energy on

teaching, research and community service in ordinary time than other vocation. High investment asks more return naturally.

### 2.2 Complex work

Work of college faculty is complex. It suggests that the main function of college faculty is to produce and transmit knowledge as well as to serve the society and, college teachers are, in nature, operators of knowledge. To transmit and produce knowledge, college teachers need to teach student as well as do some research work. The coordination of teaching and research is of great importance to the development of college teachers. At most college in our country, college teachers are usually measured by two criteria: teaching and research.

#### 2.3 Work is difficult to calculate

One hand, the work object of college faculty is person not general products. Numbers of teaching could be calculated easily while quality of teaching is hard. Achievements of teaching are students' progress and improvement. Usually, students' progress and improvements will be found after many years. Promotes of student's quality is difficult to achieve concrete quantified indices. The other hand, achievements of research and serve to society are calculated difficultly. It can't be measured only by numbers or money.

#### 2.4 With strong innovation

With intensive intellectual resources and strong innovation ability, colleges are China's main force for knowledge innovation, communication and innovative personnel training. Every part of college faculty's work need innovation. Teaching work need innovative method and pattern to motivate the enthusiasm of students and



research work require more new ideas.

#### 2.5 Diverse need hierarchy

The need hierarchy inside college faculty is different. Totally, college faculty not only have low level needs such as physiological needs and safety needs but also have high level needs such as social needs, esteem needs and self-actualization. Some young college teachers especially college graduates maybe concentrate more on low level needs than high level while other old ones pay more attention on high level. Meanwhile, need hierarchy may be different because of different personality.

# 3 Basis theories of college faculty compensation design

The problem of college faculty compensation design can be research from different theories point of view. Demand and supply theory, human capital theory, efficiency theory and equity theory could give us instructional significance through various perspectives.

#### 3.1 Demand and Supply Theory

Supply and demand is an economic model of price determination in a market. Alfred Marshall, the chief exponent to this theory, explained the complexity of the economic world tried to provide a less rigid & deterministic theory. According to him, the determination of wages is affected by the whole set of actors which govern demand & supply of labor. In a competitive market, the unit price for labor force will vary until it settles at a point where the quantity demanded by consumers (at current price) will equal the quantity supplied by producers (at current price), resulting in an economic equilibrium of price and quantity.

Demand and supply theory is the most important theory of the income distribution reform of market orientation and has instructive significance in the field of college faculty's compensation design.

The compensation level should be determined by market of labor force and reflect the college teachers' competence level also market supply and demand changes.

In order to attract and retain the high quality experts and scholars in college, college should pay college teachers higher than the market wages rate appropriately.

#### 3.2 Human Capital Theory

Human Capital Theory originates from economics put first forward by THEODORE. W. SCHULTZ, an economist in USA. It has been proved that, by human capital theory, human resource greatly energizes the growth of modern economic. Stock of individual knowledge, capability, and skills that are economically usable (all characteristics of an employee that may raise his or her salary). All those skills that are acquired through education, but also talents, I.Q., practical experience, etc. (important for empirical examinations: estimation of wage equations)

Education and income has been regarded as a solid linear relationship, the income will increase as the education level is improved.

Based on such theory:

College teachers' compensation should be able to reflect the teachers' basic human capital stock.

College, society and government should stimulate college teachers to do lifelong learning to improve their own human capital.

## 3.3 Efficiency Wage Theory

Much economic theory and research has looked at the phenomena of wage rigidity and involuntary unemployment in recent years.

The efficiency wage hypothesis argues that wages, at least in some markets, are determined by more than simply supply and demand. Specifically, it points to the incentive for managers to pay their employees more than the market-clearing wage in order to increase their productivity or efficiency. This increased labor productivity pays for the higher wages [2].

The proponents of efficiency wages argue that payment of wages higher than the market clearing wage reduces shirking and turnover, provides a pool of highly qualified workers, and produces favorable morale effects. In other words, non-clearing labor markets are the result of efficiency wages. The popularity of this approach stems from its ability to explain, in a simple manner, the existence of involuntary unemployment, and other stylized facts in a labor market.

Why managers pay efficiency wages for college faculty?

Avoiding shirking: If it is difficult to measure the quantity or quality of a college teacher's effort—and systems of piece rates or commissions are impossible—there may be an incentive for him or her to "shirk" (do less work than agreed). The manager thus may pay an efficiency wage in order to create or increase the cost of job loss, which gives a sting to the threat of firing. This threat can be used to prevent shirking (or "moral hazard").

