

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRARIAN UNIVERSITY

Manuscript

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UDC: 378.1:331.101.262

DISSERTATION

**MANAGEMENT OF THE HUMAN RESOURCES
IN THE EDUCATION**

073 – MANAGEMENT

07 – Management and administration

Submitted for a scientific degree of Doctor of philosophy (PhD)

The dissertation contains the results of own research.

The use of ideas, results and texts of other authors have references

to the relevant source _____ Li Wei

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Sumy 2022

ABSTRACT

Li Wei. Management of the human resources in education. - Manuscript.

Thesis for the degree of Doctor of Philosophy in specialty 073 - Management. - Sumy National Agrarian University, Sumy, 2022.

There are many factors that can affect the economic and social development of a country, the most important of which is human resources. Chinese economy has been developing rapidly for more than 30 years. The country's demand for human resources is also growing. Universities are important institutions that undertake social responsibilities such as talent training, scientific research and social services. As the economy and society developing, Chinese universities are growing rapidly. In the process of the rapid development of higher education, the problem of improving inner quality has not been paid enough attention, so there are a variety of problems in Chinese universities. Based on a survey of educators in China, we find that a significant proportion of university administrative workers are not involved in teaching and research activities.

Therefore, this paper mainly studies the university teachers directly involved in teaching and research. Through the research, we find that strengthening the motivation and ability of teachers can improve the performance of teachers, and thus improve the development level of universities. In order to effectively improve the working motivation and ability of teachers and promote the development of universities, it is necessary to use effective human resource management tools and systems. This will help improve the development level of universities and promote them to fulfill their social responsibilities.

This paper is devoted to solving the problem of systematic basic theory, focusing on the in-depth understanding of the concept, theory and method of human resource management in education. This study summarizes and improves the concepts and terminology of human resource management. The researchers studied the actual situation and existing problems in Chinese universities and identified suitable tools to be used in the process of human resource management in Chinese universities. The author analyzes the individual characteristics of Chinese university teachers and uses scientific tools to

evaluate the competence and motivation of teachers in educational institutions. This paper studies the relationship between the management of human resources of the university and college, the competence, and motivation of teachers. The researchers also determined the priority direction of human resource management development strategy of Chinese universities.

The scientific novelty of the research obtained is based on the substantiation of theoretical, methodological, and practical aspects of labor resources management in education. For the first time, a model for assessing the competence of teachers as an innovative tool for human resource management has been developed, which is based on the use of four dimensions of assessment (basic competence, teaching competence, scientific research competence, and social service competence). This model involves the use of 22 competence indicators, which, unlike existing models, considers both the existing competence of teachers and the development of their potential competence. Using Delphi method, questionnaire method and interview method, we obtained the basic structure of university high performance work system with 5 first-level indicators and 29 second-level indicators. On the basis of this research, we use the questionnaire compilation methods of psychology and pedagogy to compile the university high-performance work system evaluation questionnaire. Through the reliability and validity test, this questionnaire can be used to evaluate the human resource management level of Chinese universities. This tool considers for the first time that teachers should be the subject of human resource management evaluation.

The further development question is to demonstrate that SWOT analysis can be used as a management tool to define the direction of human resource management strategies in Chinese universities. According to the characteristics of the field of education, the concept of "human resource management" is improved.

The introduction defines the relevance of the research topic, identifies tasks that are clearly correlated with the purpose of the dissertation research, defines the subject, and object of research, specifies the elements of scientific novelty, characterizes the practical significance of scientific research, and more.

The first section of the work mainly studies the basic theories and concepts of

human resource management in the field of education. The author studies different ways of defining the concept of "human resource management" by different researchers, thus forming a method to improve the concept. This section also studies the concepts and theories related to human resource management such as human potential. The author analyzes the structure of educational human resource management process. This section uses comparative method to evaluate the characteristics of human resource management in different countries. It also discusses human resource management methods that China can learn from other countries.

The second section discusses the problems of human resource management in Chinese universities from the perspective of practice. We used a variety of scientific research methods in this part of the study. This part focuses on the evaluation of university teachers' work motivation and compares and describes the scientific research methods of current university teachers' motivation. This study uses questionnaire survey and statistical analysis to study the basic situation of Chinese university teachers' work motivation, which can let us know how to make teachers work better for university. In order to study how to enable teachers to work hard for the university, we construct the university teacher competency model. This model is obtained by using factor analysis method. This model is an innovative tool for human resource management. It not only considers the ability of teachers already, but also considers the potential of teachers. This research enriches the theory and practice of Chinese university teacher competency model.

In order to ensure the scientific nature of the research, we mainly used questionnaires, interviews, factor analysis, modeling and Delphi method in the second part of the research.

Based on the results of the study, the authors found that Chinese higher education system is booming today. A significant number of the population has access to higher education, and the enrollment rate of colleges and universities has been increasing. However, there are also a lot of problems in human resource management and education management in China.

In the third section, the author points out the problems that take place in the

practice and development of education in China and also suggests ways to improve the human resource management process.

Through this part of the study, the author found that there are not enough agricultural colleges and universities in China, and they are distributed in relatively poor areas. China, the world's most populous country, needs to develop agriculture to ensure food security. Chinese agricultural colleges and universities bear the responsibility of training agricultural talents and developing agricultural science and technology. The state should help agricultural colleges and universities improve the professional skills of their teachers and invest in them to ensure that they can produce more agricultural experts. There is also an imbalance in the number of teachers between different types of universities, because most teachers do not want to work in agricultural colleges and universities. This requires the country to develop some policies to help agricultural colleges and universities recruit teachers, and colleges and universities should also develop effective human resource management strategies.

The author finds that there are still some problems in human resource management practice in universities, such as human resource planning, teacher recruitment and training, teacher performance management, salary system and labor relations management.

From the perspective of management theory, this paper explores the relationship between the high-performance work system, teachers' competence and teachers' achievement motivation in the process of management.

By using the methods of questionnaire survey, a survey was conducted among teachers from 28 universities in 8 provinces of China. The results of these studies made it possible to form hypotheses involving the following types of assumptions:

- teachers feel the university's high-performance work system of human resources management performance, their work motivation is relatively high;
- there is a correlation between the motivation of teachers and their competence;
- achievement motivation is the intermediary of high-performance work system and teacher competence.

This shows that the stronger the achievement motivation of individuals is, the more

time and energy they will invest in training to acquire skills and abilities, and their competence will be higher. The results of the correlation analysis allow us to note that there is a significant positive correlation between high-performance work system and teachers' motivation for success. This is explained by the fact that a high-performance work system is a series of human resource management practices to improve the efficiency of an organization.

It is found that Chinese universities not only care about teachers' competence development, but also attach great importance to the establishment of a high-performance work system.

In addition, the author suggests directions for the human resource management strategy that is relevant for Chinese universities.

Control is very important in the process of human resource (teacher) management. This paper identifies and characterizes the necessary control areas that are relevant in human resource management practices. They are control of remuneration, control of labor safety, control of democratic governance, control of the selection and development of teachers, and control of the information resource sharing.

Key words: China, college and university teachers, competencies, digitalization, higher education, human resources, innovations, knowledge, management, model, motivation, professional development, quality, strategy, personal and intellectual potential.

АНОТАЦІЯ

Лі Вей. Управління людськими ресурсами в освіті. – Рукопис.

Дисертація на здобуття наукового ступеня доктора філософії за спеціальністю 073 - Менеджмент. – Сумський національний аграрний університет, Суми, 2022.

Фактори, які сприяють економічному та соціальному розвитку країни, включають безліч елементів, найбільш важливим з яких є людські ресурси. За

останні 30 років Китай досяг швидкого економічного та соціального розвитку. Попит країни на людські ресурси також швидко зростає. Університет є важливою установою для підготовки кадрів та виконання необхідних соціальних функцій, пов'язаних з викладанням, науковими дослідженнями та соціальними послугами. З розвитком економіки та суспільства швидко розвиваються університети Китаю. Проте в процесі бурхливого розвитку вищої освіти не приділяється належна увага питанням покращення внутрішньої якості, відповідно виникають різні проблеми. За результатами опитування працівників освіти в Китаї, було встановлено, що значна частка адміністративних працівників в університетах не залучена до викладацької та наукової діяльності.

У роботі акцентовано увагу на процесі управління людськими ресурсами, які безпосередньо займаються викладанням та науковими дослідженнями. Посилення якості та здібностей викладачів може підвищити ефективність їхньої роботи, що, своєю чергою, сприятиме підвищенню рівня розвитку університетів. Для того, щоб ефективно підвищити робочий ентузіазм і здібності викладачів, підвищити рівень розвитку закладу освіти, потрібно впроваджувати ефективні інструменти та механізми управління людськими ресурсами. Зазначене також сприятиме підвищенню якості надання університетом соціальних та освітньо-наукових послуг.

Дисертаційна робота присвячена вирішенню завдань, які спрямовані на систематизацію теоретичних основ, які орієнтовані на поглиблене розуміння концепцій, теорій, методів управління людськими ресурсами в освіті; узагальнення та удосконалення понятійно-термінологічного апарату управління людськими ресурсами; дослідження фактичної ситуації та наявних проблем в університетах Китаю; визначенні інструментів, які є доцільними для застосування у процесі управління людськими ресурсами в університетах Китаю; аналіз індивідуальних особливостей викладачів університетів Китаю та використання наукового інструментарію для оцінки компетенцій та мотивації викладачів закладів освіти; вивчення зв'язку між управлінням людськими ресурсами університету та коледжу, компетенцією та мотивацією викладачів; обґрунтуванні пріоритетних напрямів

стратегії розвитку управління людськими ресурсами в університетах Китаю та тощо.

Наукова новизна одержаних результатів досліджень полягає в обґрунтуванні теоретичних, методологічних, методичних та практичних аспектів управління трудовими ресурсами в освіті. Вперше розроблено модель оцінки компетентності викладачів, як інноваційного інструменту управління людськими ресурсами, яка базується на застосуванні чотирьох рівнів оцінки (основних якостей, педагогічної компетентності, наукової компетентності, компетентностей соціального характеру) та передбачає використання 22 показників компетентностей, що, на відміну від наявних моделей, дозволяє не ігнорувати урахування можливостей професійного розвитку викладачів, а також ідентифікувати показники, які підтверджують негативні тенденції розвитку компетентностей викладачів. Елементи наукової новизни, які орієнтовані на питання удосконалення в контексті тематики наукового дослідження, передбачають обґрунтування напрямів удосконалення структурної моделі управління людськими ресурсами в якості дієвого управлінського інструменту, який враховує особливості процесу діджиталізації (цифровізації); ідентифікації організаційних аспектів управлінського процесу людськими ресурсами, а також визначенні напрямів методичного підходу, який буде спрямований на оцінку мотивації досягнень викладачів в якості одного з основних факторів управлінського процесу.

Питання, які набули подальшого розвитку, спрямовані на обґрунтування актуальності застосування SWOT-аналізу в якості методологічного інструментарію управлінського процесу, який дозволить чітко визначити напрями стратегій управління трудовими ресурсами в університетах Китаю; удосконалення інтерпретації поняття «управління трудовими ресурсами» з урахуванням галузевої особливості.

У вступі обґрунтована актуальність теми дослідження, ідентифіковані завдання, які чітко корелюються з метою дисертаційного дослідження, визначено предмет, об'єкт дослідження, конкретизовано елементи наукової новизни, охарактеризовано практичне значення наукового дослідження та інше.

Перший розділ роботи присвячений обґрунтуванню теоретичних основ управління людськими ресурсами в освіті. Зокрема, автором досліджені різні підходи до визначення поняття «управління людськими ресурсами», що дозволило визначити напрями вдосконалення інтерпретації зазначеного поняття. Також досліджені питання, пов'язані з класифікацією потенціалу. Було проаналізовано організацію процесу управління трудовими ресурсами в освіті. За результатами застосування методу порівняння оцінено особливості управління людськими ресурсами в університетах різних країн. Акцентовано увагу на питаннях характеристики зарубіжних теорій управління людськими ресурсами.

У другому розділі досліджені питання управління людськими ресурсами в університетах Китаю з практичної позиції. Був застосований широкий спектр методів наукового дослідження. Акцентована увага на важливості оцінки мотивації викладачів університету. Було проведено порівняльну характеристику актуальних методів для наукового дослідження питань, пов'язаних з мотивацією викладачів університетів. Результати застосування статистичного аналізу створили фундаментальну основу для обґрунтування пріоритетних напрямів мотивації працівників закладів освіти Китаю. Доведено та продемонстровано необхідність впровадження моделі компетентності вчителя як інноваційного інструменту управління людськими ресурсами. Метод факторного аналізу дозволив сформулювати та обґрунтувати модель компетентності викладачів університетів Китаю, яка базується на застосуванні широкого переліку показників компетентностей та не ігнорує можливість професійного розвитку співробітників.

Результати досліджень другого розділу базувалися на використанні анкетування, опитування викладачів університетів Китаю, факторного аналізу, моделювання та методу Делфі.

За результатами дослідження автором встановлено, що на сьогодні система вищої освіти розвивається потужно, значна кількість населення має можливість здобути освіту, відсоток зарахованих на навчання здобувачів в університети та коледжі постійно зростає. Проте, існує значна кількість проблемних питань, пов'язаних з управлінням людськими ресурсами та розвитком освіти в Китаї.

У третьому розділі автором виокремлені проблеми, які мають місце у практичній діяльності та розвитку освіти в Китаї, а також запропоновані напрями удосконалення управлінського процесу людськими ресурсами.

У роботі проведені дослідження, які дозволили обґрунтувати, що в Китаї недостатня кількість сільськогосподарських коледжів та університетів. Це підтверджується тим, що чисельність населення Китаю характеризується великою кількістю. Відповідно, актуальним є не тільки розвиток сільського господарства для забезпечення продовольчої безпеки, але й підготовка висококваліфікованих кадрів з даної галузі. На сьогодні склалася ситуація, що у сільськогосподарських коледжах та університетах працюють викладачі, яким необхідно підвищити рівень своєї кваліфікації, щоб забезпечити підготовку конкурентоспроможних фахівців. Крім того, має місце нерівномірний розподіл викладачів між закладами вищої освіти. Доведено, що в контексті зазначеної проблематики необхідно на державному рівні реалізувати заходи, які б сприяли розвитку освіти в даній галузі. Крім того, на рівні університетів потрібно розробити дієві стратегії управління людськими ресурсами, які будуть актуальними для застосування у практичному аспекті.

Автором встановлено, що існує значна кількість інших проблем, які пов'язані з плануванням чисельності працівників, формуванням штату викладачів, управлінням ефективністю діяльності викладачів, а також системою винагороди та формуванням розвитку трудових відносин.

З теоретичної позиції у роботі обґрунтовано взаємозв'язок між компетентністю, мотивацією та можливостями викладачів у процесі управління.

За допомогою методів анкетування та вибіркового дослідження було проведено опитування викладачів з 28 університетів 8 провінцій Китаю. Результати даних досліджень дозволили сформулювати гіпотези, які передбачають такі види припущень:

- викладачі належать до категорії працівників з високопродуктивною організацією праці, їх мотивація є відносно високою;
- відбувається кореляція між мотивацією викладачів та їх компетентністю;

- мотивація досягнень опосередковує високопродуктивну систему роботи та компетентність викладача.

Обґрунтовано, що чим сильніша мотивація особистості до досягнень, тим більше часу і сил буде вкладено в навчання, здобування навичок, умінь, підвищення здібностей та компетентностей викладачів. Результати кореляційного аналізу дозволяють зазначити, що існує значна позитивна кореляція між високопродуктивною системою праці та мотивацією до досягнення успіху. Це пояснюється тим, що високопродуктивна система праці – серія практик управління людськими ресурсами для підвищення ефективності діяльності установи.

Встановлено, що в університетах Китаю не тільки акцентується увага на компетентностях викладачів, але й надається важливе значення встановленню високопродуктивної системи роботи.

Крім того, автором запропоновані напрями стратегії управління людськими ресурсами, які є актуальними для університетів Китаю.

З огляду на важливу роль контролю у процесі управління людськими ресурсами (викладачами), виокремлені та охарактеризовані необхідні напрями контролю, які є актуальними у практичному аспекті (контроль винагороди, контроль за безпекою праці, контроль демократичного управління, контроль за відбором та розвитком викладачів, контроль за обміном інформаційних ресурсів).

Ключові слова: Китай, викладачі коледжів та університетів, компетенції, цифровізація, вища освіта, людські ресурси, інновації, знання, менеджмент, модель, мотивація, професійний розвиток, якість, стратегія, кадровий та інтелектуальний потенціал.

LIST OF THE PUBLICATIONS

Articles in scientific publications included in the list of specialized scientific publications of Ukraine

1. Wei, Li (2019), “Features of management of labor potential in educational sphere”, *Ekonomika ta derzhava*, vol. 6, pp. 59–63. DOI: 10.32702/2306-6806.2019.6.59.
2. Wei, Li (2020), “Analysis of higher education institutions in China”, *Investytsiyi: praktyka ta dosvid*, vol. 4, pp. 77–80. DOI: 10.32702/2306-6814.2020.4.77.
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4. Wei, Li (2021), “Compilation of competency scales for teachers in local colleges and universities in China”, *International scientific journal “Internauka”. Series: “Economic Sciences”*. № 6. pp. 54 – 60. DOI: 10.25313/2520-2294-2021-6-7357.
5. **Wei, Li** and Zongxi, Li (2022), “Organizational and methodological and practical features of the study of the relation between the university highly productive labor system and the competence of the teacher”, *Investytsiyi: praktyka ta dosvid*, vol. 19 - 20, pp. 114 – 119. DOI: 10.32702/2306-6814.2022.19-20.114. (*The author used questionnaire to study the relation between the university highly productive labor system and the competence of the teacher. Through data analysis, the author verifies the mediating effect of college teachers' achievement motivation on college high performance work system and teacher competence. It provides reference for universities to improve teachers' competence and carry out human resource management measures in line with the requirements of high performance work system.*).

Articles in periodical scientific publications indexed in the Scopus databases

6. **Wei, Li**, Klietsova, N., Volchenko, N., Petrova, N. and Kharchenko T. (2022), “Teacher Competency Model in Human Resource Management: International Economic and Legal Experience in Chinese Universities under Digitalization”, *Journal of Hygiene Engineering and Design*. Vol. 40. pp. 357 – 368 (Scopus) DOI: <https://doi.org/10.32782/JHED/2023-42.3> (The author uses the methods of questionnaire, interview and expert survey to identify and summarize the terms related to the competence of university teachers. Using the method of data statistics, the author puts forward a competency model of university teachers. The model includes four dimensions: basic competence, teaching competence, research competence and social service competence, and evaluates the reliability of the model.).

Other publications

7. Nazarenko, I., **Wei, Li** and Anyu, Hou (2022), “Exploration of human resource management mode in Chinese university”. *Moderní aspekty vědy: XV. Díl mezinárodní kolektivní monografie / Mezinárodní Ekonomický Institut s.r.o.. Česká republika: Mezinárodní Ekonomický Institut s.r.o.*, pp. 44 – 57. (The author makes an in-depth study of the theories and concepts of human resource management and raises the problems existing in the current research. On the basis of studying the best human resource management mode, the author puts forward a benign interactive human resource management mode. Based on the characteristics of benign interactive human resource management model, the author puts forward a human resource management scheme for Chinese universities based on this model.).

8. **Wei, Li** and Nazarenko, I. (2021), “Bibliometric Analysis of Research on Teachers and Competency”. *Proceedings of the 37th International Business Information Management Association (IBIMA)*, May 30-31, 2021, Córdoba, Spain, pp. 10853 - 10861. (The authors searched the CNKI database and eventually came up with 1,211 Chinese papers on teachers and competency subjects. In the scientific core database search, finally collated 5129 English papers. Based on the analysis of two sample data sources,

the author summarizes the status quo and characteristics of Chinese research represented by CNKI database and the status quo and characteristics of international research represented by network science core collection database. The similarities and differences between Chinese and international studies are compared and analyzed.) .

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12. Wei, Li (2020), Evolutionary stages of the development of functions of universities in China. *Економіка, фінанси, облік та право: аналіз тенденцій та перспектив розвитку: Збірник тез доповідей міжнародної науково-практичної конференції (Полтава, 5 березня 2020 р.): у 5 ч. Полтава: ЦФЕНД, 2020. Ч. 2. с. 22 - 25.*

13. Wei, Li (2020), Research on higher agricultural and forestry universities and teachers in China. *Регулювання, значення та ефективність міжнародного співробітництва: збірник матеріалів Всеукраїнської науково-практичної конференції (м. Київ, 13 червня 2020р.). К. ГО «Київський економічний науковий центр», С. 41-44.*

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INTRODUCTION

Relevance of the topic. The factors that promote the country's economic and social development include many elements, the most important of which is human resources. In the past 30 years, China has achieved rapid economic and social development and made tremendous progress. The country's demand for human resources is also expanding rapidly. University education is an important institution for talent training and undertakes important social functions of teaching, scientific research and social services. With the rapid development of economy and society, Chinese universities are also developing rapidly. But in the process of rapid development, they do not pay enough attention to the improvement of internal quality, so there are all kinds of problems. Through interviews, we learned that many administrative staff in universities do not undertake teaching and scientific research tasks, and they do not involve in some human resource management activities. In order to unify the research standards, we defined the subject university teachers as those engaged in teaching and research in universities. Improving the quality and ability of teachers can improve their work efficiency and enthusiasm. Finally, it can improve the development level of universities. In order to effectively improve teachers' working enthusiasm and ability, and ultimately improve the quality and level of the whole university, universities should implement scientific and effective human resource management measures. In this way, universities can better fulfill the social functions of teaching, scientific research and social services. Therefore, we should not only study the theory, method and practice of human resource management from the macro level, but also study teachers' ability and motivation from the micro level. The researchers of human resource management research mainly focus on how to improve the efficiency of enterprise human resource utilization, but there are few studies in the field of education. Scholars who study human resource management in the field of education mostly study the general laws and characteristics of human resources in the field of education from a theoretical perspective. The research methods are also lacking in scientific nature, and lack of good research and micro-level research. A. Topilin (2019), O. Zakharchenko (2020), A. Balabanova (2021), E. Khrapova(2019), Zhao Yuming

(2001), N. Nawaz (2020), S. Tsokhla (2018), E. Kozhushko (2021), N. Tula (2018), Liu Xiaoying (2020), Yang Juan (2019), Li Yanping (2014), D. Guest (1997), Guan Jiyun (2020), Xian Zhi (2015), Wang Jiwei (2021), Kamoche (1996), Pfeffer (1994), K. Jiang (2012), Meng Qingting etc (2021). Mainly have studied topics in the field of enterprise human resource management. G. Uchimura (2019), A. Coutinho (2019), Xu Sulan (2020), Hu Die (2017), Rao Min (2010), Chen Chaoyan (2022), Qu Yantao (2022), Meng Youhua(2018), Zhang Fuqiang(2020), Zhang Lifang (2020), Li Dongli (2022), Peng Lei(2022), Li Zhentao (2022), Sun Shouyin(2022), Stoyanets N. (2022), Heyenko M. (2022), Hnatenko I. (2021), Shkoda T.(2021) etc. have devoted their attention to the field of human resource management in schools. But their research is mainly focused on the macro level, and the research progress remains at the theoretical research level, there is no quantitative empirical research.

The research of educational human resource management involves the macro research level of organization human resource management policy, strategy, theory, system and so on. More importantly, it is necessary to deeply study the characteristics, ability, motivation and other micro research level of organization members. D. Paauwe (2013), Wen Zhonglin (2004), Gong Yaohong (2022), Liu Hongyun (2004), Hu Jianping (2022), Liu Fuyao (2022), Edgar (2005), Khilji (2008), L. Nishii(2008), D. Lepak (2008), Liang Rongcheng (2022), Inna Lozynska (2022), Ma Silo (2020) etc. have focused on the attribution method and cognition of human resource management. It should be pointed out that the above studies of management scholars and pedagogy scholars only carried out human resource management research in their respective fields. They did not introduce the classic research paradigm of enterprise human resource management (HRM) into the field of educational HRM. In addition, previous researchers did not focus on the combination of macro and micro research. In view of the deficiencies and biases of previous studies, we study the application of theories, methods and techniques of enterprise human resource management to the field of educational human resource management. At the same time, we study human resource management in the field of education from the macro perspective of universities and the micro perspective of teachers.

Connection of work with scientific programs, plans, and topics. The dissertation was completed by the directions of research work of the Department of Accounting and Taxation: "Theoretical, methodological and practical aspects of transformation of formation and audit of accounting and reporting component of management of enterprises (institutions, organizations) in transparent conditions of innovative economy" (state registration number 0122U001378, 2022-2026). The author defines the main approaches, directions, ways to improve the system of human resources management in education.

The Aim and Objectives of the study. The aim of the dissertation work is to substantiate the theoretical, methodological, methodological and applied foundations of effective human resource management in education.

Achieving the stated goals requires completing the following tasks:

- to systematize the theoretical foundations focused on an in-depth understanding of the concepts, theories, methods of human resource management in education;
- generalize and improve the terminological concept «human resource management»;
- to investigate the actual situation and existing problems in universities in China;
- identify the tools appropriate for use in the process of human resource management in universities in China;
- analyze the individual characteristics of Chinese university teachers and use scientific tools to assess the competencies and motivation of teachers of educational institutions;
- to study the relationship between the management of human resources of the university, the competence and motivation of teachers;
- on the basis of research carried out at the level of universities in China, using scientific methods to substantiate the directions of the development strategy of human resources management;
- to substantiate the priority areas of improving the efficiency of labor resources management in Chinese universities.

The object of the research is the process of human resources management in education.

The subject of the research is theoretical, methodological, methodical and practical aspects of human resources management in education.

Research methods. This study adopts quantitative and qualitative research methods. At the same time, we adopt more suitable research methods for different research problems to ensure scientific research. Bibliometrics research method is used to study in detail the status quo, development direction and existing problems of previous research. We used abstract logical methods to formulate principles, generalize conclusions, analyze scientific results of other researchers, clarify concepts and classification tools. To develop a tool for evaluating university human resource management, we used the Delphi method (expert interview method) and questionnaire method. In order to develop a tool for evaluating teachers' competency level, we have used methods such as questionnaire survey, exploratory factor analysis and confirmatory factors to explore and clarify the indicators at all levels of the evaluation system. In order to explore the relationship between university human resource management measures, teachers' competency, and achievement motivation, we used questionnaire method and mathematical statistical analysis method. In order to explore the internal advantages and disadvantages of human resource management in Chinese universities, as well as external opportunities and challenges, we use the SWOT strategy analysis method. We illustrate the results obtained using graphical and tabular methods.

The information base of the study was the scientific works of scientists, monographs, own scientific research, data from universities in China, the Ministry of Education of China, the National Bureau of Statistics of China.

The scientific novelty of the results of the dissertation research consists in substantiating the theoretical, methodological, methodological and practical aspects of human resources management in education. Based on the results of the dissertation research, the following provisions were obtained, which have the status of scientific novelty:

first:

- a model for assessing the competence of teachers as an innovative tool for human resource management has been developed, which is based on the use of four dimensions of assessment (Basic competence, teaching competence, scientific research competence, social service competence) and involves the use of 22 secondary competence indicators, which, unlike existing models, considers both the existing competence of teachers and the development of their potential competence.

improved:

- a structural model of teacher competency, which is an effective management tool in the context of digitalization, since it is aimed at assessing basic competence, teaching competence, scientific research competence and social service competence, which, in turn, ensures an effective assessment of the activities of teachers in a practical aspect;

- proposals for the organization of control as a component of human resources management in education, which should be aimed at controlling issues related to teacher's motivation, the rational distribution of time and workload, competitive selection and development, which will allow building an effective management system and stimulate the development of teacher's competencies;

- a methodical approach to the management of human resources in universities, which is based on the assessment of teachers' achievement motivation as one of the main factors in the management process and the results of a comparative analysis of classical theories of motivation;

to be further developed:

- using the SWOT strategy analysis tool identified four choices of human resource management strategies for Chinese universities, which are growth type strategy, diversity strategy, transformation strategy, and defense strategy;

- interpretation of the concept of "management of labor resources", which is proposed to be considered as the development of rational management plans and the implementation of effective measures, aimed at strengthening the creative activity, the potentials of the workers of educational institutions and the development of their potential methods in practice, what will contribute to the identification of directions for improving the management process of human resources in education;

- a strategy for evaluating university human resource management that takes into account the micro variables of human resource management, which covers five areas (faculty selection and development, salary management, information sharing, occupational safety, and equality in the work environment).

The practical significance of the results obtained. The theoretical results of this paper enrich the theoretical connotation of human resource management, and play a certain guiding role in the research of human resource management researchers. The research and development of university high-performance work system evaluation tool can be used to evaluate the level of university human resource management. The university teacher competency evaluation questionnaire developed by research can be used to evaluate the competency level of university teachers. The development strategy of human resource management in Chinese universities can be used to guide Chinese universities to carry out human resource management practice according to their actual situation. Through the research, we have obtained the relationship between the university high-performance work system, teachers' ability and achievement motivation. This can help university human resource managers pay attention to improving the ability and achievement motivation level of university teachers.

The result of the study assessing the relationship between teacher competence and their motivation were adopted by the Committee of International Education Institute of Henan Institute of Science and Technology. The university teacher competency evaluation questionnaire proposed by the research institute was used by the Teacher Development Center of Henan Institute of Science and Technology. The research results of this paper have practical application value.

Personal contribution of the acquirer. Dissertation research is an independent scientific work of the author. The author obtained scientific results, conclusions, and proposals submitted for defence.

Recognition of research results. The main results of the research were tested at conferences at all levels, in particular: International "37th IBIMA Conference" (Cordoba, Spain, 2020), "Management of the XXI century: globalization challenges" (Poltava, 2019), "Economic and Social Development of Ukraine in the XXI Century: National

Vision and the Challenges of Globalization" (Ternopil, 2019), "Economics, Finance, Accounting and Law: Analysis of Trends and Prospects for Development" (Poltava, 2020), "Regulation, significance and effectiveness of international economic cooperation" (Kyiv, 2020), "Problems Of Accounting And Analytical Support Of The Management Board Of Entrepreneurial Activity" (Poltava, 2021).

Publications. The main results of scientific research were published in 15 scientific articles: 5 articles in specialized publications of Ukraine, 1 article in journal included in the scientometric databases Scopus, the rest - in other journals, monograph and conference proceedings.

Structure and scope. The dissertation consists of an introduction, three chapters, conclusions, a list of references and appendices. The total volume of work is 210 pages. The work contains 46 tables and 22 figures. The references consist 15 publications.

SECTION 1

THEORETICAL BASIS OF HUMAN RESOURCE MANAGEMENT IN EDUCATION

1.1 Essential and meaningful characteristics of the category "human resources management"

With the slowdown of global population growth and the accelerated development of the aging the world population, one of the important problems facing economic development is the shortage of labor resources and the continuous increase of labor costs. The development of labor potential is an important practical problem faced by countries all over the world, and the research on related theories and concepts has naturally become the focus of research in the academic field of human resource management.

The goal of human resource management is to improve the efficiency of individual members of an organization and the organization as a whole. Human resource development is an important means to achieve this goal. An important part of human resource development is realizing the full potential of every worker in an organization. In order to study the development and utilization of labor potential in the field of education, it is necessary to conduct in-depth research on the concept, categories, and characteristics of labor potential. This study investigates the concept, categories and characteristics of labor potential through an extensive literature review. Through the research, it sorts out the development of the research and development labor potential. Based on the definition of previous researchers, the concept of labor potential suitable for this study is proposed, and the classification and characteristics of labor potential are also discussed.

The scientific term "workforce potential" emerged in the 1960s and 1970s and was originally synonymous with the concept of "resources". One of the first to define the new term was V.G. Kostakov: "Labor potential is the labor force reserve", which depends on the total number of labor resources and their gender and age structure, employment level, accumulated knowledge, degree of coherence of the demographic structure of the labor force for improvement Labor efficiency, social, geographic and professional mobility

provide conditions [1]. Topilin (2019) considers the concept of labor potential to mean that, as a form of individual production factor or human factor, he takes social work ability as labor potential. American scholar Robert Slavin described potential as potential ability in "Educational Psychology", which refers to the possibility of personal ability development. This possibility can be developed into reality through certain experiences when the external environment or educational conditions permit ability. It is generally believed that labor potential refers to the potential ability of laborers, which also contains the possibility of ability development. Labor potential is the sum of the ability of laborers to develop, change and deepen. As a resource for economic development, labor potential can be measured from both qualitative and quantitative aspects. At the same time, the qualitative and quantitative features of labor potential are closely related, but the qualitative features under modern conditions are nodal, forming the current and future framework of labor potential. Unlike other resources, labor resources have the ability to form synergies, which can only be achieved through the combination of qualitative characteristics. Labor resources have many characteristics, such as irregular formation and reproduction, long growth cycle, high requirements for social and economic conditions, and high degree of participation in the economic process. The state of labor potential is mainly reflected in its implementation level and use degree, which is reflected in labor results and productivity [2].

Labour potential is understood as a set of demographic, social and spiritual characteristics of healthy people. These characteristics are manifested in the process of labor, economic and social activities and the system of social labor relations. In social activities it is necessary to distinguish between potential supply and actual supply. The potential supply of labor, or labor potential, is understood as the entire population aged 15-72 and its most active part, the working-age population. Among them, youth labor is the main source of labor potential [3]. The true total supply of labor is the economically active population, including the realized supply, i.e., people employed in the economy, and the unrealized supply, i.e., unemployed human resource issues. On the other hand, some researchers have also proposed methods to calculate the overall labor potential of society from a micro perspective. Elena Khrapova et al. (2019) proposed a method to

calculate individual factors and overall labor potential on the basis of calculating total funding for working hours [4].

Currently, research on Human Resource Management (HRM) is mainly focused on the corporate sector, while little research has been done on education. The research on human resource management in colleges and universities is increasing day by day. Most studies focus on macro human resource management. The key to human resource management is to explore scientific methods and technologies, fully explore the potential of organizational members, and provide technical support for the development of members and the improvement of organizational performance. Enterprises have more research in this field. How to apply the theory, method, technology, and potential development of enterprise human resource management to human resource management and potential development in colleges and universities is a question worth exploring.

The development of human resource management (HRM) has stages. From these stages of development, we can see the related issues and characteristics in the field of human resource development and labor potential research (Table 1.1).

Table 1.1 - Stage characteristics of HRM

Stages	Period	State of play	Management system functions
1	2	3	4
Personnel management stage	From the 1950s to the 1970s	<ol style="list-style-type: none"> 1. Lack of professional management system and management experience. 2. The main work is to record personnel files. 3. Not treating members as HR. 	Staff emoluments
Transitory stage	From the 1970s to the 1990s	<ol style="list-style-type: none"> 1. Expanded the work to formulate and issue personnel policies, recruit and manage employees, implement HR development plans. 2. The embryonic form of HRM appeared, but the deep-seated problems of HR were still not considered. 	Design, generate and analyze preliminary reports for non-financial HR information and salary information.
System HRM stage	From the 1990s to the early 21st century	<ol style="list-style-type: none"> 1. HRM becomes the maker and executor of enterprise HR development strategy. 2. Start to consider HRM strategy and implement strict management. 3. In order to improve the members and performance of the organization, HRM planning consistent with the strategic objectives of the organization was started. 	Almost all data related to HR are collected and managed. Powerful report generation tools, data analysis tools and information sharing functions.

Table 1.1 continued

1	2	3	4
High Performance HRM Stage	21st century to present	<ol style="list-style-type: none"> 1. Pay attention to the impact of employee-organization interaction on organizational performance. 2. Focus on the organization's care, commitment and motivation to employees. 3. Emphasize that human resource management improves efficiency by influencing employee competencies and motivation 	<p>Develop a systematic approach to improving performance.</p> <p>Achieve a comprehensive human resource management assessment.</p>

**Source: prepared by the author [5]*

As can be seen from the development process of human resource management (table 1.1), researchers are increasingly concerned about the role of human resource management in promoting organizational performance, which makes human resource management focus on human resource development and labor potential development. Human resource management refers to the recruitment, training, use, evaluation, motivation, and adjustment of employees according to the requirements of enterprise development strategy. To motivate the enthusiasm of employees, cultivate the enthusiasm and potential of employees, create value for the enterprise, bring benefits for the enterprise [5]. This study believes that human resource management refers to the use of scientific management methods for human resource planning, recruitment and distribution, performance management, compensation management, benefit management, training and human resource development, labor relations management and other activities. Give full play to the potential of the members, maximize the efficiency of the organization, and finally achieve the goal of organizational development. Human resource management aims to improve the economic and psychological value of workers. What is important is the development of human resources. Its core is the development of human potential. The goal is to achieve the common development of individuals and organizations by improving individual performance and ultimately improving the overall performance of the organization. Human resources in colleges and universities shall refer to the total labor capacity of laborers engaged in teaching, scientific research, management, and service in universities [6]. According to the nature of the work, the

human resources of universities can be divided into management personnel, professional and technical personnel, and workers. Professional and technical personnel refer to full-time teachers and auxiliary teaching personnel with professional and technical level. University teachers have higher education background and professional knowledge, strong work autonomy, strong mobility [7].

As a typical social public service organization, universities have their own characteristics different from ordinary enterprise organizations. Human resource management also has its particularity, and the introduction of the theory and method of human resource management is also relatively late. At present, some universities are still in the stage of personnel management, and most universities are actively exploring scientific human resource management methods and technologies to develop the potential of teachers and improve organizational efficiency. In 2013, researcher Guo Zhiping combined the basic principles of educational human resource management (table 1.2), took it as the guiding principle of educational human resource management activities, and guided educational human resource management.

Table 1.2 - Basic principles of HRM

Fundamental Principles	Principle explanation
The isomeric principle	The same number and quality of people, different organizational networks and functions will form different power and responsibility structures and collaborative relationships, resulting in different synergies.
Energy Level Matching and the Principle of Suitability	To make the best use of one's talents and materials.
Strengthening Rewards and Punishments and the Principle of Fair Competition	Through rewards and punishments fair competition mechanism is introduced to improve the work efficiency of employees.
Principle of Dynamic Excitation	Use personnel adjustment, guide personnel reasonable flow to stimulate organizational vitality and improve organizational efficiency.
Complementary Value-added Principle	Use individual difference of employee to develop strong points and avoid weak points, realize HR system optimization.
The Unification Principle of Virtue and Talent	Take employee ethics and talent as the connotation and standard of talent selection, use, cultivation and retention.
Principle of Human Capital and Income	HR development needs input cost and benefits at the same time. HR development in different fields has its own characteristics.

**Source:[7]*

Human resource management should make reasonable management plan and implement effective measures. In order to improve labor efficiency, the ability to educate institutional employees, and the use of scientific methods to develop their potential.

Labor potential is a key reference for development quality. In the context of the development of the new era, high-quality labor is needed, and it is becoming more and more important to clarify the labor potential. Labor potential usually refers to the potential ability of laborers, and the output and efficiency of laborers have a great relationship with labor potential. Potential workers are conducive to improving the quality of development. The utilization degree of laborers' own labor potential directly restricts the effectiveness of various material and technical elements of productive forces. Determines the level of labor productivity of workers, related to the quality of social benefits and economic benefits. Labor potential is related to the laborer, it comes from the laborer, is the laborer's own existence, but also affects the laborer. The research of the potential of laborers adapt to the increasing level of social development requirements, and further improve the comprehensiveness and rationality of the evaluation criteria for laborers.

The definition of labor potential fully affirms the importance of labor potential from the perspective of labor individuals and labor capabilities, the development and improvement of potential, and the needs of society. In the current new workers, especially young people, without competent environmental management and the cultivation of environmental literacy, the potential of labor cannot be displayed and enhanced, and sustainable development is obviously impossible [8]. Clarifying the meaning of labor potential is beneficial to the effective and high-quality development of society. It is of practical significance to improve the personal level and quality of workers, improve the current talent evaluation standards, and promote the creation of a more suitable working environment for cultivating workers.

Labor potential is the ability of employees to achieve enterprise goals by using limited material, technology, information, and organizational support in the process of work. The components of labor potential are understood as professional knowledge, practical skills, personal and psychophysiological characteristics of employees[9].

Research on worker potential requires the use of an information base, including the names of lists of personal characteristics of workers, the complete list of components including health, ethics, creativity, activity, organization, education, and professionalism [10].

Labor potential has long existed as a vague concept in all aspects related to social development. Social development needs to tap the labor potential of laborers. Generally speaking, the labor potential includes the laborer's spiritual, intellectual, and physical potential [11]. It is generally believed that labor potential refers to the potential ability of workers, which also contains the possibility of ability development. Labor potential is The sum total of the ability of the laborer to develop, change and deepen. The nature of labor potential that can be developed just reflects its constant newness according to the development of society, and its importance to the young labor force of the emerging labor force in social labor. Labor potential is a kind of ability, and individual ability and the initiative of labor ability belong to two categories. Workforce potential can be used as a means for workers to demonstrate a competitive advantage [12]. From the perspective of the subject, labor potential is a subsidiary and The ability above the individual serves the development of people and society, and is actively mastered by people. From the perspective of the object, labor potential is a collection of abilities that are conducive to improving labor. The ability to grow up through cultivation requires the support of external conditions.

In the scope of labor potential ability, the common ones are mental, intellectual, and physical. The same laborers have different mental states, different labor functions, and different labor output efficiency and effects. Create conditions to promote the development and deepening of labor potential, so that workers can maintain a continuous and concentrated work mood. The spiritual potential of laborers refers to the spiritual power that laborers do not exert during labor. It can stimulate the enthusiasm and creativity of workers make them work actively. It is an important content of rational organization of productivity. Promote the development of laborers' intellectual potential through the transformation of education and social production practices. The intelligence level of laborers also plays an important role in labor potential. It is not only the

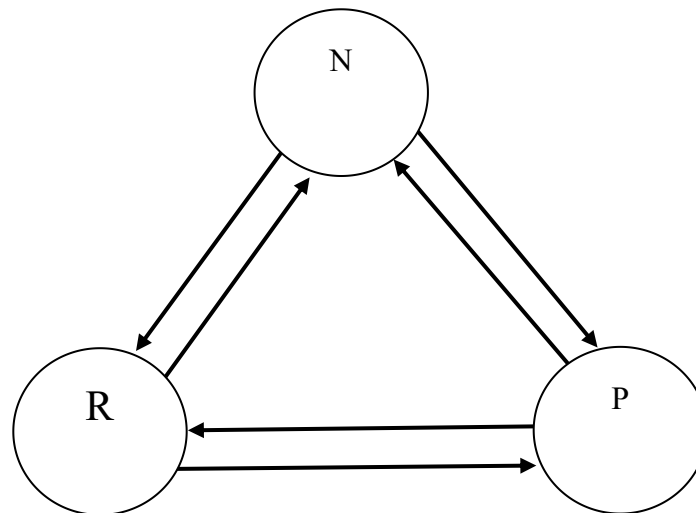
individual IQ of the labor, but also the knowledge and ability generated under sufficient social practice, which has a prominent impact on the output quality of the labor force. Labor potential includes physiological level and psychological level, It is the reason for the continuous development of workers' ability and will promote the continuous development of individual ability.

The content of labor potential reflects such factors as desire, will, emotion, interest and values, and can be transformed into the motivation, spirit, intelligence and physical strength of workers. Labor potential is also one of the criteria to distinguish one person from others. The potential of workers includes intellectual potential and physical potential. We should pay attention to continuously increasing the investment in health and intelligence of workers, and constantly improving the potential of workers in these aspects.

