

# Research on the Transformation Path and Practice of Student Services in Vocational Education Driven by Information Technology

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**Abstract:** This paper focuses on vocational education student services, analyzing issues such as rigid management models and insufficient technology application, and explores paths for promoting change through information technology. By establishing concepts driven by data and centered on students, implementing strategies such as technology empowerment, model innovation, talent cultivation, and improving evaluation and feedback mechanisms, it aims to promote deep integration, build an intelligent and personalized service system, enhance service quality, support the development of highly skilled talent, and advance the high-quality development of vocational education and the socio-economic sector.

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## 1.Existing Problems in Student Services of Vocational Education

### 1.1 Rigid management model

Traditional student affairs management relies on administrative directives,with cumbersome decision-making processes.Redundant organizational hierarchies and outdated concepts hinder service innovation;in the face of emerging industry talent demands,universities are slow to adjust majors and teaching plans,resulting in a disconnect between what students learn and market needs.Moreover,the'one-size-fits-all'management lacks flexibility,does not consider student individuality,and stifles their innovative and practical abilities.

### 1.2 Technical Application Shortcomings

Insufficient funding has led to lagging information infrastructure,making it difficult to introduce advanced equipment and software.The lack of intelligent platforms limits the application of big data and artificial intelligence,preventing the realization of precise services.Taking mental health services as an example,they still rely on traditional manual assessments,lacking intelligent tools,resulting in low efficiency and difficulty in deeply understanding students'needs,which affects the quality of services.

### 1.3 Lack of personalized needs

Traditional student services have obvious shortcomings in meeting students'individualized needs.Academic guidance follows a uniform pace and tutorial model,ignoring differences in students'learning abilities,interests,and career plans.As a result,students with strong learning abilities lack suitable resources and precise guidance,leading to frustration in learning and limiting professional growth.Support in career planning and mental health is weak.Facing emerging industries such as new media operations and cross-border e-commerce,schools lack resources and guidance,making it difficult to provide practical career advice and hands-on platforms,leaving students uncertain about career exploration.In addition,when students encounter academic,life,or psychological problems,due to insufficient understanding of individuals and poor communication channels,it is difficult to receive timely and precise assistance,hindering problem resolution and affecting both physical and mental health as well as overall development.

### 1.4 Limitations of Team Capabilities

There are dual shortcomings in the professional capabilities of the student services team.First,information technology literacy is generally low;they lack knowledge in areas such as big data analysis and artificial intelligence application,making it difficult to use advanced technologies to handle student learning and psychological data,and thus struggling to provide data-supported precision services when faced with new technological applications and

challenges. Second, their professional backgrounds are narrow, and there is a lack of qualified and experienced personnel in fields such as mental health and career planning. For example, there are insufficient professional psychological counselors and a shortage of career planning guides familiar with the industry, resulting in difficulties in ensuring service quality.

### **1.5 Defects in the evaluation feedback mechanism**

Currently, student affairs services lack a scientific and systematic evaluation framework, making it impossible to comprehensively and objectively assess the effectiveness of student management, academic guidance, and mental health services. It is difficult to measure the achievement of goals and to promptly identify problems and weak areas, resulting in a lack of basis for service optimization. Student feedback is not given enough attention, and channels for it are ineffective, making it difficult to communicate issues and suggestions in a timely manner. Even when feedback is received, the response and handling are not prompt. Students' reasonable needs are not met, affecting service satisfaction and trust, and hindering the sustainable development of student affairs services.

## **2. The Important Significance of Information Technology in Promoting Reform in Student Services for Vocational Education**

### **2.1 Innovate education models to improve educational accuracy**

Information technology, with its powerful data processing and analysis capabilities, can deeply explore students' learning progress, knowledge mastery, and interests, promoting a shift in educational philosophy from a 'one-size-fits-all' approach to personalized and differentiated education. Under precise education models, students can receive guidance tailored to their individual needs, improve learning outcomes, enhance interest and motivation, and have more opportunities to develop in areas of strength, thereby improving the quality of education.

### **2.2 Expand educational resources to promote educational equity**

Information technology breaks the spatial and temporal limitations of educational resources. Online education platforms gather high-quality courses from around the world, allowing students to access cutting-edge knowledge and skill training regardless of their location, freeing them from the constraints of regional and school resources. Educational institutions can share teaching materials and practical training projects through shared platforms, enabling students with poor economic conditions or weak foundations to improve themselves using free or low-cost online resources, effectively promoting educational equity.

### **2.3 Optimize the management model and enhance management efficiency**

Information technology enables the digital management of student information, making it easier for administrators to query and update data, improve management efficiency, and reduce errors caused by manual management. Smart attendance devices and digital methods allow real-time monitoring of student attendance and timely detection of abnormal behavior; data mining technology helps administrative staff identify management issues and patterns, promoting a shift from experience-based to data-driven management, creating a better growth environment for students.

### **2.4 Strengthen career planning and enhance employability competitiveness**

Career planning platforms leverage big data analysis to provide students with precise planning advice and to predict popular professions and skill demands, helping students prepare in advance; VR and AR technologies create realistic interview and workplace simulation environments, enhancing students' interview skills and workplace adaptability; online recruitment platforms and employment information systems enable rapid supply-demand matching, broaden employment channels, and strengthen students' employability.

