

Чжан Вэйвэй

Түндүк-Батыш педагогикалык университетинин кадрлар бөлүмү
Пекин, Кытай

ЖАҢЫ ДООРДОГУ ЖОГОРКУ ОКУУ ЖАЙЛАРДЫН КАДРЛАР ЖАНА ТАЛАНТТАРДЫ БАШКАРУУ ИШТЕРИНДЕГИ САНАРИПТЕШТИРҮҮ ИЗИЛДӨӨ

Аннотация: Партиянын XX съездинде биринчи жолу билим берүү, илим жана технологиялар, ошондой эле таланттарды өнүктүрүү боюнча үч стратегия бириктирилип пландаштырылды, бул партиянын жаңы доордогу жогорку окуу жайлардын кадр иштери боюнча жаңы талаптарын чагылдырат. Жогорку окуу жайлардын кадр иштери окутуучулардын кесиптик жашоосунун бардык этаптарын камтыган комплекстүү башкаруу кызматы болуп саналат жана таланттарды өнүктүрүү үчүн санариптештирүүнүн мүмкүнчүлүктөрүн толук пайдалануу зарыл. Бирок, жогорку окуу жайлардын кадрдык иш-аракеттеринин өзгөчөлүктөрүнөн жана санариптештирүүдө пайда болгон көйгөйлөрдөн улам, мисалы, жогорку деңгээлдеги дизайндын, билимдин жетишсиздиги жана адистердин жетишсиздиги сыяктуу маселелерден улам, санариптик системаларды түзүү санариптештирүүнүн муктаждыктарынан кыйла артта калууда. Бул макалада көйгөйгө багытталган ыкма сунушталып, беш практикалык изилдөө жүргүзүлүп, кадрдык иш-аракеттерге байланышкан маалыматтардан “адам” тууралуу жалпы маалыматка басым жылдырылып, кадрдык ишти санариптештирүүнүн жаңы моделдери, идеялары жана ыкмалары изилденет.

Негизги сөздөр: адам, кадрлар, таланттар жогорку окуу жайлар, билим, дизайн, ыкма, башкаруу; санариптештирүү.

Чжан Вэйвэй

отдел кадров

Северо-Западный педагогический университет

Пекин, Кытай

ЦИФРОВИЗАЦИЯ КАДРОВОЙ РАБОТЫ И УПРАВЛЕНИЯ ТАЛАНТАМИ В УНИВЕРСИТЕТАХ НОВОГО ВРЕМЕНИ

Аннотация: на 20-м съезде партии впервые были интегрированы три стратегии — образование, наука и технологии, а также развитие талантов, что отражает новые требования партии к кадровой работе и управлению талантами в университетах новой эпохи. Кадровая работа и управление талантами в университетах является комплексной управленческой задачей, охватывающей все этапы профессиональной жизни преподавателей, и должна в полной мере использовать возможности цифровизации для содействия развитию талантов. Однако, из-за особенностей кадровой работы в университетах и проблем, возникающих при цифровизации, таких как отсутствие верхнеуровневого проектирования, недостаток знаний и нехватка специалистов, создание цифровых систем заметно отстает от потребностей цифровизации. В данной статье предлагается проблемно-ориентированный подход и

проводится пять практических исследований, в ходе которых акцент смещается с данных о кадровой деятельности на всеобъемлющие данные о человеке, что способствует поиску новых моделей, идей и методов цифровизации кадровой работы и управления талантами.

Ключевые слова: люди, кадры, таланты, высшее образование, образование, дизайн, метод, менеджмент цифровизация;

Zhang Weiwei

Personnel Department, Northwest Normal University
China, Beijing

DIGITALIZATION OF PERSONNEL WORK IN COLLEGES AND UNIVERSITIES IN THE NEW ERA

Abstract: In the year of 2022, education, science and technology, and talent were first time integrated into a unified strategic plan, reflecting the China's new requirements for personnel management in colleges and universities in the new era. Personnel management in colleges and universities involves comprehensive management and services throughout a teacher's career and should fully leverage digital capabilities for talent development. However, due to the specific characteristics of personnel management in colleges and universities and the emerging issues in digitalization, such as the lack of top-level design, basic knowledge, and talent, the development of digital systems has lagged significantly behind the needs of digitalization. This paper adopts a problem-oriented approach to conduct five practical strategies, gradually shifting the focus of data from "personnel" data to comprehensive "people" data. It explores new models, new ideas, and new methods for the digitalization of personnel management.