Minimizing turnover: By paying efficiency wages, the college faculty's incentive to quit and seek jobs elsewhere is minimized. This strategy makes sense because it is often expensive to train replacement teachers.

Adverse selection: If job performance depends on college teachers' ability and teachers differ from each other in those terms, colleges with higher wages will attract more able job-seekers. An efficiency wage means that the college can pick and choose among applicants to get the best possible.



## 3.4 Equity Theory

Adams' Equity Theory calls for a fair balance to be struck between an employee's inputs and an employee's outputs. According to the theory, finding this fair balance serves to ensure a strong and productive relationship is achieved with the employee, with the overall result being contented, motivated employees <sup>[3]</sup>.

Inputs among college faculty typically include: hard work, skill level, tolerance, effort, enthusiasm, loyalty, commitment and so on. Outputs typically include: salary, benefits, perks, intangibles such as recognition, praise, reputation, sense of achievement and so on. According to the theory, college faculty should be content where they perceive these to be in balance. When college faculty perceives their treatment to be unfair they will be demotivated or seek alternative employment. For example, sometimes college teachers will compare to somebody from other vacation, they will fill unfair when others invest less and receive more. This will affect college teachers' effort or loyalty or enthusiasm in teaching and research work.

Equity Theory suggests:

College faculty should be content where they perceive these inputs and outputs to be in balance. This will motivated them devote more time, effort, enthusiasm on their work.

When perceive unfair of their inputs and outputs on work college faculty will put less effort or enthusiasm on their work and pay more attention to other things such as how to earn much more money through other ways. In this way, the performance of college will decrease.

Managers should seek to find a fair balance between the inputs that college faculty gives, and the outputs received.

# 4 Principles of college faculty compensation design

On the basis of theories above, managers should conform to the principle of strategic, principle of equitable, principle of competitive, and principle of incentive according to the characteristics of college faculty.

#### 4.1 Principle of competitive

Competition mechanism is the source of vitality. It injects constantly fresh impetus for colleges and college faculty.

College faculty compensation and incentive system should integrate into the market and bring in the competition mechanism of market economy. This asks colleges provide enough attractiveness to attract and retain excellent talents. Colleges could provide higher compensation for college faculty to get more relative competitive advantage.

#### 4.2 Principle of incentive

To adapt to the rapid development of high and new technology and the fierce competition for talent, colleges need to establish a suitable college incentive mechanism combined with the development of higher education and reflect college teachers' value of human capital.

Based on the human capital theory, college teachers' compensation should reflect the teachers' basic human capital stock and college, society and government should stimulate college teachers to do lifelong learning to improve their own human capital by incentive compensation.

#### 4.3 Principle of equitable

College teachers will compare their inputs and outputs with the teachers in the same college, the teachers in other college and the workers in other professions to judge if they obtained equity.

Horizontal comparison: college teachers will compare the ratio of the rewards (including money, work arranged, and obtain Recognition, etc.) and the inputs(including education degree, efforts for working time, and energy and other intangible loss, etc.) with the teachers in the same college, the teachers in other college and the workers in other professions. Vertical comparison: college teachers will compare the ratio of the rewards and the inputs at present with the ratio before. According to the equity theory, through horizontal comparison and vertical comparison, if the ratio is fairly college faculty will feel fairness, happy and do their best on their work. When college faculty be treated unfairly, they will feel bitter, nervous, lead to reduce motives, work efficiency descend, even rebellious attitude and behavior.

So, colleges should thoroughly analyzed teachers' sense of fairness, treat them according to the variability of an individual and reward them more pertinently.

#### 4.4 Principle of strategic

Develop the higher education has become the basis and guidance policy in developed countries to develop the economy, science and technology and comprehensive national strength. Many colleges put forward strategic goal to construct high level colleges, for example: to be a "unique", "integrated", "research", "internationalization" college.

College faculty compensation design should correspond with the needs of college's strategic goal and support the implementing of college's strategic objectives.

#### **5 Conclusions**

21st century, develop the higher education has become the basis and guidance policy in developed countries to develop the economy, science and technology and comprehensive national strength. College faculty's



compensation system becomes more and more important to support the strategic objectives of college.

College faculty has some unique characteristics that other profession doesn't have, such as college teachers are all high educated and high invested, their work is complex, the work is difficult to calculate, the work needs strong innovation, and the college teachers' needs hierarchy are diverse and so on.

Based on the demand and supply theory, efficiency wage theory, human capital theory, equity theory and related research, we can obtain some suggestions on the compensation design combined with the characteristics of college faculty. Managers should comply with the

principle of strategic, principle of equitable, principle of competitive, and principle of incentive on college faculty's compensation design.

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