

Research on Ethical Boundaries and Governance Paths in the Digital Transformation of Daily Behavior Management for College Students

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Abstract: In the current era of continuous digital waves, the digital transformation of college students' daily behavior management has encountered problems such as blurred ethical boundaries and ethical deviations. Considering that the coordinated development of the two has certain inherent logic, this paper starts from the theoretical basis, divides the core ethical dimensions involved in the transformation, and then builds a scientific ethical boundary system. Next, we will analyze the ethical risks existing at the data level and the technical level, as well as the deep-seated reasons for the problems arising at the technical, institutional and conceptual levels. Then, we will build an ethical governance system with clear goals, coordination among subjects and complete content. This system can provide theoretical support and practical guidance for universities to address the ethical dilemmas they encounter during digital transformation, helping them balance technological empowerment and ethical constraints, and enabling the digital transformation of student management to develop in a healthy direction.

Keywords: College students; Daily behavior management; Digital transformation; Ethical boundary

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1. Introduction

In the present era, the digital wave has arrived, pushing the transformation of college students' daily behavior management to a brand-new stage. Digital technology has been applied in the daily behavior management of college students, which has enhanced the efficiency of management and improved its accuracy. Digital technology has become a key means for the modernization of university governance. However, in the process of using digital technology, some problems have gradually emerged. When collecting data and making algorithmic decisions, ethical deviations have gradually become apparent, and ethical boundaries have become blurred. This has become a prominent obstacle in the transformation of college students' daily behavior management. To balance the empowerment brought by technology and ethical constraints, The key lies in clarifying the ethical boundaries in digital transformation and exploring scientific and effective governance approaches. This is also a necessary requirement for colleges and universities to adhere to the essence of education, protect the legitimate rights and interests of students, and promote the healthy development of the digital transformation of student behavior management.

2. Theoretical Basis of Digital Transformation and Ethical Governance in College Students' Behavior Management

2.1. Core Connotation and Value Core of Digital Transformation

The digital transformation of daily behavior management for college students takes digital technology as the core supporting force. It will systematically reconfigure the concepts, processes and methods of student behavior management. This transformation has achieved a complete process change from standardized collection of management data to intelligent analysis and precise application. The core point of it is to break down the information barriers and efficiency bottlenecks existing in traditional management, and promote the transformation of the management model from experience-based and extensive to data-driven and refined. The core value of this transformation is mainly reflected in three dimensions. The first dimension is that it can enhance the intelligent level and governance efficiency of student management in colleges and universities, achieving dynamic perception and scientific judgment of student behavior. The second dimension is that it can optimize the supply of student management services, precisely matching the growth needs of students based on data feedback. Enhance the pertinence and humanization of management. The third dimension is in line with the requirements of the development of modern higher education governance, which can provide practical support for universities to build a modern governance system and enhance their comprehensive governance capabilities, and promote the healthy development of the digital transformation of student management ^[1].

2.2. Ethical Attributes and Value Demands of College Students' Behavior Management

The daily behavior management of college students encompasses educational attributes, management attributes and ethical attributes. Its essence is to achieve educational goals through scientific management methods. Ethics is the value norm and behavioral bottom line running through the entire management process, and it plays a decisive role in the value orientation and implementation of management work. The ethical nature of this work is mainly reflected in respecting students' dominant position, maintaining educational equity, and protecting students' legitimate rights and interests. Its core value demands include three aspects: The first aspect is to adhere to the core principle of putting people first, integrate value shaping into the entire process of behavioral management, and avoid the situation where management becomes utilitarian and tool-oriented. The second aspect is to guarantee students' equal rights to development, ensure that management rules and implementation processes are fair and just, and eliminate those discriminatory treatments. The third aspect is to protect students' personal dignity and legitimate rights and interests. When managing, it is necessary to strike a balance between norms and humanistic care, so that management and education can be organically unified ^[2].

2.3. The intrinsic connection and compatible logical situation between digital transformation and ethical governance

The digital transformation of student behavior management in colleges and universities and ethical governance are not mutually opposed. In fact, they are like an organic whole, supporting and collaborating with each other. The intrinsic connection between the two is that digital transformation provides practical scenarios for ethical governance, while ethical governance becomes the value guarantee for digital transformation. Without ethical constraints, digital transformation is prone to fall into the trap of prioritizing technology only. If ethical governance is lacking during the process of digital transformation, the transformation will lose its practical foundation. The logical alignment between the two mainly lies in the fact that they are compatible, the processes are similar, and the values share a common origin. From the perspective of goals, whether it is digital transformation or ethical governance, the aim is to enhance the quality of student management, promote the all-round development of students, and drive the modernization of university governance. In terms of processes, ethical governance will run through the entire process of digital transformation, which includes the planning stage, implementation stage, and application stage. It will set behavioral boundaries for digital transformation. In terms of values, both digital transformation and ethical governance are rooted in the core educational values of student-centeredness in higher education. Together, they safeguard the essence of education and the ethical bottom line of student management

in colleges and universities.