The traditional concept of potentiality is mainly represented by Aristotle and Hegel, who described the concept of potentiality from the perspective of their own philosophical theories. Aristotle believed that potential (Ddunamis in Greek) and reality (Energeia in Greek) are two fundamental taxonomic pairs inseparable from substance and form [13]. Cui Jinfu believes that the definition of potential is a strong and inevitable trend, that is, to define potential as a sign or a harbinger of human reality. He believes that the need at a certain stage is the original force of human development. Potential is a necessary trend to meet demand. Reality is the realization of potential, the real satisfaction of needs, and then the emergence of new needs, starting a new movement from needs to potential and reality (figure 1.1). But we think his potential and dynamic concepts intersect or even confuse.

According to Schultz (T. Schultz, 1961), human potential is the knowledge, skills, and character or ability in the common sense of an individual or group. He equates potential with talent. Yang Jingdong (2003) believes that potential is a person's potential ability. Wang Tongxun (2001), Shako Gawain (1998), and others believe that human potential is a kind of energy. Tao Yunwu defines potential as unexposed ability. In psychology, potentiality is interpreted as the ability of a person to behave in the future

when they have the opportunity to learn, which is a potential and future-oriented aptitude with great plasticity [13].



N: Need; R: Reality; P: Potential

Figure 1.1 - Relationship between human needs, potential and reality

**Source:[14].*

Lev Vygotsky's “zone of proximal development theory” believes that there are two levels of student development: one is the student's current level, which refers to the level of problem-solving that can be achieved in independent activities; the other is the student's possible level. The level of development, that is, the potential acquired through teaching. Difference between the two is the zone of proximal development. Teaching should focus on students' immediate development area, provide students with difficult content and arouse students' enthusiasm. To develop the potential of students, beyond the students' immediate development area, to reach the next stage of development level, and on this basis to teach the next stage of development.

Based on the above research, the potential is a possibility of individual development, which means that an individual has the opportunity to acquire one or more abilities in the future. When the external environment or educational conditions permit, this possibility can be developed into a real ability through a certain conditioned stimulus. We believe that potential should be defined as a set of abilities that an individual has not yet discovered or demonstrated under existing conditions. But the sum of the abilities that

an individual will develop to have a positive impact on himself and the organization through appropriate external conditioning combined with the individual's subjective effort.

As a personality trait, potential is different and related to other personality traits. In order to elucidate the relationship between various personality traits, it is necessary to compare potential with other personality traits (table 1.3).

Table 1.3 - The distinction of relevant concept category

Concepts	Definitions	Characteristics	Components
Ability	Ability is the psychological characteristic necessary to complete the activity, which directly affects the activity efficiency and can make the activity go on smoothly.	<ol style="list-style-type: none"> 1. Always connect with activities. 2. Directly affect the efficiency of activities 3. The psychological. 4. Strong generality, covering a wide range. 	<ol style="list-style-type: none"> 1. Thinking ability. 2. Behavior ability. 3. Language.
Personality	In the process of socialization, individuals form and develop a unique pattern of thought, emotion and behavior	<ol style="list-style-type: none"> 1. Unique individual 2. Stable and unified 3. Comprehensiveness 4. Harmony and unity 5. Functionality 	<ol style="list-style-type: none"> 1. Id. 2. Ego 3. Superego.
Skill	Mastery and application of technical skills.	<ol style="list-style-type: none"> 1. Only by learning in person can we acquire it. 2. Practice makes perfect physical activity. 3. Eye-hand coordination ability. 	<ol style="list-style-type: none"> 1. Professional skills 2. Sports skills
Competency	The objective measurable individual characteristics and the predictable behavioral characteristics that point to performance of high performers in specific jobs, organizational environment and cultural atmosphere.	<ol style="list-style-type: none"> 1. Connecting with Situations. 2. Predictability. 3. Linking to performance. 4. Integration: dominance and recessive 	<ol style="list-style-type: none"> 1. Knowledge. 2. Skills. 3. Self-image. 4. Social motivation. 5. Quality.
Potential	The latent ability of an individual to contribute to the performance of an organization or individual by exerting influence.	<ol style="list-style-type: none"> 1. Deep-seated. 2. Visible. 3. Measurable. 4. Learning Enhanced. 5. Indirect display. 	<ol style="list-style-type: none"> 1. Internal drive. 2. Self-concept. 3. Individual character. 4. Attitude.

*Source: [14].

According to table 1.3, we can see that personality refers to the sum of certain and more stable psychological characteristics. Ability refers to the specific characteristics that can distinguish people with outstanding work performance from ordinary people according to analysis, and personality includes all the above qualities. Competence

includes skill capability and partial potential. Competencies include some skills and potential. In 2006, Tao Yunwu combined the famous Johari window theory in psychology to classify potential (figure 1.2) and constructed the potential window theory (figure 1.3) and established a 3D model of employee potential development (figure 1.4). He believes that the methods of employee potential development include learning, practice, and unconscious development. Different types of human potential need to be developed and utilized in different ways.

	Have	Not Have
Known	Potential 1 Known, Have	Potential 2 Known, Not Have
Unknown	Potential 4 Unknown, achieved	Potential 3 Unknown, Not Have

Figure 1.2 - Classification of potential

**Source: [14].*

Tao Yunwu divides potential into four types according to whether human beings know it and whether human beings have it. Potential 1: Man has and also knows he has this ability; Potential 2: Man clearly knows what is lacking; Potential 3: Has it, but I haven't realized it yet. Potential 4: I don't know what I'm missing.

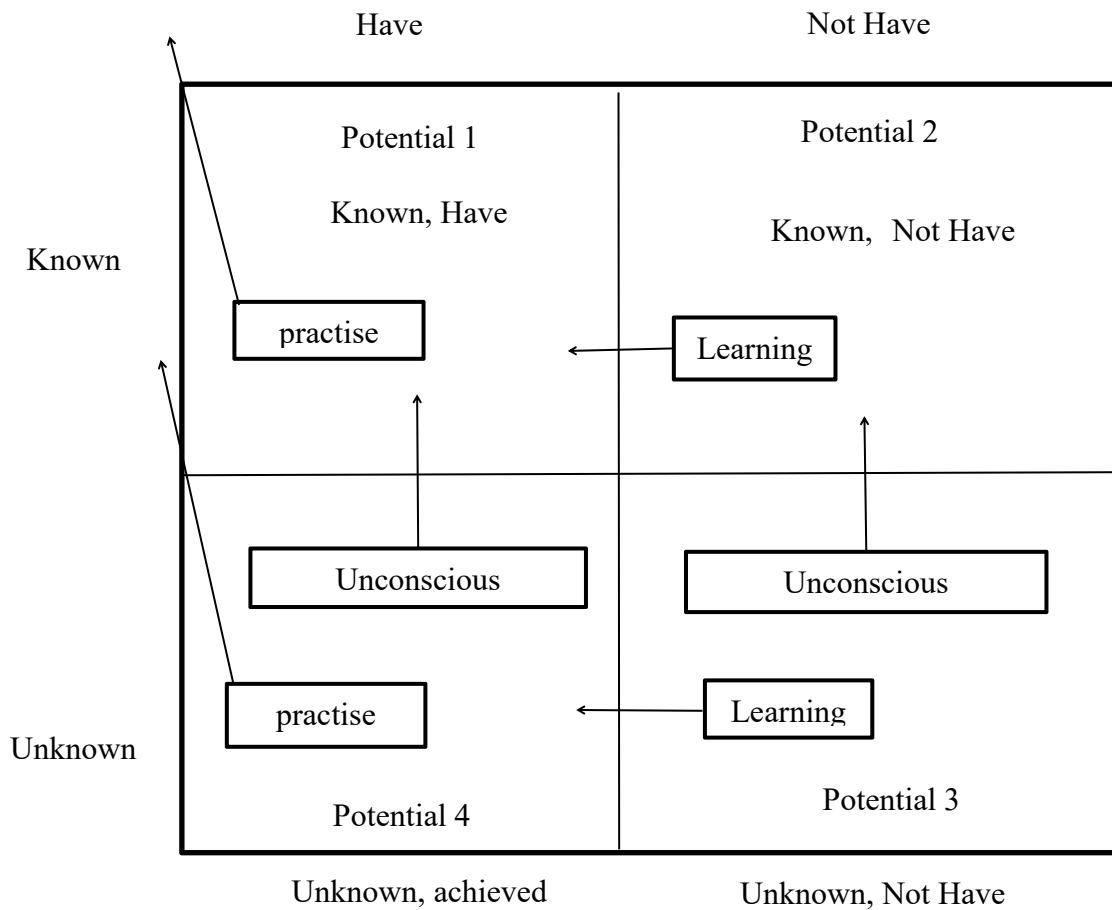


Figure 1.3 - Potential window

**Source: [14].*

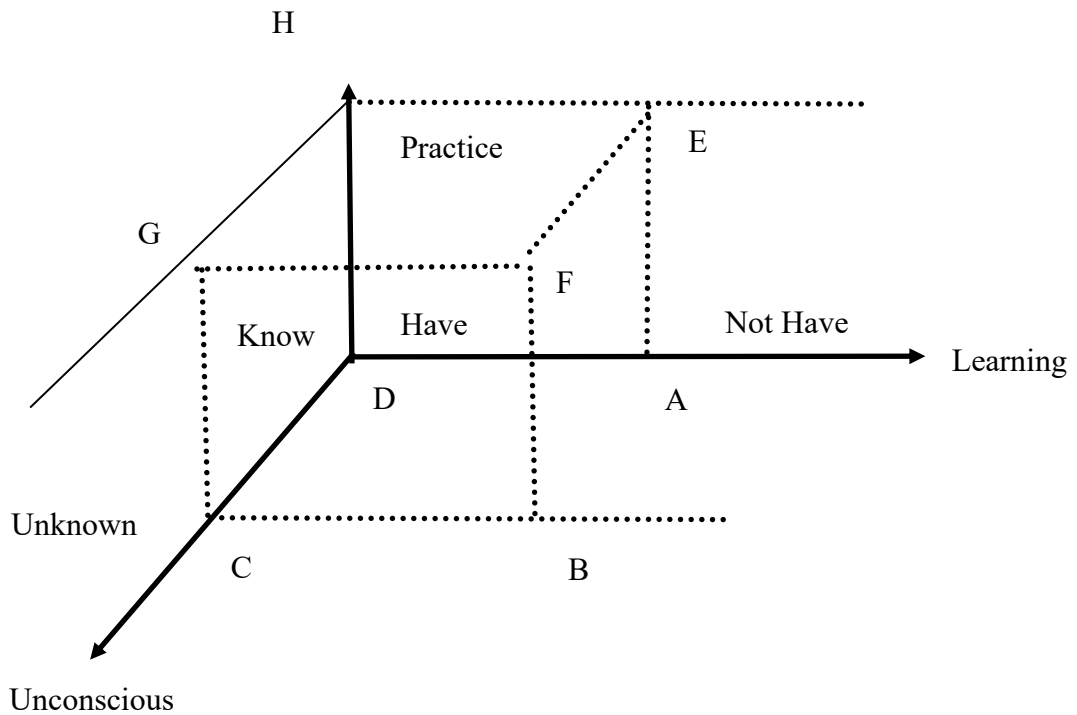


Figure 1.4 - Three dimensions of employee potential development

**Source: [14].*

If the potential we don't know is to be developed, first of all, it has to come into consciousness, so unconscious development is the best way. We realize that we can learn to gain potential that we do not yet have. Practice is the best way to turn potential into a specific ability. Therefore, practice, learning, and unconscious development are the three aspects of potential development. As can be seen in figure 1.4, Potential 1 is getting bigger and bigger through learning and unconscious development, while Potential 2, Potential 3, and Potential 4 are getting smaller and smaller. But potential 1 is still potential, and we need the practice to turn that potential into reality.

As can be seen from figure 1.4, through practical learning and unconscious development, the space between A-B-C-D-E-F-G-H is constantly expanding, and people's abilities are constantly improving. Through theoretical research, Tao Yunwu established a theoretical model of employee potential and compiled a questionnaire to measure the development of employee potential. He tested the reliability and validity of the questionnaire, tested and analyzed the potential of employees through empirical research, and proposed effective strategies for the development of employee potential [14]. Tao Yunwu's research is the first to put forward the use of psychological models in employee potential research, which has certain inspiration and guidance for our research on potential development models [15].

The university human resource management system needs to introduce scientific human resource management technology and pay attention to the improvement of efficiency while insisting on fairness. The development of the management system should be promoted to establish a scientific human resource management system which is conducive to the development of teachers' potential and efficiency. The focus is to investigate the basic situation of the potential development of university teachers at the micro level. University human resource management should use psychological theory model to study the basic structure and basic dimension of university teachers' potential. Through the use of certain technical means, the development of college teachers potential measurement tools. This paper probes into the main problems in developing the potential of university teachers, gives full play to their potential in practice, and puts forward the methods and techniques to promote their potential development.

A concept closely related to workforce potential is human resources. Human resources refers to the sum of the working age population, under working age, and over working age but capable of working in a country or region. Refers to the total population of a country or region minus the incapacitated population. The broad definition of human resources is the sum of people with intellectual and physical labor abilities in society, including both quantity and quality. The narrow definition is the manpower possessed by the organization to manufacture products and provide services. As a special resource, human resources have the following characteristics. (1) Mobility. Human beings have subjective initiative, can carry out activities with a purpose, and transform the external material world with purpose. (2) Duality. Unlike any other resources, human resources are living resources that belong to human beings and exist in the human body. Therefore, human resources are both producers and consumers. Human resources contain rich knowledge content, which makes them have great potential, as well as the unparalleled high value-added of other resources. (3) Timeliness. Human resources are different from general resources such as mineral resources. Generally, mineral resources can be stored for a long time without mining, and the quality will not be reduced. Human resources are not the same. If they are not used, their talents will be wasted and degraded. The nature of work is different, and the best period for people to exert their talents is also different. Generally speaking, 25 to 45 years old is the golden age of technology talents, and 37 years old is the peak. Timeliness requires that human resource development should seize the stage when people's age is most conducive to occupational requirements and implement the most powerful incentives. (4) Social. Human resources are in a specific society and era. Different social forms and different cultural backgrounds will reflect and affect people's values, behaviors, and thinking methods. The social nature of human resources requires special attention to the influence of social and political systems, national policies, laws and regulations, and cultural environment in the development process. (5) Continuity. The continuity (sustainability) of human resource development means that human resources are resources that can be continuously developed. Not only the use process of human resources is a development process, but also the training,

accumulation, and creation process. (6) Regeneration. Human resources are renewable resources that can be regenerated through education, training, etc.

Based on the analysis of previous studies, combined with the situation of this study, we define human resources as follows: In an organization, the population with labor ability and its education, ability, skills, experience, physical strength, etc., which contribute to the creation of general value name.

To sum up, first of all, we must pay attention to the research on human resource management in universities and use scientific human resource management theories, methods, and technologies to promote the development of human resource management in universities. Secondly, the current research on the potential development of college teachers lacks a systematic, theoretical construction and necessary theoretical system. A theoretical system should be formed by constructing a theoretical model. Third, there are applied researches on the potential development of teachers in universities, and there are no measurement tools and application technologies to guide the potential development of teachers.

Based on the above research results of domestic and foreign researchers, we can see that the research on labor potential can be roughly divided into two categories: macro-perspective and micro-perspective. From a macro perspective, researchers mainly study labor potential from the total number of labor resources and its gender and age structure, employment level, accumulated knowledge, and population structure, and pay attention to the characteristics of laborers from the perspectives of quantity and quality. They understand labor potential as a series of demographic, social, and spiritual characteristics of healthy people. The researchers mainly study labor potential from the fields of demography, sociology, economics, and management. From a micro perspective, researchers focus on the health, morality, creativity, activity, organization, education, professionalism, and other personality characteristics of workers. Researchers mainly study labor potential from the fields of pedagogy, psychology, and human resource management. This study mainly studies labor potential from a micro perspective. Therefore, this study believes that labor potential refers to the potential that can be

developed into a practical ability through training, incentives, guidance, and other measures under the conditions of the external environment or educational conditions.

Human resource management is an important research field in management, and its important goal is to improve organizational efficiency. Workers are the most important resource in an organization and the main body of an organization's operations. The potential development of organizational workers is crucial to the improvement of organizational efficiency. Therefore, this part of the paper studies the related attributes of labor potential. Through research, the concept, content, classification, and characteristics of labor potential are clarified. It also clarifies the important position and role of labor potential in human resource development and management activities. This lays the foundation for further research on human resource management in education.

1.2 Theoretical basis of human resource management in education

According to the data released by the National Bureau of Statistics of China, the population of working age (15-64 years old) peaked in 2013 and then declined at an absolute rate: the number of people decreased every year by order of 10,000, 100,000, and 1,000,000 to 10 million. By 2020, there has been a cumulative reduction of 41.7 million people. Social and economic development and the implementation of national strategic goals are inseparable from labor. Facing the general trend of decreasing labor force, the development and management of labor potential become particularly important. The field of education, especially the field of higher education, needs a lot of human resources, and it is also an important field that produces human resources. It is of great significance to study the management of labor potential in the field of education to develop the potential of labor and promote the development of the national economy.

In order to improve the efficiency of university human resource management, it is necessary to conduct in-depth research on the basic theory of university human resource management, especially the potential development of labor resources. Because workforce potential development is one of the most important activities in human resource management. Combining the history, current situation, and existing problems of China's

higher education development, this study brings out the significance of the potential development of the labor force in the field of education. Through in-depth research on the concept of labor potential, the development of labor potential, etc., to understand the basic knowledge of labor potential development. Through the research on the relevant theories of labor potential development in the field of education, the related theories are sorted out, and the relationship between the theory and the human resource management activities of higher education is found. Finally, To fully and deeply understand the activities of university human resource management this research has carried out in-depth research on the characteristics of university human resource management. This study prepares theoretical knowledge for the next step of practical research.

China's higher education has entered a stage of rapid development since the reform and opening up in 1978. After more than 40 years of development, great progress has been made in the quantity and quality of higher education, but there are also certain problems. Since entering modern times, the development of Chinese higher education has gone through different historical stages along with the development and changes in Chinese society. Xu Ping divided Chinese higher education from 1949 to the present into four stages: from the early days of liberation to 1958 (the stage of learning from the Soviet Union); 1958-1966 (separation from the Soviet model, stable development stage); 1966-1978 (turmoil and stagnation stage); 1978-present (adjustment direction and rapid development stage) [16].

On January 20, 2018, the CPC Central Committee and The State Council issued the Opinions on Comprehensively Deepening the Reform of Teacher Team Construction in the New Era. It is proposed to improve the internal incentive mechanism to adapt to the characteristics of teaching posts in universities, and to properly improve the foundation of full-time teachers. The proportion of sexual performance pay in performance pay is increased, and the job incentives for teaching teachers will be increased. The comprehensive quality of the teaching staff is an important determinant of the level of a university's education. It is directly related to the quality of personnel training, the level of discipline construction and, the future development of the school. A dynamic teacher development policy is the key to the development of higher education institutions.

universities should fully understand the development needs and characteristics of teachers' professional growth stage. It is necessary to construct an incentive mechanism to promote teacher professional development from the perspective of teacher professional development. The core essence of the transformation from training to teacher development is to contribute to the professional growth of young teachers [17].

As of 2020, the total number of students in various types of higher education in China is 41.83 million, and the gross enrollment rate of higher education is 54.4%. In 2020, there will be 9,674,500 students enrolled in general universities, an increase of 525,500 or 5.74% over the previous year; 32,852,900 students are enrolled, an increase of 2,537,700 or 8.37% over the previous year; 7,972,000 graduates, an increase of 7.972 million over the previous year 386,700 people, an increase of 5.10%. In 2020, 1.1066 million graduate students will be enrolled, an increase of 190,000 or 20.74% over the previous year. Among them, there are 116,000 doctoral students and 990,500 master students. There were 3.1396 million postgraduate students, an increase of 275,900 or 9.63% over the previous year. As of 2020, there were 1,923,487 faculty members in undergraduate colleges nationwide, an increase of 3.05% over last year; 1,276,101 full-time teachers, an increase of 4.1% over last year. The student-teacher ratio of ordinary universities is 18.37:1, of which 17.51:1 for undergraduate colleges and 20.28:1 for higher vocational (specialist) colleges. As of 2020, the construction area of universities is 920,341,300 square meters, an increase of 27,854,000 square meters or 3.12% over the previous year. The average area of students in ordinary universities is 58.32 square meters, the construction area of the school building per student is 28.77 square meters, and the value of teaching and scientific research equipment per student is 16,522.36 yuan [18]. From the above data, it can be seen that the main problems in China's higher education are: the absolute number of higher education recipients is large, but the proportion is low, and the investment in education is growing rapidly, but the total amount is insufficient. The structure of teachers is unreasonable, the student-teacher ratio is high, and the staff is tight. In addition, there are still problems, such as the low contribution rate of higher education to the economy and the rapid development of scientific research but the shortage of funds.

The main body of China's higher education institutions is the management system of public institutions, and teachers are also managed according to the model of professional personnel. Teachers are promoted mainly through the path of teaching assistants, lecturers, associate professors, and professors. Therefore, teachers will not lose their jobs if they do not break the law. As a result, there is less overall mobility in the teaching workforce. The daily assessment of teachers is mainly carried out in terms of teaching workload and scientific research results, and the assessment of social services is not very strict. This management system and mode of teachers make the teaching team lack vitality and competitiveness, and it is not easy for top-notch young teachers to stand out. Especially in the assessment of teachers, it is common to pay attention to scientific research results and despise teaching effects, which makes a considerable number of teachers ignore teaching research, which affects the improvement of school running level and teaching quality. Therefore, China's higher education and management need more effort at the micro level and more solid work [19].

In view of the above-mentioned actual situation and existing problems of China's higher education development, China should vigorously develop the potential of laborers in the field of education. While attaching great importance to vigorously training teachers and increasing the number of teachers, it is more important to continuously improve the quality of existing teachers. Therefore, it is necessary to focus on the development of teachers' human resources, play the role of scientific human resources management theory and practical technology, strive to improve the comprehensive quality of teachers and develop the potential of teachers' human resources.

In Chinese universities, in addition to the highest administrative department of the school, the most important human resource management unit is the secondary colleges. With the establishment of the secondary management system of universities and the reform of the internal personnel system, secondary colleges gradually have relatively independent financial rights, personnel rights, and resource allocation rights and become the main body of human resource management for college teachers. Exercising the power of planning, appointment, regulation, evaluation, and training of teachers' human resources within the scope will become the main paradigm of internal personnel

management in universities. Therefore, the school level should focus on human resource planning and development strategies. The secondary colleges should specifically consider the rational allocation of human resources for teachers, improve the input-output efficiency of the human resources, and further enhance the core competitiveness of secondary colleges and schools. This work is inseparable from the evaluation and analysis of the efficiency of human resource management of teachers. To clarify the current situation of human resource allocation in secondary colleges, university decision makers need to carry out scientific and correct efficiency evaluation. It is necessary to deeply analyze the advantages and disadvantages of human resources in secondary colleges, and accurately measure the input and output. Ultimately, it is to realize the purpose of optimizing the allocation of human resources in universities. [20].

There are many departments in Chinese universities, and they are generally divided into three categories: teaching departments, administrative departments, and logistics service departments. The functional department of a university is an important component of the management organization, a systematic project, and also the basic unit of university management, which affects the realization of the established goals of the entire university [21]. Human resource management in different departments has its own characteristics.

Teaching department. The teaching department of universities is the outlet of education and teaching management and has mastered the lifeblood of talent training. Teachers who are engaged in teaching work belong to such departments. At present, in the evaluation system of college teachers in China, teaching, scientific research, tutoring students, and obtaining awards are all included. The weight of scientific research indicators is enlarged, and even takes precedence over teaching, resulting in a considerable number of teachers. Forced or willing to revolve around the baton of scientific research, the centrality of teaching is becoming more and more marginal, and the positioning of teaching human resources is more ambiguous and weak [22]. There are also some more significant teaching problems, such as teaching staff. There is a certain lack of teaching ability. Compared with teaching, it is more suitable for scientific research activities. Students cannot understand the teaching methods. There is no

effective assessment mechanism for teaching work. Teaching department should establish relatively perfect incentive mechanism and access system. The teaching departments should create various learning opportunities and platforms for members to stimulate their enthusiasm. They should pay attention to the cultivation of young talents with strong executive ability and strong understanding. The teaching department should optimize the allocation of resources and create a platform and space for them to display their talents. At the same time, it is necessary to strengthen the construction of public relations capabilities, publicize the positive image of the school, improve the school's social reputation and economic benefits, and abandon and set up majors according to the current development trend to meet the needs of the times [23]. For different types of universities, clarify the teaching status.

Administration. University management is an important cornerstone of school education and scientific research development. The basic operation mode of modern university is two-level management. Only when the management department makes scientific and correct management directions, management plans, and management methods can we lead universities to a brighter future. At present, there are many problems in the university management department, which need to be solved urgently. The ambiguity of authority and lack of effective management. The management departments of universities are huge and numerous, and the assignment of work is easy to be repeated and redundant, which extremely easy to leads to the absenteeism of college management personnel. Unequal pay and lack of benefits. The high salary pays too much attention to the high-level personnel, the grass-roots employees are relatively dissatisfied with the salary distribution, and the benefits are low, which reduces the work enthusiasm of the grass-roots personnel to a certain extent. The one-sided pursuit of academic qualifications lacks an effective assessment system. Personnel with high-level education may not necessarily have management ability. Without a scientific recruitment and assessment system, personnel without management ability will take up the position [24]. Facing these practical problems, universities should adhere to the principle of people-oriented. Human resources management should pay more attention to humanistic feelings, respect individual differences, and actively combine the work needs of faculty and staff.

Universities should provide learning and further education platforms for teachers to study and create a management atmosphere that respects talents and knowledge. Strengthen employee training and optimize welfare policies. Through scientific and reasonable assessment and evaluation, the management ability should be evaluated, pay attention to the importance of human resources, optimize the allocation of human resources, and match the personnel and posts. A high-level education does not imply a high level of management. The management departments of universities should pay more attention to practical ability and innovative talents. It is also necessary to be specific to practice, to achieve a downward shift in the focus, and to "simplify administration and delegate power".

Logistics service department. The logistics department of a university is the rear guarantee for the stable development of the university, and it is related to the normal operation of the university. We should improve the quality of personnel selection and service in the logistics sector. In this way, the development of the university can be supported and all kinds of staff can be well served. Nowadays, there are still many problems in the management of logistics human resources in universities that need to be solved urgently. The management concept of the logistics team is backward, ignoring the importance of talents, ignoring the training of employees, and lacking a professional service supervision team. Most universities take teaching and scientific research as the priority development strategy, but ignore logistics management. This kind of thinking leads to the phenomenon of "only using, no cultivating" in the logistics department, which leads to the low efficiency of university logistics human resource management. There are many current logistics staff who have been introduced by acquaintances, family members of faculty members, etc. As a result, these people have a relatively low level of initiative, enthusiasm, initiative and consciousness [25]. Logistics jobs are short of young workers because of long working hours, high labor intensity, poor working conditions and low wages. Logistics work is also difficult to attract highly educated, highly skilled, high-level managers, and technical professionals. The logistics salary system is not perfect and the salary structure is too simple. Only pay attention to the salary and welfare of the staff, do not care about the informal staff [26]. Finally, if the competition

mechanism of logistics human resources in universities is not perfect and there is no corresponding competition awareness and state, there may be resulting in insufficient logistical support. In order to improve the management of logistics human resources, it is necessary to focus on strategic positioning. On the one hand, to improve the understanding of the work of logistics human resources managers in universities. On the other hand, university administrators should keep pace with The Times, innovate management concepts, and give logistics departments reasonable responsibilities and rights in personnel management, salary distribution and other aspects. It is necessary to provide support for the human resources management of university logistics. The logistics department should have an open and inclusive view of talent, and improve the personnel management system. It is necessary to establish a normal learning organization and strengthen the fine education management and training management. The logistics personnel departments of universities should increase the introduction of talents so that talents can truly provide good technical support for the logistics management of universities, arrange the rear areas of universities, and do a good job in guaranteeing. Talent is the foundation of management and an important basis for efficient management. Strengthen the construction of the logistics human resources management system in universities, standardize the employment system, establish and improve a scientific evaluation mechanism and performance appraisal system, establish a scientific competition mechanism, establish a complete salary system, create a good logistics culture atmosphere, improve logistics Employees are motivated to work and effectively enhance their sense of belonging in the logistics of universities.

The promotion of professional titles for college teachers is a higher education management policy related to human resource management and teacher evaluation in universities. The promotion system of teachers' professional titles in modern universities in China originated from western countries. The term Professional Title originally referred to "job title", and from an academic point of view, it originally had the nature of Academic Rank. With the continuous development of the professional title evaluation system for college teachers, the "professional title" has gradually evolved into a title that measures the academic level and professional ability level of teachers. What kind of

professional title a teacher obtains represents the corresponding professional and technical level and qualifications, and also symbolizes the corresponding academic identity and academic status. In China, teachers are divided into teaching assistants, lecturers, associate professors and professors according to their professional titles.

Chinese professional title system has experienced five stages of historical development. In the first stage (from the founding of New China to the 1960s) is the technical job appointment system oriented by the implementation of the job grade salary system. The second stage (1978-1983) is the technical title evaluation oriented by the exploration of the academic title system. The third stage (1986-1995) is the implementation of the professional and technical job appointment system based on job management. The fourth stage(1995-2016) is the selection stage of "position management" and "qualification management" oriented by improving talent evaluation mechanism .The fifth stage(2016 to present) is the stage of deepening the reform of the professional title system oriented by the reform of the talent classification and evaluation mechanism [27].

Different provinces have different requirements for the evaluation of professional titles of college teachers. Generally, the evaluation is carried out from the following aspects. First of all, in the basic conditions, teachers are required to love education, abide by the law, have a correct style of study, abide by professional ethics, and perform their duties. The second is to require teachers to study teaching seriously. The third is to publish academic works of great influence. The fourth is to publish high-level academic papers. The fifth is to obtain high-level scientific research awards. The sixth is to have the ability to innovate in the field of professional research. Complete the academically important scientific and technological research topics and research projects. Scientific research has achieved significant economic and social benefits. The seventh is to have a systematic theoretical basis and rich practical experience in the subject. The eighth is to be proficient in more than one foreign language.

Professional title evaluation has its necessity and importance. universities use different professional title evaluation systems and policies to evaluate teachers, which is more scientific, reasonable, fair, and equitable. It is conducive to the creation and

promotion of emerging majors and weak disciplines in universities and can promote the construction of college disciplines and the healthy development of college teachers. But China's current job title assessment has some drawbacks. The first is that the evaluation criteria for professional title promotion are not scientific and reasonable enough, and they focus too much on scientific research performance and ignore teaching performance. The second is that the evaluation indicators of professional title assessment are too unified, and the particularity of different types of institutions and different disciplines is not fully considered. Third, the professional title evaluation mechanism is not perfect, most universities can not directly employ excellent talents and talents in short supply, resulting in insufficient talents. Fourth, the supervision mechanism for professional title evaluation is not perfect, academic misconduct frequently occurs in the process of professional title evaluation, and the quality supervision of professional title promotion needs to be strengthened. The fifth is that the professional title evaluation mechanism and process are more complicated and cumbersome, and the evaluation and inspection are not comprehensive and objective [28].

Enterprise management researchers have always attached great importance to the detailed analysis of the operation and management of organizations. SWOT analysis model is their common analysis tool. SWOT analysis model, also known as situation analysis, was the earliest strategic analysis method commonly used by enterprises. This method combines Opportunity and Threats in the external environment and Strengths and Weaknesses in the internal environment for analysis. Using this method, it is possible to conduct a comprehensive, systematic, and accurate study of the situation in which the organization is located. According to the research results, we can formulate corresponding development strategies, plans and countermeasures for the organization. Although this research method has been used in enterprise management before, it also can be used to analyze university human resource management. In order to deeply study the human resource management of Chinese universities, we use the SWOT analysis model to analyze the human resource management of Chinese universities (table 1.4).

Table 1.4 - SWOT analysis of human resource management in Chinese universities

Dimension	Content
Advantages	<ol style="list-style-type: none"> 1. The cost awareness and competition awareness of universities are enhanced. 2. The school provides policy support and encouragement. 3. Improvement of the mode of attracting talents in universities. 4. Optimize the management efficiency and management level of universities, and realize the rational allocation of human resources. 5. Improve the social image of universities. The autonomy of universities to run schools is expanding day by day.
Disadvantages	<ol style="list-style-type: none"> 1. The ratio of human resources in universities lacks scientificity. 2. The management concept is relatively backward, and it is mostly decided by the leaders, which is not combined with the actual situation of the school. 3. The personnel assessment system needs to be further improved. 4. The organizational structure is relatively solid and lacks a reasonable management system. 5. Incentive measures are ineffective, enthusiasm and sense of competition are not strong. 6. Insufficient humanistic care, it is difficult to meet the needs of teachers. 7. The promotion of personnel positions is slow, and the motivation of teachers is insufficient.
Opportunities	<ol style="list-style-type: none"> 1. The inclination of national policies and the rise of supporting forces. 2. The human resource management in universities needs to be transformed from "transactional" to "strategic", and the demand for talents is increasing. 3. Policy support for universities to employ autonomy and optimize personnel allocation. 4. The development of the market mechanism makes the consciousness of the subject of talents in universities increasingly stronger. 5. Colleges and universities have diversified capital investment, which is convenient for the introduction of talents. 6. The demand for higher education resources by the state, society and students is constantly expanding.
Challenges	<ol style="list-style-type: none"> 1. Higher education management costs are increasing. 2. The competition for teacher human resources is fierce. 3. Challenges brought by the reform of higher education. 4. Enhance the awareness of talent flow. 5. College educators attach importance to changes in personal values.

**Source: [29, 30,31].*

Human resource management in Chinese universities has its own characteristics, and other countries also have their own characteristics. By studying the human resource management of universities in other major countries in the world, this research compares their characteristics and proposes methods that China can learn from (table 1.5).

Table 1.5 - Comparison of human resource management in major national universities

Nation	Features	Problems	Lessons from China
1	2	3	4
U.S.	<p>1. Divide the teaching staff into three categories: teachers, administrators, and staff, and manage them separately.</p> <p>2. The management of teachers is carried out in accordance with the contract and protected by the law, with a five-year employment period, during which they cannot be dismissed except in violation of the law.</p> <p>3. Implement the corresponding punishment system to promote teachers to improve their teaching level.</p> <p>4. Except for the president and the vice presidents, other management positions are held by tenured professors.</p>	<p>1. The school strictly implements the established teacher recruitment procedures, and the recruitment process is very complicated and lengthy.</p> <p>2. Under the system of "promotion or leave", the result is an increase in the flow of people, resulting in instability of human resources.</p> <p>3. Even if some teachers have a high teaching or academic level, they cannot be directly hired for tenure positions when they are hired for the first time in a university [32].</p>	<p>1. The fact that the administrative leadership positions are held by senior and older professors is worthy of reference by domestic universities. The age of teachers who have obtained tenure-track professorships is generally around 50 years old. The teaching and scientific research innovation ability of these people is already at a disadvantage, but they have rich management experience. It fully embodies the harmony and unity of professors' academic governance and professors' governance of schools [33].</p>
U.K.	<p>1. While attaching great importance to the professional skills of talents, the school is also committed to eliminating all discrimination based on gender, race and age, so as to implement a unified and fair policy.</p> <p>2. The human resources management department has more refined settings and is committed to providing more professional human resources services.</p> <p>3. Pay attention to the training of employees, and classify and train different types of employees [34].</p>	<p>1. There is a common problem in British universities that professionals are unwilling to engage in management work [35].</p>	<p>1. Promote the scientific, humanized, professional and informatized level of human resource management, and better realize the open, fair and just value proposition of running a school.</p> <p>2. Avoid overstaffing, there are fewer administrative leadership posts and excess ordinary administrative management posts, less research and scientific research, and excess lecturers.</p>

Table 1.5 continued

1	2	3	4
Germany	<ol style="list-style-type: none"> 1. Professors enjoy the status of national public officials, and teachers uniformly implement the salary standards for civil servants. 2. College teachers can take on-the-job training to promote the professionalization of teachers. The government and universities have special mechanisms to promote teachers' training. In addition, teachers can improve themselves through continuing education. 3. Professors are well-paid and have high social status. 	<ol style="list-style-type: none"> 1. The implementation of the job rank system lacks incentives and is easy to slack off. 2. The appointment of teachers is strict, and the training process of professors is strict and time-consuming [36]. 	<ol style="list-style-type: none"> 1. Avoid nepotism among professors in universities, promote the flow of talents, and increase the number of openly hired professors outside the school. 2. Strict requirements for the training of professors, improve the quality of professors and scientific research, teaching ability and level.
Ukraine	<ol style="list-style-type: none"> 1. Teachers can receive more international support and rewards. 2. Teachers participate extensively in scientific research cooperation and exchanges among European countries. 3. Expand the participation of young scientists in scientific research projects at all levels. 4. Constantly improve the rating and incentive system for teachers. 5. Attach importance to the gender equality of teachers in the management. 	<ol style="list-style-type: none"> 1. Unbalanced development of various majors, and incomplete coverage of the professional fields. 2. Higher education is developed and the number of universities is large, but the number of teachers is relatively small. 3. School management is free, but the state has too little support for school teachers. 	<ol style="list-style-type: none"> 1. Expand foreign cooperation and exchanges. 2. Actively carry out cooperation in transnational science projects. 3. Encourage teachers to learn English and study abroad. 4. Give universities greater management freedom.

*Source: [32-36].

Scientific management theory originated from the West, and European and American countries have accumulated rich experience in the theory and practice of human resource management in universities. If China wants to promote the high-quality development of higher education, it needs to continuously learn the advanced theories and practical techniques of human resource management in Western countries. By researching and sorting out the human resources management of universities in major

countries, it is found that each country has its own characteristics. China should focus on learning from the American experience of professors' academic management and professors' management of schools. Focus on learning refined management and legal construction from the UK. Focus on learning from Germany the unified treatment standards for teachers and civil servants and the professional development of teachers.

To develop the labor potential in the field of education, it is necessary to continuously improve the quality of teachers and improve the quality of personnel training. According to Korchak E.A., labor potential is a systemically important factor in the socio-economic system of a territory, and different methods are used to define the concept of labor potential. The prevailing view is that the workforce potential of the region has been realized at the expense of the knowledge, experience, and expertise of the able-bodied population to engage in productive activities. The efficiency of this ability determines the level of labor productivity and depends on the quantitative (determined by demographic factors) and qualitative (determined by socioeconomic level) characteristics of the labor potential of the region [37]. Therefore, labor potential includes the two dimensions of the number of laborers and the quality of laborers, and at the same time, it includes the laborers who have participated in the work and the laborers of the career. Under the circumstance of a certain number of laborers, continuously improving the knowledge, ability, and comprehensive quality of laborers is a necessary activity for the development of labor potential. Worker potential is not an arithmetic component of social potential (as many researchers think). Social potential can increase or decrease the social impact of human potential. Since the positive perception of social potential is mainly manifested in society as a whole and at the level of coordination of social relations within certain functional and territorial communities on the basis of cooperation and partnership, the implementation of such relations ensures not only the effective use of human potential, and coordinate the social behavior of individuals both within and outside of their economic activities [38]. On the basis of the agent-based labor force potential reproduction theory, a comprehensive model of urban structure labor force potential reproduction is constructed, and qualitative and quantitative methods are used in the research process. Agent-based modeling uses the concept of qualitative characteristics of

the population for the first time, and each agent is assigned eight basic qualities: physical and mental health, cognitive and creative potential, social competence, Cultural and ethical levels, achievement needs [39].

From a macro perspective, many countries have taken reasonable planning of the labor force, investment in national education, promotion of employment, strengthening of social security, and improvement of talent policies as important policies for human resource development, which not only promotes the development of human resources. The promotion of self-interest also plays an important role in the speed of social development. Human resource development from a micro perspective can be roughly divided into two directions. One is to improve people's knowledge, wisdom, experience, skills, and other capabilities through training, learning, etc., focusing on the improvement of their own capabilities [40]. The second is to improve people's enthusiasm through salary management, performance management, career planning, etc., focusing on the improvement of vitality and creativity at work [41]. The two directions complement each other and promote each other, which together constitute a complete human resource development system.

The most important workers in the field of education are teachers, who are very important human resources for schools and society. In the context of the rapid development of science and technology, if the country wants to ensure the speed and quality of scientific and technological development, it must do a good job in the development of knowledge economy, and the key to the development of a knowledge economy lies in the knowledge education in universities. In order to truly keep pace with the times, modern social education must develop scientifically and rationally and make effective use of internal human resources.

The main theoretical basis for human resource development and potential labor development in the field of education are as follows:

The first is Maslow's Hierarchy of Needs. American psychologist Abraham Maslow put forward the theory of human needs hierarchy in 1943, which divided human needs into five levels (figure 1.5): physiological needs, safety needs, social needs (for friendship and belonging) needs), respect needs, and self-actualization needs [42]. People

follow the above from low to high. Arrange the needs of the "pyramid" level and gradually pursue the satisfaction of their own needs, and get incentives from them. The theory emphasizes that human needs determine human motivation. And in every period, one need dominates, and other needs are subordinate.

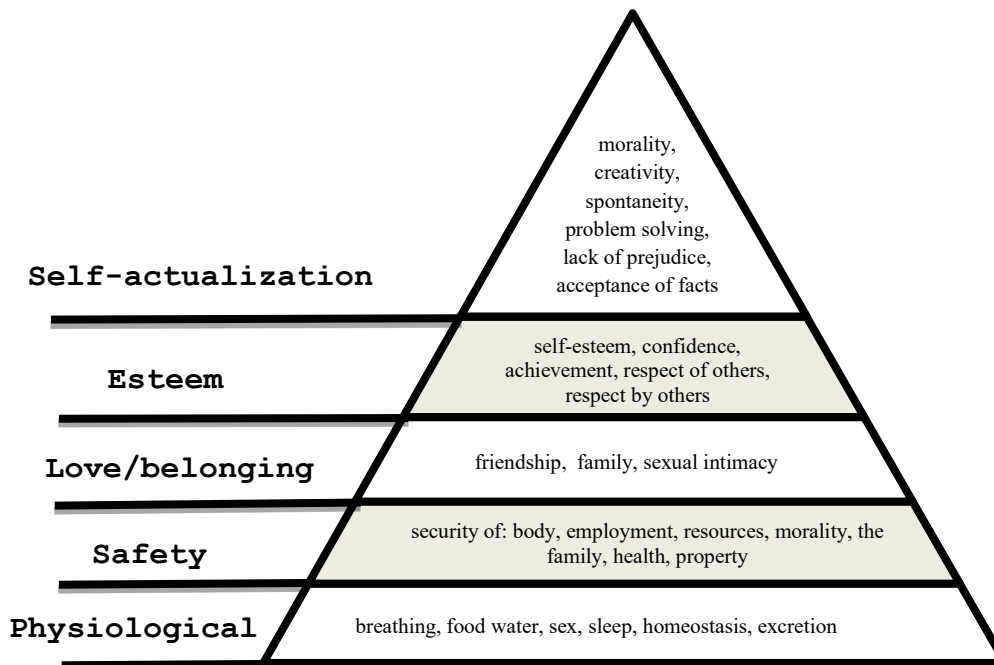


Figure 1.5 - Maslow's Hierarchy of Needs

**Source: [43].*

Through the research on the needs of teachers in different stages of Maslow's hierarchy theory research, a favorable way of teacher development planning is proposed, and an information-based teacher management platform is designed according to the needs theory plan. To achieve long-term and stable development of universities, it is necessary to improve teachers' academic level. Let them show their self-worth in the relaxed working atmosphere, and let more talents take root in the university and devote themselves to the university career [44].

The second is the human capital theory. In contrast to physical capital, human capital, also known as "intangible capital", refers to the labor capacity formed through human investment, condensed in laborers, and able to bring permanent sources of income to its users [45].