### **3.Strategies and Practical Approaches for Integrating Information Technology with Vocational Education Student Services**

#### **3.1 Innovation in Concepts Leads Service Transformation**

Innovating concepts is the primary task for breaking through the limitations of traditional student services. On one hand, establish a data-driven and intelligent service concept: through big data analysis of industry development, student learning, and employment market demand, flexibly adjust curriculum and teaching content to align with industry realities; introduce AI-powered customer service and virtual assistants to answer student inquiries, provide personalized learning and career planning advice, and enhance the intelligence and foresight of services. On the other hand, uphold a student-centered personalized service concept: use big data and AI to create personalized student service profiles, comprehensively analyze learning abilities, interests, and career planning intentions, and accurately grasp needs. Data-driven approaches clarify technical application goals, while student-centered approaches emphasize the practical implementation of technology; together, they provide guidance for subsequent technological empowerment and avoid blind attempts.

#### **3.2 Technology Empowerment Enhances Service Efficiency**

Increase investment in information technology infrastructure and build an intelligent behavior profiling system that integrates big data and AI: consolidate multidimensional student learning data, accurately depict learning behavior profiles, help student affairs staff understand student learning status, and achieve precise academic guidance; the system can automatically identify knowledge weaknesses, push learning materials and exercises, and improve learning outcomes. Construct an integrated intelligent service platform matrix to promote module collaboration, such as linking online learning and career planning modules, recommending internships and development paths based on students' majors and learning progress, breaking information silos, optimizing processes, providing one-stop services, and improving the quality of student affairs services. Technology empowerment is key to implementing concepts: these two types of systems will turn concepts into practical service capabilities and lay a solid foundation for innovative models.

#### **3.3 Innovate models to expand service dimensions**

To break through the limitations of the traditional model, innovation needs to be promoted from two aspects: First, build an integrated online and offline model. Online, rely on a one-stop information platform, using intelligent algorithms to analyze student data and push personalized information based on industry trends; offline, strengthen the function of physical service spaces by inviting industry experts to hold lectures and seminars, enhancing students' awareness and planning skills for emerging careers. The combination of the two meets students' diverse needs. Second, establish a cross-departmental collaborative mechanism, using information technology to break down departmental barriers and achieve data interoperability. When the industry discovers new trends, the Academic Affairs Office adjusts courses, the Student Affairs Office organizes activities, and the Career Guidance Center matches internship positions. Departments form a closed loop of "course teaching—practical guidance—employment services" through information sharing and regular meetings, solving collaboration problems and improving service accuracy and effectiveness. Model innovation is supported by information technology: intelligent algorithms enable precise online delivery, information sharing promotes cross-department collaboration, accumulated data provides a basis for decision-making, and integrating technological achievements can break traditional barriers, expand service dimensions, and optimize the talent cultivation environment.

#### **3.4 Quality of Talent Development and Support Services**

Talent development needs to be approached from three aspects: first, enhance the technical capabilities of the existing team, encourage members to participate in training and practice in areas such as big data analysis and AI applications, incorporate information technology application skills into assessments, and motivate improvements in service quality; second, optimize team structure by recruiting diverse talents with experience in corporate

internships, proficiency in information technology, psychological counseling, and big data analysis, leveraging professional strengths; third, build communication platforms to facilitate experience sharing among members and strengthen team service capabilities. Practice can be carried out through the 'Service Innovation Lab' and the 'Project Incubation Base,' integrating talent development and service improvement, using student experiences and problem-solving outcomes as indicators to optimize the system and services, creating a positive cycle. The integration of online and offline activities and cross-departmental collaboration requires multi-skilled talent support. Talent development not only meets the needs of new models but also provides opportunities for skill enhancement, strengthening the foundation of student services personnel and providing professional assurance for evaluation feedback.

### **3.5 Evaluation feedback promotes continuous service improvement**

To address the shortcomings of the evaluation feedback mechanism, a two-pronged approach is required. On one hand, relying on big data to establish a scientific evaluation system, collecting data such as students' academic improvement, participation in campus activities, and service satisfaction, quantifying service effectiveness, accurately identifying issues, and providing support for service optimization; on the other hand, creating a multi-channel feedback platform, including online questionnaires, suggestion boxes, and student representative meetings, lowering the feedback threshold, while establishing a rapid response mechanism, setting clear time limits for handling replies, incorporating results into assessments, forming a positive cycle for service optimization, and promoting the improvement of student service work. Talent development and evaluation feedback complement each other, with professional teams able to scientifically build evaluation systems and efficiently process feedback; evaluation feedback also provides practical testing for talent development, helping to identify skill gaps and optimize training directions. The two mutually reinforce each other, promoting the continuous improvement of student service work.

## **4. Conclusion**

The rapid development of information technology brings both opportunities and challenges to student affairs services in vocational education. The five strategies proposed in this article aim to promote the deep integration of the two and build a high-quality service system. Implementing these strategies in practice can improve service quality, support the cultivation of highly skilled talents, and promote high-quality development of vocational education and the social economy. In the future, student affairs services need to keep pace with technological advancements, continuously optimize services, leverage technological advantages, support student growth, and contribute to the development of vocational education.

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