

# Research on the Construction of Information Leadership of Undergraduate College Managers under the Background of Intelligent Education

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**Abstract:** With the wave of advanced technologies such as big data and artificial intelligence, the development of intelligence is reshaping the leadership pattern and concept. This trend poses new challenges to the information leadership ability of school administrators. In the process of promoting the construction of smart campus, managers have different performance in information leadership ability. To meet the needs of the intelligent age, it is necessary to design specialized information leadership training courses for school administrators and ensure that these courses are continuously enriched and updated. Based on this, this paper analyzes in detail the construction path of information leadership of undergraduate college managers under the background of intelligent education for reference.

**Keywords:** Intelligent education; Undergraduate school; Managers; Informatization; Leadership construction

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## Introduction

In the age of intelligent information requires school administrators to have more innovative management literacy, among which information leadership has become the key ability of intelligent management. School administrators must keep up with the challenges brought about by the new technology environment, effectively integrate the modern information technology into the traditional management practice, innovate the management mode and improve the management efficiency. In the process of transforming into intelligent management, due to different dynamics and needs, managers show individual differences in the development of information leadership. Under the guidance of the new concept of intelligent education, it is particularly important to explore the ways to build information leadership among school managers, so as to ensure that managers can keep up with the pace of The Times and constantly improve their own ability and management level.

### 1. The connotation evolution of information leadership across the era

Since the decade-year Development Plan for Education Informatization (2011-2020) released in March 2012, China's education reform has received clear scientific guidance. The plan emphasizes the importance of information leadership for the innovation and development of education, and advocates the use of information technology advantages to ensure the efficiency and quality of management. With the rapid development of big data, blockchain, the Internet of Things and other technologies, the informatization process of China's education has entered a new stage. The Education Informatization 2.0 Action Plan issued in 2018 positions intelligent technology as the core of educational management innovation, and is committed to establishing a new model of intelligent education and comprehensively improving the level of education. The first time, the action plan clarified the concept and goal of smart education, and confirms the central position of smart education in the national education reform.

### 2. The key connotation of information leadership under the background of intelligent education

#### 2.1 Clear vision

Building a leadership vision based on information technology is the key to information construction. This vision provides the

direction for determining the strategic direction, clarifying the work tasks and objectives, and ensuring the continuity and stability of the work. The establishment of the vision reflects the common pursuit of all levels, dimensions and all relevant subjects of the school. It is not only the consensus of managers and stakeholders, but also their unified guide to action. To build a scientific and reasonable vision for information development, the key is to ensure that all stakeholders have a deep understanding of the transformation and establish an effective collaboration mechanism.

## 2.2 Building an information technology space

The information space closely integrates various elements closely related to the digital process and practical application of schools. This field, as the main influencing factor in shaping and enhancing the information leadership ability, provides the necessary external conditions for the cultivation and progress of leadership. Specifically, the integration of various types of elements, including hardware resources and educational resources, jointly builds a scientific and stable school culture environment, which provides a solid support for the continuous enhancement of information leadership. These elements not only reflect the physical and environmental conditions, but also cover the relevant complex systems, which together constitute the organic whole of the school's infrastructure, educational resources and campus culture.

## 3. Under the background of intelligent education, the construction path of information leadership of undergraduate college managers

### 3.1 Understand the changes in information leadership

The rapid progress of information technology, from tape storage to cloud service, from traditional classroom to intelligent learning environment, from paper questionnaire to online data management system, to the use of multimodal technology for emotion recognition, all mark the touch point of information leadership change. School administrators need to realize that technology itself does not directly strengthen information leadership, but the key lies in how to effectively integrate technology into the overall business process of the school to achieve its potential value-added role. Drawing on the interpretation of Owen et al.'s "technology-system" reform, the development of "technology-information leadership" can be regarded as two incompletely synchronous curves, as shown in Figure 1<sup>[1]</sup>. There is often a disharmony between these two curves, and the rapid development of technology is often ahead of the adaptation and adjustment of information leadership. The "phase difference" and the "amplitude difference" between the two are persistent and in constant dynamic changes. Therefore, the challenge for managers is how to reduce this gap and achieve a harmonious synchronization between the two.