Researchers in different fields have put forward their own views from their own research perspectives, but there is no unified concept yet. Through a study of many kinds of literature, these studies tend to define the concepts of human capital and human resources as follows (table 1.6).

Table 1.6 - Human capital development history and human resource concept

Researchers	Concept description
1	2
A. Smith [46]	Adam Smith, in his 1779 book the wealth of nations, argued that fixed capital consists of the useful abilities acquired by all inhabitants or members of society, acquired through education, learning, and apprenticeship, and generally at a real cost. Thus, it can be viewed as realized capital fixed in the individual.
A. Marshall [46]	In his principles of economics, published in 1890, Marshall wrote: "We have defined personal wealth as consisting, first and foremost, of the talents and habits that directly enhance the productive efficiency of an individual. If these capabilities can be counted as capital. In this way, personal wealth and personal capital can be converted to each other. Here, the most appropriate understanding is to regard human capital as the source of wealth, just like material capital. Obviously, human capital is included in the concept of capital, and this understanding will not lead to the ambiguity of people's use of this concept".
P. Drucker [47]	In 1954, Peter Drucker pointed out in management practice that the only difference between human resources and all other resources is that human resources are "people", which are resources with "special assets" and have qualities that other resources do not have, namely "communication ability, integration ability, judgment and imagination.
T. Schultz [48]	In 1959, Thodore W. Schultz put forward the theory of human capital in his article "human investment: an economist's perspective". He believes that human capital is the ability of people as producers and consumers, people's knowledge, ability, health.
G. Becker [49]	In 1964, Garys Becker published human capital: theory and experience analysis of education in particular, which further developed human capital in theory and experience. Becker systematically explained human capital and human capital investment from the perspective of family production and individual resource allocation, and provided a convincing theoretical explanation for the nature of human capital and the investment behavior of capital.
F. Harbison [49]	"Human resources are the ultimate foundation of national wealth," Frederick H. Harbison, a British economist, wrote in his 1973 book the human resources of national wealth. Capital and natural resources are the passive factors of production, and people are the active forces to accumulate capital, develop natural resources, establish society, economy and politics, and push the country forward.
Xu Hui [50]	In 2006, Xu Hui pointed out that: "Human resources is the general term for the ability of labor force to promote social and economic development. It includes two aspects: one is the labor ability of the population that has been put into social development, and the other is the labor ability of the population that has not been put into social development activities".

Table 1.6 continued

1	2
Guan Yunfei, [47]	In 2009, Guan Yunfei pointed out that: "Human resources, as a special kind of resource, refers to the total labor capacity of the population within a certain range. It is expressed by the number and quality of people who are capable of creating wealth for the society within a certain range".
Lan Chao [51]	In 2021, Lan Chao proposed that human resources refer to the total number of people who are in, under and over working age but have the ability to work within a certain area.

**Source: prepared by the author [46-51].*

Human capital refers to the immaterial capital reflected in the quantity and quality of workers. It is reflected in a certain period of workers' health, operating skills, and labor proficiency. Human resources refer to the sum of the labor capabilities that have the ability to engage in social labor, and create social value and social wealth within a certain period of time.

The third is the theory of teacher professional development. Career development theory first appeared in the form of "career guidance", which consists of career choice theory and career stage theory. The theory of teacher professional development is not a static or isolated theory. Therefore, it is not possible to simply apply a theory but to take corresponding measures flexibly according to the actual situation. Determine the appropriate career development direction based on the mutual interests of personal career development and organizational development. Teachers are a sacred profession of specialization, and teacher specialization refers to the dynamic development process of teachers who undergo professional training and lifelong learning, continuously improve their employment quality, and become education experts [52].

The development of labor force potential is a complex and systematic work, which requires consideration of macroscopic social and economic development, as well as the situation of individual workers, and more importantly, between workers and workers in social, political, and economic activities, and between workers and workers. Interactions between organizations. Traditional labor potential development researchers attach great importance to the impact of socio-political economy and culture on the potential labor force and pay attention to the study of labor potential from the quantitative analysis of laborers. All these researches are based on the macro perspective, and there are few

researches on the micro level of labor potential development. In addition, researchers attach great importance to considering issues in the field of labor potential from the perspectives of economics and demography while ignoring that laborers are human. They have their own needs, motivations, independent thoughts and cognitions. Therefore, we should study the problems in the field of labor potential from various perspectives, such as management, sociology, anthropology, and psychology.

In order to make university human resource management more effective, it is necessary to explore its management characteristics. It is necessary to take the characteristics of relevant management as the foothold of optimizing the development of university human resource management system. The goal is to improve the quality of human resource management in universities. Human resource management in universities has the following characteristics: The first is human nature. The purpose of human resources management is to promote the steady development of education in universities. The main body of management is teachers. Only by always paying attention to teachers can we formulate management regulations that meet the actual needs of teachers' development and eliminate the resistance of human resources management. The second is professionalism. Human resource management can improve the efficiency of the division of labor and collaboration among teachers, give full play to their expertise, and make each educational management work more meticulous. The third is reciprocity. Universities improve teachers' work efficiency through human resource management, thereby improving the overall efficiency of the university and forming common interests between teachers and universities. The fourth is integrity. University human resource management is related to every teacher and is in line with the university development strategy. It can optimize and adjust according to the development needs of university education, and highlight the comprehensiveness of university management system. The fifth is intersectionality. Human resource management focuses on interdisciplinary development. Psychology, management, economics, sociology, law, etc., lay the foundation for the effective implementation of HRM objectives. Universities need to take intersectionality as the focus of human resource management system development and absorb various management ideas. The sixth is systemic. Human resource management in universities

has the characteristics of comprehensiveness, and the relevant rules and regulations, management concepts, and reward and punishment mechanisms are in a state of parallel development, which makes the relevant management system more extensive. The seventh is liquidity. Teachers are constantly flowing between regions and universities. Schools recruit new teachers to fill the shortage of human resources. At the same time, they must anticipate the mobility of talents in universities and reduce the turnover rate of outstanding teachers by optimizing human resource management strategies [53]. The eighth is duality. On the one hand, the human resources of universities need to use their own intelligence and ability to cultivate the educated; on the other hand, the human resources of universities have cultivated new human resources for society - graduates.

Human resource management is a science with strong application. Therefore, scientific methods are very important to improve the efficiency of human resource management. Human resource management is a systematic project which involving many links between an organization's internal talent management and service. Researchers generally believe that Human resource management mainly includes Human resource planning, Recruitment and configuration, Training and development, Performance management, Compensation and benefits management, Labor Relations Management. Managers will use different methods in each link to make management more efficient (table 1.7). Therefore, it is necessary for us to deeply analyze the common management methods in each management link.

Table 1.7 - Specific methods of human resource management

Management module	Method	Describe
1	2	3
Human resource planning	Human resource planning	Transform the enterprise human resources strategy into medium and long-term goals, plans and policy measures, including the analysis of the current situation of human resources, the forecast and balance of future personnel supply and demand, and ensure that the enterprise can obtain the required human resources when needed.
	Human Resource Accounting	Cooperate with the financial department to establish a human resources accounting system, carry out the accounting of human resources investment costs and output benefits, and provide a basis for human resources management and decision-making [54].

Table 1.7 continued

1	2	3
Recruitment and configuration	Job Analysis and Design	On the nature, structure, responsibilities, processes of each job position in the enterprise, as well as the quality, knowledge and skills of the staff who are competent for the position, on the basis of the relevant information obtained from the investigation and analysis, the personnel management documents such as job description and job specification are compiled.
	Employee recruitment and selection	According to the requirements of human resource planning and job analysis, we will recruit and select the required human resources for enterprises and arrange them to certain positions.
Training and development	Training and development	Improve the knowledge, ability, work attitude and work performance of employees, groups and the whole enterprise through training, and further develop the intellectual potential of employees to enhance the contribution rate of human resources.
	Career plan	Encourage and care about the personal development of employees, and help employees formulate personal development plans to further stimulate their enthusiasm and creativity.
Performance management	Performance Evaluation	Evaluate and evaluate the contribution of employees to the company and the performance achieved in the work within a certain period of time, and give timely feedback to improve and improve the work performance of employees, and provide a basis for personnel decisions such as employee training, promotion, and remuneration [55].
Compensation and benefits management	Payroll Management	Including the design and management of basic compensation, performance compensation, bonuses, allowances and benefits and other compensation structures to motivate employees to work harder for the company.
	Employee incentive	Using motivation theories and methods to satisfy or limit the various needs of employees to varying degrees, causing changes in employees' psychological conditions, and motivating employees to work hard for the goals expected by the enterprise.
Labor Relations Management	Labor Relations Management	Coordinate and improve the labor relationship between enterprises and employees, carry out corporate culture construction, create a harmonious labor relationship and a good working atmosphere, and ensure the normal development of business activities [56].

**Source: prepared by the author based on materials [54, 55, 56].*

Generally speaking, the common methods of managing human resources will be considered from six aspects: initial human resource planning, recruitment and configuration, training and development, performance management, compensation and benefits management, and labor relations management. In addition to these general human resource management methods, there are more specific management methods (table 1.7).

The application of human resource management tools in the human resource management work of universities can improve the quality of college teachers'

management and make the internal management business of universities effective. In order to make human resource management work in universities more effective, it is necessary to discuss the characteristics of its management tools and take the characteristics of related management tools as the foothold for the optimization and development of the human resource management system in universities, aiming to improve the quality of human resource management in universities. The characteristics and advantages of human resource management tools in universities mainly include the following categories.

The first feature is that it can significantly improve the degree of professional matching between teachers and positions. The trend of global economic integration also has an important impact on universities and society. At this time, it is necessary for universities to improve the management standards of teachers and achieve strict management [57]. Human resource management tools can play an important role in such human resource management activities. Using human resource management tools, comprehensively considering talents, and adhering to the principle of selecting talents, can improve the degree of professional matching and ensure that the selected talents can successfully complete the job.

The second feature is that it is convenient to form a well-standardized reward and punishment mechanism for college teachers. Properly encouraging teachers in universities can play a role in mobilizing teachers' enthusiasm for work and effectively improving teachers' enthusiasm for work [58]. In this regard, universities should use human resource management tools to design a relatively perfect incentive mechanism. Appropriate rewards should be given to teachers with positive work attitude and high quality scientific research achievements. It can be a spiritual reward or a material reward. This can not only mobilize teachers' enthusiasm for work but also strengthen teachers' sense of belonging to universities and effectively condense the centripetal force of employees within universities. Human resource management tools also combine rewards and punishments to ensure a healthy and fair working atmosphere in universities and effectively improve teachers' enthusiasm for work.

The third characteristic is that it is beneficial to improve the informatization level of human resource management in universities. In the management of human resources, universities can use information technology to improve work efficiency. universities can use information technology in human resource management tools to manage teacher selection, evaluation, performance, salary management and other activities. Thus, it can effectively improve the scientific and accurate level of human resources management in universities, and realize the informatization and automation level of human resources management in universities [59].

The fourth characteristic is that it is helpful for universities to implement the concept of people-oriented management. People are the most important and active factor in universities and are very important to the development of universities[60]. The implementation of humanism reflects the respect of individual teachers in colleges and universities. This can make teachers more proactive in the work process, and the rights and interests of teachers will be protected. Applying human resource management tools to human resource management in colleges and universities can make the management work more humanized. It can well change its management concept and mode, and better play the role of people-oriented management concept.

The fifth characteristic is that it is conducive to the refined management of universities. Human resource management tools in universities should reasonably allocate human resources and adjust the coordination relationship between various elements of the human resource system when carrying out human resource management work. Managers can do a good job in the segmentation and quantification of human resources work, such as being able to accurately calculate the workload and work situation of each teacher. In this case, universities can formulate effective work plans according to the actual workload of teachers and improve the work plan. Delicate management can also help teachers better participate in work, help universities coordinate related resource allocation, improve teachers' working conditions, remuneration, promotion channels, etc., and increase teachers' life satisfaction, focusing on the relationship between teachers and universities. The common interests between the

two must stimulate the initiative of teachers' work practice, realize the common development of teachers and universities, and help the efficient development of college education [61].

Through the research on the theory of labor potential in the field of education, it is found that in order to fully develop the potential of labor, Chinese universities must pay attention to the systematic human resource management of teachers, of which human resource development is the key. With the slowdown of global population growth, the potential development of human resource development has encountered a bottleneck, and the research focus should focus on developing the potential of labor quality, that is, to strive to improve the overall quality of individual workers [62]. Therefore, it is of great significance to study the in-depth exploration of teachers' human resource management at the micro level. This research will focus on the use of current human resource management theories and technologies and through in-depth research on teachers' competency, motivation, and other personality characteristics to explore effective ways to improve human resource management. Finally, we can find an effective way to improve the work efficiency of teachers and promote the overall efficiency of universities.

1.3 Characteristics of foreign theories of human resource management

China has a long history, and Chinese culture contains rich human resource management ideas. But scientific human resource management theory still originated in western countries. In order to improve the efficiency of human resource management and promote economic and social development, we need to conduct in-depth research on foreign human resource management theories. Apply their ideas, theories, knowledge, and techniques to human resource management practices that improve organizational efficiency.

This part studies the related concepts of human resources and human resource management and their development process. The relevant theories of human resource management are sorted out, and the theoretical models proposed by the researchers are discussed in detail. Through the research on the development process and development

trend of personnel management, the important content in the field of human resource management research high-performance work system is introduced. The concept of high-performance work system is put forward through a comprehensive study of the theory of high-performance work system and their development direction. It lays a theoretical foundation for further research on human resource management.

William Petty's assertion that "land is the mother of wealth and labor is the father of wealth" and Bouagir Bell's statement on the value of working time are early representations of human resources. In 1919, the economist-institutionalist John R. Commons first used the term "human resources" in his book *Industrial Management*, but he focused more on the study of government and institutions of effect. In his 1954 book, *Management Practice*, Peter F. Drucker, a well-known modern management scientist, stated, "Compared to all other resources, the only difference is that it is a person", and it is a resource with "special assets" that managers must consider. Drucker believed that human resources have qualities that other current resources do not have, namely, "coordination, integration, judgment and imagination" [63]. After Peter Drucker proposed the concept of "human resources", E. Wight Bakke (E. Wight Bakke) 1958 published a book, "The function of human resources", which deals in detail with the management of human resources. Human resource management is seen as a general management function. Buck believes that the function of human resource management is as important for the success of the organization as other management functions, such as accounting, production, and marketing. According to Barker, the HR function includes personnel administration, labor relations, human relations, and executive development [64]. In 1982, Tichy, Fombrum and Devanna first proposed the integration of human resource management and organizational strategic planning to improve organizational performance in "Strategic Human Resource Management". They comprehensively analyzed the deep relationship between enterprise development and human resource management [65]. In 1984, Beer, Spector, and others published *Human Capital Management*, emphasizing that effective human capital management can exploit and unleash great potential for productivity. It is believed that human resource management is not only the unilateral management of employees but also the combination of employee

development and enterprise development in order to obtain higher management benefits. Beer's concept opens a new chapter in modern human resource management [66]. In 1995, Salaman put forward the concept of an integrated human resources strategy, arguing that changes in the environment will affect the company's formulation of overall strategy, and human resources strategy is formulated in accordance with the company's overall strategy [67]. In the same year, Huselid, Delanney, and Wright emphasized that it is the overall human resource management system, rather than individual human resource management practices, that can create sustainable competitive advantages for enterprises in their research on the best human resource management model. In 2020, Zhou Yulian reviewed Marx's views on human capital and suggested that the new trend in human resources development in the new era is "two transformations, one point of view". Transformation of human resources into human ones, the transformation of aggregate advantages into per capita advantages, and establishment of a human-oriented concept of human resources development [68]. Table 1.8 presents related research on the concept of human resources. As can be seen from the table, different researchers have studied human resources from different perspectives. Their concept of human resources is influenced by their own theoretical background. We can compare the concepts of human resources proposed by different researchers to help us develop our own concepts.

Table 1.8 - Related research on the concept of human resources

Researcher	Important discussion
1	2
William Petty	"The earth is the mother of wealth, and labor is the father of wealth".
Bouagir Bell	Value determines working time. Agirber pointed out that in order to support the normal development of the social economy, all types of goods must be exchanged at a certain price ratio, otherwise it will cause economic disruption, commercial stagnation and cause great suffering to all industries. He believes that the basis of a certain percentage of the price or equivalent exchange is "necessary costs" in the production of goods, and "necessary costs" are based on labor consumption.
Commons	The term "human resources" is being used for the first time, but he believes that the term focuses on the political aspects of government and institutions.
Peter Drucker	It is believed that human resources are special resources that have "the ability to coordinate, the ability to integrate, judgment and imagination".

Table 1.8 continued

1	2
White Tank	The book "Human Resource Function" deals with issues related to human resource management. He believes that the function of human resource management is as important as human resources.
Tichy, Fombrum, Devanna	For the first time, Strategic Human Resource Management proposed integrating human resource management and organizational strategic planning to improve organizational performance, and comprehensively analyzed the deep relationship between enterprise development and human resource management.
Beer, Spector, etc.	He opens a new chapter in modern human resource management and believes that human resources and enterprise development are complementary, complementary.
Salaman	Human resources are influenced by corporate culture.
Guzelid, Delaney, Wright	Human resources are an important component of a company's competitive advantage.
Zhou Yuliang	This article summarizes Marx's view of human capital and proposes a new trend in the development of human resources in the new era as "two transformations, one point of view"

**Source: prepared by the author [68].*

At present, human resource management has always been the focus of research by management researchers. This study divides the theoretical development of HRM into several stages and introduces the important theories in each stage. Through our research, we divide the development of human resource management research in China into four stages (table 1.9) [69].

Table 1.9 - Comparison of development stages of human resource management theory research in China

Stage	Features	Advantage	Shortcoming
1	2	3	4
HR management stage	At this stage, people are managed as files, and the personnel department is only a department that handles formalities. It is also mainly responsible for daily attendance, salary payment, resignation and other related procedures.	1. It is suitable for small and medium-sized enterprises with small scale and few employees. 2. Lower requirements for managers.	1. In terms of management technology, the management technology works according to the rules, and the machinery is rigid 2. The management strategy focuses on the recent or current personnel work, and considers the situation on a case-by-case basis. 3. In terms of management methods, system control and material incentives are mainly adopted, which cannot reflect the value of each person. 4. The means of management are single, mainly manual.

Table 1.9 continued

1	2	3	4
Human Resources management stage	This stage emphasizes the "work" as the core, and its goal is to focus more on how to enable individuals to complete the work, and start the establishment of various modules of human resource management.	<ol style="list-style-type: none"> 1. Detailed division of labor in human resource management. 2. The degree of specialization of management personnel is improved. 	<ol style="list-style-type: none"> 1. The management modules are independent of each other and lack communication. 2. Pay attention to the management and use of human resources and lack the concept of human resources development.
Strategic Human Resource Management Stage	The human resources department has developed into a strategic partnership between the business departments, whose goal is to support the realization of the company's strategy.	<ol style="list-style-type: none"> 1. The business scope of human resource management has further increased. 2. Human resources are no longer passively supporting the realization of corporate strategic goals, but actively integrating with corporate strategies and participating in every aspect of corporate strategy realization. 	<ol style="list-style-type: none"> 1. Human resource management needs to be in line with the corporate strategy, and it is prone to disputes over management authority. 2. Human resource management workers need strategic management ability and theoretical knowledge, and face greater challenges.
Talent management stage	The goal of this stage is to achieve continuous talent supply in the process of company development, and the business focus of human resource management shifts to attracting, recruiting, developing, managing and retaining talents.	<ol style="list-style-type: none"> 1. Human resource management is seen as a whole rather than a split model. 2. Develop people as an important resource so that employees can work proactively and creatively. 3. The strategic position of human resource management has been strengthened. 	<ol style="list-style-type: none"> 1. The assessment cost is high and difficult, and it seems that the ideal is difficult to do. 2. Excessive emphasis on humanism, employees will pay more attention to their own interests, blind competition, easy to form small gangs.
New stage of human resource management	The types of management organizations are diversified and the methods are diversified. Professional service outsourcing agencies appear. Emphasis on longevity, consistency and effectiveness of work.	<ol style="list-style-type: none"> 1. The management work is refined, which can form a management synergy. 2. Management outsourcing to promote the formation of a professional human resource management organization. 	<ol style="list-style-type: none"> 1. Diversification and differentiation of management functions can easily lead to unclear responsibilities and rights. 2. The management functions are further differentiated and the workload increases. 3. Management outsourcing increases the economic burden of enterprises.

*Source: prepared by the author[69].

International human resource management theory research is mainly divided into four stages of development (table 1.10)

Table 1.10 - Comparison of development stages of international human resource management theory research

Stage of development of foreign personnel research	Specifics
Stage of labor management	Mainly started in the early nineteenth century, the value of labor was not yet realized, and the status of workers was low. When it comes to improving employee motivation, Owen focuses on motivating employees through benefits and performance appraisals. Taylor severely disciplined employees with discipline and detailed job descriptions, and motivated them with lucrative money. Munsterberg uses psychological tests to select suitable employees. These attempts gave rise to the first special department of personnel management. Badge believes that work efficiency can be improved through the division of labor, and treats people as "material people" without taking into account any emotional or social factors.
Stage of scientific management	Mainly from the late nineteenth to early twentieth century. The main focus is on management and research, the application of a standardized mechanical management model, the improvement of the relationship between work and management through welfare policy, the establishment of performance appraisal and more.
Stage of interpersonal relationships	The Hawthorne Mayo test emphasizes the company's spirit of cooperation, employee satisfaction, etc., and establishes the theory of interpersonal relationships. Gradually the status of workers improved, and human capital began to be valued.
The science of organizational behavior	The role of personnel managers was gradually clarified, more and more legislation on personnel management appeared in the government, and a number of books on personnel management appeared in scientific circles.
Strategic Human Resources Management (SHRM) phase.	For the first time, the value of people is as important as the value of material resources. The strategic nature of organizational development connects people and organizations, integrates and absorbs the results of research on organizational behavior and the study of interpersonal relationships, as well as emphasizes respect for people. values.
Stage of human resource management focused on internationalization, cross-culture and diversification	The IHRM governance strategy and its corresponding governance model emphasize the internationalization and diversification of human resource management. Green forms of management and human resource management, based on the economy of sharing and the economy of concerts, reflect the diversification of forms of human resource management at a new stage of development.

**Source: prepared by the author [70].*

Currently, the development of human resource management theory is at the stage of internationalization, cross-culture, and diversification, but it also demonstrates some new directions of development. Pavan believes that competition in various fields will be

associated with talent competition, and human resources are the basis of enterprise management [70]. There are four international strategies in International Human Resource Management (IHRM): ethnocentric strategy, multicenter strategy, global center strategy, and mix. Different strategies have different respective management models. Among them, the most representative management models are the EPRG model (figure 1.6), the IN-DI model (figure 1.7), and the integration-response model (figure 1.8).

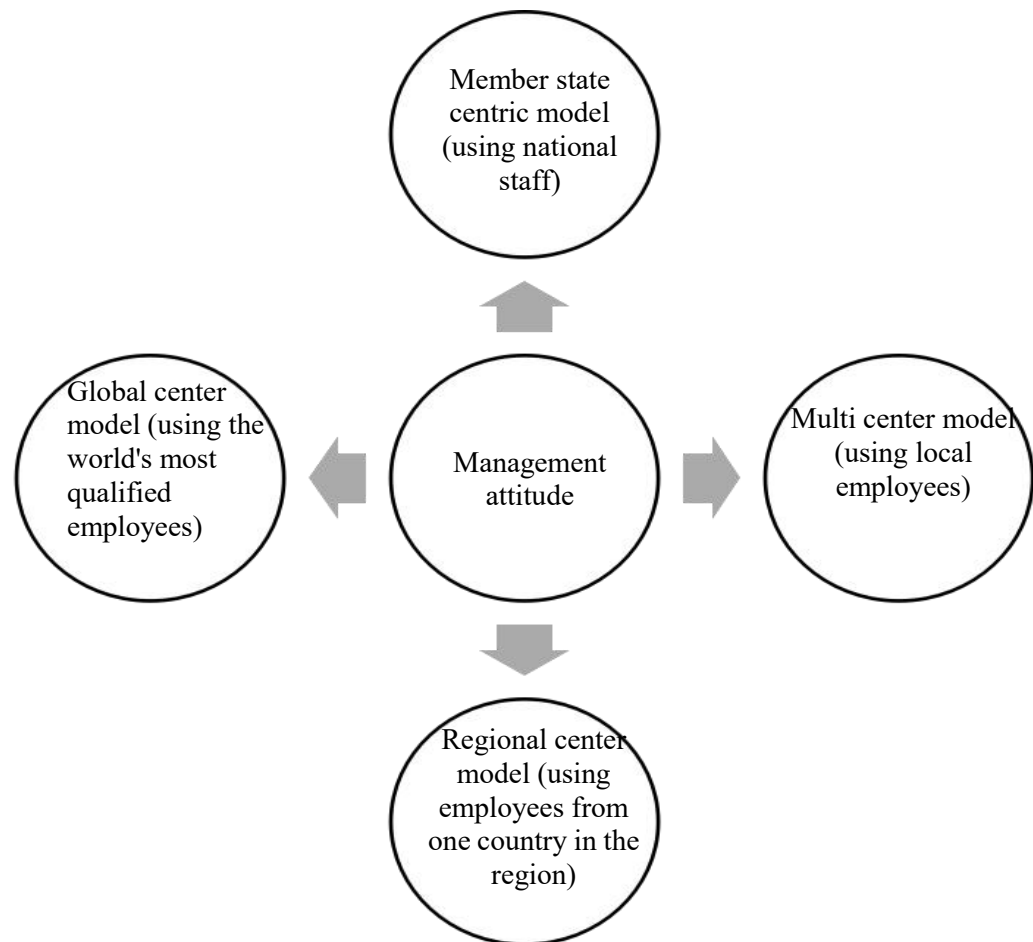


Figure 1.6 - EPRG model

**Source: prepared by the author [71].*

Heenan and Perlmutter founded the EPRG management model in 1979, which divides the human resource management attitude of multinational enterprises into the Ethnocentric model, the Polycentric model, the Regiocentric model, and the Global center Geocentric model based on the management-oriented concept. The Ethnocentric

model means that multinational companies focus their strategy on their home country business, and their business in other countries is only placed in a secondary position. The company's employees are mainly employees from a certain country, especially those in core positions. The Polycentric model means that multinational companies focus their strategies on the business of their overseas subsidiaries, and the parent company is only responsible for support and service activities such as guidance and liaison. The Regiocentric model refers to the strategy that multinational companies focus their strategy on overseas operations in a certain area and pursue the strategy of maximizing the overall interests of overseas subsidiaries or branches in this area. Geocentric mode refers to the strategy that multinational corporations to unite different subsidiaries to coordinate actions through global networks and seek to maximize the overall interests of multinational corporations [71].

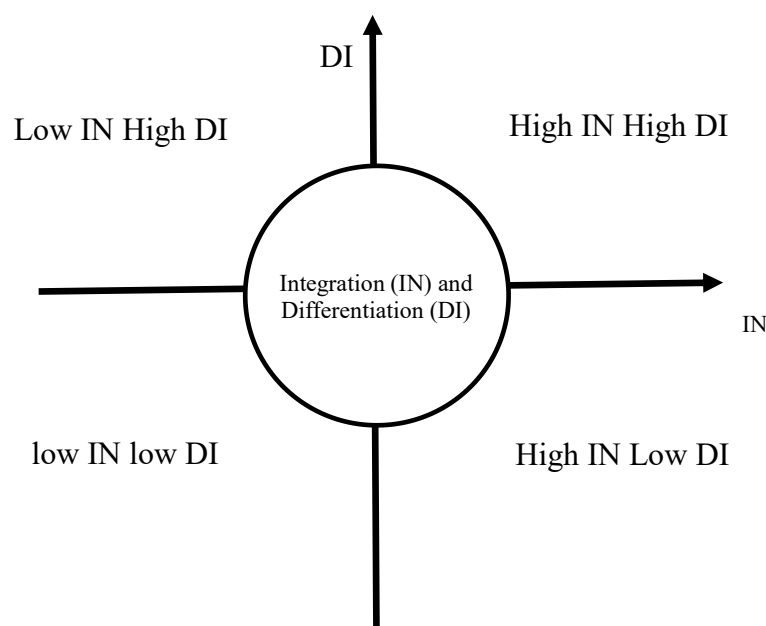


Figure 1.7 - IN-DI Model Diagram

**Source: prepared by the author [71].*

From the perspective of resource capacity in international human resource management, Kamoche (1996) studied how to balance the needs of the organization for coordination and control (Integration) at the center and sensitivity and flexibility (Differentiation) at the subsidiary or unit level change the key issue of increasing pressure.

Offers a Resource Competency (RC) perspective to revisit the integration-differentiation (IN-DI) debate, proposing how companies can address some of the dilemmas inherent in IN-DI decision-making by building up their knowledge and expertise. The model believes that the balance coordination, and control should be paid attention to in the human resource management of multinational corporations is Integration and flexibility and sensitivity are Differences. Integration and Differentiation are divided into four quadrants, which also divide the management types into four categories, namely: high IN low DI, high IN high DI, low IN high DI, and low IN low DI. According to the different strategic orientations, career management, personnel allocation, and management form, the mode of international human resource management is different. This perspective also allows us to assess the underlying paradigmatic foundations upon which strategic decisions in international human resource management are based [72].

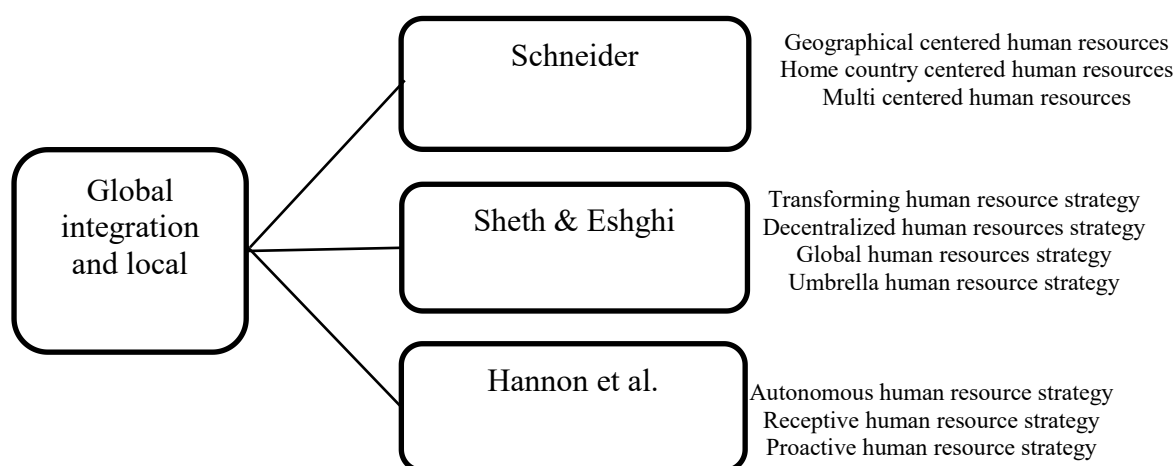


Figure 1.8 - Integration-response model

**Source: prepared by the author [73].*

The integrated strategic orientation of the international human resource management of multinational corporations seeks to use the best approach and apply it to the whole company to create a global system. According to this guide, some local differences are allowed. Schneider (1988), based on two dimensions of global integration and local differentiation, divided the international human resource strategies of multinational companies into geocentric human resource strategies (high global

integration and high local differentiation), human resources focused on the home country strategies (high global integration and low local differentiation), polycentric strategy (low global integration and low local differentiation). Sheth & Eshghi (1989) separated human resource strategies from coherence and localization and proposed the application of various strategies. They divided IHRM strategies into Adhoc Human Resource Strategy, Decentralized Human Resource Strategy, World Wide Human Resource Strategy, and Umbrella Human Resource Strategy. To address the globalization and localization dilemma, Hannon et al. (1995) built the Global Integration-Local Response Model (GI-LR) as a strategic response to the standardization-adaptation dilemma and assigned it to three different strategies. These are autonomous HR strategy (low global integration, high local response), receptive HR strategy (high global integration, low local response), and proactive HR strategy (high global integration, high local response) [73].

According to the above research, researchers believe that the trend in the development of human resource management theory is as follows: First, foreign human resource management has rich theoretical support. Researchers are focusing on human resource management systems to understand, develop and apply specific human resource management techniques from a system perspective. Explore human resource theory from a more integrated and integrated world perspective. Secondly, in the developed countries of North America and other regions, the trend towards professionalization and specialization of human resource management is constantly growing. There is a formalized education system for human resource management to provide human resources managers with special knowledge and skills for social and economic development [74]. Third, the influence of various liberal ideas in the process of managing foreign human resources at the highest level is a manifestation of human initiative, and full attention is paid to the peculiarities of human resources. Enterprises gradually show their respect, understanding and care for human resources through the welfare system. This greatly enhances employees' sense of belonging and identity to the organization, stimulates their potential and creativity, and they can better serve the organization. Fourth, note the importance and role of human resource management in the management of the organization. Human resource management functions are gradually becoming specialized

and departmental, and the specific content of human resource management is increasingly enriched in the process of continuous improvement, with an emphasis on human resource management, training, and development of employees. Fifth, attach importance to creating a cultural atmosphere for the enterprise. The cultural atmosphere can imperceptibly influence the behavior of the people around you. A good and unified corporate culture can allow corporate people to be positive and work hard to achieve the ideal state when the part is bigger than the whole. Sixth, the forms of human resources are gradually diversifying [75]. Widespread use of digital models to free up human resources through the expansion of big computer data. Promote green human resource management, link everything to the environment, work together to create a friendly environment, and create a long-term corporate structure. The economic form of the sharing economy and the gig economy maximizes the deployment of human resources. On the one hand, human resources can be used wisely, and on the other hand, economic development improves quality and efficiency, creating conditions for improving people's lives.

Human resource management is an important scientific field in management, the ultimate goal of which is to increase the efficiency of organizational work. The theory of a high-performance work systems is an important research area in the study of organizational human resource management in terms of strategic human resource management. A high-performance work system (HPWS) is a core concept in strategic human resource management, also known as a "better human resource management system", a "high commitment system" or a "high engagement system", including the ability to improve organizational performance. A range of human resource management practices can better improve the knowledge, skills, and abilities of employees, as well as their motivation to work. At the same time, by protecting, authorizing, and training employees, they can improve their performance, benefit the organization, and ultimately achieve the organization's strategic goals [76]. In the 1980s, Japan's economy grew rapidly, and productivity surpassed that of the United States. American researchers have begun to study Japanese models of corporate governance and found that they appreciate the impact of human resource management activities such as training, occupational safety and teamwork with high employee participation in the organization. Terpstra and Rosell

(1993) postulated five best practices in recruitment and found that the use of these methods has a moderate relationship with organizational performance. Pfeffer (1994) argues that a wider range of 16 management techniques, such as participation and empowerment, incentive compensation, job security, motivation, and learning, can increase an organization's productivity and profitability. Similarly, Osterman (1994) argues that a large number of innovative working methods, such as teams, job rotation, quality control circles, total quality management, etc., lead to increased productivity in all US organizations. In 1995, Huselid first proposed that there might be an optimal human resource management model, which helps to maximize organizational performance. Huselid's hypothesis has attracted the attention of many human resource scientists, and more and more scientists around the world are involved in research work. Since then, Chinese and international researchers have conducted in-depth and systematic studies of high-performance operating systems and achieved many research results [77].

Walton believes that human resource management models can be divided into commitment and control. The type of commitment is to achieve the goal of extremely consistent autonomous behavior of employees for corporate purposes by strengthening the emotional bond between employees and the organization. The control type requires employees to strictly abide by the organization's management system and rules, and rewards employees according to measurable output, so as to achieve the purpose of reducing costs or improving efficiency. Delery and Doty summarized two models of human resource management from different human resource management practices. These are the internal type of development (internal system) and the market-oriented type (market-type system) [78]. Internal development is the treatment of employees with a long-term, developmental perspective and expects employees to be loyal to the organization and thus make a long-term contribution. Organizations that adopt internal development attach great importance to the development of employees, tend to give priority to recruiting employees through internal channels, and provide employees with extensive training. Their performance evaluation takes employee development as the starting point and uses less incentive compensation mechanism. Their employees have a high degree of job security and value employee participation in decision-making. Ensure

employee participation in decision-making. The market-oriented type considers labor relations from a short-term and transactional point of view, and the relationship between labor and management is based on mutual use, and everyone takes what he needs. Dyer divides human resource management into three categories: incentives, investments, and engagement [79]. Organizations that adopt the incentive model are mostly centralized in structure, and production technology is relatively stable. Requires employees to work stably within a certain amount of work and also uses incentive tools as the main way to motivate employees. The relationship between the organization and employees is a purely direct and simple relationship of exchange of interests. Organizations that adopt an investment model attach great importance to employee innovation, and production technology is usually more complex. The organization and employees build long-term working relationships, and pay attention to training and motivation of employees. The characteristic of the model of participation is the power to make decisions in the organization, and most employees can participate in decision-making, so the requirements for initiative and innovation of employees are high. According to the summary of previous studies, human resource management models can be divided into two basic forms, one based on commitment and the other based on control. Organizations that adopt the commitment-based HRM model attach great importance to employee development in order to enhance employees' awareness of a community of common destiny and establish a long-term employment relationship with the organization. These organizations tend to employ rigorous recruitment procedures, extensive internal career development pathways, and training programs. They smoothly adopt contingency incentive compensation mechanism, universal job security and self-management team and other human resource management practices. However, organizations that adopt a model of human resource management based on control mainly meet the needs of organizational development through the external labor market, with virtually no training of the existing workforce. It can be seen that the human resource management model based on commitment is essentially a kind of high performance work systems. Some scholars also call this kind of human resource management mode as high-performance work system or best human resource management practice.

Numerous studies of individual and organizational outcomes of high-performance work systems (HPWS), such as productivity (Shih et al., 2013), voluntary turnover (Selden et al., 2013), discretionary behavior (Elorza et al., 2013), and corporate productivity (Messersmith & Guthrie, 2010; Kaufman, 2015) [80]. McDuffie noted that in order for a system of personnel management practices to improve the effectiveness of the organization, it must have three elements:

- 1) employees must have significant knowledge and skills;
- 2) personnel management practices should motivate employees to make full use of their knowledge and skills;
- 3) should allow employees to self-help the organization achieves its goals [81].

Batt (2002) considers The three dimensions of the human resources system are:

- 1) A selective set of employees with strong general skills and learning abilities;
- 2) The project work provides opportunities for individual assessment and collaborative learning;

3) Promotion of human resources such as training, worker safety, and high incentives. Boselie et al. (2005) found that among the 104 previous studies on the relationship between human resource management and performance, there was a huge gap in the discussion of the "black box" mechanism. "Contingency theory," "resource-based view" and "AMO model" are the three most commonly used theoretical frameworks. Among them, the Contingency theory assumes that human resource management is influenced by background factors (such as corporate strategy) from the external environment in the process of influencing corporate efficiency. Resource-oriented believes that human resource management affects performance by cultivating organizational human and social capital; the AMO model indicates that human resource management affects employee productivity by affecting Ability, Motivation, and Opportunity. Pauwe (2009) found that the application of the AMO model is mainly focused on the individual level, focusing on skills, competencies, motivation, and participation of employees [82].

Appelbaum's famous "AOM" model of high performance work system regards organizational performance as a function derived from the structure of core

organizational elements. He believed that organizational structure is composed of three core dimensions: employee ability, motivation and opportunity to participate[83]. Any organization that wants to improve its performance must focus on improving these three dimensions. In 1995, Husseid divided the human resource management activities of the best human resource management model into two groups using factor analysis: one was activities that affected employees' abilities, and the other group was activities that affected employee motivation. Bailey also noted that the organization's human resources are often underused because employees do not fully realize their potential at work; If the organization's human resource management measures can affect the motivation and ability of employees, it can affect the level of employees' contribution to the organization, so as to improve the overall performance level of the organization [84]. The ultimate goal of increasing employee participation is also to motivate employees to mobilize their enthusiasm. In essence, the views of scholars are consistent, and they believe that the high performance work system model includes two sets of factors, one affecting the ability of employees and the other affecting their motivation.

The above study shows that the study of practical activities in personnel management in universities has achieved rich theoretical and empirical results but less content about a highly productive system of work in universities. Foreign scholars have discussed the relationship between impact between a highly productive work system and organizational commitments in universities, but there are no studies on impact mechanisms such as intermediate variables. Domestic scientists study high-performance work systems and organizations only in terms of knowledge, moral literacy, innovation, and psychological empowerment. The relationship between variables and individual variables is less compatible with studies of other intermediate variables. Therefore, in combination with the actual situation in different regions of China and under different mechanisms of action, the connotation and structure of a highly productive work system and the relationship between it and other variables of human resource management need further study.

Although researchers have conducted many studies of high-performance work systems, there is still no single concept of high-performance work systems in academia.

Pfeffer (1994) believed that high-performance human resource management refers to a series of human resource management measures to help enterprises improve business performance. Edwards and Wright (2001) believe that the theoretical assumption underlying highly efficient work systems is that if an organization treats its members well, employees will improve their attitude to work and constantly increase their sense of satisfaction and commitment. This attitude continues to influence behavior, which in turn leads to improved organizational efficiency. Wei Da (2002) considers a highly productive work system as a series of different but mutually reinforcing and synergistic systems of human resource management practices that can bring lasting competitive advantages to enterprises or organizations and positively affect the productivity of the enterprise. Jiang, K. et al. (2012) believe that a highly productive work system is a dynamic combination of a number of human resource management practices that can combine and contribute to diverse organizational outcomes [85].

Refer to the above researchers' definition of high-performance work system. This study believes that efficient work system refers to the systematic human resource management practices adopted by organizations. Its purpose is to improve the ability of employees, improve the motivation of employees, improve work efficiency, and achieve the strategic goals of the organization. The corresponding system of highly productive work of the university refers to the systematic practice of human resources management adopted at the university.

Conclusions to section 1

1. According to the results of the study of the key stages in the development of scientific approaches to substantiate the essence of the concept of "human resource management" in order to better understand the content of the concept under study, its interpretation was improved. Therefore, in human resource management, we should understand how to make a reasonable management plan and implement effective measures. To improve labor efficiency, enhance the ability of employees in educational institutions, and develop their potential using scientific methods.

2. Based on the results of SWOT - analysis of human resource management in Chinese universities has identified advantages (the cost awareness and competition awareness of universities are enhanced; the school provides policy support and encouragement; improvement of the mode of attracting talents in universities; optimize the management efficiency and management level of universities, and realize the rational allocation of human resources; improve the social image of universities; the autonomy of universities to run schools is expanding day by day); disadvantages (the ratio of human resources in universities lacks scientificity; the management concept is relatively backward, and it is mostly decided by the leaders, which is not combined with the actual situation of the school; the personnel assessment system needs to be further improved; the organizational structure is relatively solid and lacks a reasonable management system; incentive measures are ineffective, enthusiasm and sense of competition are not strong; insufficient humanistic care, it is difficult to meet the needs of teachers; the promotion of personnel positions is slow, and the motivation of teachers is insufficient); opportunitys (the inclination of national policies and the rise of supporting forces; the human resource management in universities needs to be transformed from "transactional" to "strategic" and the demand for talents is increasing; policy support for universities to employ autonomy and optimize personnel allocation; the development of the market mechanism makes the consciousness of the subject of talents in universities increasingly stronger; universities have diversified capital investment, which is convenient for the introduction of talents; the demand for higher education resources by the state, society and students is constantly expanding); challenges (higher education management costs are increasing; the competition for teacher human resources is fierce; challenges brought by the reform of higher education; enhance the awareness of talent flow; college educators attach importance to changes in personal values).