Keyword: people, personnel, talents, higher education, education, design, method, management digitalization

Since the year of 2012, with his clear view on the trends of digitalization, networking, and intelligence, President Xi Jinping, the President of People's Republic of China, has made a series of new assertions, deployments, and requirements. These actions have pointed the way forward and provided fundamental guidelines for transitioning China's economy from a phase of rapid growth to high-quality development. It was in the year of 2022, education, science and technology, and talent, as the three major strategies, were first integrated, emphasizing the implementation of the strategies of invigorating the country through science and education, strengthening the country with talent, and driving development through innovation. This reflects China's new requirements for personnel management in colleges and universities in the new era. The further integration of modern information technology into their governance systems for personnel management is needed. By leveraging digital intelligence technology, colleges and universities can advance the digital transformation of personnel management, fully harness the power of digitalization to drive talent development, and support the transition from being a large country with strong education to a great power in education. This will provide strong support for building a learning-oriented society and a learning-oriented nation.

1. Background of Digitalization of University Personnel

The Ministry of Education of the People's Republic of China released the "Education Informatization 2.0 Action Plan," marking the transition of China's educational informatization

from the era 1.0 to the 2.0. The rapid development of information technology has brought new challenges and opportunities to education, making “what education is for and where it is heading” a global issue of concern. In the year of 2022, China included “building a great power in education” as a key objective for China's development by 2035. Fully promoting the digital transformation of education is of great strategic significance for implementing the Digital China strategy, supporting the construction of a powerful nation of education, and advancing education modernization with Chinese characteristics. It is the only way to cultivate modern talents who can adapt to and lead in the digital age and is an inevitable choice in line with the global trend of educational reform [1].

Colleges and Universities, as the main ground for educational digital transformation, bring together various types of personnel in teaching, research, and management. Each type of talent has its own professional field and development path. In colleges and universities, the freedom for academic research and innovation shall be provided, however, the efficient administrative management shall also be maintained. This requires human resources departments to continuously explore and innovate management concepts and methods, establishing a more scientific, efficient, and reasonable personnel management system to meet the needs of higher education development in the new era.

2. Features of Digitalization of Personnel Work in Colleges and Universities

a) Complexity and Diversity

Personnel management in colleges and universities encompass the entire career lifecycle of teachers, including their recruitment, professional title evaluation, job appointments, salary distribution, social security services, performance assessments, and retirement services. Additionally, it involves responsibilities such as fostering teacher ethics and conduct, professional development, and reward and punishment management. These tasks are closely related to the personal interests of each teacher and constitute a vast and complex system [2].

On one hand, the diversity of personnel positions and the complexity of various tasks create a complicated intertwining of personnel and task management. On the other hand, as colleges and universities expand in scale and construction, the dimensions of personnel management information have greatly expanded, which makes it increasingly difficult to manage due to its large volume and dispersed feature [3].

б) Individuality and Collectivity

Personnel in colleges and universities is a group with a higher educational background, which means they have different characteristics in terms of work expectations and career development paths compared to people from other industries. With their explicit long-term development goals and core values, colleges and universities shall clearly and effectively pass these information to all faculty and staff. This encourages them to align their personal career plans with the future vision of colleges and universities, fostering consensus and resonance. At the same time, colleges and universities should provide personalized career development guidance and support based on the individual needs of different types of personnel. This helps individuals achieve personal value while also bringing new growth opportunities to the colleges and universities. It is crucial to actively balance the collective norms of personnel management in colleges and universities with the flexible demands of individual development.

в) Regulatory Compliance and Procedural Consistency

Regulatory Compliance and Procedural Consistency are key requirements for personnel management in colleges and universities. With the establishment of clear policies and processes and enhancement of oversight mechanisms, a fair, just, and efficient management for personnel in

colleges and universities will be ensured. This not only helps to improve faculty and staff job satisfaction and career development opportunities but also promotes the overall stability and development of the colleges and universities.

For example, policies related to job positions appointment, selection, promotion and performance evaluation must be rigid and minimize subjective interference. It is essential to effectively implement standardized procedures and conduct timely monitoring and evaluation.

However, this can also result in numerous steps, high entry barriers, and procedural path dependencies, making it challenging to navigate the system.

The above-mentioned features have resulted in an overwhelming amount of data in personnel management, with data being constantly changing and wide-ranging. This often leads to issues such as outdated data, fragmented data, and increased risks to data security. These challenges make it difficult to update and maintain data effectively, becoming real obstacles to achieving the digital transformation of personnel management.

3. Challenges in the Digitalization of Personnel Work in Colleges and Universities

a) Lack of Top-Level Design in Management

In the digital transformation of colleges and universities, hardware upgrades are the easiest to implement. Some colleges and universities, eager for quick results, invest heavily in hardware facilities without prior data analysis and top-level design. They often fail to conduct a comprehensive, objective, and reasonable assessment of the college or university's actual situation. Additionally, they tend to overlook the enhancement of soft power, such as training for digital proficiency among management personnel. This leads to a disconnection between hardware facilities and actual work processes once the hardware is in use. As a result, the workload of management personnel increases, or the mismatch between their digital management skills and the facilities leads to low utilization efficiency of the hardware. Consequently, the return on investment is not high, and the hardware fails to achieve its intended purpose.