3. Digital Transformation of Student Behavior Management in Higher Education Institutions and the Construction of Ethical Dimensions and Boundaries

3.1. Division of Core Ethical Dimensions in Digital Transformation

When colleges and universities carry out the digital transformation of student behavior management on a daily basis, there are actually many ethical dimensions involved, and these ethical dimensions are all centered around the core connection between technology application and student management. It includes four relatively main aspects, namely data, technology, subject and value. The dimension of data ethics mainly focuses on the moral norms of data throughout its entire life cycle. It clearly defines the ethical requirements in the links of data collection, storage, analysis, and application. It can be said that the dimension of data ethics is the most fundamental ethical dimension in digital transformation. The dimension of technical ethics will impose some ethical constraints on algorithms and the application of artificial intelligence, particularly emphasizing fairness, transparency and controllability during the process of technical design and operation. The dimension of subject ethics will clarify the ethical responsibilities and behavioral boundaries of the participating subjects such as institutions, technical service providers, and students, and define the moral obligations of all aspects during the transformation process. The dimension of value ethics will always adhere to the core values of education and ensure that digital management does not deviate from the fundamental goal of cultivating talents. Both management efficiency and the development of students will be taken into consideration simultaneously. These aspects constitute the ethical bottom line of value for transformation^[3].

3.2. Basic Principles and Core Basis for Ethical Boundary Construction

In the process of the transformation of student behavior management in higher education institutions towards digitalization, to establish ethical boundaries, four core principles need to be followed. The purpose of doing so is to ensure that the boundary Settings are scientific and reasonable, and to adhere to the principle of nurturing people, that is, to take the educational goals of the school as the most fundamental orientation. Let ethical boundaries serve the all-round development of students well. To adhere to the principle of student autonomy means that protecting students' legitimate rights and interests should be regarded as a very crucial part of boundary construction. We must respect students' dominant position and their dignity, follow the appropriate principles of technology application, and control the scope and depth of technology application well to prevent situations such as technology abuse and excessive digital management. We must adhere to the principle of equal rights and responsibilities, and clearly define the boundaries of ethical responsibilities based on the role positioning of the participating subjects, so that rights and obligations can be unified. The core foundation of these principles lies in the hard constraints formed by laws and regulations, the inherent demands of institutional governance, the value norms of educational ethics, and the objective needs of students' development. These foundations provide a very solid support for the construction of ethical boundaries.

3.3. Core Composition and Definition Criteria of Ethical Boundaries

The ethical boundaries of the digital transformation of student behavior management in colleges and universities are composed of three core boundaries: data, technology, and management. Moreover, each boundary has clear definition standards. The data ethical boundary mainly focuses on the core points of data legality and compliance. Its definition criteria are related to informed consent during data collection, purpose restrictions during data usage, and security guarantees during data storage. These standards are used to clearly define the scope and boundaries of data application. The technical ethics boundary is developed around the core content of technical controllability and traceability. Its definition criteria include the openness and transparency of algorithm design, the fairness and impartiality of technical application, and the interpretability of decision-making results. These standards are used to describe the depth and limitations of

technical intervention. The boundaries of management ethics are centered on educational orientation. Its defining criteria include the moderation of management behavior, humanistic care in the management process, and the fairness and rationality of management results, etc. These standards clearly define the boundaries between digital management and students' autonomous development, which can prevent situations such as excessive or insufficient management ^[4].

4. Analysis of Ethical Risks and Causes in the Digital Transformation of Student Behavior Management in Universities

4.1. Core Ethical Risks at the Data Level

During the process of the transformation of student behavior management in colleges and universities towards digitalization, the ethical risks mainly manifest as the infringement of students' data rights and the insufficiently standardized use of data. At this stage of data collection, in some cases, data collection is carried out on students' personal daily life situations and psychological states. It has exceeded the reasonable range and crossed the boundaries that should be set for reasonable collection. However, the information collected is actually unnecessary for student behavior management work to obtain. During the data storage stage, due to loopholes in technical protection or negligence in management, there is a risk that students' personal data may be leaked or tampered with. Such situations pose a certain threat to students' rights and interests in terms of information. In the process of data sharing and usage, There will be phenomena such as sharing student behavior data with third-party institutions without authorization, applying the data to unmanaged analysis, and over-exploring students' behavioral characteristics. These actions violate the principles of necessity and legality that data usage should follow, causing a certain degree of damage to students' personal privacy and autonomy in data matters ^[5].

4.2. Ethical Misconduct in Technological Applications

The application of digital technology in student behavior management often leads to ethical issues such as technology-centered dominance and improper algorithms. Some universities overly rely on technological tools but neglect the fundamental characteristics of education and the student-centeredness, treating technical indicators as the sole criterion for behavior assessment. As a result, a data-driven management trap emerges. In this trap, Due to the limited training data, the algorithm model shows value bias, resulting in an unfair assessment of students' behaviors. In addition, the application of technology lacks transparency. The decision-making process and fundamental principles are kept confidential from students, which leaves them with no way to appeal or question their behavioral evaluations. This has led to information asymmetry and power imbalance in the context of technological governance.