3. This study proves that human resource management in universities has four characteristics.

- 1) The management function should ensure the development of education;
- 2) Existing conditions for improving the professionalism of teachers;
- 3) Established relationships between teachers involved in the implementation of

the educational process and the administration of universities;

4) Important elements of psychology, economics, sociology, and law should be integrated with management.

4. It is substantiated that in the process of human resource management, it is important to use specific methods, such as human resource planning, human resource accounting, job analysis and design, employee recruitment and selection, training and development, career plan, performance evaluation, payroll management, employee incentive, and labor relations management.

5. Currently, the development of human resource management theory is at the stage of internationalization, cross-culture, and diversification, but it also demonstrates some new directions of development. There are four international strategies in international human resource management: ethnocentric strategy, multicenter strategy, global center strategy, and mix.

6. An analysis of foreign theories of human resource management allows us to draw conclusions foreign human resource management has rich theoretical support; there is a formalized education system for human resource management to provide human resources managers with special knowledge and skills for social and economic development; full attention is paid to the peculiarities of human resources; human resource management functions are gradually becoming specialized and departmental, and the specific content of human resource management is increasingly enriched in the process of continuous improvement, with an emphasis on human resource management, training, and development of employees.

SECTION 2

PRACTICAL METHOD OF HUMAN RESOURCES USE AND MANAGEMENT IN CHINESE UNIVERSITIES

2.1 Evaluation of the achievement motivation of Chinese University teachers

An important goal of human resource management is to improve the enthusiasm and initiative of members of the organization. Improving the motivation level of university teachers can encourage university teachers to make efforts and be aggressive in their work. In the personal development of teachers, it is very important to study hard, constantly improve their ability, and constantly improve their post competence. Achievement motivation generally refers to an internal driving force for college teachers to continuously pursue higher teaching and scientific research achievements through their own efforts [86]. It is a stable personality trait or the inner psychological tendency of college teachers. In this research, we found that the achievement motivation of university teachers plays a very crucial role in university human resource management activities.

There are two very famous experts in the field of achievement motivation research. They respectively put forward two important achievement motivation theories and have far-reaching influence on the academic circle. D.C. McClelland was the first psychologist to conduct a systematic study of achievement motivation through a testing approach. In the development history of achievement motivation, the publication of the book "Achievement Motivation", co-authored by D.C. McClelland and J.W. Atkinson, is regarded as motivation for achievement has truly become the hallmark of a research topic in psychology. D.C. McClelland's theory of achievement motivation mainly includes the following: D.C. McClelland distinguishes three important motivations or needs that individuals have in work situations, they are: Need for achievement is the need to strive for success; Need for Power is the need to be out of the control of others and to influence or control others; Need for affiliation is the need to build friendly interpersonal relationships [87]. On this basis, D.C. McClelland believes that people with a strong need for achievement are very eager to continuously improve their work efficiency, strive to do

things better, and achieve maximum success. They do not attach great importance to the material gains that come with success but attach more importance to the joy of overcoming difficulties, solving problems, and constantly striving for success in the process of striving for success, and attaching more importance to the personal sense of accomplishment after success. People with high demand for achievement generally have strong professional dedication and aggressive spirit. They are willing to take certain risks and more practical. Most of them are enterprising realists. In terms of task selection, high achievers are more likely to choose jobs where they feel the chance of success and failure is evenly divided rather than choosing jobs with a very low or very high probability of success. Jobs with a low probability of success have a very high chance of luck, and the Need for achievement cannot be met. Likewise, a job with a high probability of success is not challenging, and easy success does not demonstrate one's ability. People with high achievement motivation like to set goals that can only be achieved through their own efforts. They can experience the joy and satisfaction of success, when there is an equal chance of success or failure, and ultimately reach their goal through hard work. D.C. McClelland believes that an individual's achievement motivation is influenced by social factors such as early family upbringing. The level of achievement motivation of the country and society is related to the speed of social and economic development.

Another important representative of achievement motivation theory is the famous American psychologist J.W. Atkinson, who was a student of D.C. McClelland. On the basis of previous research, J.W. Atkinson paid more attention to considering the differences between individuals in his research, emphasized the influence of the individual's internal cognitive process on the formation of achievement motivation, and adopted the method of hypothesis analysis to put forward the expectation \times value theory of achievement motivation. J.W. Atkinson believes that there are two motivational forces in the formation of achievement motivation: the motivation to pursue success and the motivation to avoid failure. The former makes people approach the goal in action to pursue success, and the latter makes people avoid goals to avoid failure. A person's achievement behavior is seen as the result of the combined effect of these two motivational forces. The basic framework of J.W. Atkinson's theory of achievement

motivation and the interrelationship between concepts can be represented by figure 2.1.

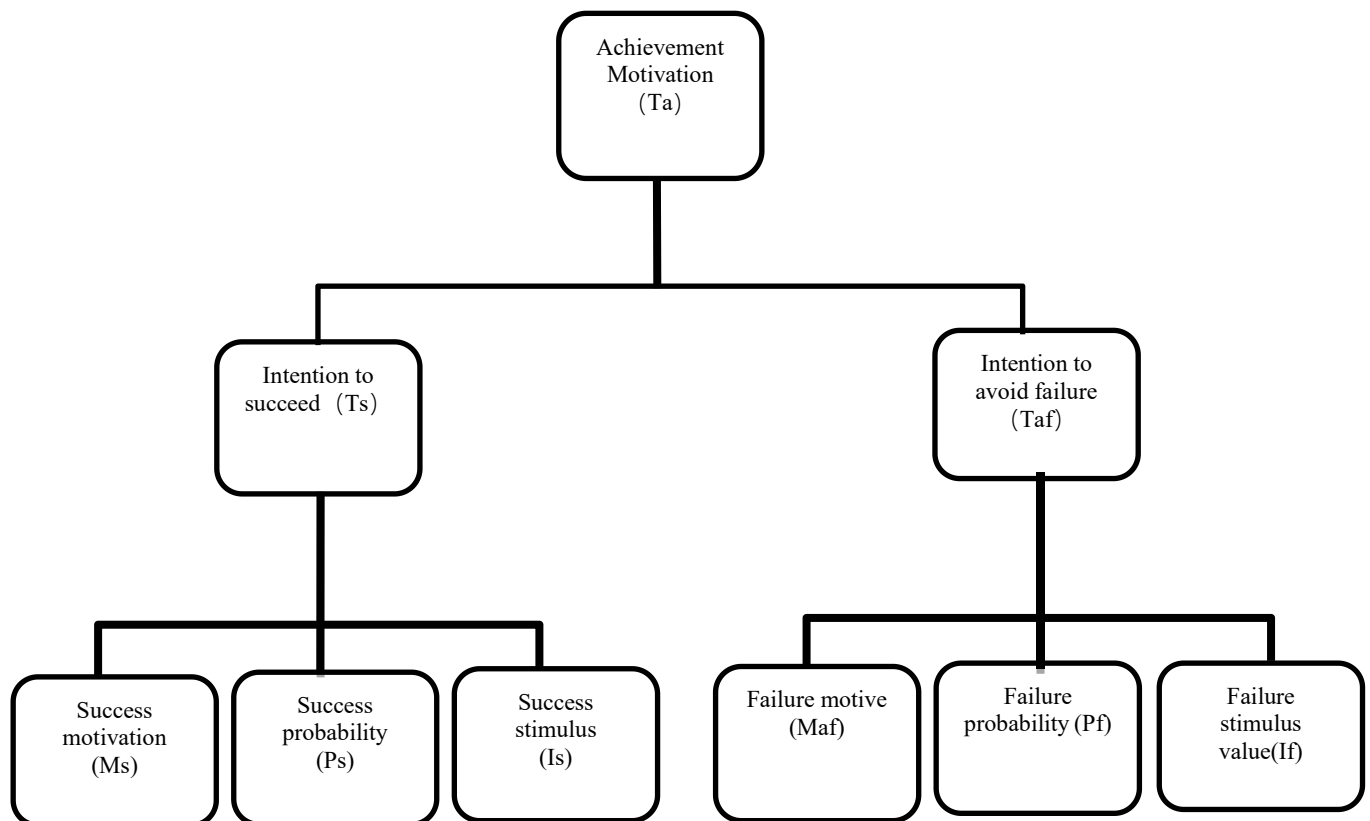


Figure 2.1- Achievement Motivation Expectation Value Model

**Source: prepared by the author [88].*

J.W. Atkinson believed that the motivational tendency (T_s) of people to pursue success is determined by three factors. The first is the need for achievement, or the motivation to succeed (M_s), which J.W. Atkinson defines as "the ability to experience pride in achievement." This is a relatively stable, persistent state of pursuit of success, which can be measured by the thematic Apperception test (TAT). The second is the probability of success (P_s) in a task, when success is inevitable $P_s=1$, when failure is inevitable, $P_s=0$, so the value of P_s varies between 0 and 1. The third is the incentive value of success (I_s), that is, the joy and happiness experienced by individuals after success. Pride is an emotional experience. If the difficulty of the task is great (the probability of success is low), the joy and pride experienced after the success are high; if the task difficulty is small (the probability of success is high), the emotional experience

after the success is low. Therefore, J.W. Atkinson assumes that I_s and P_s are inversely related, ie, $I_s = 1 - P_s$. J.W. Atkinsons used the formula $T_s = M_s \times P_s \times I_s$ to represent the motivation to pursue success. Since $I_s = 1 - P_s$, the above formula can be written as: $T_s = M_s \times P_s \times I_s = M_s \times P_s \times (1 - P_s)$ [88].

J.W. Atkinson believes that the ultimate behavior is not determined by the motivation to pursue success alone. There is another important factor to be examined, that is, the fear of failure or the tendency to avoid failure (T_{af}). Similar to the motivation to pursue success, the fear of failure is also determined by three aspects: the motivation to avoid failure (M_{af}), the probability of failure (P_f), and the incentive value of failure (I_f). The relationship between the three can be expressed by the following formula: $T_{af} = M_{af} \times P_f \times I_f$.

According to J.W. Atkinson, the activities or motives (T_a) that an individual ultimately adopts to approach or avoid achievement orientation are determined by the intention to approach success (T_s) minus the intention to avoid failure (T_{af}). We use the formula $T_a = T_s - T_{af} = M_s \times P_s \times I_s - M_{af} \times P_f \times I_f = M_s \times P_s \times (1 - P_s) - M_{af} \times P_f \times (1 - P_f)$ to express it. For any task, people perceive a greater likelihood of success as less likely to fail. Therefore, J.W. Atkinson assumed that $P_s + P_f = 1$, that is, $P_f = 1 - P_s$. Substituting this hypothetical formula into the above synthetic motivation formula is: $T_a = M_s \times P_s \times (1 - P_s) - M_{af} \times (1 - P_s) \times P_s = (M_s - M_{af}) \times P_s \times (1 - P_s)$.

Table 2.1– Comparison of the classical theory of achievement motivation

Theoretical name	Advantage	Shortcoming
1	2	3
Achievement needs theory	1. Initiated research on achievement motivation. 2. Look at motivation as a personal trait that drives an individual to improve his abilities and achieve success. 3. Emphasize that the pursuit of success is mainly determined by internal factors. 4. Linking personal motivation with social process, seeking the psychological motivation of social progress and economic development [89]. 5. Propose an achievement motivation training program to guide the practice of human resource management.	1. Take achievement motivation as the sole decision of behavior, ignoring cognitive factors such as behavior goals, value orientation, and behavior attribution. 2. Take achievement motivation as the only decisive force for social and economic development. 3. There is no research on achievement motivation in different countries and different cultural backgrounds.

Table 2.1 continued

1	2	3
Expected value model	<ol style="list-style-type: none"> 1. The first important systematic theory of achievement motivation. 2. Use achievement motivation to predict individual behavior. 3. Propose that achievement motivation is composed of the motivation to pursue success and the motivation to avoid failure. 4. Emphasize that subjective and objective factors jointly affect individual behavior. 5. Establishment of Motivation Model Using Mathematical Reasoning [90]. 	<ol style="list-style-type: none"> 1. The scientific nature of the mathematical model needs to be further verified. 2. Expressing complex motivation problems with simple mathematics, ignoring the richness and diversity of motivation. 3. Think that achievement motivation is stable, ignoring the variability of individual psychology.

**Source: prepared by the author [80, 90]*

By studying D.C. McClelland's achievement need theory and J.W. Atkinson's desired value achievement motivation model, we compare their characteristics (table 2.1).

As an intermediate variable, achievement motivation plays a moderating and influencing role in the study of university human resource management and other variables. In the previous literature, although a large number of studies have shown that there is a positive and complex relationship between high-performance work systems and performance, the mechanism of high-performance work systems is still unclear. A study is very important. In addition, there is one motivation dimension among the three dimensions of the AMO theory that studies high-performance work systems, and social exchange theory also believes that most of the existing empirical studies on the relationship between high-performance work systems and other performance outcomes have Scholars have focused on the research on employees' human capital or motivation and other related novelties as mediating variables. Therefore, according to the literature findings, researchers explore the influence of different teachers' high-performance work systems on teachers' scientific research performance by introducing achievement motivation. It reveals how the achievement motivation of university teachers influences the effect of high-performance work system on teacher performance [91]. Based on self-determination theory, individual traits and motivations are introduced as boundary conditions. The first and high order moderating effects of core self-evaluation and

achievement motivation were investigated. The relationship between high-performance work system and employee happiness is studied [92].

In the study of achievement motivation, an unavoidable problem is how to measure it scientifically. Due to the important role of achievement motivation on job performance, researchers pay attention to developing a variety of multidimensional measurement tools and corresponding management control methods.

Murry (1938) first proposed that the Thematic Apperception Test (TAT) method could be used to measure various human psychological needs, including achievement motivation. McClelland (1953, 1955) further revised the TAT method to actually use the measurement of achievement motivation. His basic assumption is that achievement motivation can be induced under certain conditions, so he uses self-inclusion and frustration situations to induce achievement motivation and then implement it. TAT measurement is to evaluate the strength of achievement motivation through the established scoring system. Although the TAT method has been widely used in the measurement of achievement motivation, it has also been criticized due to its limitations in specific operations and premise assumptions. Ward (1994) pointed out that the reliability of TAT is .03-.59 in terms of test-retest reliability; the reliability of TAT is also low in terms of internal consistency. Lindgren et al. (1986) reported that since the projection test can only provide very little information, its reliability is not very high, generally only .30-.40, but the rater reliability is very high. Since the 1990s, the improvement of projection technology itself has developed in two directions. One is to make the test and scoring more standardized and objective. In this regard, Winter et al. (1985) improved the method of content analysis for TAT, so the correlation between the scorers is above .85, and the research of empirical validity also obtains ideal results. When Zhang Tongyan et al. (1993) compiled the Chinese version of TAT, descriptive phrases were added to each picture, and the subjects only had to make choices to reflect. Another direction of development is not to pursue the unification of procedures, but to focus on the establishment of test-test relationships. Get people to respond more and better. Strengthen the analytical literacy of test takers and scorers so that they can better use these tools [93].

In addition to the TAT method, researchers have successively developed a variety of methods to measure achievement motivation. There are tests that are similar to projection methods, such as the Complete sentence test. There are also many that use self-reporting scales to measure achievement motivation, such as the EPAQ (Extended Personal Attributes Questionnaire) (Edward, 1959), WOFO (The Work and Family Orientation Questionnaire) (Helmreich, 1978), AAMI (Aberdeen Academic Motivation Inventory) (Entwistle, 1968), AMQ (Achievement Motivation questionnaire) (Lynn, 1969), AMS (Achievement Motivation Scale) (Renmin & Hagtvet, 1988), LAAS (The Life Achievement Scale) (Piedmont, 1989), MTQ (Motivation Trait Questionnaire) (Heggstad & Kanfer, 2000), etc. These test tools have their own unique features. Many of the items in WOFO, AMQ, SAMQ, and MTQ are related to work ethics, the pursuit of excellence, status advantage, demand status, self-transcendence, competition orientation, and other factors and are more in line with the conception. AMS is a self-reported scale based on Atkinson's theory, with a total of 30 questions, including 15 questions each for pursuing success (MS) and avoiding failure (MF). There is a certain degree of assurance for the degree of measurement (Renmin & Hagtvet, 1988) and it is, therefore often used in confirmatory measurements. A distinctive feature of LAAS that distinguishes it from other methods is a measurement idea based on activity frequency, which assumes a direct relationship between the strength of achievement motivation and the frequency of achievement behaviors. The recently proposed MTQ method is based on the multidimensional structure of achievement motivation and was formed after integrating previous single-dimensional measurement items, so it has improved concept validity.

In recent years, with the rise of tacit knowledge (Sternberg, 1995, 1998) related research, situational judgment tests have made new progress in methods and because they have better job performance. Predictive validity (McDaniel, Morgeson, et al., 2000), therefore, has led to a rapidly expanding field of application. The Situation Judgment Test consists of two parts: the situation and the possible response items. The situation comes from the actual work, and there are several possible responses in each situation. So it's actually a scenario-based task decision. Hunter and Hunter (1984) believed that the situational judgment test could measure multidimensional ideas. Schmidt and Hunter

(1993) further believed that it could measure not only general cognitive ability but also certain components of work experience and personality, such as emotional Stability, sense of responsibility and group compatibility. Based on the cross-situational characteristics of achievement motivation, Grote and James (1991) tried to use the situation-response test method of achievement motivation to verify the consistency of cross-situation behavior. Grote and James discussed and analyzed that in order to ensure high reliability and validity of the scenario-response test, firstly, the definition of achievement motivation characteristics directly affects the test concept, so the theoretical conception must be correct; secondly, the selection and response of scenarios Items are designed to be "reasonable" and responses are scored in a "reasonable" way. The so-called "reasonable" means that it must be based on job or event analysis of key situations and typical reaction patterns, based on work behavior, and theoretically guaranteed to be related to job performance (Chars & Schmitt, 1997). In terms of scoring methods, deductive scoring and empirical scoring are usually used (Weekley & Jones, 1999). It is necessary to carry out a reasonable analysis because different scoring systems have inconsistent interpretations of the results.

Through research, we found that each method of measuring achievement motivation has its own advantages and disadvantages. Through research, we compared the characteristics of achievement motivation measurement methods, as shown in Table 2.2.

Table 2.2 - Comparison of the characteristics of achievement motivation measurement methods

Theoretical name	Features
TAT Measurement	1. Measured the natural response of the subject. 2. It is an operational measurement. 3. It measures achievement needs. 4. The interpretation of the results is difficult.
Self-reported scale measurement	1. It measures the responses of subjects to stimuli [94]. 2. It is a response-type measurement. 3. It measures achievement value. 3. Simple operation and high reliability.
Hybrid measurement	1. Use pictures to test. 2. It is difficult to explain. 3. Higher requirements for operators.
Situational Judgment Test	1. The test questions are close to the reality of social life. 2. The test design is difficult. 3. Different people may have errors in understanding different situations [95]. 4. Emerging tests need to be improved in the application.

**Source: prepared by the author [94, 95].*

Atkinson's achievement motivation theory has been widely recognized by

researchers in China. Based on Atkinson's theory, a number of well-known scales for measuring individual achievement motivation have been established, among which the more famous scales include the Achievement Motivation Scale (AMS) compiled by Gjesme and Nygard. Chinese scholar Ye Renmin (1992) revised it. The scale consists of 30 items, divided into two parts, each with 15 items, respectively measuring the motivation to pursue success and the motivation to avoid failure. The achievement motivation score consists of the motivation score for pursuing success minus the motivation score for avoiding failure. Higher scores indicate stronger achievement motivation. The split-half reliability of the scale was 0.77 ($p < 0.01$), and the validity was 0.58 ($p < 0.01$). The scale is widely used in my country, with a usage rate of more than 70%, and a large number of research results have been obtained.

University teachers are the most important resources in the university, and they are also the participants in the university's human resource management activities. For universities to achieve high-efficiency work and high-level development, high-level teachers must work for the university. The achievement motivation of university teachers is an important indicator of their willingness to work hard for the university, and it is also a reflection of the human resource management level of the university. Combined with the characteristics of this study, in order to understand the achievement motivation of Chinese university teachers, we used the Achievement Motivation Scale (AMS) compiled by Gjesme and Nygard to investigate the achievement motivation of Chinese university teachers. This study conducted a questionnaire survey with Chinese university teachers as the survey objects and adopted the convenient sampling method to select teachers located in eastern China (Shandong, Guangdong), central China (Henan, Hebei, Hubei), and western China (Xinjiang, Sichuan, Chongqing). Teachers from 28 universities (Undergraduate universities: Qingdao University, Zhaoqing Normal University, South China Normal University, Henan University, Henan Normal University, Henan University of Science and Technology, Henan University of Science and Technology, Xinxiang University, Henan Institute of Technology, Xinjiang Normal University, Chongqing Three Gorges University. Technical Colleges: Xinxiang Vocational and Technical Teachers College, Henan University of Science and

Technology Higher Vocational and Technical College, Hebei Foreign Economic and Trade Vocational College, Guangdong Polytechnic Vocational College, Xinjiang Tianshan Vocational and Technical College, Sichuan Engineering Vocational and Technical College, Wuhan Vocational and Technical College, Shandong Business vocational school. Private universities: Sanquan College of Xinxiang Medical College, Guangzhou Xinhua College, Yanjing Institute of Technology, Wuhan College, Wuhan Institute of Bioengineering, Xinjiang Tianshan Vocational and Technical University, Chongqing Institute of Engineering, Chongqing Institute of Finance and Economics, Qingdao City College) in the provinces were used as research objects, and electronic questionnaires were distributed to them. A total of 400 copies were recovered, of which 390 were valid, with an effective rate of 97.5%.

Statistical analysis was performed on the recovered data using SPSS software, and the results showed that the average achievement motivation of Chinese university teachers was 1.66 (table 2.3).

Table 2.3 - Descriptive statistical analysis of achievement motivation scores

Variable	N	Minimum	Maximum value	Mean	Standard deviation	Variance
Achievement motivation score	390	-33	41	1.66	9.848	96.982

**Source: prepared by the author.*

During the data survey, we divided the age of the subjects into four stages (table 2.4). During the data analysis, we found that teachers aged 31-40 had the lowest achievement motivation (figure 2.2).

Table 2.4 - Descriptive statistics of age and achievement motivation

Variable	Age	Number of cases	Average value	Standard deviation	Minimum	Maximum value
Achievement motivation score	30 years old or younger	43	3.09	10.562	-17	39
	31-40 years old	211	0.44	9.376	-30	41
	41-50 years old	108	2.71	10.158	-33	30
	51 years old or above	28	4.54	10.156	-9	33
	total	390	1.66	9.848	-33	41

**Source: prepared by the author.*

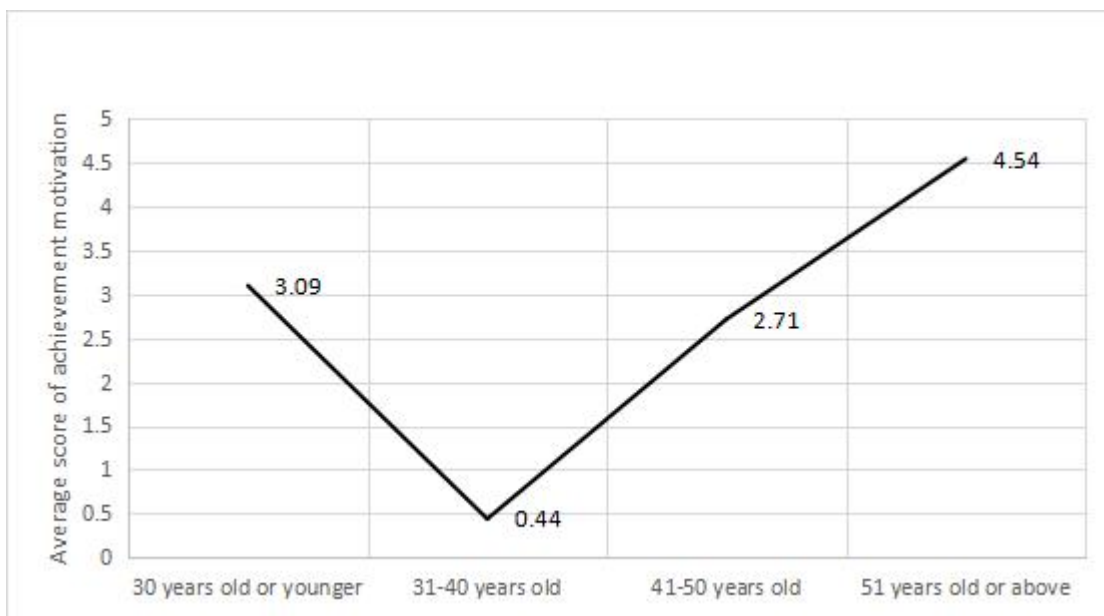


Figure 2.2 - The age difference in university teachers' achievement motivation

**Source: prepared by the author.*

This difference was found to be significant through the difference test (Table 2.5).

Table 2.5 - Difference analysis of age and achievement motivation

Variable	Source of variance	Sum of squares	Degrees of freedom	Mean square	F
Achievement motivation score	Between groups	753.255	3	251.085	2.621*
	Within the group	36972.704	386	95.784	
	total	37725.959	389		

**Source: prepared by the author*

The achievement motivation of Chinese university teachers shows different characteristics at different ages. In China, university teachers aged 31-40 usually have elderly people to take care of and children to educate and support. Teachers at this age typically need to devote a significant portion of their time and energy to the family, so they temporarily reduce the level of motivation to pursue career success. Most young teachers under the age of 30 have not established a family or have just established a family, and their main energy and time are to pursue career achievements. Teachers at the age of 41-50 are generally independent, and the elderly have passed away and begun to invest more time and energy in the pursuit of work achievements. Therefore, teachers at

this age experience a short-term decline in achievement motivation development before rebounding. Teachers the age of 51 or above are facing retirement. According to common sense, the motivation of teachers entering the retirement age to pursue job achievement should be in a state of decline, but the research results show that their motivation for achievement is increased. We believe that this is related to people's pursuit of social value. Teachers who are facing retirement will feel that their sense of social value is reduced. At this time, they must show a positive attitude and pursue career achievements to reflect their social value.

We also obtained similar results in the analysis of the characteristics of achievement motivation of teachers with different working hours. From the statistical results in Table 2.6, we can see that university teachers with working hours of 11-15 years have the lowest achievement motivation.

Table 2.6 - Descriptive statistics of achievement motivation and working hours

Variable	Work time	Number of cases	Average value	Standard deviation	Minimum	Maximum value
Achievement motivation score	5 years and below	74	3.19	11.416	-17	41
	6-10 years	130	0.7	8.98	-30	34
	11-15 years	63	-0.48	9.175	-23	23
	16-20 years	65	1.62	9.417	-33	28
	21 years and above	58	4.21	10.223	-19	33
	total	390	1.66	9.848	-33	41

**Source: prepared by the author.*

Through data analysis, we found that teachers with different working hours have certain differences in their achievement motivation. We conducted the difference test by using data statistical analysis software and found that the difference was significant (table 2.7).

Table 2.7 - Difference analysis of achievement motivation and working hours

Variable	Source of variance	Sum of square	Degrees of freedom	Mean square	F	Salience
Achievement motivation score	Between groups	956.691	4	239.173	2.504*	0.042
	Within the group	36769.267	385	95.505		
	total	37725.959	389			

*Note: * means significant level $P < 0.05$*

**Source: prepared by the author*

To facilitate viewing, we plotted the relationship between teachers' working hours and achievement motivation. Figure 2.3 shows the relationship between the working hours of university teachers and motivation for achievement.

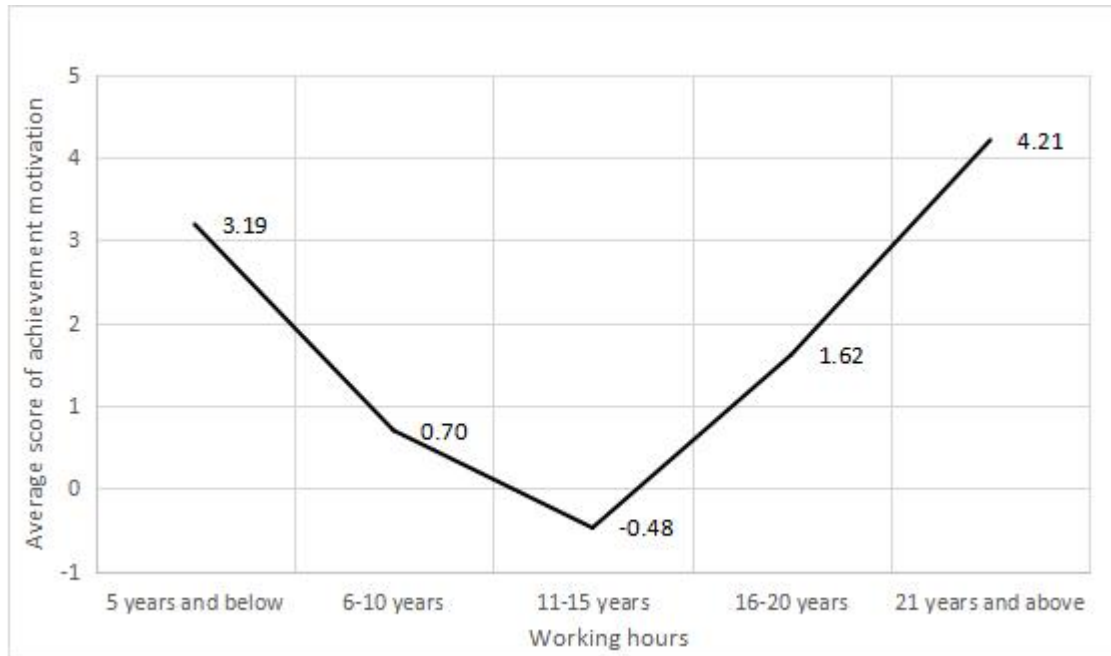


Figure 2.3 - The relationship between university teachers' Working years and achievement motivation

**Source: prepared by the author.*

It can be seen from figure 2.3 that Chinese university teachers are full of novelty about their work in the period when they first started working, and they have a higher social status when they enter university work. At this time, their satisfaction and happiness are also relatively high. High achievement motivation. As the working hours increase, they adapt to the work and become bored, and at this time, there will be a stage of decreased achievement motivation. College teachers who have worked for 11-15 years have the lowest achievement motivation, which corroborates with the lowest achievement motivation of teachers aged 31-40. Chinese university teachers who have been working for 11 years generally enter middle age. Teachers at this age generally face greater pressure, and most of this pressure comes from their families. There is a saying in China called mid-life crisis, also known as "gray middle-aged" which generally occurs in men between the ages of 39 and 50, and in men between the ages of 40 and 65. It is also

called "men's forty syndrome". In a broad sense, it refers to various barriers and crises such as career, health, family, and marriage that may be experienced at this stage of life. At this point, they adjust their level of work motivation and focus primarily on caring for their children and family. After the "mid-life crisis", the achievement motivation of university teachers gradually increased. When approaching retirement, their achievement motivation reached the highest level because they wanted to reflect their social value.

Motivation is an important factor that determines the efficiency of individual activities. This part compares the characteristics of the classical motivation theory and analyzes the existing problems through the related theoretical research on achievement motivation. The characteristics of different motivation measurement methods are studied and compared. The Chinese university teachers are selected to use the more common achievement motivation assessment tools to measure the achievement motivation level of Chinese university teachers. Through data analysis, the basic characteristics of Chinese university teachers' achievement motivation are obtained, which provides a reference for further research on university teacher motivation and human resource management.

2.2 Evaluation of human resource management in Chinese universities

The research on strategic human resource management mainly focuses on the organizational level, taking a "macro" research orientation. However, the problem with this macro perspective is that it is impossible to study the impact of human resource system implementation on organizational performance, and it is difficult to explore the impact of the human resources system and the path and mechanism of organizational performance [96]. Thus, micro-human resource management began to appear. This research perspective puts more emphasis on specific HR practices and the impact of HR systems on specific employee attitudes and behaviors. The micro-perspective has certain advantages over the macro-perspective in studying the implementation of human resource management systems and their impact on employees' attitudes and behaviors. Differences in HRM implementation are ultimately influenced by employee perceptions and behaviors. The function of human resources depends not only on the implementation

of human resource systems, but also on employees' perception of human resource management practices (Nishii, Wright, 2008). Therefore, it is necessary to focus on the transfer of HR practices from managers to individual employees and groups of employees. Khilji and Wang (2006) emphasized that HRM research should pay more attention to HRM practices perceived by employees or managers rather than HRM systems designed by organizations. This can better explain the influence of human resource management on employees' individual behavior. Research has found significant differences in employees' perceptions of human resource management within organizations (Edgar & Geare, 2005), their perceptions of HR practices (Khilji & Wang, 2006), or attribution (Nishii, Lepak, & Schneider, 2008). This ultimately affects their work behavior and performance.

In the study of human resource management and organizational performance, and employee performance, researchers have adopted different perspectives and orientations. The more typical ones are the resource-based view and human capital theory which study the relationship between human resource management and organizational performance. These views hold that human resources are the source of an organization's competitive advantage. They believe that developing and maintaining valuable, scarce, inimitable, and irreplaceable human resources in an organization can help companies form and maintain a competitive advantage (Huselid, 1995). However, this view has certain flaws in explaining the relationship between human resource management and employee behavior. With the rise of multi-level approaches and a focus on employee outcomes, micro-researchers have begun to use a "behavioral" perspective to explore the mediating mechanisms through which HRM systems affect employee attitudes, behaviors, and performance. The "behavioral" perspective of human resource management research holds that human resource management systems achieve organizational goals primarily by promoting the desired behavior of employees. This perspective provides a basis for explaining the relationship between high-commitment HRM systems and positive employee behavior (Jing, Lepak, Hu, & Baer, 2012). This view mainly relies on the "ability-motivation-opportunity" (Ability-Motivation-Opportunity; AMO) model generated by behavior to explain the effectiveness of human resource management

systems. This model believes that the human resource management system mainly promotes employees to generate behavioral motivation, develops and cultivates the ability of employees to complete such behaviors, and provides opportunities to perform such behaviors (Jiang et al., 2012), to realize employees' active behaviors. Therefore, the AMO model can also be used to explain the relationship between high-commitment HRM systems and proactive behaviors. From the perspective of active behavior research, existing studies have found that the generation of active behavior needs to meet three conditions: one is the "reason" or reason for the individual to participate in the active behavior; the other is the "ability" to express the active behavior; "Positive Experience" (Parker et al., 2010). Combining research in these two fields, the "capacity-motivation-opportunity" model of high-commitment human resource systems influencing employee behavior corresponds to the "competence" "rationality" and "positive experience" produced by active behavior. Based on the AMO model, we discuss the mediating mechanism of high-performance human resource system on employee initiative behavior. When studying the relationship between high-commitment work systems and organizational performance, social exchange theory (Tsui et al., 1997) argues that when an organization is good at serving and providing benefits to employees, employees are willing to show benefits that are beneficial to the organization behavior and behavior. Performance returns to the organization. Therefore, a high-commitment work system can induce a sense of psychological responsibility in employees, thereby rewarding higher levels of organizational commitment and performance and ultimately improving the performance of the entire organization (Sun, Aryee, & Law, 2007). However, the underlying assumption of the theory is that employees perceive kindness in high-commitment work systems as organizational behavior. Bowen and Ostroff (2004) and Nishii et al. (2008) pointed out that employees assign different meanings to the same HR practice. In other words, employees may not think that the sister organization really cares about them. When a high-commitment work system makes employees understand that the goodwill of the employer is necessary. Nishii et al. (2008) pointed out that employees have multiple understandings of an organization's HR practices, and the effectiveness of an organization's HR practices depends on employees' understanding and

commitment to the organization's HR practices.

If an organization implements effective human resource management measures, it will inevitably improve the work-ability and enthusiasm of the members of the organization, thereby improving the work efficiency of the entire organization. What are the elements of effective human resource management practices? How to judge that an organization has implemented effective human resource management measures?

This must take into account the evaluation of the effectiveness of human resource management measures, and there is a need for research into the measurement of high-performance work systems [97]. In previous literature, researchers have measured the practice of high-performance work systems differently. Masimova and Campion (2013) conducted a meta-analysis of HPWS measurement tools and found that HR practices used by HPWS mainly included payroll and benefits, job design, training and development, recruitment and selection, employee relations, communication, performance management, and promotion. At present, there are relatively few studies on high-performance work systems in foreign universities, and there is a lack of research tools that can be directly used. This study develops an assessment tool for high-performance work systems in Chinese universities.

Since Huselid first proposed the hypothesis of the existence of an optimal human resource management model in 1995, researchers at home and abroad have conducted in-depth research on this human resource management system that can improve organizational efficiency. Below we summarize their research from both Chinese and international perspectives (table 2.8).

Table 2.8 - Summary of empirical research on the structure of China's high-performance work system

Researcher	Year	HPWS content structure	Research object	Research methods
1	2	3	4	5
Liu Shanshi et al [98]	2005	Strict recruitment, training and development, contribution-based distribution, internal career development, occupational safety, job design, team management, information sharing	Theoretical research	Literature research
Yang Dongtao, Cao Guonian [99]	2006	Training development, performance evaluation, employee participation, work procedures, employment insurance	China's foreign investment and joint ventures	Questionnaire

Table 2.8 continued

1	2	3	4	5
Rao Min [100]	2009	Talent selection and training, performance appraisal and salary rewards, efficient information communication, career and job security, participation in management and emotional incentives	260 teachers in 3 universities	Behavioral incident interview
Hu Shuhong, Liu Guanhua [101]	2013	Teacher recruitment, teacher training, teacher teaching and research assessment, teacher salary management, teacher job and professional security, teacher participation management, teacher communication, strategy-based teacher human resource planning, subject and job analysis	Staff and teachers of three universities in Inner Mongolia	Interviews and questionnaires
Xing Zhouling and Zhou Shaosen [102]	2009	Employee allocation and selection, incentive mechanism, occupational safety, employee participation, performance management and strategy-based human resource planning	1,600 faculty and staff in 6 universities in China	Questionnaire
Liu Jun, Su Fangguo, & Liu Xiaolin [103]	2016	Strict recruitment, internal career opportunities, systematic training, formal information sharing, shared compensation and result-oriented performance management	Chinese financial companies	Grounded Theory

*Source: Researcher's collation [98-103].

Table 2.9 contains a summary of empirical research on the structure of an international high-performance work systems.

Table 2.9 - Summary of empirical research on the structure of international high-performance work system

Researcher	Year	HPWS content structure	Research object	Research methods
1	2	3	4	5
Huselid, M.A [104]	1995	Employee skills and organizational structure; employee motivation	968 U.S. companies	Questionnaire
Delery and Doty [105]	1996	Internal career opportunities; training; result-oriented evaluation; employee safety; participation; job description; profit sharing	Banking	Questionnaire
Fey and Bjorkman [106]	2001	Development; feedback; salary	100 foreign companies in Russia	Questionnaire survey (exploratory factor analysis)
Batt [107]	2002	Skill level; job design; human resource incentives to increase involvement	Telecom call center	Questionnaire

Table 2.9 continued

1	2	3	4	5
Park et al. [108]	2003	Performance-oriented practice; practice combined with strategy; practice of improving employee skills	Japanese multinational companies in the U.S. and Russia	Questionnaire
Thang Le Chien and Quang Truong [109]	2005	Information exchange; performance management; training and development; group orientation; employee retention management	137 Vietnamese companies	Interviews and questionnaires
Tsai Chin-Ju [110]	2006	The effectiveness of recruitment and selection; the effectiveness of training and employee development; the effectiveness of remuneration practices; the effectiveness of employee authorization; the effectiveness of work safety practices	38 Taiwanese semiconductor design companies	Interviews and questionnaires
Kaya and Nihat [111]	2006	Behaviors and attitudes; extensive training; work skills training; clearly stated policies; team activities; multi-functional training; incentives to achieve goals; strategic communication; ease of interaction; performance feedback	124 companies in Turkey	Questionnaire
Yongmei Liu [112]	2007	Employee selection and allocation, salary level, training, incentive salary, internal promotion, occupational safety, flexible working time system, participation mechanism and complaint channels, human resource planning	19,000+ organizations	Interview and questionnaire survey
Sun et al. [113]	2007	Participation, promotion, training, recruitment, job description, evaluation	Hotels in 12 cities along the east coast of China	Questionnaire
Gavino et al. [114]	2012	Training and development, performance compensation, performance management, selective allocation, promotion opportunities, development opportunities, decision-making, participation	58 MBA graduate students from Asian Business School	Research methods

**Source: Researcher's collation [104-114].*

Edward Lawler and his assistants from the Center for Effective Organization Research at the University of Southern California studied the top 1,000 companies ranked by Fortune and came up with four basic principles of high-performance work models: Information sharing, Knowledge development, Performance and compensation, and Equality working environment [115]. Occupational safety protection is the basic

requirement of any organization member and a prerequisite for employees to actively learn, actively participate in management, and work actively. Therefore, this study combines the four basic principles of the high-performance work model proposed by Edward Lawler et al. and proposes five first-level indicators of the high-performance work system in universities. They are information sharing, teacher selection and development, performance and compensation, and equality. The working environment and occupational safety are guaranteed.

In order to obtain high-quality indicators of high-performance work systems in Chinese universities, the researchers interviewed participants in human resource management activities in three Chinese universities. The interview outline includes the following content: What human resource management practices can improve efficiency from five aspects: information sharing, teacher selection and development, performance and salary, equal working environment, and occupational security. The researcher conducted in-depth interviews with 21 subjects. Among the interviewees, 9 were human resource managers, 7 were department managers, and 5 were frontline teachers. Participants are characterized as: 5 lecturers, 10 associate professors, and 6 professors. There are 9 women and 12 men. 13 are married, and 8 are unmarried. The results show that, as a system, human resource management practice has a multi-level and multidimensional structure. Most of the interviewees describe it at the overall level, such as the knowledge, skills, and abilities of the faculty and staff. It is also described from a specific operational level, such as recruitment and selection, training, etc. The researchers sorted out, counted, and analyzed the interview results, combined with the high-performance work structure indicators in the results of Chinese and international researchers, and obtained 29 high-performance work system primary secondary indicators under 5 primary indicators. Among them, there are 5 information-sharing dimensions, 7 teacher selection and development dimensions, 8 performance and salary dimensions, 4 equal working environment dimensions, and 5 occupational safety guarantee dimensions.

The Delphi method is designed by the organizer to design a questionnaire on the proposed problem and to inquire about and investigate the selected expert group members

through letters and other forms. According to the prescribed procedures, the expert group members exchange opinions anonymously through the organizer's feedback materials. Through several rounds of consultation and feedback, the opinions of experts gradually concentrated, and a statistically significant expert collective judgment result was obtained. The Delphi method can be used for prediction and evaluation [116]. According to the requirements of the Delphi method, the expert team must have high enthusiasm and authority, and the evaluation results must be quantified. With reference to previous research experience, this study uses the following methods to quantify data:

1. Expert positive coefficient: The questionnaire recovery efficiency is used to express the active degree of expert participation.

2. Calculation of Expert Authority (CR): Whether an expert is authoritative has a considerable influence on the reliability of the evaluation. Therefore, when processing the evaluation results, we must consider the authority of the experts to score the influencing factors. CR is generally determined by three factors (table 2.10): One is the academic level of the expert C_a . The second is based on Judgments C_b . The third is familiarity C_c of the experts. The calculation formula is: $CR = (C_a + C_b + C_c) / 3$.