б) Lack of Basic Knowledge in Digitalization

In today's rapidly advancing digital age, although some colleges and universities have made certain achievements in the digitalization of personnel management, and some have attempted to address current management challenges through digital means, it is undeniable that most personnel management processes still follow traditional models. Personnel management are crucial aspects of university administration, leading many colleges and universities to maintain a cautious and conservative approach in this area. As a result, traditional management models cannot be abandoned, and modern system management models cannot operate independently. This situation increases the repetitive workload for HR personnel, preventing digital processes from realizing their full value and potential. Consequently, this limits the efficiency of management work and poses significant challenges to the digitalization of personnel management in colleges and universities.

3. Poor Digital Literacy of Management Team

Management staffs have varying attitudes toward the digitalization of personnel management in colleges and universities, leading to differing levels of proficiency in using information technology for management. If these staffs are content with the status quo and do not actively acquire new knowledge and skills, much of the management work remains manual, or only partially digitized for tasks such as data input, output, retrieval, and storage. This lack of awareness of the superiority and advanced nature of digital transformation, and the failure to fully explore the functions and value of digital tools, results in a low level of digitalization. Currently, most of their digitalization in personnel management are still at a relatively low level. There are few staffs in the

management team who are proficient in using digital technology, and the overall quality and capabilities of the staffs need further improvement to meet the demands of digital management.

4. Strategies applied to the Digitalization of Personnel Work

a) Breaking Tradition to Create a “New Platform”

precise management of personnel work in colleges and universities is inseparable from the establishment and improvement of information platforms. In promoting this construction, it is quite necessary to maintain consistency in thinking, achieve a unified understanding of digital management in personnel work, update the concepts of all faculty and staff, establish a digital consciousness, and recognize that digital construction enhances management efficiency with the help of science and technology rather than increasing burdens [4].

Firstly, the leadership should place a high priority on the digital transformation of personnel management, allocating certain resources for digital construction and system maintenance. They should also strengthen the education and promotion of digital concepts so that teachers and administrators can genuinely appreciate the benefits brought by the digitalization of personnel management. Secondly, the top-level planning and design for digital construction shall be conducted. In the early stages of information technology construction, scientific and reasonable planning is necessary. This includes the necessary division of tasks, clarifying the connections and boundaries between subsystems, and planning the integration of internal systems from the perspective of business collaboration. This also involves referencing other systems, standardizing personnel codes, pushing data to a data center for integration, and establishing a real-time intercommunication mechanism for the digital exchange center. Through this, an information-sharing mechanism can be established to fully integrate human resources and talent data archives, ultimately creating a big data platform for personnel management. Finally, at the operational level of personnel management, colleges and universities should guide faculty and staff to fully utilize the information service platform, continuously improving and optimizing it through practical use. This process should gradually shift from offline to online services, from dispersed to centralized services, from passive to proactive services, and from manual to network services. The goal is to create a comprehensive, full-lifecycle personnel operation system.

b) Establishing Rules and Building a “Resource Shared for All” System

Personnel management is a task of great significance where people is the center, therefore, it is essential to have clear guidelines and standardized procedures. During the management process, normalization and institutionalization are the foundations and guarantees for establishing and improving the personnel management and service mechanism, thereby enhancing work efficiency and standards. This also promotes transparency and openness in personnel work to some extent. As various talents develop in their careers, their personal information changes accordingly. Timely and accurate information updates, along with transparency, reflect the quality and level of management services.

Personnel departments in colleges and universities are typically divided into multiple sections, each responsible for different tasks and duties, and each maintaining its own data information system. In traditional work modes, asynchronous data updates or differing data standards among sections often result in a large amount of redundant data, affecting the integrity and coherence of the information. Since personnel work is an integrated task, the data should be interlinked. Most current personnel management software cannot achieve complete automation and lacks automated data update mechanisms. The interconnection between data modules often relies on manual updates or synchronization, increasing operational complexity and the risk of errors. Introducing automated

data update mechanisms should be considered to ensure timely and accurate interconnections between data modules. This would streamline the data flow, making it easier to retrieve various types of information and better understand the personnel structure and needs of the university. Consequently, more scientific and reasonable personnel management strategies can be formulated.

b) Standardized Governance to Guarantee “High Quality Data”