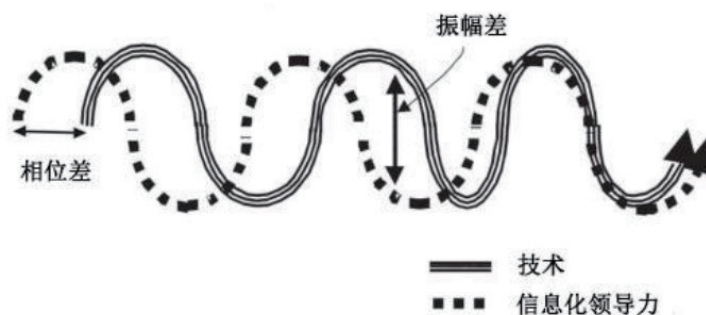


Figure 1. Change relationship of "Technology- -information leadership"

In order for new technologies to play a key role in the promotion of information leadership, managers' values must be consistent with technical values. If managers have reservations about the new technology, then there will be a mismatch between personal values and technology development, leading to a disconnect between managers and technology. In daily management, technical support may gradually be regarded as a routine activity, integrated into the value system of managers, thus reducing the "amplitude difference". However, as new technologies continue to emerge, new gaps may emerge. This requires managers to find a balance between the rapidly evolving technology environment and the gradual development of information leadership. They need to understand and adapt to the technological change, and constantly adjust and update the definition and category of information leadership.

### 3.2 Build a common team vision

In the context of intelligent education, one of the key ways for undergraduate college managers to build information leadership is to establish a common vision of the team. This requires managers to first deeply understand the connotation and direction of intelligent education and integrate it into the overall plan of school development. In the process of implementing the Vision plan, the school's senior management team, including the principal and the principal in charge, needs to demonstrate the leadership skills to lead the change while

ensuring the stable operation of the campus. They should first establish the school development strategy and regulation system, and to the practical problems facing the school as the core, through in-depth analysis and cause classification to set solutions and priorities, build the characteristics of school development, a combination strategy, to promote the all-round development of the school, and to cultivate students, focus on students' personal growth. The management must also be good at listening, work with team members to build a shared vision, draw a preliminary blueprint for the construction of a smart campus, and delegate it to middle managers, who will further refine and promote the specific implementation plan of the smart campus. After that, senior managers will summarize and adjust these plans, forming a phased plan for the construction of a smart campus after the participation of all faculty and staff and students<sup>[2]</sup>.

### **3.3 Build a unified education platform**

The construction of smart space is the core premise to promote the deepening application of smart campus. The first step is to build an advanced intelligent infrastructure framework integrating "cloud, network, platform and terminal". With the support of the intelligent education cloud platform, the intelligent wireless network and the Internet of Things technology are used to create a fully interconnected space environment. At the same time, the comprehensive intelligent management platform is adopted to realize a single login portal, integrate various teaching and management applications in the campus, and ensure the efficient operation of campus dynamic information release, assets, personnel and teaching management and other businesses. In order for students to easily study at any time and place, corresponding mobile devices should be equipped. These devices are not only portable but also able to track and record students' learning process, generate detailed learning data packets and upload them to the intelligent management platform for teachers and administrators for timely analysis and evaluation.

### **3.4 Provide fine management**

Taking X undergraduate colleges as an example, X undergraduate colleges actively embrace advanced technology in the teaching field, and have established the intelligent classroom application mode of "one group, one use". In the continuous attempts and many iterations of the teaching and research group, a unique teaching mode and teaching methods adapted to different courses are formed for each subject, so as to transform the traditional teaching into a mixed learning mode combining personalized learning before and after class and interactive activities in class. In order to improve the effect of classroom teaching, X Undergraduate College uses the intelligent classroom observation system and adopts face and speech recognition technology to assist teachers to sort out and summarize the teaching content and ask questions. In addition, through the long-term use of the network, the school has established a huge school-based question database and students' academic monitoring database.

In the promotion of hybrid teaching, school leaders pay particular attention to the support of intelligent technologies to achieve adaptive learning and fine management. Adaptive learning activities are designed to focus on individual differences, using spatially recorded data to set differentiated learning goals and activities. For example, the test content is set according to the learner's ability level, providing learners with selective learning paths and forms of expression. At the same time, collect the basic information of teachers, and build the teacher database, combined with teaching and scientific research activities, to promote the professional growth of teachers<sup>[3]</sup>.

## **Conclusion**

To sum up, the construction of information leadership is an important and urgent topic under the background of intelligent education. By enhancing managers' information awareness, encouraging managers to participate in the development and application of information technology and other strategies and methods, the information leadership of managers can be effectively improved, so as to better cope with the challenges and opportunities brought by intelligent education. Looking into the future, with the development of information technology and the deepening of intelligent education, the information leadership of undergraduate college managers will face higher requirements and greater challenges. It is necessary to pay continuous attention to the development trend of this field and constantly explore new methods and approaches to better promote the implementation and development of intelligent education.

## **References:**

- [1] Li Minggen. Research on the Construction of information Leadership of university Managers under the background of intelligent Education [J]. The Journal of Higher Education, 2022,8(20):80-83.DOI:10.19980/j.CN23-1593/G4.2022.20.019
- [2] Zhao Xiaowei, Shen Shusheng. The connotation evolution and construction strategy of information leadership of school administrators [J]. Audio-visual Education Research, 2019,40 (11): 34-40.
- [3] Zhang Hong.— From the perspective of organizational change [J]. Audio-visual Education Research, 2017,38 (09): 29-34.

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