Table 2.10 - Quantification table of expert authority evaluation

Academic levels	Quantized value	Judgments based	Quantized value	Familiarity	Quantized value
Senior title	1	Experience	0.8	Very familiar	1
Deputy senior title	0.9	theoretical analysis	0.6	Familiar	0.8
intermediate	0.8	Peer understanding	0.4	Relatively familiar	0.4
		Expert self-evaluation	0.2	Not very familiar	0.2
				Unfamiliar	0

**Source: prepared by the author.*

3. Calculation of the mean value of importance (C_i): The greater the mean value of the importance of the influencing factors, the higher the relative importance of the influencing factors. The mean value of importance reflects the degree of concentration of expert ratings, and the calculation formula is:

$$C_i = \frac{1}{m} \sum_{j=1}^m C_{ij} \quad (2.1)$$

In the formula, C_i is the mean value of the importance of influencing factor i ; C_{ij} is the scoring value of expert j on influencing factor i ; m is the number of experts participating in the scoring.

4. Calculation of the full score frequency K_i : The full score rate is the ratio of the number of experts m_i who give full marks to the influencing factor and the total number m_i of experts who have evaluated the influencing factor i . The calculation formula is:

$$k_i = \frac{m_i'}{m_i} \quad (2.2)$$

5. Calculation of Coefficient of Variation (V_i): Coefficient of Variation is an important indicator representing the magnitude of fluctuations. It shows the degree of difference in the understanding of the relative importance of influencing factors among experts. The smaller the V_i , the higher the coordination among experts. The calculation formula is:

$$V_i = \frac{S_i}{C_i} \quad (2.3)$$

In the formula, C_i is the mean value of the importance of influencing factor i , and S_i is the standard deviation of the score of influencing factor i , which is:

$$S_i = \sqrt{\frac{1}{m_i - 1} \sum_{j=1}^{m_i} (c_{ij} - c_i)^2} \quad (2.4)$$

6. The calculation of index weight: The determination of index weight is based on the expert assignment of the importance of indicators at all levels, and the average importance of each indicator and the weight coefficient value of each indicator at all levels are calculated [117]. This study uses the product proposed by Saaty. Method to calculate the combined weight of each indicator. The calculation formula is:

$$W_i = \prod_{t=1}^t w_i \quad (2.5)$$

In the calculation formula: W_i is the combined weight, t is the number of levels of the index, $t = 1, 2$, and w_i is the weight coefficient of the stratified index.

This research recruited 25 experts with a high degree of authority, unique insights, rich experience, and high theoretical level in the field of human resource management. They come from 4 Chinese universities of different types and levels, and they are all leaders or professional staff engaged in human resource management in universities. Including 18 males and 7 females; experts are 36-67 years old, of which 6 are 36-45 years old, 5 are 46-55 years old, and 12 are 56-67 years old. The working hours of the experts are All are more than 11 years old. Among them, there are 7 in 11-20 years, 11 in 21-30 years, 7 in 31 years and above; 19 are professors, and 6 are associate professors; According to the academic qualifications of experts, there are 16 doctors and 9 masters. The members of the expert group have a lot of human resource management theory and practical experience. Most of them are both managers and employees, and they can think about the practice of human resource management from different angles.

Through data investigation, using the expert authority evaluation quantification table and calculation formula, the expert authority coefficient is 0.878, which shows that the members of the expert group have a high academic level. The judgment problem is mainly based on their own experience and theoretical analysis, and their research topics are very familiar. During the three rounds of anonymous feedback from experts, only 25 questionnaires were distributed in the third round, and 24 points were returned, with a recovery rate of 96%. The recovery rate of the remaining two questionnaires was 100%. It can be seen that experts are more active in participating.

The study uses the Likert 5-level scale model to design an expert evaluation questionnaire. The expert evaluates the relative importance of each indicator according to the five levels of "not important, less important, general, more important, and very important". Assign values of 1, 2, 3, 4, 5. After the previous round of expert consultation, the research team calculated and analyzed the results of the experts' anonymous feedback and selected indicators with a mean value of index importance greater than > 3 and a coefficient of variation < 2.5 to enter the next round of expert consultation until the expert group reached agreement on all indicators opinion.

According to the results of the first round of anonymous feedback from experts, the evaluation of importance is averagely divided from 3.01 to 4.90, and the coefficient of variation is 0.061 to 0.298. Thirteen experts suggested that the "performance and compensation" in the first-level indicator should be revised to "Performance-linked compensation". Teachers feel that it is unfair and undermine the efficiency of the entire organization. Deleted the second-level indicators that have an average score of importance evaluation < 3 and a coefficient of variation > 0.25 , "Holding to participate in academic exchanges" "Introducing talents to focus on discipline echelon and academic teams", "Assessment focusing on the combination of quantitative and qualitative evaluation", and "feedback teachers' opinions in time" or suggest "four indicators". According to the second round of anonymous feedback from experts, it is found that the evaluation of importance is averagely divided into 2.26 ~ 4.89, the coefficient of variation is 0.021 ~ 0.258, and the index of "high-performance awards for outstanding performance" indicators with the average importance evaluation score < 3 and the coefficient of variation > 0.25 are deleted. In the third round of anonymous feedback from experts, all experts reached an agreement on all indicators. After careful statistics, analysis, and calculations on the data evaluated by experts, 5 first-level indicators (table 2.11) and 24 second-level indicators (table 2.12) were finally obtained.

Table 2.11 - The main function table of the first-level index expert score of the high-performance work systems in universities

Index content		Importance average	Index Weight	Full score frequency	Standard deviation	Coefficient of Variation
Teacher selection and development	A1	3.60	0.1819	0.20	0.8282	0.2301
Performance-linked compensation	A2	4.87	0.2456	0.87	0.3521	0.0723
Information Sharing	A3	3.21	0.1483	0.07	0.7035	0.2401
Occupational safety guarantee	A4	4.60	0.2322	0.60	0.5071	0.1102
Equal working environment	A5	3.80	0.1918	0.27	0.9411	0.2477

**Source: prepared by the author.*

As can be seen from table 2.11, among the five first-level indicators, experts pay more attention to Performance-linked compensation. This indicator relates to teacher motivation and fairness. Secondly, they consider the Occupational safety guarantee also very important, which is the basic guarantee of teachers' work.

Table 2.12 - Indexes of high-performance work systems in universities and main function table of expert scores

First level indicator	Secondary indicators	Mean importance	Index Weight	Combination weight	Full score frequency	Standard deviation	Coefficient of Variation
1	2	3	4	5	6	7	8
Teacher selection and development	Provide academic exchange opportunities	3.60	0.1251	0.0227	0.20	0.9556	0.2450
	Support teachers to participate in training, learning and continuing education	4.60	0.1596	0.029	0.70	0.5071	0.1102
	Have a clear strategic plan for talent development	4.40	0.1770	0.034	0.60	0.8281	0.1882
	Develop and implement talent introduction and training plans	4.01	0.1390	0.0252	0.42	0.9258	0.2309
	Pay attention to the professional development of teachers	4.58	0.1770	0.034	0.40	0.5071	0.1107
Performance-linked compensation	The salary system is considered based on performance	4.80	0.3912	0.058	0.75	0.4139	0.0862
	Salary design can reflect the more jobs you get	4.70	0.2666	0.0303	0.84	0.4140	0.0881
	Strict, fair and transparent evaluation and review procedures	4.62	0.1596	0.029	0.60	0.5071	0.1098
	Performance evaluation focuses on the combination of quantitative and qualitative	4.61	0.3432	0.0797	0.64	0.5071	0.1100
	Set clear job responsibilities and goals for teachers	4.40	0.3283	0.0763	0.60	0.8281	0.1882
	Pay attention to job matching	4.41	0.2069	0.0509	0.60	0.8278	0.1877
Information Sharing	Open channels for teacher feedback, suggestions and appeals	3.42	0.1599	0.0393	0.10	0.8283	0.2422
	Provide an exchange and cooperation platform for academic teams	3.79	0.1319	0.0241	0.24	0.7746	0.2044

Table 2.12 continued

1	2	3	4	5	6	7	8
	Timely and accurate information release	3.40	0.1182	0.0215	0.20	1.0556	0.3105
	Attach importance to promoting teacher exchanges	3.67	0.1476	0.0283	0.20	0.8165	0.2229
Occupational safety guarantee	Welfare can make teachers feel at ease in teaching and research	4.90	0.2288	0.0562	0.86	0.3522	0.0723
	The service department gives teachers the greatest support for teaching and research	4.61	0.1850	0.0355	0.66	0.5071	0.1101
	Caring for the improvement of teachers' quality of life	4.61	0.2163	0.0532	0.62	0.5072	0.1100
	Perfect logistics support	4.41	0.3282	0.0763	0.61	0.8283	0.1884
	Provide teachers with good working conditions and scientific research facilities	4.60	0.2163	0.0532	0.63	0.5072	0.1102
Equal working environment	Policy development solicits teachers' opinions	3.60	0.1288	0.0247	0.00	0.7746	0.2423
	Leaders make teachers feel cared	3.90	0.3151	0.0467	0.13	0.6398	0.1655
	Faculty and staff participate in leadership assessment	4.60	0.1850	0.0355	0.65	0.5071	0.1103
	Faculty and staff participate in the formulation of school development plans	3.60	0.2936	0.0435	0.00	0.5072	0.1409

Note: University high-performance work system total score = \sum secondary index score \times combination weight

*Source: prepared by the author.

The construction of the primary index system refers to the best human resource management theory and uses literature research, questionnaire surveys, interviews, and other methods to improve the scientific nature of the research. In the process of constructing the formal index system, the Delphi method research procedure was strictly implemented. By calculating the expert authority coefficient of 0.878, the importance score of the index was 3.21-4.90, and the coefficient of variation was 0.0723-0.3105, indicating that the expert has high authority. The index system constructed by the research is scientific.

With the deepening of research, research on department-level HPWS and employee perception of HPWS continues to emerge, and many kinds of literatures use department-level research (Vermeeren, 2014; Kuvaas, Dysvik & Buch, 2014;

Messersmith, Patel & Lepak, 2011; Jensen, Patel & Messersmith, 2013). In the same organization, the HPWS of different departments will be different (Nishii & Wright, 2008; Vermeeren, 2014), the department head is the implementer of HPWS, and previous studies usually use the department head to evaluate the department-level HPWS. Due to the different abilities and willingness of department heads to handle human resources affairs, the workload and sense of responsibility are different (Bos-Nehles, 2010; Kuvaas, Dysvik & Buch, 2014; Vermeeren, 2014). The perception and execution of department heads, that is, the department-level HPWS differs. The formulation of organizational management systems must be felt by employees in order to have a positive impact on organizational performance. Therefore, this study will use the developed high-performance work system measurement tool to effectively measure college teachers' perceptions of the organization's implementation of high-performance work system practices, thereby judging the implementation of high-performance work system practices in their universities.

Combined with model construction and using the methods of compiling evaluation questionnaires related to psychology and pedagogy, we made the "University High-Performance Work System Evaluation Questionnaire" (Table 2.13).

Table 2.13 - University high-performance work system evaluation questionnaire

Questionnaire items	Degree of compliance
1	2
Provide academic exchange opportunities	1 2 3 4 5
Support teachers in training, learning and continuing education	1 2 3 4 5
Have a clear talent development strategy plan	1 2 3 4 5
Develop and implement talent introduction and training plans	1 2 3 4 5
Focus on teacher professional development	1 2 3 4 5
The compensation system is based on performance	1 2 3 4 5
Salary design reflects the more work you get	1 2 3 4 5
Rigorous, fair and transparent evaluation and review procedures	1 2 3 4 5
Performance evaluation focuses on the combination of quantitative and qualitative	1 2 3 4 5
Set clear job responsibilities and goals for teachers	1 2 3 4 5
Focus on job matching	1 2 3 4 5
Open channels for teacher feedback, suggestions and grievances	1 2 3 4 5
Provide a platform for academic teams to communicate and cooperate	1 2 3 4 5
Timely and accurate information release	1 2 3 4 5

Table 2.13 continued

1	2
Emphasis on promoting teacher communication	1 2 3 4 5
Welfare can make teachers feel at ease in teaching and research	1 2 3 4 5
The service department gives teachers the greatest teaching and research support	1 2 3 4 5
Concerned about improving the quality of life of teachers	1 2 3 4 5
Perfect logistics support	1 2 3 4 5
Provide teachers with good working conditions and research facilities	1 2 3 4 5
Consult teachers for policy making	1 2 3 4 5
Leaders make teachers care	1 2 3 4 5
Faculty and Staff Engagement in Leadership Assessments	1 2 3 4 5
Faculty and staff participate in the formulation of school development plans	1 2 3 4 5

**Source: prepared by the author.*

The questionnaire test topics include teacher selection and development, performance-related compensation, information sharing, occupational safety, security, equal working environment, five first-level indicators, and 24 second-level indicators. The respondents were asked to answer based on their perceived level of compliance with the school's situation. Choose from a total of 5 options, from "Not at all" to "Completely". The reliability and validity of the scale were tested according to the data collected from the scale. The overall α coefficient of the questionnaire data is 0.967, and the α coefficient of each latent variable is greater than 0.96, so the overall reliability of the questionnaire is very good. The scale is very suitable for the purpose of this research and can be further analyzed. Teacher selection and development, performance-related compensation, information sharing, occupational safety and security, and equal working environment have standard factor loadings of more than 0.6, indicating that all the items in the scale are related to their corresponding variables and have good explanatory power. From the combined reliability and average variance extraction values, the minimum combined reliability CR of each latent variable is 0.8429; the AVE values are all greater than the standard reference value of 0.50. The overall fit index also achieved the fit index (table 2.14).

Table 2.14 - Overall fit index table

Fit metrics	X2/df	NFI	CFI	IFI	TLI	PCFI	RMSEA
Reference	<3	>0.9	>0.9	>0.9	>0.9	>0.5	<0.08
Numerical value	2.111	0.882	0.908	0.908	0.894	0.793	0.089

**Source: prepared by the author*

It can be seen that the scales used in this questionnaire design have good validity. On the basis of literature research, this study explores the practical application of human resource management of high-performance work systems in universities through the scientific method combining quantitative and qualitative research. First of all, this study introduces the idea of enterprise human resource management in universities, which expands the connotation and extension of human resource management research. Second, this study has clarified the key objectives and core index system of human resource management in Chinese universities, providing guidance, standards, and reference basis for personnel management practice in Chinese universities. Thirdly, this study has developed a reliable tool to evaluate the level and quality of HRM in universities, which can be used to diagnose and evaluate university HRM practice activities.

2.3 Evaluation of the competence of Chinese university teachers

There are many ways to assess competence. According to the number of evaluators and the number of evaluation methods used, it can be divided into the single-person evaluation and multi-person evaluation. The former work is tedious and prone to single-reviewer bias for a variety of reasons (Theron & Roodt, 2009). The multi-evaluator method can solve the problems faced by a single evaluator and can generate quantitative data, psychometric data, reliability and validity coefficients, etc. [118]. There is another assessment based on competency criteria established by the country or industry. This assessment is called a criteria-based competency assessment. For example, the national standards for psychological counselors, the relevant regulations on teacher qualifications and their competencies in teacher qualification standards, etc. In the process of competency evaluation, many competency evaluation tools have been developed in combination with the industry. For example, the competency assessment tools developed by Hay Group include "Competency Toolkit", "Emotional Competency Questionnaire", "Emotional Competency Questionnaire" (University Edition), "Hay Group Explorer", "Leadership Competency Questionnaire", "Management Competency Questionnaire", "Management Competency Questionnaire" (feedback version), etc. The

human resources departments of 104 banks in Taiwan of China entrusted psychology experts to invite dozens of enterprises from different industries to participate in the cooperation. According to the actual needs of Taiwan enterprises, the platform of "Work Function Scale and Evaluation Center" was designed and developed.

In addition to business, researchers in the field of education have also conducted many fruitful studies on competency measurement tools. Hart (1934) surveyed 4,000 high school students' opinions on popular and unpopular teachers, obtained the trait performance of the most popular teachers, and compiled a "Teacher Trait Scale" for teachers to self-examine and compare. The table includes 15 essential characteristics that affect teacher performance and teaching effectiveness. Cheung and Lew conducted a survey of 800 secondary school students, normal students, and in-service teachers in Hong Kong and obtained 20 general qualities of ideal teachers, which were listed in the "Ideal Teacher Qualities Table". Based on N.R. Dodle's research on effective teaching in Florida, USA, the "Teacher Behavior Classification Table" was formulated according to behavioral science theory, teaching theory, learning theory, curriculum theory, and teaching experience to classify the teaching profession. The table covers six areas: measurement and evaluation of student behavior, instructional design, instructional presentation, the burden of administrative responsibilities, communication skills, development of personal skills, and student self-development. Each aspect has 4 to 7 items. Sam Nelson et al. (1946) developed the Self-Scale of Teaching Suitability for Future Teachers. The scale is based on existing teacher characteristics. It can more comprehensively measure the teaching performance of normal students and in-service teachers. healthy. Schorling and Batchelder (1956) compiled an Inventory of Important Factors in Teacher Personality Performance. The table divides the performance of teacher personality into emotional stability and mental health, personal demeanor, health and activity, character, adaptability, cooperation, and voice and intonation. There are ten categories, leadership, resourcefulness, and communication. There are a number of standard features under each category. Ryans's (1960) "Teacher behavior discrimination table" presents 25 effective and ineffective teacher behaviors, which are used to distinguish and investigate teachers' performance which can distinguish between

effective and ineffective behaviors of teachers in the teaching environment. Cruickshank (1986) compiled the "Characteristic Table of Effective Teacher Literacy" based on his own research on teacher effectiveness and conducted 36 evaluations on teacher literacy from three aspects: classroom organization, teaching behavior, and classroom management. Witty (1940) developed a "Teacher's Personality Characteristics and Effectiveness" measurement table based on 12 criteria of effective teachers and ineffective teachers derived from his own research. Brewer and Simmons (1985) proposed a checklist for teachers to self-analyze and monitor their own behavior, compiling a teacher trait test consisting of 28 diametrically opposed items to test whether teachers are creative, dynamic, organized, and enthusiastic. McIntyre, D.JO'Haire, M.J.'s "Teacher Communication Style Explanation Sheet" includes 12 questions to help teachers assess their own communication styles and communication methods. In the evaluation process of primary and secondary school teachers in the United States, the evaluation scale used by principals mainly includes five aspects: planning ability, teaching skills, work attitude, and personality characteristics to evaluate teachers [119]. The "Teacher Interpersonal Relations" scale evaluates teachers' interpersonal relationships from several aspects, including teacher-student relationship, teacher-student relationship, the public, teacher-manager relationship, and teacher-professional relationship, and guides teachers to pursue the following professional maturity characteristics. Really care about others, know yourself, have mature life goals, know your values clearly, have self-control, and be cautious. The influence of one's own behavior on others, the planned correction of one's own shortcomings, the improvement of one's own abilities, and so on. This scale can be used as a practical standard for teachers' own teaching behavior or as a self-examination exam. Domestic scholars have also compiled some corresponding evaluation tools. The "Quality Evaluation Scale for Primary School Teachers" contains 90 items, and the principal or evaluator can evaluate a teacher one by one at the same time [120]. Wei Hong and Hu Zuying (1993) formulated the "Characteristic Table of Excellent Teachers" based on various research conclusions, which involved four factors: teaching organization, teaching motivation, teaching clarity, and positive personality characteristics. Cha

Youliang (1998) put forward 40 items for the "Quality Assessment of Excellent Teachers" and 40 items for the "Assessment of Teaching Quality of Excellent Teachers". Wang Weihong et al. (2002) used the self-edited "Teachers' Psychological Quality Questionnaire" to investigate school teachers and principals from the aspects of innovative spirit, self-confidence, interpersonal relationships, and emotional regulation. Xu Yan (1999), based on the results of the open and semi-open questionnaires, surveyed the construction of the 21st-century teachers' team on the psychological quality of outstanding talents, and the questionnaire has a total of 50 psychological characteristics words.

The above-mentioned numerous quantitative empirical studies on the personal characteristics of teachers use different evaluation methods and collect a large amount of data. The data they collected was mainly conceptual, with less research on teacher ability and behavior, and could only be said to be related to teacher ability. Because the connotation of teacher quality involved in the research is not completely consistent with the concept of teacher ability [121]. Again, moreover, this approach to research solicitation is far from adequate. At present, from the perspective of competency modeling and evaluation, special research on teacher competency is still very rare. Nonetheless, there are still many inspirations for the empirical research on teacher competency in the research on the quality of excellent teachers and their teaching behavior and teaching practice activities, as well as the research on teacher effectiveness [122]. This study is an attempt based on the above analysis. From the perspective of competency, the research will analyze some competency characteristics of teachers through their past teaching behaviors. The main goal of the research is to build a teacher's competency model. Finally, a research tool that can measure teachers' abilities is developed to provide theoretical support for the next empirical research.

A teacher's performance, intelligence, and ability should be the criteria and basis for evaluating teachers, while ability is a comprehensive reflection of a teacher's external ability and implicit quality. High-quality teachers are not necessarily good-performing teachers. They should also include teachers with high intrinsic potential. Most of their abilities are like parts of what's hidden under an iceberg. Over the course of his career, he

will slowly show higher abilities [123]. In the new era, in order to better evaluate college teachers and provide a basis for teacher selection, appointment, training, and performance management, it is necessary to build a teacher competency model. The competency model has a certain timeliness. The factors that affect competence are dynamic and will change with the development of society, the changes of the times, the changes in enterprises and industries, and the changes in the market [124]. As society evolves, so does the workplace. The 2019 COVID-19 pandemic has had a major impact on the world. This influence is also reflected in the ability of modern college teachers.

In recent years, scholars at home and abroad have conducted in-depth explorations on the competency model of college teachers. For example, He Qizong (2015), Yan Zhengshu (2015), and Liao Hongjian (2017) studied the teaching competence model of college teachers from different perspectives. Wang Zhenghua (2015), Li Xiaojuan (2017), Liu Xingfeng (2018), and Wang Wei (2019) studied different types of university teachers' victory models. Liu Haiyan (2018), Zhao Zhongjun (2019), and Zhao Guang (2020) studied the competency model of college teachers from different perspectives. Researchers such as Blomeke, S (2010) and Balcar, J (2010) studied the general competency model of teachers. Lindmeier (2010), Suroto (2017), and Boonsri, S (2018) studied the competency models of mathematics teachers, physical education teachers, and vocational and technical teachers, respectively. Yurdakul, IK (2014), Suroto (2017) and Bahcivan, E (2019) examined competency models for pre-service or future teachers. Gyurova, V (2014), Anhalt, CO, etc. (2014) studied the construction of different types of teacher competency models.

Our research draws on the above research experience. In terms of research methods, we use not only quantitative methods but also qualitative research methods. The goal of this research is to collect vocabulary on the competency characteristics of college teachers by combing the research results on the competence of college teachers from 2010 to 2020 and conducting interviews with college teachers and education administrators. Through expert group discussion, a vocabulary of university teachers' competency is formed, and original materials are prepared for constructing a competency model.

First, we searched the literature (journal articles) from 2010 to 2020 on China Knowledge Network, the largest literature database in China, with the subject of "University Teacher Competency", and obtained 265 articles; A total of 422 articles were retrieved in the database of Science from 2010 to 2020. After studying the literature, it was found that 17 of them were related to the construction of the competency model. Through the author's study, the statistical results of the dimension and index system were obtained [125]. We sorted out the competency entries of college teachers described in these 17 representative documents, and obtained a total of 359 competency entries (second-level indicators) (table 2.15).

Table 2.15 - Statistics of the competency survey of university teachers

Serial number	Name	Serial number	Name	Serial number	Name
1	Love education	11	Emotion management ability	21	Teaching methods and skills
2	Professional knowledge reserve	12	Interpersonal communication skills	22	Self-confidence
3	The ability to integrate theory with practice	13	Sound personality	23	Creative thinking ability
4	Logic analysis ability	14	Scientific education concept	24	Ability to find and solve problems
5	Participate in academic activities related to the subject	15	Social responsibility	25	Project management ability
6	Learning ability	16	language expression skills	26	Classroom organization
7	Caring for students	17	Teamwork	27	Compressive ability
8	Enterprising spirit	18	Academic ethics	28	The ability to obtain and use information
9	Master the frontier dynamics of the subject	19	Critical thinking skills	29	Research persistence and focus
10	Promote school-enterprise cooperation capabilities	20	Scientific research transformation ability	30	Understand the needs of economic and social development

**Source: prepared by the author.*

In order to ensure the authority of the research, this study selected 20 experts who are engaged in university educational administration, teaching theoretical research, and

working in the front line of teaching as the consulting objects, including 8 men and 12 women; the age range of experts is 36-67 years old. Among them, 5 experts are 36-45 years old, 9 are 46-55 years old, and 6 are 56-67 years old. Experts have more than 11 years of teaching experience. Among them, 5 are 11-20 years old. Five of them have worked for 10 to 20 years, 10 for 30 years, and five for more than 31 years. Among them, there are 16 professors and 4 associate professors. Among them, 18 have a doctor's degree and 2 have a master's degree. All of them are professors. There are 12 experts in liberal arts and 8 experts in science and engineering. All experts are master tutors. Generally speaking, the expert group is professionally representative and authoritative.

The 30 college teachers' competency vocabulary collected was compiled into a vocabulary questionnaire, which was based on the 7-level scoring system of the Richter Scale. Among them, "1" means very unimportant; "2" means not important; "3" means less important; "4" means fair; "5" means more important; "6" means important; "7" means very important. A questionnaire survey was conducted with Chinese university teachers as the subjects of the survey. Select 25 university teachers from 8 provinces and cities in eastern China (Shandong, Guangdong), central (Henan, Hebei, Hubei), and western (Xinjiang, Sichuan, Chongqing) as the research objects. A total of 608 electronic questionnaires were issued, and the efficiency was 100% (table 2.16). The recovered valid samples were randomly divided into half using SPSS22.0 software, sample A (304 copies) was used for exploratory factor analysis (EFA), and sample B (304 copies) was used for confirmatory factor analysis (CFA).

Table 2.16 - Descriptive statistics of the measurement indicators of the university teacher competency vocabulary questionnaire

Measurement standard	Sample size	Minimum	Max	Average	Standard error	Standard deviation	Variation
1	2	3	4	5	6	7	8
Love education	608	1	7	6.61	.033	.809	.654
Learning ability	608	1	7	6.61	.029	.727	.529
Emotion management ability	608	1	7	6.48	.034	.849	.721
language expression skills	608	1	7	6.57	.031	.771	.595
Teaching methods and skills	608	1	7	6.51	.032	.799	.639
Classroom organization	608	1	7	6.48	.032	.801	.642
Professional knowledge reserve	608	1	7	6.61	.028	.696	.485

Table 2.16 continued

1	2	3	4	5	6	7	8
Caring for students	608	1	7	6.59	.030	.740	.548
Interpersonal communication skills	608	1	7	6.34	.036	.897	.805
Teamwork	608	1	7	6.33	.038	.925	.856
Self-confidence	608	1	7	6.42	.035	.851	.725
Compressive ability	608	1	7	6.44	.034	.849	.721
The ability to integrate theory with practice	608	1	7	6.53	.031	.768	.589
Enterprising spirit	608	1	7	6.37	.036	.877	.769
Sound personality	608	1	7	6.61	.030	.729	.531
Academic ethics	608	1	7	6.67	.027	.662	.439
Creative thinking ability	608	1	7	6.44	.034	.830	.689
The ability to obtain and use information	608	3	7	6.50	.031	.757	.573
Logic analysis ability	608	3	7	6.42	.033	.814	.662
Master the frontier dynamics of the subject	608	3	7	6.42	.033	.820	.673
Scientific education concept	608	3	7	6.46	.032	.799	.638
Critical thinking skills	608	2	7	6.35	.036	.885	.783
Ability to find and solve problems	608	2	7	6.46	.032	.796	.634
Research persistence and focus	608	3	7	6.37	.035	.853	.728
Participate in academic activities related to the subject	608	2	7	6.15	.041	1.016	1.033
Promote school-enterprise cooperation capabilities	608	1	7	5.82	.049	1.211	1.465
Social responsibility	608	3	7	6.42	.034	.846	.715
Scientific research transformation ability	608	1	7	5.98	.048	1.176	1.382
Project management ability	608	1	7	5.96	.046	1.144	1.308
Understand the needs of economic and social development	608	1	7	6.13	.043	1.072	1.148

**Source: prepared by the author.*

An exploratory factor analysis was conducted with SPSS Statistics 22 to determine the structural factors of the scale. Then, SPSS Amos 23 was used for confirmatory factor analysis to check whether the factor structure model of the scale was consistent with the actual data acquisition results. The recovered 608 vocabulary questionnaires were analyzed. The survey data were randomly sampled by SPSS and divided into two groups. The 304 data with a grouping variable of 0 is sample A, which is used for exploratory factor analysis of the competency model. The grouping variable is the 296 data of 1 in sample B, which is used for confirmatory factor analysis of the competency model. We used SPSS Statistics 22 statistical software for exploratory factor analysis of the sample group. Through KMO test and Bartlett's spherical test on the data, KMO value is 0.9949

and P value of Bartlett's spherical test is 0.00. It shows that the data is very suitable for factor analysis(table 2.17).

Table 2.17- KMO and Bartlett's spherical test of exploratory factor analysis sample of university teacher competency content

Age	Times	Percentage	Effective percentage	Cumulative percentage
30 years old or below	66	10.9	10.9	10.9
31 years old-40 years old	324	53.3	53.3	64.1
41 years old-50 years old	173	28.5	28.5	92.6
51 years old or above	45	7.4	7.4	100.0
Total	608	100.0	100.0	

**Source: prepared by the author.*

Exploratory factor analysis is to clarify the structural validity of variables and verifies the rationality of related items. This factor analysis selected 304 samples. The sample size is 10.4 times the number of variables, so the number of samples meets the requirements.

Exploratory factor analysis of university teachers' competency is carried out, the principal component method is used to extract the factors, and the rotation method uses the Varimax maximum variation method. According to the characteristic value greater than 1, the load on a certain factor is greater than 0.5, and there is no cross load. This means that Both factors have not standard extraction factor more than 0.4 load. Among them, logic analysis ability, classroom organization ability, and project management ability all have a load on two factors, but they all have a higher load on one of the factors. After discussion by the expert group, it was decided to assign them to the higher load. Factors. In accordance with the screening criteria of exploratory factor analysis, after multiple factor analysis, the dimensions with less than three questions were deleted one by one, the cross coincidence was high, the total load was small, and the content meaning of the same dimension was quite different from other items. After many explorations, the final 22 items remain. The cumulative explanatory variance of the four factors is 73.974%, which passed the validity test of exploratory factor analysis. The results are shown in table 2.18.

Table 2.18 - Exploratory factor analysis results of the competency content of university teachers

Indicators	Original data				Re-adjusted			
	Element				Element			
	1	2	3	4	1	2	3	4
The ability to obtain and use information	.572				.784			
Creative thinking ability	.595				.738			
Logic analysis ability	.527	.309			.702	.411		
Master the frontier dynamics of the subject	.579				.688			
Critical thinking skills	.579				.685			
Research persistence and focus	.571				.673			
Ability to find and solve problems	.489				.651			
Interpersonal communication skills		.743				.847		
Teamwork		.613				.719		
Self-confidence		.527				.697		
Compressive ability		.537				.676		
Caring for students		.372				.563		
Sound personality		.376				.557		
Love education			.624				.772	
Teaching methods and skills			.497				.669	
Learning ability			.437				.656	
Classroom organization	.308		.483		.408		.639	
language expression skills			.444				.624	
Professional knowledge reserve			.395				.596	
Promote school-enterprise cooperation capabilities				.995				.845
Scientific research transformation ability				.946				.814
Project management ability	.458			.815	.422			.752

**Source: prepared by the author.*

We imported the data collected from the questionnaire into the data analysis software for data processing. We used sample A with a random grouping variable of "1" performed a confirmatory factor analysis on the four dimensions of the competency vocabulary questionnaire. The analysis results of the measurement model are shown in Figure 2.4. From the results of exploratory factor analysis, we can clearly see that the structure of teachers' abilities is divided into four parts. This means that there are four first-level indicators in the competency structure of teachers. Each primary indicator is composed of several secondary indicators. In addition, it is evident that the secondary indices under each primary index share common characteristics. Of course, this is only a preliminary exploration result. The accuracy and validity of this result need further proof. Therefore, subsequent confirmatory factor analysis is needed.

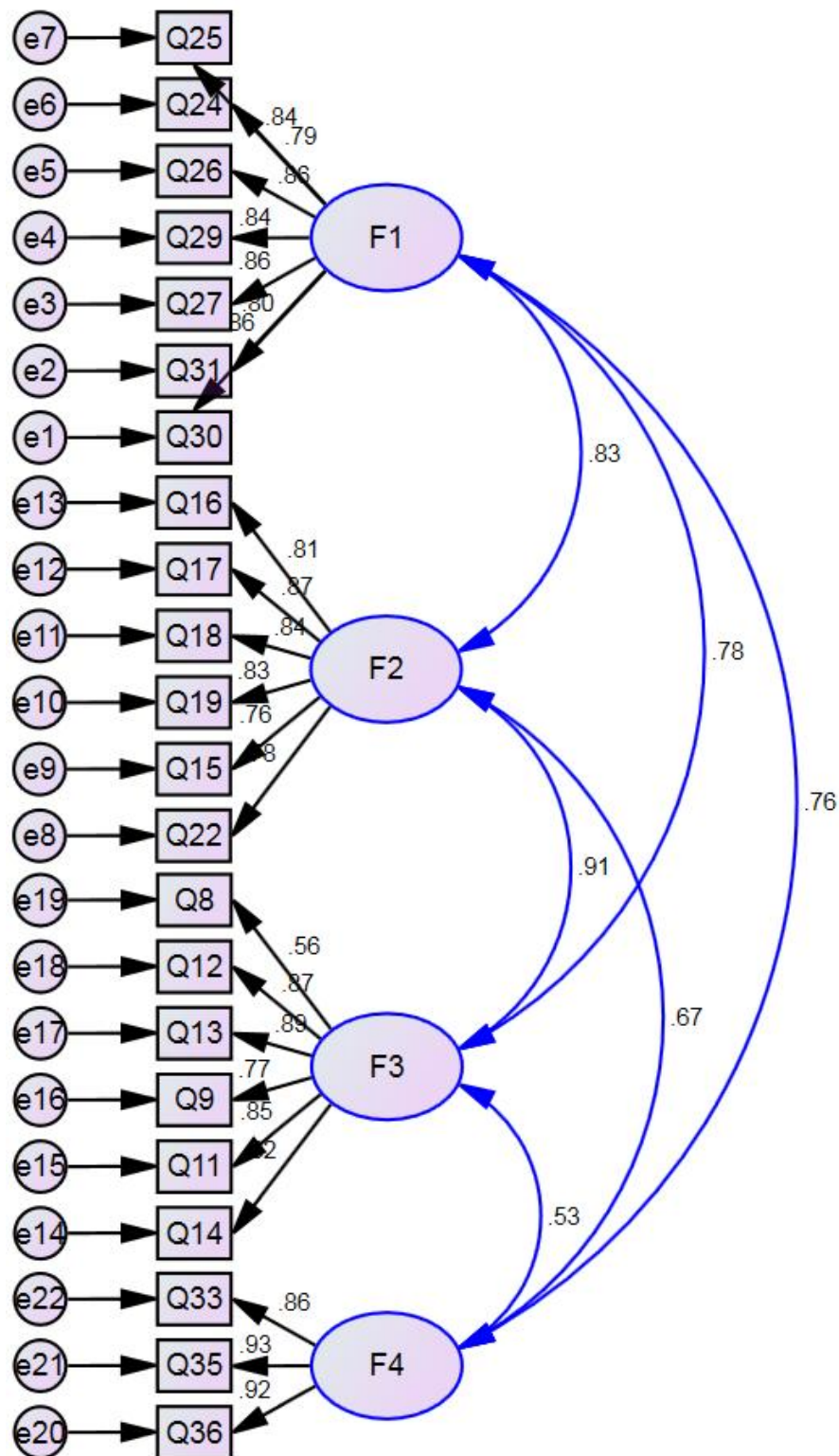


Figure 2.4 - Results of confirmatory factor analysis of university faculty competency

**Source: prepared by the author.*

Among them, the χ^2 value is 693.656, $df=203$, the ratio of the χ^2 value to df is 3.417,

which is less than 5, and the model fit is acceptable. Among other fitting indexes, RMSEA=0.091, NFI=0.891, CFI=0.920, GFI=0.826, and the t value of each parameter is significant. It can be seen that the model has a better fitting effect. The factor structure shown in figure 2.4 has passed the verification. This means that the division and measurement of the four dimensions of college teachers' competence proposed in this study are effective.

Reliability analysis is performed on sample A, and the results are shown in Table 2.19. The CICT of all items is greater than 0.35, and Cronbach's coefficient of all dimensions is more significant than 0.6. However, after deleting the item, only Cronbach's coefficient of "love education work" increased. After discussion by the expert group, the item was considered to be too broad and revised to "love education work". The Cronbach's coefficient has been reduced after each of the remaining items is deleted, indicating that the variable measurement is consistent.

Table 2.19 - Overall reliability test results of confirmatory factor analysis of competency content (N=296)

Dimension	Item	Total Correlation Coefficient (CICT)	Cronbach's a value after deleting the item	Cronbach's a coefficient
Dimension one	Ability to acquire and use information	.738	.937	.940
	innovative thinking ability	.810	.931	
	logical analysis ability	.841	.928	
	critical thinking skills	.845	.928	
	Grasp the frontier dynamics of the discipline	.804	.932	
	Persistence and focus of research	.837	.928	
	problem-finding and problem-solving skills	.764	.935	
Dimension two	interpersonal communication skills	.719	.916	.923
	Teamwork	.786	.907	
	self-confidence	.830	.901	
	Compressive ability	.808	.904	
	Caring for students	.797	.906	
	sound personality	.738	.914	
Dimension three	love education	.545	.922	.910
	Teaching Methods and Skills	.767	.892	
	classroom organization skills	.818	.884	
	learning ability	.808	.885	
	language expression skills	.806	.886	
	Professional knowledge reserve	.769	.892	
Dimension four	Promote school-enterprise cooperation	.820	.925	.929
	scientific research transformation ability	.888	.871	
	Project management ability	.857	.895	

**Source: prepared by the author.*

Through exploratory factor analysis and confirmatory factor analysis of the "University teacher competency vocabulary questionnaire", this study established a university teacher competency model consisting of 4 competency dimensions and 22 competency indicators (table 2.20).

Table 2.20 - Competency model of university teachers

Dimension	Index number	index
Dimension one	1	The ability to obtain and use information
	2	Creative thinking ability
	3	Logic analysis ability
	4	Critical thinking skills
	5	Master the frontier dynamics of the subject
	6	Research persistence and focus
	7	Ability to find and solve problems
Dimension two	8	Interpersonal communication skills
	9	Teamwork
	10	Self-confidence
	11	Compressive ability
	12	Caring for students
Dimension three	13	Sound personality
	14	Love education
	15	Teaching methods and skills
	16	Classroom organization
	17	Learning ability
	18	language expression skills
Dimension four	19	Professional knowledge reserve
	20	Promote school-enterprise cooperation capabilities
	21	Scientific research transformation ability
	22	Project management ability

**Source: prepared by the author.*

We explained and defined the obtained indicators by reading literature, querying dictionaries, etc. Factor one includes the ability to acquire and use information, the ability to think creatively, the ability to analyze logically, the ability to think critically, the ability to grasp the frontier dynamics of the subject, the persistence and focus of research, and the ability to discover and solve problems. The ability to acquire and use information refers to the ability of university teachers to obtain subject-related information from relevant materials and corresponding platforms in a timely and effective manner and use the information effectively to promote their own work. Creative thinking ability refers to the creative consciousness and innovative spirit of thinking activities, not sticking to

conventions, singularity, and seeking change, which is manifested in creatively asking questions and creatively solving problems. Logical thinking ability refers to the ability to think correctly and reasonably. That is, the ability to observe, compare, analyze, synthesize, abstract, generalize, judge, and reason about things, use scientific methods, and accurately and methodically express their thinking process. Critical Thinking (Critical Thinking) is to evaluate thinking through certain standards to improve thinking. It is reasonable and reflective thinking, which is not only a thinking skill but also a thinking tendency. Master the frontier dynamics of the subject refers to understanding the development trend of the subject's research field and the key issues that restrict the development of the subject. The persistence and focus of research refer to the fact that one's own research field remains unchanged for a long time, and the focus of research is more concentrated and in-depth. The ability to discover and solve problems refers to individuals who are good at discovering contradictions in their work and life and are good at using resources to resolve contradictions and promote the development of things in a good direction.

Factor two includes interpersonal communication ability, teamwork ability, self-confidence, ability to resist stress, enterprising spirit, caring for students, and 7 indicators of sound personality. Interpersonal communication skills include expression skills, listening skills, and design skills. Design skills include image design, action design, and environment design. Generally speaking, communication ability refers to the excellent subjective conditions that the communicator possesses to be competent in communication work. In short, the ability of interpersonal communication refers to the ability of a person to communicate information effectively with others, including external skills and internal motivations. Teamwork ability, also known as teamwork ability, refers to the ability that is built on the basis of the team, exerts team spirit, and complements each other to achieve the maximum work efficiency of the team. For team members, it is not only necessary to have personal abilities but also to have the ability to do their best in different positions and to coordinate and cooperate with other members. Self-confidence is a psychological characteristic that reflects the degree of trust that an individual has in his ability to successfully complete an activity. It is a conscious characteristic and

psychological state that actively and effectively expresses self-worth, self-respect, and self-understanding. Individual differences in self-confidence affect individual psychology and behavior in various aspects, such as learning, competition, employment, and achievement to varying degrees. Stress resistance, also known as psychological endurance, is an individual's ability to withstand and regulate psychological pressure and negative emotions caused by adversity. It mainly refers to the strength of adaptability, tolerance, endurance, and ability to overcome adversity. A certain psychological endurance is an important part of an individual's good psychological quality. An enterprising spirit is an upward and determined mental state. The meaning is similar to enterprising, but it can better describe the determination and courage of the subject. It is one of the necessary conditions for the overall development and continuous progress of mankind. Caring for students means always thinking about students in their hearts, considering problems from the needs and interests of students, caring about students' growth and development from the heart, and hope that students can make progress in all aspects. A sound personality refers to an individual with a "sound personality", which is a new era concept that expresses the essential state of human existence. The ideal standard of a healthy personality is that the individual's physical, psychological, moral, and social elements are perfectly unified, balanced, and coordinated so that people's talents can be fully utilized. A sound personality means whether one's understanding of oneself is correct and whether one's goal is clear.