By implementing a series of standardized measures, organizing data inventories, clarifying data flow, and integrating, maintaining, and storing comprehensive information related to faculty and staff through multiple channels, the support data provides to operations, services, and decision-making can be enhanced, thereby improving data quality. First, clarify the source. For basic data management, adhere to the principle of “the one who generates it, is responsible for it,” ensuring a single source of data origin and designated data management personnel. Second, standardize the norms. The personnel management department should develop and publish coding standards. Faculty and staff should fill in the relevant data according to these standards, continuously updating and refining the data standards through processes such as professional title evaluation and annual performance assessment. Third, analyze the data. By conducting departmental needs assessments, identifying data collection, and performing data quality checks, different data fields are bound to one or more data quality testing rules to identify issues in data quality. Subsequently, technical and managerial solutions are proposed to address these identified problems. Fourth, clean the data. Based on data quality testing, colleges and universities shall correct erroneous data according to data standards, and for missing data, they should backtrack to the corresponding business to supplement and improve it. In addition, a data ledger for comprehensive data management shall also be established.

(4) Optimizing Processes to Achieve Efficient Management

The digitalization of personnel work signifies a revolution in work methods and a change in the hierarchical levels of internal management within colleges and universities. This advancement pushes internal organizational structures of universities from a previous flat structure towards a matrix-oriented direction. To better meet the demands of digital development, optimization adjustments should be made to personnel operations, reconstructing new operation processes. Each operation department within the personnel management department should achieve smooth communication of data links. Colleges and universities should facilitate data sharing and effective integration among various functional departments, undergo process reengineering, and optimize workflow. This optimization is crucial for enhancing the efficiency of personnel management. The personnel data platform can incorporate various content related to teaching, research, competitions, and other aspects involving all types of talent. Through multidimensional co-construction and sharing of digital resources, it promotes operation synergy among departments, collectively striving to meet the growing information demands of faculty and staff. As a result, the efficiency and service level of relevant operation processes will be significantly enhanced.

(5) Data Integration for Precise Evaluation of Personnel and Units

By collecting teachers’ information data across their entire lifecycle and multiple dimensions, along with accompanying data, analyzing the academic activity of various personnel, and creating precise profiles for teachers, we can assist them in planning their career development. For instance, through big data analysis of various dimensions such as education, scientific research, training, rewards, ethics, research direction, and peer evaluation, we can create profiles for individual teacher growth. By linking with the position task system and establishing a teacher evaluation model, this approach not only facilitates scientific, efficient, and precise decision-making by the personnel

department but also helps teachers conduct self-assessments for their own development. It provides data support for judging personal development strengths, potential, and warning signs for meeting individual task standards.

In summary, the process of digitalization of personnel work in colleges and universities is a continuous discovery of data value. By combining the characteristics of personnel work and adopting a problem-oriented approach, conducting five strategies, we can gradually shift the focus of data from “personnel” operation data to comprehensive data about individuals. This progression starts with emphasizing the efficiency improvement achieved through the informatization of small-scale operational data, then moves on to empowering operation processes through the digitalization of big data and optimizing workflows. Ultimately, we can achieve innovative operation value by intelligently processing the data.

5. Prospects for Digital Transformation of Personnel Work

With the advent of the era of education informatization 2.0 and the national strategic goal of accelerating the construction of a powerful nation of education and building a high-quality education system, the digital transformation of personnel work in universities is an important part of education modernization. Leveraging information technology can not only reduce the workload of routine and procedural personnel tasks, saving labor costs and improving work efficiency, but also simplify operation processes, save processing time, unleash the development potential of school management work. It also helps establish teachers’ career data archives, covering comprehensive teacher information data, teaching data, research data, performance assessment data, promotion data, and other teacher information platforms, helping teachers manage personal information, self-evaluation, and conduct multidimensional comparative analysis, improve the refinement of personnel management and enhance the scientific and accuracy of decision-making. By combining the introduction and cultivation of personnel management teams, continuously using information technology to promote the development of university personnel platforms, data governance, co-construction and sharing, process optimization, and evaluation reform, we can explore new models, new ideas, and new methods for digitalization of personnel work while solving personnel work issues, and enhance the governance capacity of colleges and universities in a scientific way.

In the future, the extensibility and transferability of the comprehensive personnel data platform can be further developed. This can be achieved by integrating operation requirements with strong data correlations, creating core modules, and enabling interaction between modules through a small number of data fields to ensure stability. Additionally, the functionality and value of digital tools can be explored. We also need to further utilize data sharing platforms, construct a unified standard sharing system for school-wide information, and effectively break down data application barriers to facilitate the use of data across departments. Through the positive feedback loop of continuous digital transformation, consolidating digital thinking patterns and work concepts, we can collectively promote the high-quality development of personnel work in colleges and universities.

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Рецензент: саясий илимдердин кандидаты, доцент Ажымамбетова Н.