Factor three includes six indicators: love of teaching work, teaching methods and skills, classroom organization ability, learning ability, language expression ability, and professional knowledge reserve. Love for teaching refers to a mental state in which teachers can obtain positive emotions such as happiness, accomplishment, and satisfaction from teaching and are willing to continue to engage in teaching. Education actually has two parts, including teacher teaching methods (teaching methods) and student learning methods (learning methods). They are the unity of teaching methods and learning methods. The teaching method must be based on the learning method. Otherwise it will not be able to effectively achieve the expected purpose due to lack of pertinence and feasibility. However, because teachers are in a dominant position in the teaching

process, teaching methods are in a dominant position in teaching methods and learning methods. Teaching skills refer to the stable and complex teaching behavior system formed by teachers using existing teaching theory knowledge through practice. It includes the primary teaching skills formed by repeated practice or imitation in a certain way on the basis of teaching theory, as well as the advanced teaching skills formed by repeated practice on the basis of teaching theory, reaching the level of automation, that is, teaching Skill. Teaching skills are necessary education and teaching skills for teachers. They have a positive effect on achieving good teaching results and realizing teaching innovation. In addition, teachers should also skillfully use computer technology, multimedia technology, and other advanced educational technology to organize teaching and use advanced technology to continuously improve teaching methods and methods to improve teaching effects. Master modern teaching methods and skillfully use the information highway to collect, organize, and use various information materials to serve teaching and scientific research. Classroom organization ability and classroom management are a series of teaching behaviors for teachers to complete teaching tasks, regulate interpersonal relationships, harmonize the teaching environment, and guide students to learn. Good classroom management is the cornerstone of teaching activities, and teachers must continuously improve classroom teaching management skills. The relevant elements of classroom management include physical environment and classroom discipline. The basic model has three orientations: behaviorist orientation, humanistic orientation, and teacher effectiveness orientation. School management level, teacher management ability, student learning behavior, class size, and class nature affect the effectiveness of classroom management. Learning ability refers to the psychological characteristics that an individual needs to engage in learning activities. It is a combination of various abilities to successfully complete learning activities, including perception and observation ability, memory ability, reading ability, problem-solving ability, etc. Generally speaking, the level of learning ability is closely related to the evolution of the germline. The higher the germline evolution, the stronger the learning ability. In an educational environment, the development of learning ability and the teaching process complement each other. Language expression ability refers to the ability to use words,

words, sentences, and paragraphs in the process of oral language (speaking, speaking, making reports) and written language (answering questions on thesis, writing articles), both of which are based on language. The basic medium, although written language can be a summary of spoken language, there is no direct relationship between the two. Poor eloquence is not necessarily good at writing. Language expression ability specifically refers to accurate words, clear meaning, proper structure, concise sentences, coherent text and theory, easy language, conforming to norms, and the ability to express objective concepts clearly, accurately, coherently, and appropriately without language problems. Language expression ability also comes from pronunciation, eloquence is a manifestation of language expression ability, beautiful language is the manifestation of one's own quality, and more comes from education and acquired learning. It includes spoken language and written language. Professional knowledge reserve refers to being familiar with the rich theoretical and practical knowledge of the major, having its own theoretical results and research system, and having certain authority in the professional field. Professional knowledge refers to the degree of authority and professionalism of the communicator's support for the claim. For example, doctors, scientists, and professors are the most professional in their fields. Credibility refers to the degree to which the source of information is considered objective and honest. For example, friends are more trusted than unfamiliar salesmen. Cuteness refers to how attractive the information source is to the recipient. People like confession, humor, and natural sources. Undoubtedly, the most reliable source is people who score high in these three factors.

Factor four includes three indicators: the ability to promote school-enterprise cooperation, the ability to transform scientific research, and the ability to project management. Promote the ability of school-enterprise cooperation. School-enterprise cooperation refers to a cooperation model established by schools and enterprises. It is a "win-win" model that focuses on training quality, focusing on school learning and business practice, and focusing on resource and information sharing between schools and enterprises. School-enterprise cooperation has achieved a new concept of meeting social needs, connecting with the market, cooperating with enterprises, and combining practice and theory. As a university teacher, you must be able to play a role in the

school-enterprise cooperation process. You should explore the resources of the school and the enterprise, become a bridge connecting the school and the enterprise, promote the exchange of information between the school and the enterprise. You should finally realize the continuous and efficient cooperation between the school and the enterprise. You should realize the school A win-win situation with the enterprise. The ability to transform scientific research, also known as the ability to transform scientific research results, refers to the subsequent testing, development, application, and promotion of practically valuable scientific and technological achievements produced by scientific research and technological development in order to improve the level of productivity until the formation of new products and new products. Craftsmanship, new materials, development of new industries, and other activities. As a university teacher, one must have the ability to transform scientific research results into real technologies and products so that science and technology can serve social production and effectively promote the development of social productivity[126]. Project management ability refers to the ability to use specialized knowledge, skills, tools, and methods in project activities to enable the project to achieve or exceed the set requirements and expectations under limited resources [127].

The naming of each dimension is also carried out in the form of anonymous feedback from the expert group. The index explanation obtained by reading the literature and searching the dictionary is sent to the expert group members. Each expert group member independently names each dimension. After three, In the round of communication, factor one is named scientific research competence; factor two is named basic competence; factor three is named teaching competence; and factor four is named social service competence (table 2.21).

Table 2.21 - Competency model of local university teachers

Dimension	Index number	Index
1	2	3
Research Competence	1	The ability to obtain and use information
	2	Creative thinking ability
	3	Logic analysis ability
	4	Critical thinking skills
	5	Master the frontier dynamics of the subject
	6	Research persistence and focus

Table 2.21 continued

1	2	3
	7	Ability to find and solve problems
Basic Quality	8	Interpersonal communication skills
	9	Teamwork
	10	Self-confidence
	11	Compressive ability
	12	Caring for students
	13	Sound personality
Teaching competency	14	Love teaching
	15	Teaching methods and skills
	16	Classroom organization
	17	Learning ability
	18	language expression skills
	19	Professional knowledge reserve
Social service competence	20	Promote school-enterprise cooperation capabilities
	21	Scientific research transformation ability
	22	Project management ability

**Source: prepared by the author.*

From the above analysis, the competence of local university teachers is composed of four main components: basic quality, teaching competence, scientific research competence, and social service competence, with a total of 22 indicators.

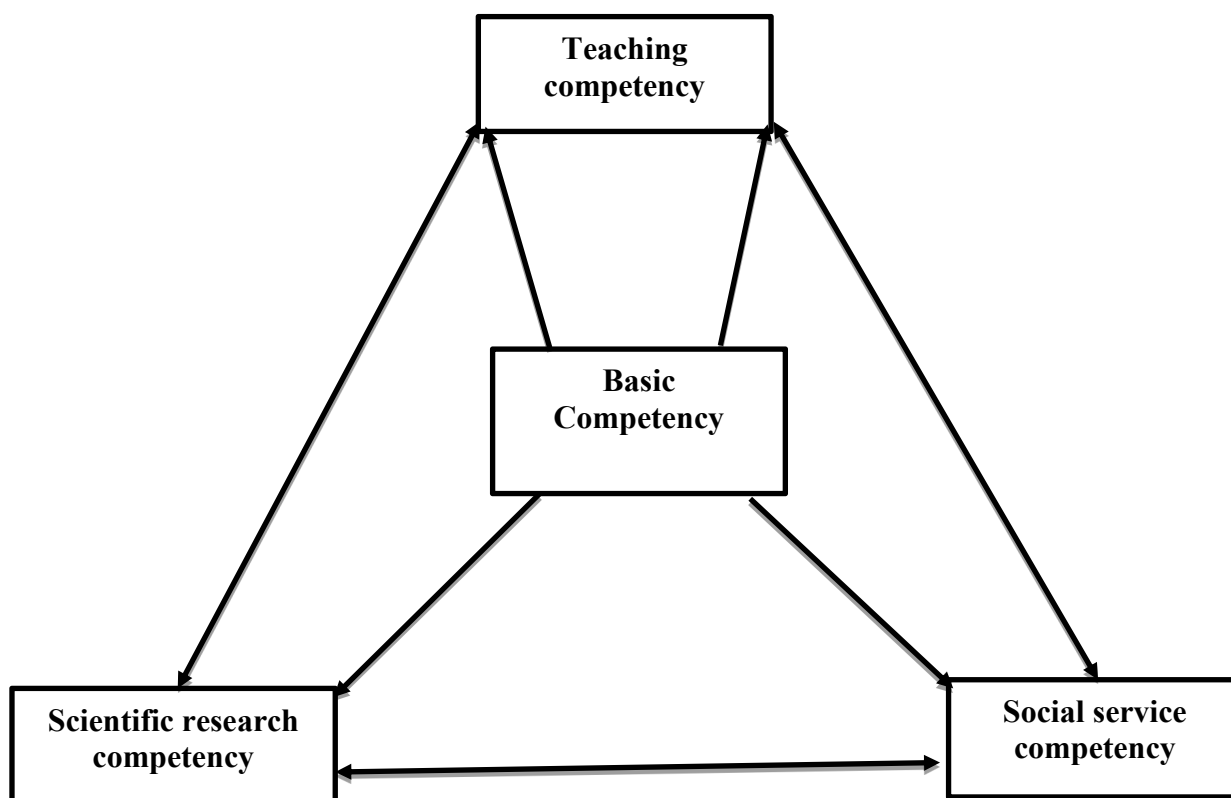


Figure 2.5 - The relationship between Q+(T+R+S)

**Source: prepared by the author.*

These four principal components reveal the inherent logical relationship and characteristics of the competence of local university teachers. In other words, the competence of local university teachers is formed by the interaction of the four dimensions of basic quality (Q), teaching competence (T), scientific research competence (R), and social service competence (S) in a certain logical relationship, namely $Q+(T+R+S)$ model (figure 2.5).

The Q in this model refers to the basic moral and psychological qualities that a local university teacher must possess. And $T+R+S$ is the ability that local universities must have in their work; we call it business ability.

From the above analysis, the competence of university teachers is composed of four main components: basic competence, teaching competence, scientific research competence, and social service competence, with a total of 22 indicators. Organizing experts to conduct three group discussions and comprehensively and accurately define each competency vocabulary of the four-factor model explored before, thereby forming an "Initial questionnaire of university teacher competency content" with 22 behavior descriptions (table 2.22). The questionnaire adopts the 7-level scoring system of the Richter scale. Among them, 1 means very unimportant; 2 means not important; 3 means less important; 4 means fair; 5 means more important; 6 means important; 7 means very important.

Table 2.22 - The initial questionnaire on the competency content of university teachers

Dimension	Competency vocabulary	Behavior description	Very unimportant to very important
1	2	3	4
Research Competency	Creative thinking ability	Thinking activities are creative and innovative, not sticking to conventions; they can raise and solve problems creatively.	1 2 3 4 5 6 7
	The ability to obtain and use information	Can effectively obtain information in subject areas; can efficiently use information to promote problem solving.	1 2 3 4 5 6 7
	Logic analysis ability	Be able to observe, compare, analyze, synthesize, abstract, generalize, judge and reason about things.	1 2 3 4 5 6 7
	Master the frontier dynamics of the subject	Understand the development trend of the research field of this subject and the key issues restricting the development of the subject.	1 2 3 4 5 6 7
	Critical thinking skills	Can use certain criteria to evaluate thinking and improve thinking.	1 2 3 4 5 6 7
	Ability to find and	Can find contradictions in work and life, and use resources	1 2 3 4 5 6 7

Table 2.22 continued

1	2	3	4
	solve problems	to resolve contradictions and promote the development of things.	
	Research persistence and focus	I have remained unchanged for a long time in my research field, and the research problems are more concentrated and in-depth.	1 2 3 4 5 6 7
Basic Competency	Interpersonal communication skills	Can communicate effectively with others.	1 2 3 4 5 6 7
	Teamwork	Can efficiently cooperate with other members of the team to achieve the team's maximum work efficiency.	1 2 3 4 5 6 7
	Self-confidence	Have a high degree of trust in oneself to be able to successfully complete the job.	1 2 3 4 5 6 7
	Compressive ability	Able to withstand and regulate the psychological pressure and negative emotions caused by adversity.	1 2 3 4 5 6 7
	Caring for students	Always take the growth and development of students at heart; like students and consider problems from the needs and interests of students.	1 2 3 4 5 6 7
	Sound personality	The physical, psychological, moral, and social elements of personality are unified, balanced, and coordinated.	1 2 3 4 5 6 7
Teaching Competency	Love teaching	Able to gain happiness, sense of accomplishment and satisfaction from teaching, and be willing to continue teaching.	1 2 3 4 5 6 7
	Teaching methods and skills	Be able to use a variety of technologies to improve teaching methods and methods to improve teaching effects; master modern teaching methods, and be able to use the Internet to collect, organize, and use various information materials for teaching services.	1 2 3 4 5 6 7
	Classroom organization	Be able to organize classroom teaching well, control the classroom atmosphere, and have good classroom interaction with students.	1 2 3 4 5 6 7
	Learning ability	In the learning activities, they show high perception and observation ability, memory ability, reading ability, and problem-solving ability.	1 2 3 4 5 6 7
	language expression skills	The words are accurate, the semantics are clear, the structure is proper, the sentences are concise, conforming to the norms, and the objective concepts can be expressed clearly, accurately, coherently, and appropriately, without language problems.	1 2 3 4 5 6 7
	Professional knowledge reserve	Familiar with the theoretical and practical knowledge of this major, have their own theoretical results and research system, and have authority in the professional field.	1 2 3 4 5 6 7
Social service competency	Promote school-enterprise cooperation capabilities	It can promote the exchange of information between schools and enterprises, promote continuous and efficient cooperation between schools and enterprises, and achieve a win-win situation.	1 2 3 4 5 6 7
	Scientific research transformation ability	It can test, develop, apply, and promote the results of scientific research and technological development, so as to form new products, new processes, and new materials, develop new industries, and promote the development of social productivity.	1 2 3 4 5 6 7
	Project management ability	Be able to use professional knowledge, skills, tools and methods to make the project meet or exceed the set requirements and expectations under limited resources.	1 2 3 4 5 6 7

**Source: prepared by the author.*

The object of study is university teachers. Using a convenient sampling method,

we selected 28 universities (Undergraduate) in 8 provinces in the east (Shandong, Guangdong), central (Henan, Hebei, Hubei), and west (Xinjiang, Sichuan, and Chongqing). universities: Qingdao University, Zhaoqing Normal University, South China Normal University, Henan University, Henan Normal University, Henan University of Science and Technology, Henan University of Science and Technology, Xinxiang University, Henan Institute of Technology, Xinjiang Normal University, Chongqing Three Gorges University. Technical Colleges: Xinxiang Vocational and Technical Teachers College, Henan University of Science and Technology Higher Vocational and Technical College, Hebei Foreign Economic and Trade Vocational College, Guangdong Polytechnic Vocational College, Xinjiang Tianshan Vocational and Technical College, Sichuan Engineering Vocational and Technical College, Wuhan Vocational and Technical College, Shandong Business vocational school. Private universities: Sanquan College of Xinxiang Medical College, Guangzhou Xinhua College, Yanjing Institute of Technology, Wuhan College, Wuhan Teachers from the Institute of Bioengineering, Xinjiang Tianshan Vocational and Technical University, Chongqing Institute of Engineering, Chongqing Institute of Finance and Economics, Qingdao City College) were the respondents. Distributed electronic questionnaires to them and collected 300 copies of which were 298 valid questionnaires, with an effective rate of 99.3%. The recovered valid samples were processed using IBM SPSS22.0 software, and the reliability and validity of the content questionnaire were tested by analyzing the data of the valid questionnaire to further verify the university teacher competency model established before. Use IBM SPSS22.0 software to conduct exploratory factor analysis on each item of the university teacher competency content questionnaire, verify the rationality of the relevant measurement items, and form a formal competency content questionnaire after discussion by experts.

We conducted a statistical analysis of demographic variables on 298 valid initial questionnaires on the competency content of university teachers. The tested teachers included 121 males and 175 females. As of 2019, there were 1,740,145 full-time teachers in ordinary universities in China, including 883,138 female full-time teachers, which is in line with the fact that there are more women than men in college teachers.

In terms of age distribution, we can see that there are fewer teachers aged 30 or under and those over 51 years old, 35 and 21, respectively, accounting for 11.82% and 7.09% of the total number of teachers, respectively. There were 82 teachers between 41 and 50 years old, accounting for 27.7% of the total number of teachers. There are more teachers between the ages of 31 and 40, 158 people, accounting for 53.38% of the total number of teachers.

In terms of job title distribution, 160 of the 298 teachers were candidates with intermediate professional titles, accounting for 54.05% of the total number of teachers. There are 9 senior teachers, accounting for 3.04% of the total number of teachers. There were 71 teachers with senior deputy titles, accounting for 23.99% of the total number of teachers. There are 35 teachers with junior professional titles, accounting for 11.82% of the total number of teachers. There were 21 ungraded teachers, accounting for 7.09% of the total number of teachers.

From the distribution of professional fields, there are 154 teachers majoring in liberal arts, accounting for 52.03% of the total number of teachers. There are 55 teachers in science majors, accounting for 18.58% of the total number of teachers. There are 34 teachers in engineering majors, accounting for 11.49% of the total number of teachers. There are 19 teachers in agronomy, accounting for 6.42% of the total number of teachers. There were 31 teachers in other majors, accounting for 31% of the total number of teachers.

From the perspective of the teachers' academic qualifications, there are a total of 53 teachers with a doctorate degree, accounting for 17.91% of the total number of teachers. There are 195 teachers with a master's degree, accounting for 65.88% of the total number of teachers. There are 48 teachers with a bachelor's degree, accounting for 16.22% of the total number of teachers. Participants with no college degree or below.

From the perspective of teaching time, 66 teachers have been taught for less than 5 years, accounting for 22.30% of the total number of teachers. There are 81 teachers who have been taught for 6-10 years, accounting for 27.36% of the total number of teachers. There are 59 teachers who have been taught for 11-15 years, accounting for 19.93% of the total number of teachers. There are 50 teachers who have been taught for 16-20 years,

accounting for 16.89% of the total number of teachers. There are 40 teachers who have been taught for 20 years or more, accounting for 13.51% of the total number of teachers.

Before doing exploratory factor analysis, the KMO and Bartlett's values of the variables should be tested. The results are shown in the table. It can be seen from table 2.23 that the index of the appropriateness coefficient KMO of the teacher sample is 0.949, indicating that the data is very suitable for factor analysis. In addition, the Bartlett's sphere test chi-square value is 5407.304, the degree of freedom is 231, and the significance P value is 0.000. The sphere hypothesis is rejected, indicating that the questionnaire items are not independent and the value is valid. The results of both indicators show that the data is very suitable for factor analysis.

Table 2.23 - KMO and Bartlett's sphere test of exploratory factor analysis sample of teacher-participant competency content questionnaire (N=298)

Kaiser-Meyer-Olkin measures sampling suitability.		.949
Bartlett's Sphere Test	Bangla	5407.304
	df	231
	Saliency	.000

**Source: prepared by the author.*

Use IBM SPSS22.0 software to carry out an exploratory factor analysis on the competency content questionnaire of local university teachers. According to the characteristic value greater than 1, the load on a certain factor is greater than 0.5, and there is no cross load. This means that Both factors have not standard extraction factor more than 0.4 load. The variance explanation rate was 61.005, which passed the exploratory factor validity test (table 2.24).

Through the factor analysis of the content questionnaire on the competency of university teachers (Table 2.24), it can be seen that the division of its dimensions is basically the same as that of the university teacher competency model we constructed before. This research has better verified the scientific nature of the university teacher competency model we constructed before. At the same time, it also proves the validity and scientific nature of the content questionnaire on university teachers' competency.

Table 2.24 - Results of exploratory factor analysis of local university teacher competency content questionnaire (N=298)

Rotating element matrix a								
	Original data				Re-adjusted			
	Element				Element			
	1	2	3	4	1	2	3	4
The ability to obtain and use information	.567				.781			
Creative thinking ability	.575				.721			
Logic analysis ability	.515	.311			.693	.419		
Master the frontier dynamics of the subject	.556				.663			
Research persistence and focus	.557			.355	.661			.421
Critical thinking skills	.548				.648			
Ability to find and solve problems	.462				.621			
Interpersonal communication skills		.740				.840		
Teamwork		.637				.759		
Self-confidence		.511				.676		
Compressive ability		.517				.648		
Caring for students		.392				.585		
Sound personality		.372				.548		
Love teaching			.634				.787	
Teaching methods and skills	.308		.495		.411		.662	
Classroom organization	.348		.480		.465		.641	
Learning ability			.395				.611	
Professional knowledge reserve			.410				.611	
language expression skills			.421				.593	
Promote school-enterprise cooperation capabilities				.992				.842
Scientific research transformation ability				.942				.828
Project management ability				.838				.769

Acquisition method: analysis of main components.

Rotation method: Maximum variation method with Kaiser normalization.

a. Convergence loops in 7 iterations.

**Source: prepared by the author.*

However, in the process of conducting the questionnaire survey, some teachers reported that the language expression of some items in the questionnaire was too professional, and some were difficult to understand. In view of this, we specially consulted the expert group, consulted dictionaries and related documents, revised the expressions of professional questions in the questionnaire, and tried to use easy-to-understand language expressions so that the respondents could better understand the meaning of the questionnaire.

Participants answered to ensure the validity of the questionnaire results. Combining the factor analysis results of the content questionnaire, after discussion by an

expert group, after 3 revisions, the final competency content questionnaire was obtained. The questionnaire consists of 4 parts and a total of 22 items (table 2.25).

Table 2.25 - Questionnaire on the competency of university teachers

Dimension	Competency vocabulary	Behavior description	Very unimportant to very important
1	2	3	4
Research Competency	Creative thinking ability	Creative thinking activities, not sticking to conventions; able to raise and solve problems creatively.	1 2 3 4 5 6 7
	The ability to obtain and use information	Can effectively obtain information in subject areas; can efficiently use information to promote problem solving.	1 2 3 4 5 6 7
	Logic analysis ability	Have the ability to observe, compare, analyze, synthesize, abstract, summarize, judge and reason about things.	1 2 3 4 5 6 7
	Master the frontier dynamics of the subject	Understand the development trend of the research field of this subject and the key issues restricting the development of the subject.	1 2 3 4 5 6 7
	Critical thinking skills	Good at questioning, evaluating and reflecting on issues.	1 2 3 4 5 6 7
	Ability to find and solve problems	Can find contradictions in work and life, resolve contradictions, and promote the development of things.	1 2 3 4 5 6 7
	Research persistence and focus	I have remained unchanged for a long time in my research field, and the research problems are more concentrated and in-depth.	1 2 3 4 5 6 7
Basic Competency	Interpersonal communication skills	Can communicate effectively with others.	1 2 3 4 5 6 7
	Teamwork	Can efficiently cooperate with other members of the team to achieve the team's maximum work efficiency.	1 2 3 4 5 6 7
	Self-confidence	Believe that you can successfully complete your work.	1 2 3 4 5 6 7
	Compressive ability	Able to withstand and regulate the psychological pressure and negative emotions caused by adversity.	1 2 3 4 5 6 7
	Caring for students	Always take the growth and development of students at heart; like students and consider problems from the needs and interests of students.	1 2 3 4 5 6 7
	Sound personality	The physical, psychological, moral, and social elements of personality are unified, balanced, and coordinated; they can correctly personalize themselves and have a clear life goal.	1 2 3 4 5 6 7

Table 2.25 continued

1	2	3	4
Teaching Competency	Love teaching	Able to gain happiness, sense of accomplishment and satisfaction from teaching and be willing to continue teaching.	1 2 3 4 5 6 7
	Teaching methods and skills	Be able to use a variety of technologies to improve teaching methods and methods to improve teaching effects; master modern teaching methods, and be able to use the Internet to collect, organize, and use various information materials for teaching services.	1 2 3 4 5 6 7
	Classroom organization	Be able to organize classroom teaching well, control the classroom atmosphere, and have good classroom interaction with students.	1 2 3 4 5 6 7
	Learning ability	In the learning activities, they show high perception and observation ability, memory ability, reading ability, and problem-solving ability.	1 2 3 4 5 6 7
	language expression skills	The words are accurate, the semantics are clear, the structure is proper, the sentences are concise, conforming to the norms, and the objective concepts can be expressed clearly, accurately, coherently, and appropriately, without language problems.	1 2 3 4 5 6 7
	Professional knowledge reserve	Familiar with the theoretical and practical knowledge of this major, have their own theoretical results and research system, and have authority in the professional field.	1 2 3 4 5 6 7
Social service competency	Promote school-enterprise cooperation capabilities	It can promote the exchange of information between schools and enterprises, promote continuous and efficient cooperation between schools and enterprises, and achieve a win-win situation.	1 2 3 4 5 6 7
	Scientific research transformation ability	Be good at transforming one's own scientific research results into new products, new processes and new materials.	1 2 3 4 5 6 7
	Project management ability	Good at managing scientific research projects, able to achieve or exceed the needs and expectations set by the project under limited resource conditions.	1 2 3 4 5 6 7

**Source: prepared by the author.*

After our previous research, it has been proved that the competency model of university teachers has four dimensions and 22 indicators. In addition, we have compiled a questionnaire on the competence of university teachers through scientific methods and the opinions of the expert group. And finally verified the validity of the questionnaire

through the implementation of the questionnaire pre-survey. In order to effectively measure the competence of university teachers, we need a tool that can implement competency measurement. Therefore, we change the expression of each item in the content questionnaire of university teacher competence and transform it into a university teacher competency evaluation questionnaire (table 2.26) [128].

Table 2.26 - Evaluation scale of teacher competency of university teachers

Dimension	Competency content	Competency behavior description	Very compliant-very non-compliant
1	2	3	4
Research Competency	Creative thinking ability	My thinking activities are creative and innovative, not sticking to conventions; I can raise and solve problems creatively.	1 2 3 4 5
	The ability to obtain and use information	I can effectively obtain information in subject areas; I can efficiently use information to promote problem solving.	1 2 3 4 5
	Logic analysis ability	I can observe, compare, analyze, synthesize, abstract, generalize, judge, and reason about things.	1 2 3 4 5
	Master the frontier dynamics of the subject	I understand the development trend of the research field of this subject and the key issues restricting the development of this subject.	1 2 3 4 5
	Critical thinking skills	I can use certain criteria to evaluate thinking and improve my thinking.	1 2 3 4 5
	Ability to find and solve problems	I can find contradictions in work and life, and use resources to resolve contradictions and promote the development of things.	1 2 3 4 5
	Research persistence and focus	I have remained unchanged for a long time in my research field, and the research questions are more concentrated and in-depth.	1 2 3 4 5
Basic Competency	Interpersonal communication skills	I can communicate effectively with others.	1 2 3 4 5
	Teamwork	I can efficiently cooperate with other members of the team to achieve the maximum work efficiency of the team.	1 2 3 4 5
	Self-confidence	I have a high degree of trust in my ability to successfully complete the work.	1 2 3 4 5
	Compressive ability	I can bear and regulate the psychological pressure and negative emotions caused by adversity.	1 2 3 4 5
	Caring for students	I always take the growth and development of students at heart; I like students and consider problems from the needs and interests of students.	1 2 3 4 5
	Sound personality	My physical, psychological, moral, and social elements are unified, balanced, and coordinated.	1 2 3 4 5

Table 2.26 continued

1	2	3	4
Teaching Competency	Love teaching	I can get a sense of happiness, accomplishment and satisfaction from my teaching work, and I am willing to continue my teaching work.	1 2 3 4 5
	Teaching methods and skills	I can use a variety of technologies to improve teaching methods and methods to improve teaching effects; I master modern teaching methods, and can skillfully use the Internet to collect, organize, and use various information materials for teaching services.	1 2 3 4 5
	Classroom organization	I can organize classroom teaching well, control the classroom atmosphere, and have good classroom interaction with students.	1 2 3 4 5
	Learning ability	I have shown high perception and observation ability, memory ability, reading ability, and problem-solving ability in learning activities.	1 2 3 4 5
	language expression skills	I use accurate words, clear meaning, proper structure, concise sentences, and conform to norms. I can express objective concepts clearly, accurately, coherently, and decently, without language problems.	1 2 3 4 5
	Professional knowledge reserve	I am familiar with the theoretical and practical knowledge of this major, have my own theoretical results and research system, and have authority in the professional field.	1 2 3 4 5
	Social service competency	Promote school-enterprise cooperation capabilities	I can promote the exchange of information between schools and enterprises, promote continuous and efficient cooperation between schools and enterprises, and achieve a win-win situation.
Scientific research transformation ability		I can test, develop, apply, and promote the results of scientific research and technological development, so as to form new products, new processes, and new materials, develop new industries, and promote the development of social productivity.	1 2 3 4 5
Project management ability		I can use professional knowledge, skills, tools and methods to make the project meet or exceed the set requirements and expectations with limited resources.	1 2 3 4 5

**Source: prepared by the author.*

On the basis of literature research, this study explores the components of teachers'

competence in universities through the scientific method combining quantitative and qualitative research. New methods and perspectives for studying the ability structure of university teachers. This study defines the core index system of teachers' competency in Chinese universities and provides guidance, standards, and a reference basis for human resource management and teacher ability development and improvement. This study has developed reliable tools for evaluating the competency of university teachers, which can be used to evaluate their competence level.

Conclusions to section 2

1. Research results show that an important goal of human resource management is to improve the enthusiasm and initiative of organization members. As an intermediate variable, achievement motivation plays a moderating role between university human resource management and other variables. Since achievement motivation plays an important role in job performance, researchers attach importance to developing multi-dimensional measurement tools and corresponding management and control methods. The classical theory of achievement motivation includes achievement need theory and the expected value model. We compare and analyze the two classical theories of achievement motivation. The advantage of the need for achievement theory is that it holds that the pursuit of success is mainly determined by internal factors. The main disadvantage is to view achievement motivation as the sole determinant of behavior. The main advantage of the expected value model is that achievement motivation is composed of the motivation to pursue success and the motivation to avoid failure. The main disadvantage is that achievement motivation is stable, ignoring the change in individual psychology.

2. In order to study the problem of motivation, we can use different methods to conduct TAT measurement, self-report scale measurement, mixed measurement, and situational judgment test. The main characteristic of achievement motivation TAT measurement is the natural response of the measured subjects, which is difficult to interpret. The main feature of self-reporting scale measurement is that it measures the response of the subjects to the stimulus. The operation is simple, and the reliability is high.

The main characteristic of the mixed measurement method is that it is difficult to explain and requires the operator to do well. The feature of the situational judgment tests is that the test questions are close to the reality of social life and the test design is difficult.

3. A total of 390 teachers from 28 universities in 8 provinces were investigated and studied using the Achievement Motivation Scale (AMS). The results of statistical analysis show that the motivation level of Chinese college teachers depends on their age. The efforts of teachers under the age of 30 maximize career development, and motivation declines among teachers aged 41-50. Teachers at this age generally face greater pressure of family life, with the elderly and children to take care of at home, so their energy is transferred from work to family, which is an important reason for the decrease in achievement motivation.

4. This study applies the research methods and applied technologies of enterprise human resource management to the research of university human resource management. Through scientific methods, the author explores the measures that should be paid attention to in university human resource management and develop scientific tools that can be used to evaluate the level of university human resource management. The human resource management evaluation tool we developed includes five first-level indicators and 24 second-level indicators, including teacher selection and development, performance-related salary, information sharing, occupational safety and security, and an equal working environment.

5. Previous human resource management evaluation attaches importance to top-down evaluation and ignores the participation of teachers. Our research attaches importance to the participation of faculty groups in the evaluation of university human resource management. It can reflect the actual situation of university human resource management more comprehensively and objectively. Through the Delphi method, questionnaire survey, and other methods, through the statistics, analysis, and calculation of the data, we finally obtained the university high-performance work system index system. The index system includes five first-level indicators and 24 second-level indicators: teacher selection and development, performance-related salary, information sharing, occupational safety and security, and equal working environment. It provides

guidance, standard, and a reference basis for personnel management practice in universities. This study has developed a reliable tool to evaluate the level and quality of human resource management in universities, which can be used to diagnose and evaluate the practice of human resource management in universities.

6. Through our research on index weights, it is found that university teachers attach great importance to the salary system and occupational security related to salary. It can be seen that they prefer to get a fair compensation and occupational security when working in universities. In the secondary index, teachers pay more attention to the salary system based on performance consideration; welfare can make teachers at ease with teaching and research; pay design can reflect more work, more pay. According to the research, university teachers first attach importance to salary and welfare, second attach importance to fair and just treatment, and third attach importance to occupational safety.

7. This study studied 608 Chinese university teachers by using scientific methods such as literature research, questionnaire survey, and Delphi method. Through the process of exploratory factor analysis and confirmatory factor analysis, a scientific model of Chinese university teachers' abilities is finally obtained. The competency model includes four first-level indicators: teaching competence, scientific research competence, basic competence, and social service competence. And further subdivided into 22 secondary indicators. On this basis, this study developed a tool to evaluate teachers' competency level, which laid a foundation for the subsequent research.

SECTION 3

AN EMPIRICAL STUDY ON HUMAN RESOURCE MANAGEMENT AT CHINESE UNIVERSITY

3.1 Problems existing in human resource management in Chinese Universities

The role of higher education is to cultivate people with profound knowledge and lofty morals, fully realize the unity of their own values and social value, and can influence a person's future development from the beginning to the end of life. University is different from high school. University pays more attention to the development of morality, intelligence, and physique. And the university is the last stop for students to turn from school to society. Whether students can grasp this time period depends on the joint efforts of schools and teachers. This period happens to be an important period in one's life for the development of outlook on life, world outlook, and values. At the same time, it is also a period of transition of university students' personalities from teenagers to adults. They will gradually determine their self-awareness and cultivate their independence. Important changes in a person's life are not smooth sailing. In the process of growth, it is inevitable to encounter various difficulties and contradictions, resulting in various problems. Fundamentally speaking, these problems are actually the formation and confirmation of outlook on life, world outlook, and values. The talents that universities want to cultivate are not only to have high scientific and cultural quality, healthy physical quality, but also to pay attention to students' ideological, moral, and psychological education issues. Only by strengthening the cultivation of university students' outlook on life, world outlook, and values from various channels can we fully realize the comprehensive development and healthy growth of university students. The importance of higher education deserves everyone's deep consideration. Many people may think that if you get a diploma after finishing university, you will be fine. In fact, this kind of thinking is wrong. University education is to provide talent to society. The talent not only need to master the knowledge of basic technology but also need to be able to unite and cooperate to create a better society. The importance of higher education is of great benefit to people themselves. In

the process of learning, one can gain a wide range of knowledge, learn all kinds of professional knowledge, and make oneself a better person. University education pays more attention to practical social activities, among which there are many various types of associations which are equivalent to a small society. During this period, you will meet many alumni with similar interests. They come from all over the world. You can learn about the customs and customs of all the country from them, and at the same time, you can learn a lot from them. This kind of friendship is pure and free of any interests. The current society is actually not simple. Freshman college students may encounter obstacles everywhere. They need to deal with certain social relationships and cultivate the courage to face setbacks. It is also the most critical. University education is about self-cultivation and cultivating your drive to pursue happiness. During this period, you will -- gain knowledge, make friends, and exercise your abilities.

Higher education is an education implemented for cultivating elite talents and an educational form extended in response to the current social development trend. The implementation of higher education is mostly carried out in comprehensive universities, specialized universities, and graduate schools. There are also many types of higher education, including vocational, academic, and professional. Rather than what we think, only education implemented in those comprehensive universities can be called higher education. In the future development trend, higher education will become more and more important. In accordance with the development trend of the world, my country has also embarked on the construction of double-first-class universities and double-first-class disciplines. The development of higher education in my country is very fast, and now it has entered the stage of the popularization of higher education. Nearly half of the students have the opportunity to receive higher education. In the face of the current rapidly developing higher education system, my country's social economy also needs to vigorously develop industries that accept these high-end talents, such as the low-carbon economy-related industries that my country is currently trying to develop, as well as new emerging industries in my country. The media industry, these industries are good places to accommodate these high-end talents. However, this is also related to the lack of career-planning education for students before university. Most college students have a

clear career planning concept only in college. As a result, many college students enter the university without a sense of purpose and live with the group in the dark. The result of living in this way is that they may find a good job when they graduate, but this is not bad and does not meet their psychological expectations, and finally, their hearts will have a serious imbalance. Higher education is an educational form extended to promote the further development of the whole society. The emergence and development of higher education are actually promoting the further implementation and development of the concept of lifelong education. The educational site of higher education, as the last place of formal education, can fully develop the quality of students' cooperative learning, independent learning, and inquiry learning so that they can practice the concept of lifelong learning in their future life.

Science and technology play an important role in social and economic development. After world war II Japanese and European economies were once on the verge of collapse. However, relying on the high-quality human resources, science, and technology that remained, they recovered quickly. Why has the US economy been able to lead the world since the second World war? Because they invested in education and developed human resources. Material resources are important, but high-quality human resources can overcome the shortage of material resources. With the coming of the knowledge economy, society keeps progressing, and competition becomes more and more fierce. The economic strength of a country becomes more and more dependent on the quality of human capital. Thus it can be seen that human resources play a decisive role in the development of the social economy. The advantage of human resource quality is replacing the advantage of labor force quantity and becoming the new driving force of economic growth [129].

University is an important place for the generation of labor resources and undertakes the important responsibility of cultivating talents for national economic and social development. Since the 1980s, China's economy and society have undergone tremendous changes, and the system and structure of higher education have also been adjusted accordingly. In order to meet the demand for talent in China's reform and opening up, in 1999, the Ministry of Education of China issued the "Action Plan for the

Revitalization of Education for the 21st Century", which proposed that by 2010, the gross enrollment rate of higher education would reach 15% of the school-age youth. After ten years of development, China's higher education scale ranks first in the world. According to the statistics of the Ministry of Education of China, as of 2021, There are 3,012 regular universities in China, including 1,270 undergraduate universities, 1,486 universities, 256 adult institutions of higher learning, and 1.8852 million full-time teachers. As can be seen from figure 3.1, the total number of university students in China has increased year by year, from 117,000 at the founding of the People's Republic of China in 1994 to 44.3 million by 2021.

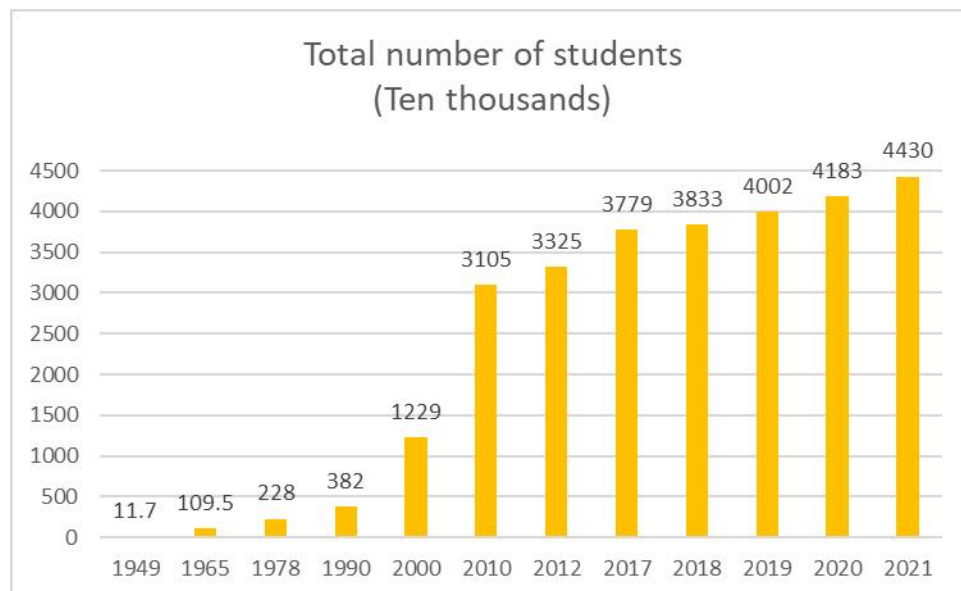


Figure 3.1 - The scale of higher education enrollment

**Source: Produced by researchers based on data from the Ministry of Education.*

As can be seen from figure 3.2, the college enrollment rate in China has been increasing year by year. It was 0.26% when the People's Republic of China was founded in 1994 and it reached 57.8% by 2021.

Statistics from the Ministry of Education of China show that as of 2021, There are 3.332,400 million graduate students nationwide. Among them, 509,500 were doctoral students, and 2.822,900 were master's students. In 2021, a total of 1.1765 million graduate students will be enrolled nationwide. Among them, 125,800 doctoral students and 1.050,700 master students were enrolled.

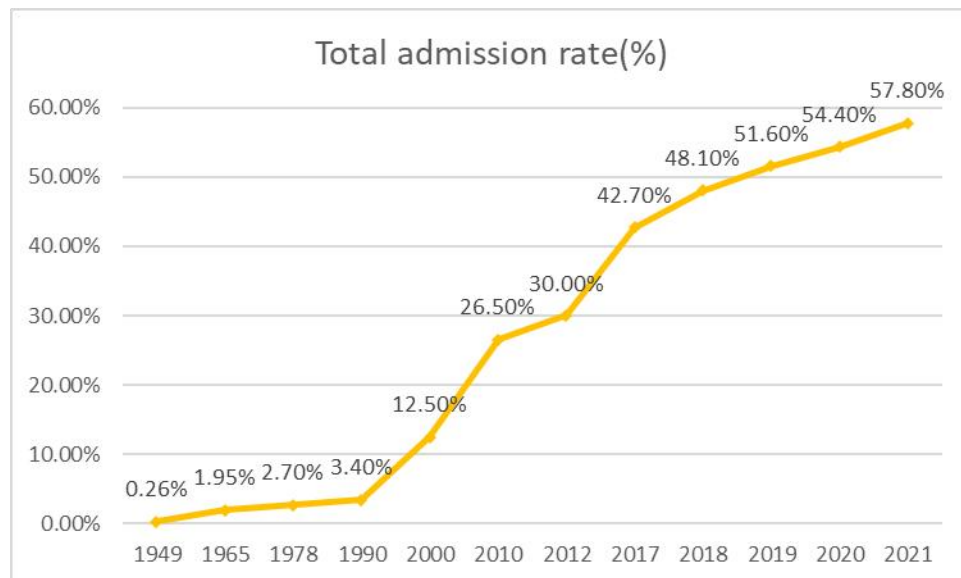


Figure 3.2 - Higher education gross enrollment ratio

**Source: Produced by researchers based on data from the Ministry of Education.*

With the rapid development of Chinese universities, it is of great significance to study human resource management and development of Chinese universities. Incentive Research of college teachers has become an important aspect of human resource management research.

The rapid development of university education in China has obvious advantages of scale. But its development also has many problems. Agriculture is the foundation of the national economy and is related to national security and social stability. China is a country with a large population, and food security is related to the long-term stability of the country. China has always attached great importance to the development of agricultural science and technology and has established a large number of agricultural and forestry colleges. agricultural and forestry college teachers [130]. Through literature review, interviews, and other methods, we deeply explored the basic situation of China's agricultural and forestry universities and the basic situation of the teaching staff, found existing problems, and put forward constructive comments and suggestions.

As shown in figure 3.3, there are many agriculture and forestry universities in China, including 82 agricultural universities and 102 forestry universities, which belong to the large-scale agriculture and forestry universities in the world.

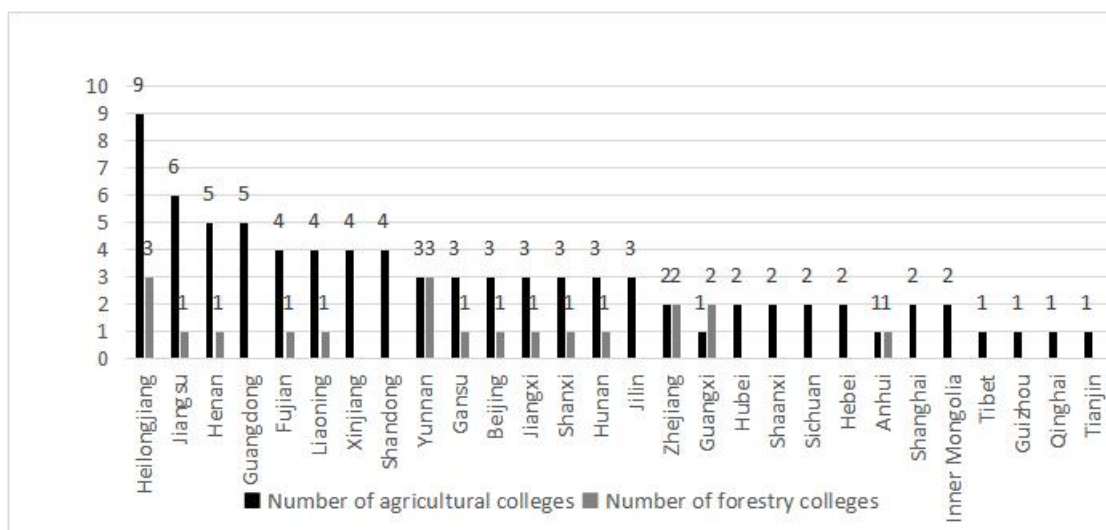


Figure 3.3 - The number of agriculture and forestry universities in various provinces in China

**Source: produced by researchers based on data from the Ministry of Education.*

Although there are a large number of agricultural and forestry universities in China, there are various problems in the process of our development.

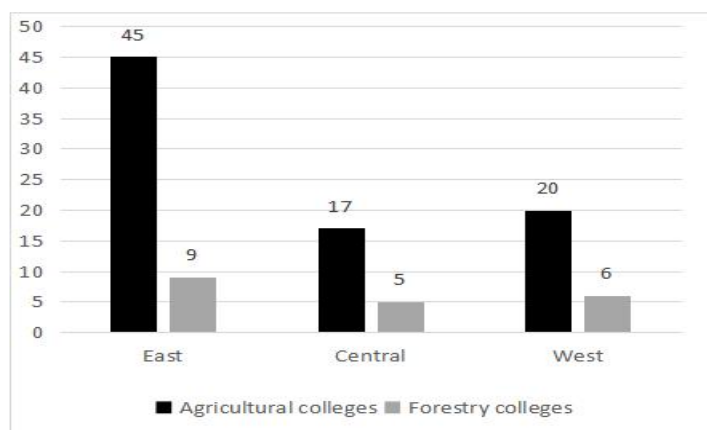


Figure 3.4 - Regional distribution of Agricultural and Forestry Universities in China

**Source: produced by researchers [131].*

Compared with other types of universities, the number of universities is still insufficient, followed by unreasonable regional distribution. As shown in figure 3.4, the vast western area has a vast land area, with a total area of about 6.86 million square kilometers, accounting for about 72% of the total national area, but there are only 26

higher agriculture and forestry colleges, accounting for 25.5% of the national agriculture and forestry universities [132].

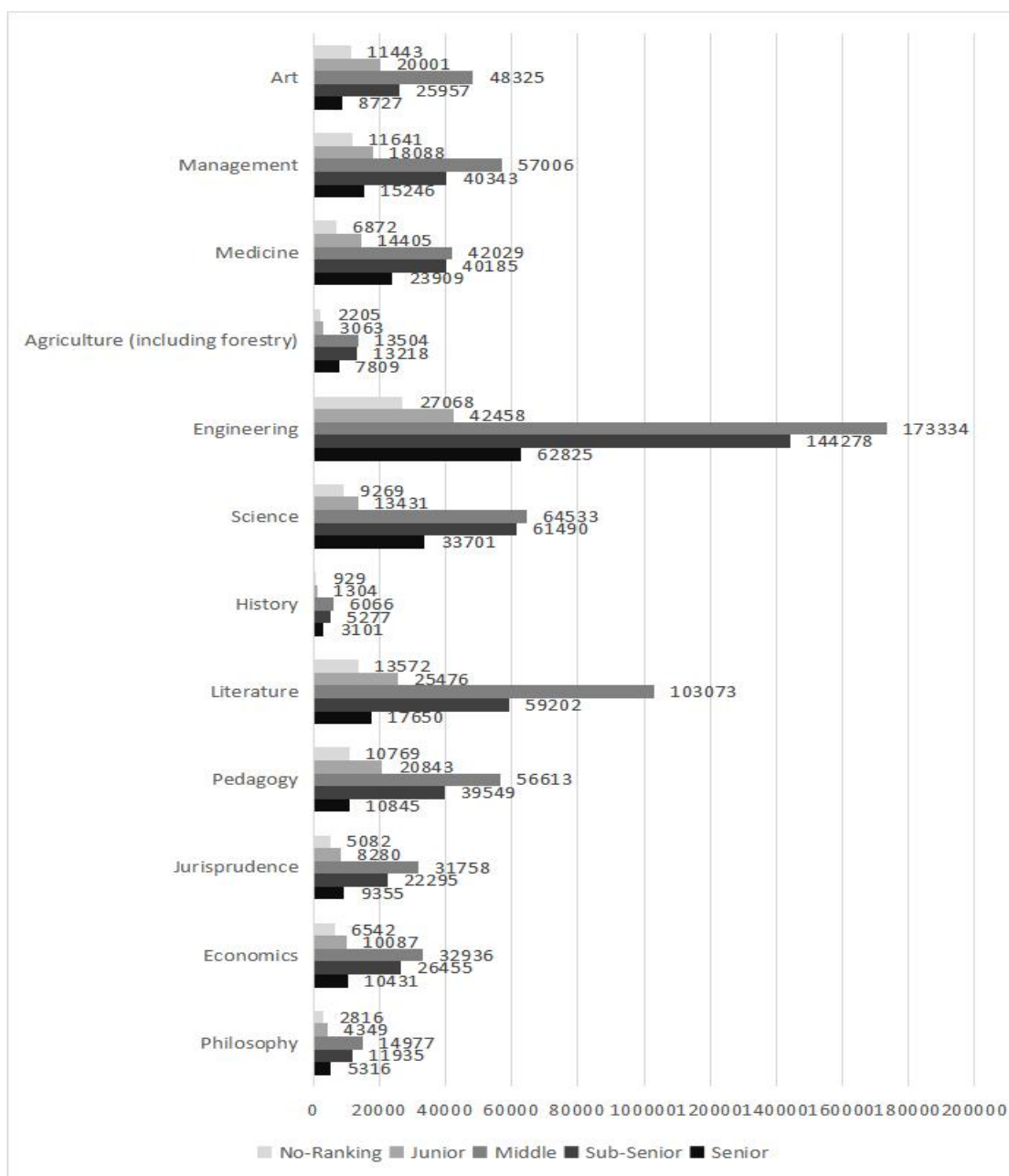


Figure 3.5 - Basic information on the number of professional teachers in Chinese universities by majors

**Source: produced by researchers [132].*

By 2017, there were 1,633,246 teachers in universities nationwide, including 39,799 teachers majoring in agriculture and forestry, accounting for only 2.44%. Among the teachers of agriculture and forestry, the number of ungraded and junior teachers is

large, prone to the fault of personnel with high professional titles.

Above, we explore the basic situation of Chinese agriculture and forestry colleges and teachers. In view of the existing problems, we put forward the following Suggestions and opinions: first, the government should increase support for agriculture and forestry universities to develop more preferential policies to help school development, to special agriculture and forestry professional teachers policy support, to encourage more professional talents to contribute to the development of agriculture and forestry science and technology. Second, agricultural and forestry universities should strengthen the human resource management of teachers, formulate a scientific teacher training system, constantly improve teachers' teaching and scientific research ability, and constantly improve the function of universities to serve society [132]. Third, agricultural and forestry universities and teachers should seize China's rural revitalization strategy as a national development plan based on rural development, improve the level of agricultural and forestry science and technology, improve the ability to serve rural areas, and serve farmers [134].

From the problems of human resources of teachers in agricultural and forestry universities, we can see that there are a series of problems in the distribution of human resources of teachers in Chinese universities. Through the study, we found that the existence of these problems is ultimately problem in the human resource management strategy and practice of Chinese universities [135].

From a strategic perspective, the system elements of human resource management mainly include the strategic planning of human resources, acquisition, reconfiguration of institutional personnel, training and development reflecting professional characteristics, work performance management, salary management and its incentive, constraint, competition, and elimination mechanism [136]. University is a special social group. Its human resources refer to the general term of people who have intellectual labor ability and physical labor ability and who can promote the development of higher education and cultivate specialized talents while acting in economic and social development. It is unique from enterprises. They have high education and professional knowledge background, subjective initiative and freedom in work, strong mobility, and preference

for choice, high self-development needs, development timeliness, and sustainability. In view of the above characteristics of human resource management in universities, human resource management activities must meet the needs of the university, a special social organization, in order to promote the performance of organizations and members so as to ensure the best operation of the work in universities, and finally achieve the strategic goals of the university. However, there have long been various problems in the human resource management activities of Chinese universities (table 3.1).

Table 3.1- Problems existing in human resource management activities in Chinese universities

Human resource management activities	Issues of human resources management in Chinese universities
Planning of human resources	The concept is outdated. Significant state intervention and lack of autonomy of universities. Lack of overall strategic planning. Emphasis on managing things and neglecting services to people. Neglect of the systemic role of HRM.
Recruitment and staffing	Emphasis on titles and qualifications. Emphasis on merit ignores potential. Neglect of matching people to jobs. Emphasis on qualifications neglects competencies. Failure to consider the fit between the teacher and the work environment.
Training and development	Emphasis on form and neglect of the effectiveness of training. Lack of long-term planning and systematic training. Lack of individual training for staff development. Teacher training and courses are mostly campus-based.
Performance management of activities	Evaluation is one-off, focusing on research papers and contributions to projects. The evaluation indicators are not comprehensive, unclear and variable. The evaluation process is not objective and fair. Evaluation results are not used as a basis for reinstatement, dismissal, promotion and salary management. Some evaluators do not fully understand the work of teachers.
Remuneration management	Fixed and inflexible. Equalizing and not effective in motivating teachers. Emphasis on job qualifications and seniority to the detriment of competence and contribution.
Management of labor relations	Lack of authority to terminate employment relations. Absence of procedures and systems related to the termination of employment relations. Lack of measures to build relationships in the team. Less involvement of teachers in school management. Neglecting to build and maintain the teacher's working environment, team and organizational relationships.

**Source: prepared by the author.*

The overall goal of HRM activities is to improve the work efficiency of individuals and organizations and to promote the organization to achieve strategic goals. The main participants and executors of this activity are the members of the organization, so the study of individual ability, motivation, and other characteristics has been the focus of

research in the field of human resource management research. In the field of human quality management, the research point is high-performance work systems. The so-called high-performance work system is "a series of highly consistent policies and activities within the organization to ensure that human resources serve the organization's strategic goals" [137]. The AMO theory in high-performance work and high-performance human resource management systems is currently of great interest to researchers in the field of human resource management research.

The emergence and development of AMO theory have gone through a long process. Vroom first proposed the individual work performance model, that is, the individual behavior performance =f (ability motivation). Appelbaum (2000) sorted out the relevant theories for the first time and proposed the AMO theoretical model. The main connotation of AMO theory is: if human resource management can meet the requirements of employee ability (ability), motivation (motivation), and opportunity (opportunity), the interests of the organization will be maximized. The theoretical model can be expressed by the following formula: employee performance =f [employee ability (A), employee motivation (M), employee opportunity (O)]. Its theoretical model can be represented in figure 3.6.

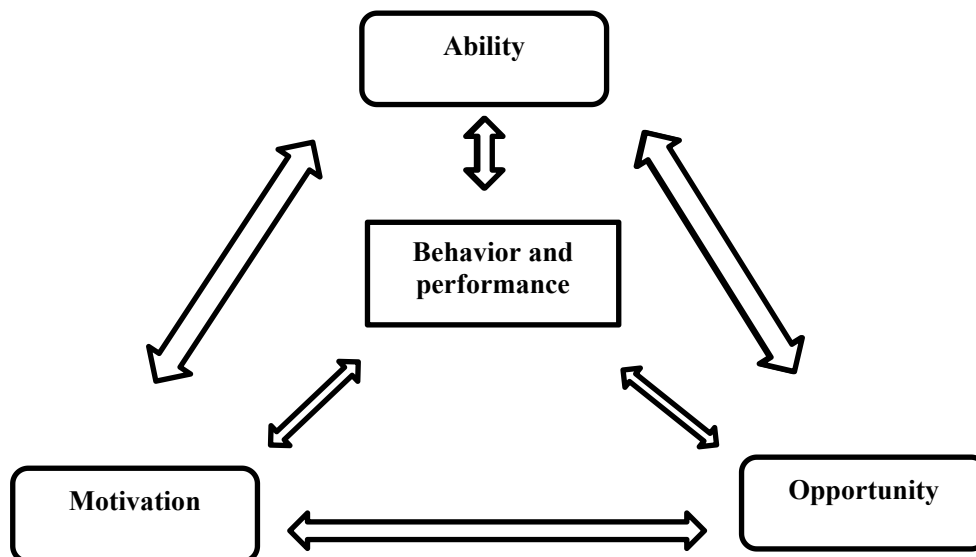


Figure 3.6 - The relationship of each element in The AMO theory model

**Source: produced by researchers [136].*

According to this theory, there are three mechanisms for human resource

management to affect organizational interests.

1. Human resource management directly affects the ability of employees to complete tasks. Mainly in terms of knowledge, skills, and ability, human resource management can improve employees' ability through training, qualification management, and talent training.

2. Human resource management affects employees' motivation to complete tasks. It is mainly to provide appropriate incentives and remuneration for employees who complete their tasks, including salary, performance, bonus, equity, spiritual incentive, etc.

3. Provide and improve work opportunities for employees. Opportunities cover tools, equipment, resource supply, working conditions, leadership behavior, organizational policies and procedures, information, and timing. It's often point to external work environment factors.

Combined with the study of AMO theory, we believe that the most important factor in HRM is the motivation and ability of the members. If a member of the organization can gain internal and external motivation through the work he does, it will become the force for his willingness to continuously work hard for the organization [138]. If the members have the necessary ability to complete the organization's work and can be better competent for the job position, it will greatly improve the work confidence of the organization members and the quality of the work completed. When both have it at the same time, it shows that the employees of the organization are willing to work hard for the organization and have the necessary ability and quality to complete the organizational work. Job opportunities in AMO theory include tools, equipment, resource supply, working conditions, leadership behavior, organizational policies and procedures, information, and timing, and usually point to external work environment factors. These are mainly achieved through the organization of a reasonable human resource management system. Therefore, we believe that the three elements of human resource management, the motivation level, and competence of organizational members, promote each other and form a working system to promote the improvement of organizational efficiency. Therefore, it is necessary to study the relationship between the three in-depth

to explore the operating mechanism.

There are many problems in China's higher education, and researchers also have some problems in the process of studying China's higher education.

1. Lack of practical application of socialization. First of all, the research on higher education has a utilitarian tendency, and the research method is very speculative. For these problems, if we only focus on the self-use of the results and ignore the use of other aspects, this is the biggest problem currently existing. For higher education, this is a fundamental study. For research results, it is generally the publication of papers and books, but in this process, what researchers do is write, compose, publish, etc. According to this process some recent achievements of researchers are related to it. Therefore, higher education research has obvious utilitarian tendencies, and most higher education journals are flooded with manuscripts of professional titles and other similar manuscripts. In addition, not only because of this but also for many other reasons, that is, higher education is more speculative. It is said that the emphasis is on speculation and neglect of experimental research, and the emphasis is on value and less on facts. In the process of research, we do not pay enough attention to quantitative analysis, and there is a lack of certain research on qualitative research. In the aspect of problem discussion, we only analyze at a superficial level, do not understand the methods and methods of research, and cannot find the development law of higher education. The occurrence of the above problems directly causes researchers to have a certain degree of utilitarianism, which is not conducive to the expansion of research. The continuous practice of speculative research will seriously affect the research of higher education.

2. Higher education research tends to assimilate. For higher education research, there is very little education in this area, and there is a lot of research on some specific issues, and the topic selection is relatively convergent. Research on specific problems is different from theoretical research. Research on specific problems is to study those phenomena, mainly to explain and analyze certain problems and phenomena. This purpose is mainly to solve specific problems in practice. Therefore, has a certain immediacy in characteristics. A series of research on theories often research these issues in a certain sense, mainly to discover the laws of development. After discovering these

laws, they can provide ideas for theoretical basis. Since the convening of the Third Plenary Session of the Eleventh Central Committee, our country has achieved many achievements. In terms of research, we have carried out many aspects of exploration and research. In addition, many academic monographs are published every year, and not only are they published in Many of these published works can be called works of higher education, but these proportions are very small. For theoretical research, we are still not mature enough, lack certain theoretical knowledge, and cannot achieve innovation. As a result, many works are in the same way, and there is no in-depth research, and in the process of discussion, it is not possible to conduct multi-angle discussions. Just to study and discuss from a low-level aspect, it is easy to cause the problem to be considered not particularly comprehensive, and then there will be omissions.

3. A single cycle of educational research. Since the Third Plenary Session of the Eleventh Central Committee, research on higher education has gradually improved. For higher education research in my country, the overall strength is relatively strong, but it is inevitable that researchers and research institutions will conduct independent research. Therefore, it is easy to cause the power to be relatively scattered, not concentrated enough, lack certain cooperation, unable to concentrate on research, and the flames of everyone gathering firewood is high. In addition, some are relatively small in scale, and some may only have two or three people, so not only will there be a shortage of researchers, the system is not perfect, the direction is not clear enough, and the thinking is not clear enough. Seriously, the efficiency of research will be greatly reduced, and the results obtained are also very small. If these problems persist, the efficiency of research institutions will be greatly reduced, which is the so-called "doing more with less".

This study consulted the relevant data of China's education statistics and shows them in the form of charts, and understands the basic situation of human resources, development characteristics, and basic problems of human resources in Chinese universities. The problems in all aspects of human resource management in Chinese universities were studied through a literature review, interviews, and questionnaire survey. This study also puts forward the next step to further explore the problem of human resource management in Chinese universities through RM practice research.

3.2 Research on university human resource management practice

Through the study, we found that there are some problems in human resource management in Chinese universities. Combined with the classic theory of human resource management, we believe that the main factors affecting the effect of human resource management practice are the motivation level and the competence level of the organization members. In order to deeply understand the practice process of university human resource management, this research plan from the university human resource management practice (high-performance work system), university teachers' achievement motivation, and the relationship of university teachers' competence level expected to explore the law of university human resource management practice activities, used to guide the university managers for effective human resource management.

Selection of the study subjects. This study in China university teachers for questionnaire survey, convenient sampling method, select distribution in eastern China (Shandong, Guangdong), central (Henan, Hebei, Hubei), western (Xinjiang, Sichuan, Chongqing) 8 provinces of 28 universities (Undergraduate universities: Qingdao University, Zhaoqing Normal University, South China Normal University, Henan University, Henan Normal University, Henan University of Science and Technology, Henan University of Science and Technology, Xinxiang University, Henan Institute of Technology, Xinjiang Normal University, Chongqing Three Gorges University. Technical Colleges: Xinxiang Vocational and Technical Teachers College, Henan University of Science and Technology Higher Vocational and Technical College, Hebei Foreign Economic and Trade Vocational College, Guangdong Polytechnic Vocational College, Xinjiang Tianshan Vocational and Technical College, Sichuan Engineering Vocational and Technical College, Wuhan Vocational and Technical College, Shandong Business vocational school. Private universities: Sanquan College of Xinxiang Medical College, Guangzhou Xinhua College, Yanjing Institute of Technology, Wuhan College, Wuhan Institute of Bioengineering, Xinjiang Tianshan Vocational and Technical University, Chongqing Institute of Engineering, Chongqing Institute of Finance and Economics, Qingdao City College) teachers as the research object, to them an electronic

questionnaire, 400 recovered, 390 effective questionnaires, effective efficiency of 97.5%.

Study hypotheses. HR practices emphasizing investment, engagement decision-making, and growth opportunities make employees feel supported by the company and consider themselves part of a social exchange relationship (Allen et al., 2003; Paauwe et al., 2013). HPWS enhances employee perception of organizational support, which in turn promotes employee creativity. Finding that decentralized management regulates the relationship between perceived organizational support and employee creativity. Information sharing can help employees absorb new ideas and knowledge from others, thus helping them to generate more ideas (Chiang et al., 2015). The opportunity to participate in decision-making promotes the acquisition, sharing, and combination of knowledge, thereby encouraging learning behavior (Edmondson, 1999), and thus promoting creative behavior (Hirst et al., 2009). High-quality work is another important component of the HPWS. A well-designed job gives employees more autonomy and feedback and senses the meaning of their work, thus enhancing their inner motivation and encouraging them to develop creative ideas (Shalley et al., 2004). Providing extensive training broadens the knowledge and skills needed for creativity (Amabile, 1983) and helps employees connect existing and new knowledge to generate creative ideas and solutions (Chang et al., 2014). In HPWS visibility, employment security can encourage employees to take a long perspective on their careers (Pfeffer, 1998), take the initiative (Bartram et al., 2014) and participate in creative behavior.

Generally speaking, the low organizational performance is mostly due to the failure of employees to play their full potential. Therefore, organizations can develop appropriate human resource management policies to influence employees' skills, motivation, and work structure through better human resource management and then improve enterprise performance and competitive advantage (Bailey, 1993). The behavior guidance mechanism emphasizes the compensation, reward, and control system (Fisher & Govindarajan, 1992), which holds that the management of human resources can guide employees to act consistent with the enterprise strategy and achieve the goal of cost reduction or product differentiation (Schuler & Jackson, 1987). In recent years, many studies have found that companies can use the most appropriate human resource

management systems to improve their knowledge, skills, and abilities (KSA) to enhance motivation, avoid laziness, retain quality employees, and leave ineffective employees (Jones & Wright, 1992).

Combs et al. (2006) believe that the high-performance work system is a series of human resource management practices that can improve organizational performance, mainly through employee authorization to enable them to use their knowledge, skills, and capabilities. High-committed HM provides a powerful internal driving mechanism for employees to consciously monitor their own behavior [139]. The High-performance work system is an effective way to align employee motivation and behavior to organizational goals [140]; High-committed to direct employee behavior and attitudes toward positive organizational goals [141]. From the perspective of employees, the high-commitment human resource management model implemented by enterprises can improve their work motivation [142].

According to the various theories of mathematics in this study, combined with the purpose of this study and the analysis results of the literature discussion, we have constructed the research framework and theoretical model of the relationship between the efficient working system and the achievement motivation and competence, which is shown in figure 3.7.

Based on the above studies and the working practice of the researchers, this study proposes the following four basic hypotheses:

Hypothesis 1: Teachers feel more about the organization's high-performance work system practice, and their post-competence is relatively high.

Hypothesis 2: Teachers feel more about the organization's high-performance work system practice, and their achievement motivation is relatively high.

Hypothesis 3. There is a correlation between teacher achievement motivation and teacher competency.

Hypothesis 4. Achievement motivation mediates the high-performance work system and teacher competence.

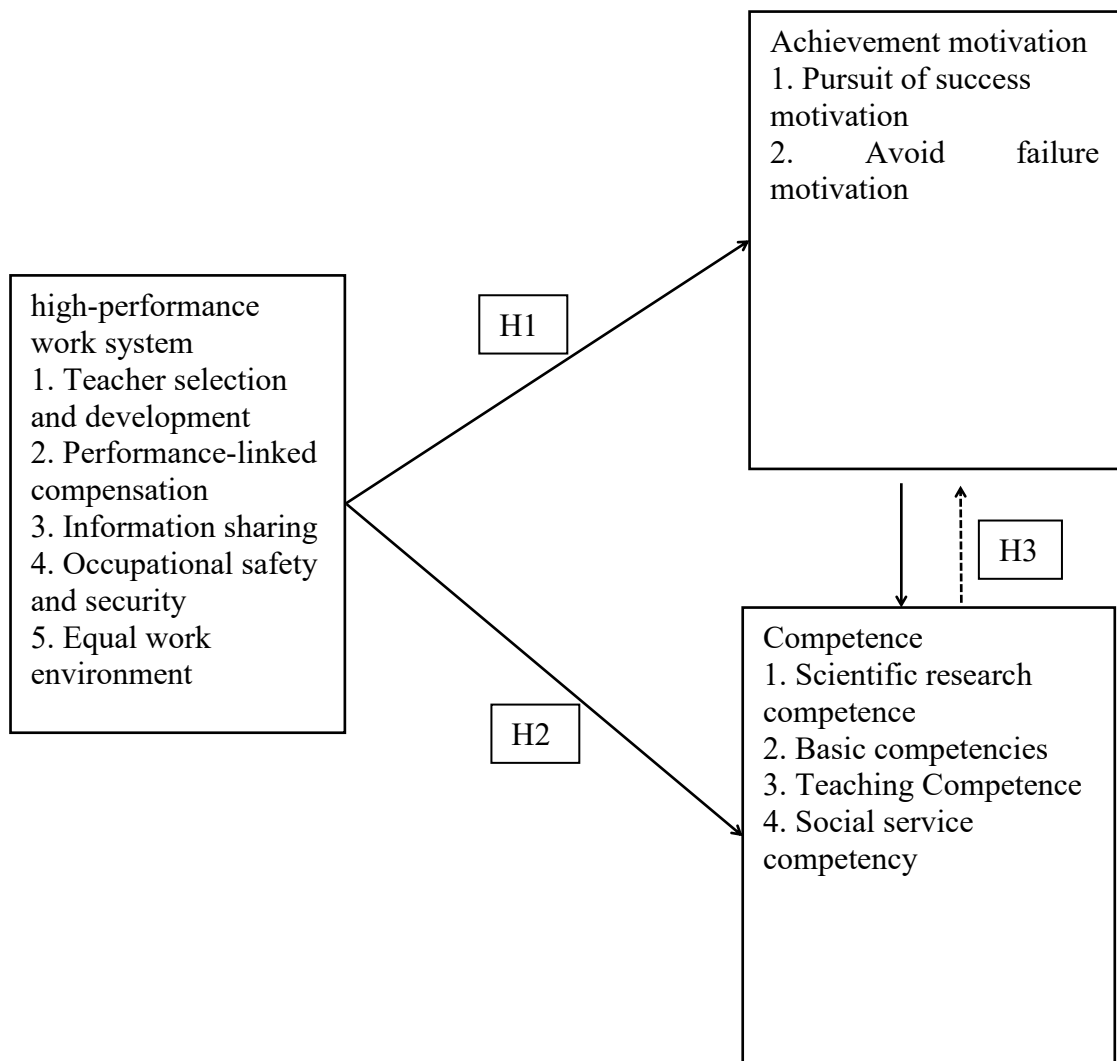


Figure 3.7 - The theoretical model of the high-performance work system, achievement motivation, and the impact mechanism of competency

** Source: collated by researchers [139-143].*

In terms of research methods, this study mainly used the questionnaire survey method and mathematical, statistical analysis. This study performed the reliability and validity test of the measurement tools using AMOS23.0. Correlation analysis and mediation effect tests were performed on the questionnaire data using SPSS 17.0 and LISREL 8.7. High-performance work system index evaluation. The self-compiled university high-performance work system questionnaire is used to evaluate the degree of teachers' high-performance work system in the school. The questionnaire test questions include five first-level indicators and 24 second-level indicators: teacher selection and development, performance-linked salary, information sharing, occupational security, and

equal working environment. Please choose to answer according to the degree of compliance with the school situation. Choose a total of 5 options from Full unconformity to Full conformity. A confidence validity test was performed against the data collected from the scale. The overall α coefficient of the questionnaire data was 0.967, and the α coefficient of all latent variables was greater than 0.96, so the overall reliability of the questionnaire is very good, and the scale is very consistent with the purpose of this study and can be conducted for further analysis. The standard factor load included in teacher selection, development, performance-linked salary, information sharing, occupational security, and equal working environment is greater than 0.6, indicating that all the test items in the scale have a good ability to explain the corresponding variables. From the combined reliability and mean-variance extraction values, the minimum combined reliability CR of each latent variable is 0.8429; the AVE is greater than the standard reference value of 0.50. The overall fit index also reached the adaptation index (table 3.2). This shows that all the scales used in this questionnaire design have good convergence validity.

Table 3.2 - The overall fitting index of the University high-performance work system questionnaire

Fit metrics	X2/df	NFI	CFI	IFI	TLI	PCFI	RMSEA
Reference	<3	>0.9	>0.9	>0.9	>0.9	>0.5	<0.08
Numerical value	2.111	0.882	0.908	0.908	0.894	0.793	0.089

**Source: prepared by the author.*

An assessment of teacher achievement motivation. The Achievement Motivation Scale (AMS), compiled by psychologists Gjesme and Nygard (1970) at the University of Oslo, Norway, and revised by Ye Renmin and Hagtvvet (1992), uses a 4-point score. It is divided into two dimensions: motivation to pursue success (Ms) and motivation to avoid failure (Mf). According to Atkinson's theory, the achievement motivation score (Ma) consists of the pursuit of success score minus the avoidance of failure score (Ma=Ms-Mf). The higher the score, the higher the achievement motivation. According to the research results of the scale revisers, the split-half reliability of the scale was 0.77 ($P < 0.01$), and

the validity was 0.58 ($P < 0.01$). Through the analysis of the data of this study, the overall α coefficient of the scale data is 0.892, and the α coefficient of each latent variable is greater than 0.9, so the overall reliability of the scale is very good and can be further analyzed.

University teacher competency assessment. This study adopts the self-assessment questionnaire of university teachers' competence to evaluate the competence level of teachers [143]. The questionnaire test questions include basic competency, scientific research competency, teaching competency, and social service competency, four first-level indicators, and 22 second-level indicators. Through the analysis of the survey data, the overall α coefficient of the questionnaire data is 0.953, and the α coefficient of each latent variable is greater than 0.87, so the overall reliability of the questionnaire is very good and can be further analyzed. The standard factor loadings of the measurement items included in the variables of scientific research competence, basic competence, teaching competence, and social service competence are all greater than 0.6, indicating that all the measurement items in the scale have better performance for their corresponding variables. Judging from the combined reliability and average variance extraction values, the combined reliability CR of each latent variable is at least 0.8903; the AVE values are all greater than the standard reference value of 0.50. The overall fitting indicators of the questionnaire all reached the adaptation indicators (table 3.3). It can be seen that the scales used in this questionnaire design have good convergent validity.

Table 3.3 - Overall fit index of teacher competency questionnaire

Fit metrics	X ² /df	NFI	CFI	IFI	TLI	PCFI	RMSEA
Reference	<3	>0.9	>0.9	>0.9	>0.9	>0.5	<0.08
Numerical value	2.625	0.944	0.913	0.913	0.901	0.802	0.078

**Source: prepared by the author.*

Discussion of the study findings. We mainly explore the relationship between high-performance work systems, achievement motivation, and teacher competence. The data in table 3.4 shows that there is a significant positive correlation between the five dimensions of the high-performance work system and the four dimensions of teacher competence; there is also a significant positive correlation between the motivation to

pursue success and the four dimensions of teacher competence Positive correlation; motivation to avoid failure was not related to teacher competency.

Table 3.4 - The relationship between high-performance work system, achievement motivation, and teacher competency

Dimensions		Scientific research competence	Basic competency	Teaching Competence	Social service competency
high-performance work system	Selection and Development	0.416***	0.420***	0.455***	0.399***
	performance-based compensation	0.427***	0.434***	0.427***	0.414***
	Information Sharing	0.466***	0.439***	0.431***	0.426***
	Occupational safety and security	0.435***	0.387***	0.432***	0.469***
	Equal work environment	0.469***	0.437***	0.441***	0.425***
Achievement motivation	Pursuit of success	0.333***	0.290***	0.406***	0.442***
	Avoid failure	-0.023	-0.059	-0.043	0.035

Note: *** means $p < 0.001$

*Source: prepared by the author.

The relationship between high-performance work systems and achievement motivation. The data in table 3.5 show that the five dimensions of the high-performance work system have a significant positive correlation with the motivation to pursue success; the two dimensions of occupational safety and an equal working environment have a significant positive correlation with the motivation to avoid failure.

Table 3.5 - The relationship between high-performance work system and achievement motivation

Dimensions	Pursuit of success	Avoid failure
Selection and Development	0.270***	0.064
Performance-based compensation	0.196***	0.060
Information Sharing	0.228***	0.085
Occupational Safety and Security	0.271***	0.100*
Equal work environment	0.261***	0.105*

*Source: prepared by the author.

The mediating role of motivation to pursue success in the relationship between high-performance work systems and teacher competency. Because there is a significant positive correlation between the high-performance work system and teacher competency,

and there is also a significant positive correlation with the motivation to pursue success, we use the motivation to pursue success as a mediator variable (W), and use the total score of the high-performance work system. is the independent variable (X), and the total score of teachers' competence is the dependent variable (Y), and the mediating effect is tested by the method of regression.

The data in tables 3.6 and 3.7 show that the motivation to pursue success played a partial mediating effect on the relationship between high-performance work systems and teacher competence, with a mediating effect of $0.023/0.431=5.23\%$.

Table 3.6 - The mediating role of pursuit motivation in the relationship between high-performance work system and teacher competency

Intermediary effect	t	p
Y=0.431X	13.084	0.000
W=2.597X	5.512	0.000
Y=0.371X	11.480	0.000
+0.023W	6.812	0.000

**Source: prepared by the author.*

The mediation effect means that the influence of X on Y is achieved through W. W is a function of X, and Y is a function of W. Consider the influence of the independent variable X on the dependent variable Y. If X affects the variable Y through W, then W is called the mediator variable [144].

Table 3.7 - Proportion of the mediating effect of pursuit motivation in the relationship between high-performance work system and teacher competency

Category	Effect	Boot SE	Boot LLCI	Boot ULCI	Effect ratio
Direct effect	0.4082	0.038	0.3333	0.4824	94.80%
Indirect effect	0.0225	0.0117	0.0018	0.0479	5.23%
Total effect	0.4306	0.553	0.366	0.495	

**Source: prepared by the author.*

Because there is a significant positive correlation between high-performance work systems and teacher competence, there is also a significant positive correlation with motivation to pursue success. In order to test the hypothesis of this study, that is, the mediating effect of college teachers' achievement motivation between college

high-performance work system and teacher competency. In this study, the motivation to pursue success is used as the mediating variable (W), the total score of the high-performance work system is the independent variable (X), and the total score of teachers' competence is the dependent variable (Y). In order to verify the mediating effect of achievement motivation in the relationship between high-performance work systems and teacher competency.

First, take the total score of the high-performance work system as an independent variable, and examine its influence on the total score of teachers' competency, that is, whether the result of the regression coefficient t-test is significant. As shown in Table 3.6, the total score of the high-performance work system has a positive effect on the total score of teacher competency, with a t value of 13.084. Then, the achievement motivation is introduced into the mediation effect test as a mediating variable. When the mediating variable is introduced into the mediating effect test, the result of the regression coefficient t-test of the independent variable's influence on the mediating variable is 5.512. It shows that the motivation to pursue success plays a partial mediating effect on the relationship between a high-performance work system and teacher competence. The work system of universities is interrelated with teachers' competence and motivation to pursue success. The motivation to pursue success is the attribution of teachers' competence to the work system of universities, which is a mediating variable which affects the relationship between dependent variables and independent variables. The regression test showed that the regression coefficient was significant, indicating that the mediating effect of motivation to pursue success was significant.

Discussion of the study findings. The results of correlation analysis show that there is a significant positive correlation between high-performance work system, achievement motivation, and teacher competency. On the one hand, it verifies the hypothesis and achievement motivation of this study, and there are significant differences in the perception of human resource management among employees within the organization (Edgar & Geare, 2005), their perception of HR practices (Khilji & Wang, 2006) [145] or attribution (Nishii, Lepak, & Schneider 2008), will ultimately affect their work behavior and performance [146]. The high-performance work system has an important effect on

teachers' competence. On the other hand, the "achievement need" was first proposed by Murry, and some scholars transformed the achievement need into achievement motivation, that is, the inner motivation and psychological tendency to strive for excellence to achieve higher goals. Demand is a necessary condition for motivation, and motivation is a necessary condition for all behaviors except reflex behavior. As an internal driving force, achievement motivation has an important influence on human behavior. Achievement motivation has an important positive effect on the development of teachers' competency.

The measurement of achievement motivation is to deeply understand the subject's personality, needs, expectations, and attitudes towards success or failure of things, as well as the possible consequences of behavior, to cultivate and train the correct understanding and attitude, and to improve the efficiency of learning and work. In education, it is important to teachers. It is of great practical significance to take appropriate teaching methods. In this study, achievement motivation has two dimensions, pursuit of success and avoidance of failure, and the relationship between discussion and teacher competence is analyzed from these two dimensions. It can be seen from the analysis results that the achievement motivation to pursue success has a positive predictive effect on teacher competence, showing a positive correlation, while the achievement motivation to avoid failure has nothing to do with teacher competence. How do we measure achievement motivation in research? In the process of researching this issue, different researchers have proposed methods of measuring achievement motivation from different perspectives. In order to more accurately and scientifically analyze the impact of achievement motivation, we can integrate different scales at home and abroad, refine the scales, improve the measurement process and methods, and make the results more accurate.

Teachers' grades, intelligence, and ability should be the criteria and basis for evaluating teachers, while competence is a comprehensive reflection of teachers' external ability performance and implicit quality. High-competence teachers are not necessarily teachers who have demonstrated good performance behaviors but should also include teachers with high intrinsic potential, most of which are like the part of the iceberg that is hidden under the iceberg. During the course of his career, he will gradually show a higher

ability. In the new era, in order to better evaluate university teachers and provide a basis for teacher selection, appointment, training, and performance management, it is necessary to build their competency model. In this study, the four dimensions of scientific research competence, basic competence, teaching competence, and social service competence are measured and analyzed. From the research results, we can see that both high-performance work system and achievement motivation have a significant positive correlation with teacher competency. Among them, the positive correlation between equal working environment and scientific research competence is relatively obvious, and the positive correlation between occupational safety and social service competence is relatively obvious. Taking the high-performance work system and competency as an example, the correlations between different dimensions of the variables are still different. It can be seen that the construction of the competency model has an important impact on the research.

Further research and discussion found that the five dimensions of the high-performance work system put forward higher standards for teachers' scientific research competence, basic competence, teaching competence, and social service competence. High-performance work system can reasonably allocate teachers' human resources and strive to create a "person-to-post" work environment. It can also stimulate the achievement motivation of teachers to pursue success and improve their work efficiency and ability. Teacher competency has a significant positive correlation with the motivation to pursue success but has nothing to do with the motivation to avoid failure. Achievement motivation has a significant positive predictive effect on the behavioral performance of teachers who need to be engaged in learning, which can directly affect teachers' engagement status and ultimately affect teachers' competence. The stronger the individual's motivation for achievement, the more time and energy will be invested in learning related skills, improving teachers' ability, and thus improving teachers' competence [147].

We discussed the relationship between high-performance work system and achievement motivation. The results of correlation analysis show that there is a significant positive correlation between the five dimensions of the high-performance

work system and the motivation to pursue success. This is because the high-performance work system is a series of human resources management practices for improving organizational performance. It can provide employees with extensive training, targeted guidance and effective participation, and can also enhance employees' sense of belonging and identity to the organization[148]. It can be found that the high-performance work system takes organizational performance as the primary service goal. The development of organizational activities and the improvement of performance are inseparable from the development and utilization of human resources. The improvement of organizational performance comes from the efforts of employees, so it is a valuable resource for enterprises. Similarly, for universities to improve the teaching competence of college teachers, the setting of human resources practice in schools must follow the objective development law of teachers' mental activities. As the driving force of external behavior, it can stimulate teachers' internal behavior motivation. Through the study, the university high-performance work system has important practical significance. On the one hand, choose and train more competent teachers, the performance hook salary system can meet the pursuit of higher quality of life, and improve the enthusiasm of teachers. The sharing of information platforms can provide more teaching and academic resources for college teachers, making teachers more willing to increase their participation in decision-making and work engagement. Through their own efforts, teachers continue to pursue high-quality teaching and high-level scientific research achievements, take on challenging jobs and increase their attention to the end. On the other hand, universities provide teachers with an equal working environment and guarantee occupational safety. This is from the perspective of strategic human resource management, focusing on the long-term sustainable development of the entire college teacher group, which can reduce teachers' worries and can Let teachers give full play to their abilities, enrich their professional knowledge and improve their personal abilities with peace of mind. While providing high-quality welfare and logistics support for teachers, it also conveys the importance, respect, support, and concern of the university. It can effectively meet teachers' demand for external conditions, enhance teachers' motivation to pursue success, and improve teachers' teaching ability. In addition, the high-performance work system

has a double-edged sword effect, which has both a positive and a negative side. Faculty benefits need to be mastered within certain limits. If it exceeds a certain limit, it will have bad effects.

According to the results of this study, there is a significant positive correlation between the two dimensions of occupational safety and an equal working environment and the motivation to avoid failure. When faced with good welfare benefits and an equal working environment, college teachers have obtained a long-term commitment from the school to a certain extent. They perceive job security and stability, their motivation to avoid failure will also increase, and the pursuit of their own performance will decrease. Worrying about and fearing the possible consequences of task failure, unwilling to accept a certain degree of risky and challenging tasks, and more inclined to maintain an evasive attitude, which will have a negative impact on the innovation and development of universities; if colleges provide teachers with occupational safety guarantees. When the degree of peaceful and equal work environment is low, the level of achievement motivation of college teachers will be improved, and they will redouble their efforts to improve their work performance, thereby avoiding the danger of being eliminated. Therefore, universities should determine an appropriate occupational security level when carrying out human resources practice [149]. On the one hand, the level of occupational security as an important health care factor should not be too high. Otherwise it will affect teachers' achievement motivation level and increase the factors to avoid failure; Be bolder to take on challenging jobs, pursue higher teaching and scientific research achievements, and increase the work engagement and happiness of college teachers.

From another perspective, according to Maslow's hierarchy of needs theory, several aspects of the performance system of universities can be regarded as several levels of needs. When the external and lower levels, such as occupational equality environment and occupational safety guarantee, are satisfied, teachers will pursue higher levels of choice and development needs, and generate motivation based on the needs. Needs will be transformed into different positive motivations that will motivate teachers' future behaviors. It can also be seen that the five dimensions of the performance work system have a significant positive correlation with the motivation to pursue success.

This study explores the mediating role of successful pursuit motivation in the relationship between high-performance work system and teacher competence. The results of the study show that the high-performance work system plays an important role in the improvement of teachers' competence. The current universities not only pay attention to the competence of teachers but also begin to attach importance to the establishment of a high-performance work system so that teachers in universities with a higher-performance work system have a higher level of competence. In the relationship between the high-performance work system and the teacher's competency, the pursuit of achievement has played a certain intermediary role. The high-performance work system has a degree of pursuing achievement motivation to affected teachers' competency. This shows an important role in achieving the motivation in high performance. The important role of the system in the process of influencing teachers' competency. In this study, when achievement motivation is introduced as an intermediary variable, the improvement of teacher competency by the high performance work system is higher than the independent effect on the dependent variable. Teachers who perceive a high performance work system also have a higher level of achievement motivation. When the achievement motivation level of college teachers increases, they will motivate teachers to do better than before, that is, willing to improve, pursue excellence, accept challenges, accept personal responsibility, and strive to achieve success in work [150]. In this way, once college teachers can motivate universities to establish a high-performance work system through the pursuit of achievement motivation, the competence of college teachers will eventually be improved. The drive for self-improvement is a need to be able to perform a certain job and achieve a certain achievement through one's own efforts, thereby winning a certain social status. It is content to win a certain position. The motivation to pursue success is in line with the internal drive of self-improvement. In the efficient work system, the promotion of teachers' status fully reflects the encouragement of college teachers to pursue success. According to Harvard professor David McClelland, competency distinguishes high achievers from ordinary people in a job. The pursuit of success can effectively improve teachers' competence. The high-performance work system attaches importance to the motivation of pursuing success, which will help university teachers to

improve their competence through their own efforts.

According to the research results, it can be known there is a significant correlation between university human resource management measures, university teachers' post-competence, and achievement motivation. They interact with each other to form an organic system. This system determines the efficiency of university human resource management and has a very important impact on the development of the university. This requires universities to fully consider the characteristics of teachers, especially how to mobilize the achievement motivation of teachers when formulating and implementing HRM policies. Because only when the motivation of most teachers is mobilized will they be active in completing the work to improve the efficiency of the overall work. Secondly, universities should pay attention to the improvement of teachers' competence, so that teachers have the possibility to complete their work, so as to improve their self-confidence and motivation. Form a mutually promoting benign effect. Thirdly, universities should establish the concept of people-oriented human resource management, take into account the individual needs of different types of teachers, and take personalized management measures. Fourthly, universities should encourage teachers to participate in management to make up for the defects of traditional top-down management. Let the teachers who know the actual situation of the grassroots participate in the formulation and implementation of the human resource management system.

3.3 Human Resource Management Strategy and Suggestions for Chinese Universities

With the rapid development of China's economy, the demand for talents is very urgent. This social and economic development situation has promoted the rapid development of China's higher education. With the rapid development of higher education in China, Chinese universities have entered a stage of extensive development, focusing on the rapid expansion of scale, but ignoring the improvement and development of internal quality. Therefore, there are various problems in the management of Chinese universities, and there are also various problems in the process of human resource

management. The key point of university human resources is to rationally plan and equip all kinds of talents around the school's educational objectives. We should properly handle the relationship between the parts and the whole [151]. According to the characteristics of all kinds of personnel management, through a variety of means, to achieve the efficient operation among the elements of the system.

In the 3.1 part of the paper, we have discussed in detail the problems of human resource management in Chinese universities. After a detailed study of various issues of human resource management in Chinese universities, we found that the most important and core factor is the role of teachers. Using scientific research tools, we conduct a practical study of human resource management activities in Chinese universities and discover the relationship between promoting teachers' motivation and competency levels and university human resource management measures (high-performance work systems). In order to develop the strategy of university human resource management, we combine the theoretical research and practical research of university human resource management, using questionnaire research, expert interview and SWOT analysis and other methods. We have analyzed the human resource management of Chinese universities, and formulated four different human resource management strategies for Chinese universities according to their internal strengths, weaknesses, opportunities and challenges (table 3.8). Some universities have clear advantages in internal operational development and clear opportunities in the external environment. This means that such universities are in a very favorable development period and should develop an aggressive human resource management strategy, which we call growth strategy. When a university has obvious advantages in internal operations and development, it is a huge challenge in an external environment. It must fully consider internal and external environmental factors, should develop a flexible human resources management strategy, we call it a diversity strategy. When there are serious problems in the internal development of a university and it is at a disadvantage compared with other universities, but the external development environment has encountered more development opportunities, it shows that the university needs to change its thinking from an internal development to formulate human resource management strategies. This is called a turnaround strategy. Some universities

are at a disadvantage in the internal operation management of human resource management, and the external development environment is also confronted with many challenges, which means that they encounter great difficulties in their development. These universities should develop a relatively conservative human resource management strategy, which we call defensive strategy [156].

Table 3.8 - Chinese university human resource management SWOT analysis and its strategy

	Advantage	Disadvantage
Internal factors	<ol style="list-style-type: none"> 1. The school has a deep foundation in running schools, and the top leaders and leaders have increasingly rich experience in running schools. 2. The awareness of planning and the awareness of running schools according to the charter is gradually enhanced. 3. Qualified hardware equipment and high-quality educational resources. 4. The training mode is flexible, and the school-running ability is gradually improved. 5. The structure of teachers has its rationality, and it consists of a preliminary incentive mechanism and training system. 	<ol style="list-style-type: none"> 1. The awareness of strategic reform is not strong, and the inertial force of development is large. 2. The idea of running a school is backward, the orientation of running a school is not clear, and there is convergence. 3. The ability to improve strategic reform is not enough. 4. The concept of strategic human resource management is relatively backward. 5. The construction of the teaching staff and the unreasonable structure of teachers. 6. The performance evaluation system and salary incentive mechanism are unreasonable, and the scientific research atmosphere is not strong. 7. The construction of college network platform is not perfect.
External factors		
Opportunity	Growth strategy	Turnaround strategy
<ol style="list-style-type: none"> 1. The government attaches great importance to improving the ability of college teachers. 2. The local economic structure is adjusted, and the local government attaches great importance to the development of local universities. 3. Society's demand for higher education. 4. The professional background of some universities with industry characteristics often has the characteristics of local regional economic development. 5. Dividends of informatization innovation. 	<ol style="list-style-type: none"> 1. Combining its own school-running advantages and faculty to improve the level of school-running, and taking strategy as the guide, establish a scientific and effective human resource management system. 2. Improve the professional level of administrative personnel, improve employment conditions, optimize the structure of teachers, establish a training mechanism for administrative personnel and teachers, improve the school's salary incentive mechanism, and establish a sound assessment mechanism. 3. Use teaching and research to strengthen services for local governments and strive for greater support [152]. 	<ol style="list-style-type: none"> 1. Seize the opportunity to expand enrollment, expand the scale of running schools, enrich the funds for running schools, and improve facilities and equipment. 2. Take multiple measures to introduce highly educated and high-level talents, and use the system to "contain" the flow of people. 3. Use the training funds according to the points to increase the training of teachers. 4. Combined with the national education reform, increase the reform under the premise of maintaining stability [153].

Table 3.8 continued

Challenge	Diversity Strategy	Defensive strategy
1. Challenges brought by the rapid development of information technology. 2. Competitive pressure of domestic comprehensive universities. 3. Government policies are lagging behind, and the source of funds is single, which restricts its investment. 4. The society has prejudice against some universities.	1. Encourage teachers to study postgraduate and doctoral degrees during their in-service period, improve their academic qualifications, and continuously improve their school-running level by taking advantage of the school's school-running advantages. 2. Concentrate superior strength to create school business cards. 3. Improve the employment competitiveness of students [154].	1. Enhance the awareness of crisis and clarify the orientation of universities. 2. Reasonably set up majors according to the local industrial structure. 3. Optimizing the education and teaching management team. 4. Moderate extension construction and connotation construction. 5. Strengthen external publicity and image recognition, and raise awareness [155].

**Source: prepared by the author.*

Through SWOT analysis, we understand the advantages, disadvantages, opportunities, and challenges faced by human resource management in Chinese universities and formulate four development strategies suitable for universities in different development situations in China. In order to realize the strategic plan for the university's scientific development, it is necessary to formulate scientific and reasonable strategic goals in combination with the actual situation of the university [157].

In the 2.2 part of the thesis, the researcher explores the practical application of human resource management of high-performance work systems in universities by using the Delphi method based on a large number of literature studies through the combination of quantitative and qualitative scientific methods. The introduction of enterprise human resource management ideas into universities expands the connotation and extension of human resource management research. By using the methods of literature, interview, and Delphi, the study explores the key goal and core index system of human resource management in Chinese university, namely the high performance working system (Table 3.9). Provide guidelines, standards, and reference basis for human resource management practices in universities. Improve the efficiency of university human resources management, stimulate teachers' work motivation, and promote the development of universities.

Table 3.9 - High-performance work system indicators in universities and main

functions of expert scoring

Tier 1 strategic objectives	Secondary indicators strategic objectives	Average importance	Exponential weights
Teacher Selection and Development	Provide academic exchange opportunities	3.60	0.1251
	Support teachers in training, learning and continuing education	4.60	0.1596
	Have a clear talent development strategy plan	4.40	0.1770
	Develop and implement talent introduction and training plans	4.01	0.1390
	Focus on teacher professional development	4.58	0.1770
Performance-linked compensation	The compensation system is based on performance	4.80	0.3912
	Salary design reflects the more work you get	4.70	0.2666
	Rigorous, fair and transparent evaluation and review procedures	4.62	0.1596
	Performance evaluation focuses on the combination of quantitative and qualitative	4.61	0.3432
	Set clear job responsibilities and goals for teachers	4.40	0.3283
	Focus on job matching	4.41	0.2069
Information Sharing	Open channels for teacher feedback, suggestions and grievances	3.42	0.1599
	Provide a platform for academic teams to communicate and cooperate	3.79	0.1319
	Timely and accurate information release	3.40	0.1182
	Emphasis on promoting teacher communication	3.67	0.1476
Occupational Safety and Security	Welfare can make teachers feel at ease in teaching and research	4.90	0.2288
	The service department gives teachers the greatest teaching and research support	4.61	0.1850
	Concerned about improving the quality of life of teachers	4.61	0.2163
	Perfect logistics support	4.41	0.3282
	Provide teachers with good working conditions and research facilities	4.60	0.2163
Equal work environment	Consult teachers for policy making	3.60	0.1288
	Leaders make teachers care	3.90	0.3151
	Faculty and staff engagement in leadership assessments	4.60	0.1850
	Faculty and staff participate in the formulation of school development plans	3.60	0.2936

**Source: prepared by the author.*

The construction of the first-level index system of the high-performance work system in Chinese universities draws on the best human resource management theory and adopts methods such as literature research, questionnaire survey, and interview to improve the scientific nature of the research. In the process of constructing the formal index system, the Delphi method research procedure is strictly implemented. By

calculating the expert's authority coefficient of 0.878, the importance score of this index is 3.21-4.90, and the coefficient of variation is 0.0723-0.3105, indicating that the expert has high authority, and the index system constructed in this study is scientific.

The strategic goal of university development is the specificization of its strategic plan. This study combines the research of high-performance work systems and the strategic development plan developed by SWOT analysis of China University Human Resources Management. It has proposed universally applicable war for China University Human Resources Management. (Figure 3.8).

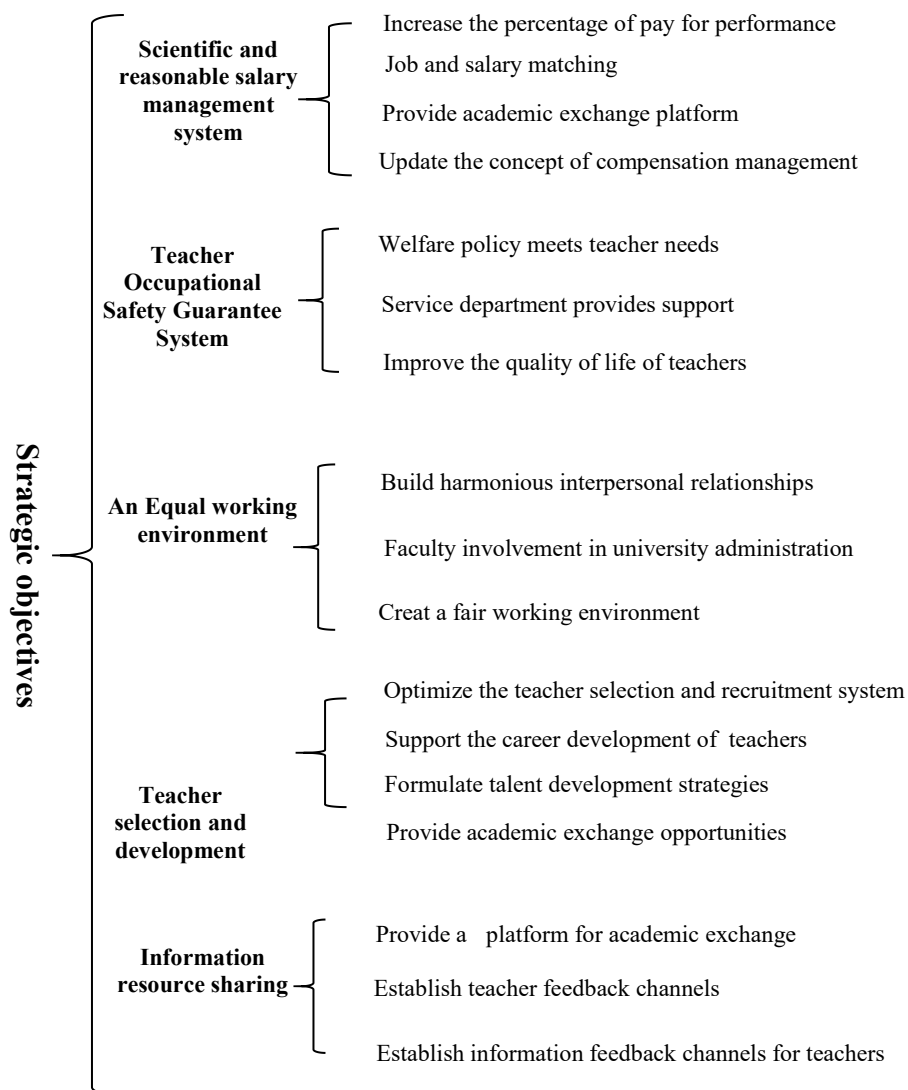


Figure 3.8 - The strategic goal of human resources development in universities

**Source: prepared by the author.*

Based on the above research, we believe that to improve organizational

performance, it is necessary to consider both organizational goals and personal goals. Only when the members of the organization unify the goals of the organization and their own personal goals are they willing to put their own efforts to work [158]. Because the realization of the goals of the organization will also achieve their goals. Combined with the research, we propose an individual and organizational psychological contract teacher motivation model (figure 3.9). The model is based on "motivating college teachers - building psychological contract - working hard - accomplishing goals - satisfying both parties - incentive mechanism". The operation process is mainly divided into four blocks.

1. Build a psychological contract. The expected goals of both universities and teachers affect the establishment of psychological contracts. Combined with our previous research results: university teachers attach great importance to the content of five aspects, so universities should form contracts with teachers in the following five aspects. These five aspects are remuneration, selection and development, working environment, occupational safety, and information sharing.

2. Efforts. Personal needs and organizational tasks promote the occurrence of effortful behavior, and expectations and personal achievement motivation are internal forces that determine a person's level of effort. University human resource managers need to let teachers understand the university's goals and combine them with their own development goals in management practice. Make teachers work hard to achieve personal goals while promoting the realization of university goals.

3. Complete the goal. In the organizational environment, college teachers rely on their own post competencies to complete their goals, but if they do not formulate incentive goals and adopt incentive means, they will definitely complete the goals and satisfy both parties. The premise of this process is that the university should provide teachers with good working conditions and environment, and the university teachers themselves have the corresponding personal ability and quality.

4. Incentive mechanism. When establishing the incentive mechanism, the three aspects of material, spirit, and emotion are indispensable. Only by organically combining them can we achieve the harmonious unity of the university's development strategy and teachers' own development goals. The achievement of goals can satisfy both the

institution and the faculty, which in turn promotes and influences incentives. Incentives, in turn, influence the construction of psychological contracts, resulting in a model that can cycle dynamically. Universities should use psychological contract correctly and reasonably to form a virtuous circle, so as to achieve the common development goal of universities and teachers.

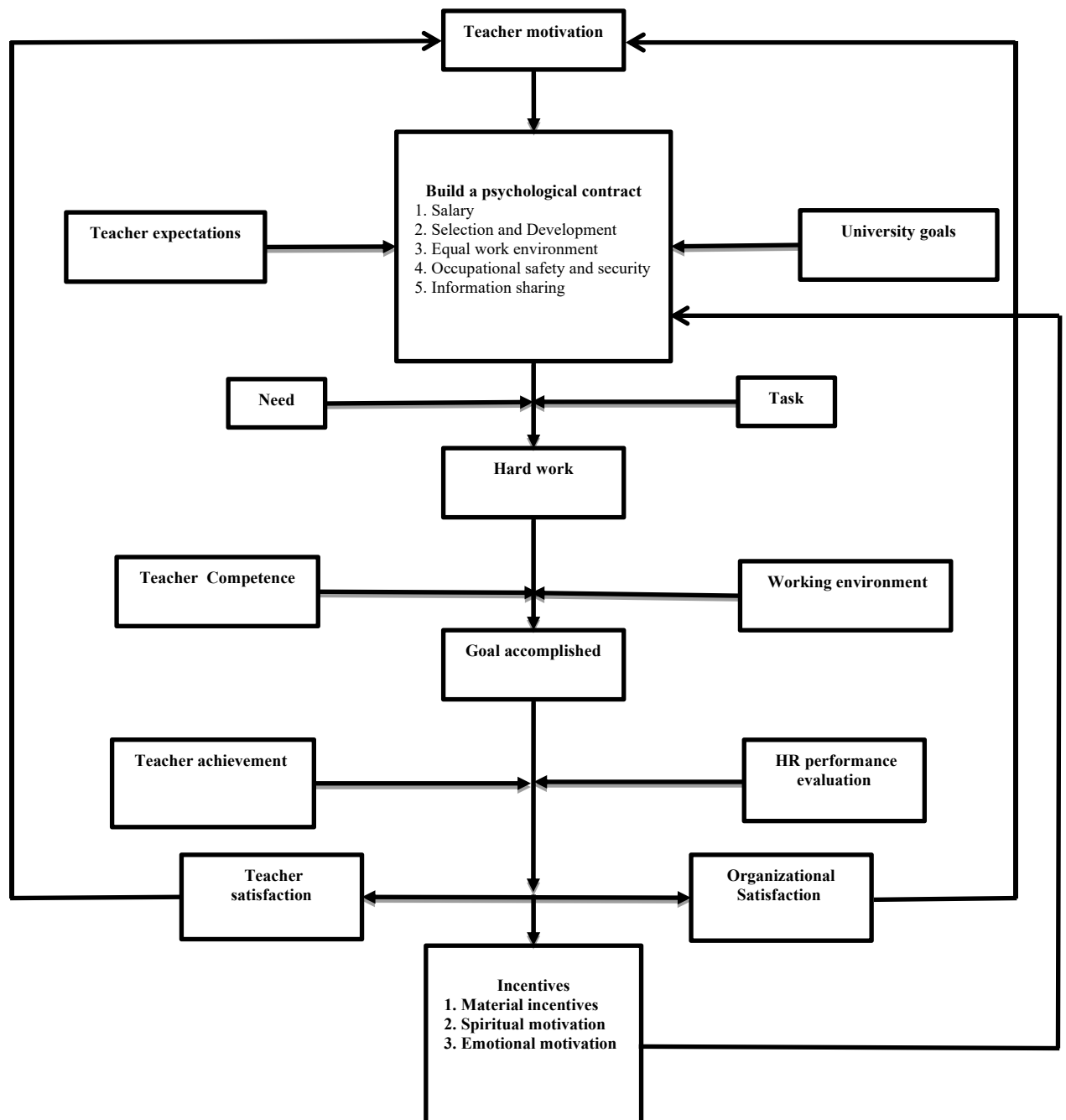


Figure 3.9 - University teacher incentive system relationship diagram

**Source: prepared by the author.*

The university human resources plan refers to the process of predicting and

balancing the human resources supply, based on the changes in the strategic planning and development goals. In essence, it is the supplementary planning for the needs of all kinds of university personnel [159].

University human resources planning is an important link of university human resources management, and is the beginning of university human resources management. It is an important activity for the overall planning and arrangement of human resources in the university. Through the in-depth study of human resources in Chinese universities, we find that Chinese universities should carry out human resources planning according to the following steps. First, the human resources management department of universities should pay attention to the collection of information. The information that needs to be collected includes: (1) the overall status and development plan of the university itself. (2) External environment, policy environment, national and local labor security laws and regulations of university human resource management. (3) The current human resources management status of the university, the number of people in each department, the vacancy and over-staffing of personnel, and whether the matching between posts and personnel is reasonable. (4) Education level, experience, and training of employees in each department [160]. The second step is to decide on the planning period. The university's human resource plan can be divided into strategic long-term planning, strategic medium-term planning and specific short-term operation planning. The third step is to formulate the overall plan of human resource management and specific plans for each project according to the overall development plan of the university. The fourth step is to monitor and evaluate the process and results of university human resource planning, and attach importance to information feedback. Constantly adjust the overall planning and various plans of human resource management of the university, so as to make them more realistic and better promote the realization of university goals.

Human resource planning of Chinese universities needs to consider the following aspects: The first is strategic planning. Strategic planning is the core of all kinds of human resources-specific plans and is the key plan that concerns the overall situation. The second is organizational planning. Organizational planning is the design of the overall framework of the university, which mainly includes the collection, processing, and

application of organizational information. Organization planning also includes drawing organization structure chart, organization investigation, diagnosis, evaluation and organization design, adjustment, structure setting, etc. The third is institutional planning. System planning is an important guarantee to realize the goal of human resource general planning, including the human resource management system construction procedures, institutionalized management, and other contents. The fourth is staffing. Personnel planning is the overall planning of the total number, composition, and flow of university personnel, including the analysis of the current situation of human resources, organization quota, personnel demand and supply, forecast and personnel supply and demand balance, etc. The fifth is cost planning. Expense planning is the overall planning of university labor costs and human resources management costs, including human resources budget, nucleic acid, settlement, and human resources cost control [161]. Some researchers say that from a micro point of view, university human resource planning should be made in detail from three aspects: quantity, quality, and structure.

In order to give full play to the maximum efficiency of university human resources, it is necessary to organize the human resources in the organization effectively. Organization can be interpreted as a verb or a noun. When used as a noun, it refers to an effective working collective, a form of each group of people joining together to achieve some common goal. When the organization is used as a verb, it means to organize a large number of people to coordinate their behaviors so as to achieve a common goal. For example, Fayol believes that an organization is a business, which provides all the necessary raw materials, equipment, funds and personnel for the operation of the business. The organization of human resources in a university mainly relies on the internal organizational setting of the university to effectively organize human resources such as full-time teachers, administrators, logistics personnel, and laboratory staff. Maximize your efficiency. The organization of human resources in Chinese universities mainly coordinates various human resources organizations together through different types of organizations to form a work team to complete different types of work. University organizations should include the following categories: Party and mass organs, teaching departments, administrative organs, academic institutions, teaching, and auxiliary

institutions, etc. [162]. The Party and mass organization is a unique organizational institution of Chinese universities. It is an organizational institution to publicize the leadership program and ideology of the Communist Party of China and strengthens the leadership of the Communist Party of China over various affairs of the university [163]. The university is divided into different teaching departments according to the major category. These organizations organize teachers with the same or similar professional backgrounds to undertake research, teaching, and social service tasks in the professional field. Chinese universities also need to set up different administrative organizations according to different types of work. The administrative organizations will gather different professionals to conduct unified management of school affairs. Financial management agencies, human resources management agencies, audit management agencies, security departments, etc., are composed of professionals. Chinese universities should also set up academic institutions to take charge of academic management, degree management, and teaching guidance. Teaching and auxiliary institutions are also essential organizations of universities, including libraries, laboratories, herbariums, network centers, and other institutions. The organization of university human resources is to establish different levels of organizations, set up different jobs, and effectively organize professionals to form an organic whole of mutual interaction to promote the effective operation of the overall organization of the university and improve the efficiency of university operation and management.

University human resource control refers to the concrete implementation of human resource management. The content of its control is determined according to the specific practical activities of human resource management in universities. According to our research results, human resource control in Chinese universities should focus on the following five aspects.

1. Control remuneration. The study found that Chinese university teachers attach great importance to fair and reasonable remuneration. They generally believe that the salary of university teachers should be related to performance appraisal. Only in this way can the scientific, fair and reasonable salary be ensured, the enthusiasm of teachers can be fully mobilized, and the overall work efficiency of the university can be improved.

Through research, we suggest that Chinese universities should pay attention to the following issues in salary management. First, we should try our best to increase the proportion of performance-based compensation in total compensation and formulate a reasonable performance-based compensation distribution system. It is necessary to formulate and improve the system to avoid the randomness of salary structure and performance appraisal. To match the position and salary, according to the actual situation of teachers in universities, arrange teacher training work and job transfer, and the salary level should be equal to the position. The reward and punishment system should be closely linked with the performance appraisal mechanism to stimulate teachers' enthusiasm for labor. In addition, we can also learn from the entrepreneurship education teacher training mechanism in American universities, equip each teacher with a mentor, and design a set of targeted performance evaluation indicators. The third is to improve the organizational security system. A leading group should be set up to design compensation systems. The person in charge of each department is responsible for the design of salary system. Remuneration is linked to performance, providing a strong organizational guarantee for the smooth implementation of the remuneration system. The fourth is to promote the concept of salary management to keep pace with the times. It is necessary to have a strong overall salary awareness, adhere to the people-oriented principle, pay attention to teachers' work, family and life, ensure a high degree of matching between salary and teachers' performance and maximize the incentive effect. Change the performance indicators from quantitative to quantitative and qualitative, and examine the performance of college teachers at multiple levels.

2. Control benefits. In our research, we found that occupational safety is very important to Chinese university teachers and they are very concerned about occupational safety related issues. Therefore, we suggest that Chinese universities should ensure the occupational safety of teachers in the following aspects. First, formulate welfare policies that allow teachers to work with peace of mind. Universities should reduce teachers' concerns from both financial compensation incentive and non-financial compensation incentive, and establish a good compensation and welfare system. Second, the service department should provide the greatest support for teachers' work. In universities,

especially research-oriented universities, teachers in teaching and research positions are the main body of the school, and they undertake a lot of teaching and research work. Therefore, the school should build a scientific research platform for these researchers to the most excellent extent, organize and advocate teachers to actively participate in domestic and foreign academic research activities, and explore cooperation with enterprises. In the above-mentioned welfare and salary guarantee system, non-economic benefits have been mentioned, and non-economic benefits include the working environment, the work itself, and the academic atmosphere. The third is to care about improving the quality of life of teachers. According to Maslow's Hierarchy of Needs Theory, an individual's need for higher-level needs arises from the satisfaction of an individual's needs for lower-level needs. universities should pay attention to the role of guaranteeing the daily life of teachers. Teachers should be given sufficient leisure and relaxation time during national statutory holidays so that teachers can better accompany their families or go out on trips, and allow teachers to have a certain amount of time at their disposal to satisfy their own abilities or happiness in life pursuit.

3. Control democratic administration. An equal working environment enables teachers to experience the respect and recognition of the organization and colleagues and is also an important part of their sense of worth. Therefore, we suggest that Chinese universities create an equal working environment for teachers from the following aspects. First of all, we should strengthen the humanistic care of the organization and help the members to build harmonious interpersonal relations. While making great efforts to create a high-quality physical environment for teachers, universities should also attach great importance to the creation of a harmonious humanistic environment so that college teachers can effectively participate in the development of the school. University trade unions should work actively to solve teachers' difficulties and protect their rights and interests. The university should build a harmonious interpersonal relationship, promote communication between employees, resolve conflicts, and make everyone work together happily. To realize the democratization of management, constantly improve various democratic management systems, and build a fair, just, civilized, and harmonious environment. The second is to reform the governance system of universities and support

teachers to participate in management. The governance system pursues the system construction of management standardization, institutionalization, specialization, identification, and human culture. Third, the leadership of universities should attach importance to teachers' participation in decision-making and build a new mechanism for teachers to participate in decision-making. Improve and perfect the conventional democratic management system, such as education congress, special research, democratic discussion, and other methods. Build a new mechanism for college teachers to participate in decision-making, such as introducing a hearing system and building a participation platform through the Internet. Fourth, we must give full play to the leading role of teaching staff and create a fair environment. When universities use incentive mechanism in human resource management, they must implement the principle of fairness and justice. Managers should also strictly uphold social justice and strive to treat each employee fairly. The setting of positions should also be carried out in strict accordance with the actual needs of the development of education and teaching in universities so that applicants can compete fairly and select outstanding talents from the applicants. Through the establishment of information communication channels, both faculty and employees can convey their opinions and views on the working environment of the incentive mechanism on the information exchange platform, and human resource managers can also choose a higher value and improve the system in a targeted manner. So as to ensure the scientific and rational operation of the incentive mechanism.

4. Control teacher selection and development. The selection and professional development of teachers in universities is helpful to improve the comprehensive quality of teachers, improve the efficiency of teachers, and promote the all-round development of universities[164]. The key is to do the following aspects of work. The first is to optimize the selection and employment system of college teachers. By setting up situational simulation experiments, according to teachers' attitudes and ways of dealing with different situations, we can analyze teachers' personality traits and other competency indicators, adhere to the principles of human-job matching and fair competition, and optimize the structure of teachers and the quality of training [165]. The second is to support teachers' participation in training, learning, and continuing education. The

content setting of continuing education for teachers in universities should not only consider making up for the shortcomings of teachers but also meet the characteristics of the times and the needs of students' development in order to receive the expected ideal results. In practice, attention should be paid to the overall improvement of teachers' attitudes, knowledge, and skills in universities [166]. Teacher training and learning should adhere to the principles of learning on demand and applying what they have learned. Schools should carefully plan the learning content and focus on planning the learning content according to the characteristics of the times. It is necessary to lay a solid foundation for teachers to greatly improve the quality of continuing education through the open continuing education platform between universities or between colleges and society. The third is to pay attention to the professional development of teachers. Teachers are important resources to improve teaching quality in universities. Their own professional development level directly affects the level of university research and teaching. Improve teachers' professional identity, thereby stimulating the endogenous motivation of teachers' professional development. Universities should improve the mechanism and procedure of teacher qualification certification, help university teachers to complete the certification of professional qualification certificates, and promote the development of teachers' professional skills. Fourth, there must be a clear strategic plan for talent development and formulate and implement talent introduction and training plans. In order to improve the university talent introduction program it is necessary to strengthen the coordination of the government, and to clarify the responsibilities of the departments. It is necessary to strengthen the coordination and overall planning between different departments. It is necessary to clarify the purpose of attracting talents and exert the positive effect of evaluation.

5. Control information resource sharing. Combined with research, we believe that Chinese universities should promote information resource sharing from the following aspects. The first is to form an academic team for teachers and provide a platform for communication and cooperation. In the field of higher education in China, the academic team is an important academic output unit. Academic team building has become the focus of universities in my country, and it is of great significance to teachers' professional

information exchange. Providing a communication and cooperation platform for the academic team of college teachers will help the output unit to operate more conveniently and smoothly and provide teachers with more teaching and academic resources. Academic team exchange and cooperation platform is an important resource for university teachers to provide academic exchange and promote teachers' scientific research, they play an important role. The practical significance of providing a communication and cooperation platform for academic teams is significant. Providing an exchange and cooperation platform ensures information sharing from the platform level. The modern academic information exchange system promotes the gradually emerging information service system, access management, rights management, and comprehensive information service model. Therefore, it is very practical and important to establish a special website for academic team communication in universities. Taking the academic team communication website as a springboard, we can exchange and share the latest academic research progress and achievements on the website, inspire each other, and cause the exchange and collision of academic ideas in different directions and levels. The same school can regularly hold offline academic group salon exchanges to conduct face-to-face and in-depth exchanges and discussions on academic issues. Integrate and archive the exchanges of academic groups, build an archival institution for information exchange by academic groups, and build clear and efficient information exchange and cooperation to give full support in measures and policies. There is a connection between the sense of participation and the sense of achievement, online and offline simultaneous participation, complete and mature academic groups exchange files, allowing teachers to experience the sense of participation, enhance the pursuit of achievement, and then promote progress. The second is to pay attention to promoting teacher communication. Teacher exchange is a key part of information sharing. Information exchange and sharing among teachers promote the updating and progress of the whole academic. Facilitating teacher communication promotes information sharing from the level of intra-teacher communication. High-quality teacher communication is a favorable guarantee for promoting information sharing to stimulate the vitality of college teachers and the pursuit of achievement, and the exchange and cooperation between academic teams and

exchanges between teachers can also play a role in promoting the willingness of college teachers to work. Promoting teacher exchanges will help academic groups and university teachers to understand the development and trend of the latest academic frontier information and help promote academic research. With the support of high-performance work systems, teachers are more willing to participate in exchanges and cooperation between academic teams. In the mutual exchanges, teachers in universities are stimulated to pursue high-level teaching quality and scientific research achievements. universities should meet the needs of ongoing academic groups and teacher exchanges, such as the provision of venues for academic salons to provide opportunities for teacher exchanges. Build bridges for teacher communication and do a good job of reviewing and sorting out teacher communication files. The communication between teachers and the level of information sharing has been improved. The growth of teachers lies in communication. With the advancement of the times, cooperation and communication between teachers are particularly important. The third is to open channels for teachers' feedback, suggestions, and appeals. The most important thing in information sharing is the exchange of information, and the fluidity of information has a corresponding impact on the enthusiasm of teachers. Open the feedback channels of teachers, publicize the feedback of teachers in universities, openly and transparently handle the problems and suggestions encountered, create a respectful, valued, supportive and caring attitude and environment, and provide high-quality logistics and communication channels. The teacher's in-school complaint system is a legal system formulated for a special group of teachers on the basis of my country's Constitution to protect the rights of teachers. The Fourth Plenary Session of the 18th Central Committee emphasized the need to "govern the country according to law", and therefore schools must "govern the school according to law". It is of great practical significance to establish an appeal system for teachers in schools. A special direct complaint channel is specially set up to ensure that there is a response to the complaint and feedback. Information sharing is guaranteed at the policy and legal levels. Setting a time limit for responding to feedback is conducive to actively handling and resolving teachers' feedback, suggestions, and appeals. Universities should open special channels for faculty feedback, suggestions and appeals. This can reduce the worries of

university teachers and allow them to focus on teaching and research. The final realization of continuous improvement of teacher competence, promote the promotion of work efficiency.

Conclusions to section 3

1. This research analyzes the basic situation and existing problems of China's university education development through the collection of a large number of educational statistics authoritative data. It focuses on exploring the problems existing in the process of university human resource management practice. Through the research, we find that the problems of human resource management in Chinese universities are as follows: 1) there is much government intervention, and universities lack autonomy; 2) egalitarianism, which can not be effectively stimulated; 3) teachers are less involved in school management activities; 4) the evaluation process is not objective and unfair.

2. Combined with the classic human resource management theory - AMO theory, this paper puts forward the internal factors such as teachers' ability and teachers' achievement motivation that need to be paid special attention to in university human resource management. Through the research, we find that the important factors that determine the efficiency of university human resources management are teachers' competence and achievement motivation.

3. This study uses scientific tools to study teachers in 28 universities in 8 provinces in China and distributes electronic questionnaires to them. A total of 400 questionnaires were recovered, and 390 were valid questionnaires. Through questionnaire survey and data analysis, it is finally explored that the practice of high-performance work systems felt by teachers in Chinese universities is related to teachers' competence. Teachers' motivation to pursue success plays a mediating role between the two. It means that teachers feel that the implementation of high-performance work system human resource management measures in schools can effectively improve the motivation level of teachers to pursue success and then promote the improvement of teachers' competency level.

4. Combined with the analysis and discussion of the research results, this article makes a SWOT analysis of our university's human resource management and makes a comprehensive understanding of the strengths, weaknesses, opportunities, and challenges of our university's human resource management. The main advantages of human resource management in Chinese universities are the deep foundation of school running and the rich experience of leading a group running a school. Its main shortcoming is that the consciousness of strategic reform is not strong, and the idea of running a school is backward. The opportunity is the government attaches great importance to the informatization innovation dividend. The challenge is the rapid development of information technology and the competitive pressure of comprehensive domestic universities.

5. According to the actual development of different types of universities, formulates four aspects of human resource management development strategic planning for Chinese universities: growth strategy, diversification strategy, reverse strategy, and defensive strategy. Universities implementing the growth strategy should give full play to their advantages, be proactive and constantly improve the quality of education. Universities that implement the strategy of turning around should foster their strengths and circumvent their weaknesses, seize opportunities and improve constantly. Universities implementing a diversity strategy should concentrate resources to build advantages and enhance core competitiveness. Universities with defensive strategies should strengthen their awareness of the crisis, actively think about transformation and upgrading, and adjust their thinking to seek breakthroughs.

6. According to the results of the empirical research, we propose the teacher incentive model system starting from the university's strategic human resource management objectives. The model comprehensively considers the goals and needs of both the university and the teachers, and embodies the value needs of the organization and its members. It is emphasized that the function system of motivating teachers' work motivation is constructed from five aspects: a scientific and reasonable salary management system, teacher occupational safety guarantee system, an equal working environment, teacher selection and development, and information resource sharing. On

the one hand, the model points out that the characteristics of teacher individuation should be considered from the perspective of teacher expectation, demand, ability and satisfaction. Organizational needs should be considered from the aspects of organizational objectives, tasks, working environment and human resource evaluation. The model finally emphasizes employee motivation from three material, spiritual and emotional aspects. The interaction between the elements is expressed visually.

7. Combining theory and empirical research, we have a comprehensive understanding of university human resource management. This study presents five suggestions for the effective implementation of the strategic objective of human resource management in Chinese universities. 1) the implementation of a scientific and reasonable salary management system; 2) improve the occupational safety system for teachers; 3) creation an equal working environment; 4) attach importance to the selection and development of teachers; 5) attach importance to the sharing of information resources in universities. It provides the scientific basis for implementing scientific and reasonable human resource management strategies in Chinese universities.

CONCLUSIONS

This study makes a detailed research of the theories of human resource management and related fields. And the associated concepts, ideas, and methods are analyzed and compared. The ultimate goal of human resource management is to develop the potential of human and improve the efficiency of the organization. Therefore, this study first studies the potential of human resources. Based on the research results of the key stage in the development of the scientific method, the interpretation of the concept of "human resource management" has been improved to confirm the nature of the concept and thus better understand the content of the concept under study. This study also makes an in-depth study of teacher competency, teacher achievement motivation, and other related concepts and theories. Promote and improve the concepts and terminology of university human resource management. At present, the development of human resource management theory is in the stage of internationalization, cross-culture, and diversification, but there are also some new development directions. There are four kinds of international strategies for international human resource management: national center strategy, multi-center strategy, global center strategy, and mixed strategy. Through in-depth research of foreign human resources management theory, we can enrich human resource management theory. Establish a formal human resources management education system, providing human resource managers with expertise and skills needed for social and economic development. Pay attention to the particularity of human resources, and gradually specialize and departmentalization of human resource management functions. In the process of continuous improvement, the specific content of human resource management is increasingly rich, emphasizing human resource management, staff training, and development. Through the micro and macro research of human resource management theory, we find that improving the efficiency of human resource management in universities needs to start from micro and macro perspectives. From the micro point of view, we should attach importance to teachers' competence and achievement motivation. From the macro point of view, we should start with the university human resources management strategy, management strategy, and

management practice method.

This study investigates the basic situation and existing problems in Chinese education, especially the development of university education. By collecting a large number of authoritative educational statistics data, this paper analyzes the basic situation and the existing problems of the development of higher education. Through the analysis of the current situation of human resource management in Chinese universities, it is found that there are obvious advantages, disadvantages, challenges, and opportunities in human resource management in Chinese universities. It also points out the obvious characteristics of human resource management in universities. (1) The management department should ensure the development of education; (2) Existing conditions for improving the professional level of teachers; (3) Establish a relationship between faculty members involved in the implementation of the educational process and university management; (4) Integrate key aspects of psychology, economics, sociology and law into management. The main problems of human resource management in Chinese universities are : (1) The government intervenes more, and the autonomy of universities is insufficient. (2) The equalitarianism that cannot motivate effectively. (3) Teachers are less involved in school management activities. (4) The evaluation process is not objective and unfair. This paper combines the analysis discussion of the previous research results, SWOT analysis of Human Resources Management in China. We fully understand the advantages, disadvantages, opportunities, and challenges of Human Resources Management in China. The main advantages of human resource management in Chinese universities are a large number of students and the rich experience of managers. The main disadvantage is the backward management concept. China's reform and opening up and the strategic development of internationalization are great opportunities for Chinese universities. The rapid development of other universities is an important challenge for Chinese universities.

The research successfully developed and tested a series of research tools to assess university human resource management, faculty competence, and faculty motivation. An important goal of human resource management is to improve the enthusiasm and initiative of organization members. Achievement motivation, as an intermediate variable,

plays a regulating role between human resource management research and other variables in universities. Due to the important role of achievement motivation in job performance, researchers attach importance to the development of various multidimensional measurement tools and corresponding management and control methods. The measurement methods of achievement motivation include the TAT measurement method, self-rating scale measurement method, mixed measurement method, situation judgment test method, etc. This study shows that the motivation level of Chinese college teachers is related to age. The efforts of teachers under 30 years old maximized career development, while the motivation of teachers between 41 and 50 years old decreased. This study applies the research methods and application techniques of enterprise human resource management to research the university human resource management.

A tool is developed to evaluate the high-performance work system perceived by teachers in universities. This tool can help us find the problems existing in human resource management practices in universities. This paper discusses the measures that should be paid attention to in university human resource management. And through the scientific method to develop a set of scientific tools to evaluate the university human resource management level. The human resource management evaluation tools developed by us include five first-level scientific tools, including teacher selection and development, performance pay, information sharing, occupational safety and security, equal working environment, and 24 second-level indicators. We find that college teachers attach great importance to the salary system and occupational security related to salary. It can be seen that they prefer fair pay and job security when working in universities.

The individual characteristics of university teachers are studied, and the competency of college teachers is evaluated with scientific tools. The previous human resource management evaluation emphasizes the top-down evaluation and neglects the participation of teachers as the main body. This study attaches importance to the participation of faculty groups in the evaluation of university human resource management. It can reflect the actual situation of human resource management in universities more comprehensively and objectively. By using literature research, questionnaire survey, Delphi method, and other scientific methods, 608 Chinese college

teachers were studied. Through the process of exploratory factor analysis and confirmatory factor analysis, the scientific model of teachers' ability in Chinese universities is finally obtained. The competency model contains four first-level indicators: teaching competency, scientific competency, basic competency, and social service competency. It is further subdivided into 22 secondary indicators. On this basis, this research develops a teacher competency level assessment tool, which lays a foundation for the follow-up research. Through the research, we developed and verified the research tools of human resource management activities in universities, such as incentive scale, college teacher competency questionnaire, college high-performance work system questionnaire, etc., which laid the foundation for the follow-up research.

Through the study of the relationship between university human resource management, faculty competence, and faculty achievement motivation, we found the factors that affect the willingness and ability of university faculty to work. In this study, scientific tools were used to conduct a questionnaire survey among teachers in 28 universities in 8 provinces of China. Finally, through the questionnaire survey and data analysis, this paper discusses the relationship between the practice of high-performance work systems and teachers' abilities. The research shows a significant positive correlation between high-performance work systems, teacher achievement motivation, and competence. Teacher success motivation plays an intermediary role between the two. This shows that implementing human resource management measures of high-performance work systems in schools can effectively improve the motivation level of teachers to pursue success and further promote the improvement of teachers' ability level.

Combining micro research with scientific methods, the development strategy of human resource management in universities is constructed. The priority direction of improving the efficiency of human resource management in Chinese universities is made clear. According to the actual development situation of different universities, this paper puts forward four aspects of the development strategy planning of human resource management in Chinese universities: increasing strategy, diversifying strategy, turning strategy, and defensive strategy. Combining theoretical research and empirical research,

we have a comprehensive and profound understanding of human resource management and teacher incentive mechanisms in universities. Finally, because of the effective implementation of the strategic goals of human resource management in Chinese universities, this paper puts forward five suggestions, including : (1) to implement a scientific and reasonable salary management system. (2) Improve the professional security system for teachers. (3) Create an equal working environment. (4) Pay attention to the selection and development of teachers. (5) Pay attention to the sharing of college information resources. These suggestions will provide a scientific basis for the implementation of scientific and rational human resource management strategy in the universities of China. It is also a priority direction to improve the efficiency of human resource management in Chinese universities.

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APPENDICES

Evidentiary Material

Li Wei, a PhD student of Sumy National Agrarian University, has studied and proposed that there is a close correlation between the competence of university teachers in university human resources management and their achievement motivation. According to his research, we evaluated the teachers in our unit, and the evaluation results can better reflect the human resource management status of our unit, as well as the post competency and achievement motivation level of our teachers. It provides a reference for us to effectively improve teachers' work efficiency, improve teachers' competency level and achievement motivation.

Our practice has proved that Li Wei's research has strong practical application value.

Youth League Committee of International Education Institute
of Henan Institute of Science and Technology

October 25, 2022



Evidentiary Material

According to the university human resource management evaluation tool "University Teacher Competency Evaluation Questionnaire" proposed by Li Wei, a PhD student of Suny National Agrarian University, we evaluated our teachers, and the evaluation results can better reflect the post competency of our teachers.

It is hereby certified that the above research results have strong practical application value.

Teacher Development Center of
Henan Institute of Science and Technology

教师发展中心
October 26, 2022