4.3. Analysis of Deep-rooted Causes of Ethical Risks

The ethical risks existing in the transformation of college students' behavior management towards digitalization are generated by the interaction of factors such as technology, systems and concepts. From a technical perspective, digital technology is developing rapidly, which leads to a disconnection between moral standards and their actual implementation. Technology itself has the characteristic of being a tool. This often leads people to apply it only in a one-sided way. From an institutional perspective, up to now, universities have not yet established comprehensive moral standards and digital management supervision mechanisms. In terms of data governance and technology application, the division of responsibilities is still not clear enough, and there is no effective accountability system. From the perspective of concepts, some managers hold a technology-centered mindset They failed to notice the ethical boundaries within digital management and also overlooked the fundamental mission of education itself. Students have insufficient awareness of their own digital rights and lack the ability to protect these rights, which leads to the absence of effective systems to restrain ethical risks ^[6].

5. Construction of the Ethical Governance System for the Digital Transformation of Student Behavior Management in Universities

5.1. Goal Orientation and Core Principles of Ethical Governance

The ethical governance of the digital transformation of student behavior management in colleges and universities must have a particularly clear goal orientation and follow the core principles of science and rationality. Only in this way can it provide some guidance and lay a certain foundation for the ethical governance practice of the digital transformation of student behavior management in colleges and universities. The goal orientation mainly focuses on three particularly key aspects: The first aspect is to clarify the ethical boundaries of digital transformation and standardize the application models of technology and data in student behavior management. The second aspect is to prevent and defuse various ethical risks during the transformation process, and protect students' legitimate rights and personal dignity. The third aspect is to achieve a dynamic balance between technological empowerment and ethical constraints. Promote the continuous development of the digital transformation of student behavior management towards a healthy, orderly and efficient direction, and keep moving forward in a sustainable direction, ultimately serving the fundamental mission of moral education work and modernization of governance in colleges and universities. The core principles are as follows: We must adhere to the fundamental principle of moral education, ensuring that integrity is always centered around the core goal of talent cultivation. We must uphold the principle of student autonomy, taking the protection of students' rights and interests as the starting point and ultimate goal of governance. We must follow the principle of technical efficiency, treating digital technology as a means to standardize management and serve students. The principle of unifying rights and responsibilities should be followed to clearly define the moral responsibilities and performance requirements of each governance entity^[7].

5.2. The Framework and Division of Responsibilities in Ethical Governance

The ethical governance for the digital transformation of college students' daily behavior management needs to establish a multi-party collaborative and clearly defined responsibility framework. This framework should break through the limitations of a single governance entity and form a comprehensive and multi-level governance collaboration situation. In such a framework, universities, as the core governance subjects, It is necessary to coordinate the overall planning, system formulation and implementation in ethical governance, as well as various governance resources. As the main body of collaboration, technology providers must fulfill their obligations in terms of moral compliance throughout the entire process of technology research and development as well as application maintenance. Only in this way can they ensure the moral safety of technology products. Students, as the participating subjects, should play the role of supervision, feedback and offering suggestions to safeguard their own legitimate rights and interests. As the regulatory body, the education administrative department should fulfill its duties such as industry guidance, regulatory assessment, and normative guidance. It is necessary to establish the moral bottom line of the industry. Each entity should clearly define its responsibilities. Schools should take the lead in formulating the detailed content of governance and carry out daily management work. Technology providers should ensure that their technologies comply with regulations and cooperate in conducting risk screening work. Students should exercise their rights to informed consent, participation and supervision in accordance with the law. The education administrative department should establish a supervision mechanism and carry out regular supervision work. In this way, all subjects can eventually do their own work well, cooperate closely and strive in the same direction.

5.3. The Content System and Operating Norms of Ethical Governance

The ethical governance of the digital transformation of college students' daily behavior management needs to establish a systematic and complete content system, and formulate scientific and rigorous operational norms. This is done to ensure that the governance work can be implemented in place, be effective, and form a long-term effective system. The content system is constructed around the key links of digital transformation. Data ethics governance encompasses the entire process of data collection, storage, use, and sharing. It is essential to strictly adhere to the basic requirements of data

security and student privacy protection, and not to cross this bottom line. Technical ethics governance defines the scope, standards, and boundaries of technology application, and it is necessary to prevent problems such as technology abuse and algorithm deviations. Management ethics governance has regulated the behavioral patterns of management subjects, enhanced their ethical awareness, and prevented the emergence of formalism and utilitarianism in digital management. The operation norms have established a closed-loop management mechanism throughout the entire process. An ethical review system has also been set up in advance. Ethical evaluations should be conducted on digital management projects before implementation. During the real-time monitoring process, the dynamic monitoring mechanism should be improved. If any moral hazard is found, timely intervention should be carried out. An accountability and rectification mechanism should be established. For situations where moral violations occur, the relevant parties should be held accountable in accordance with the law, urged to make rectifications, and a regular communication and feedback mechanism should be established. This will facilitate all parties to express their opinions and continuously promote the development of the moral governance system towards a more complete direction^[8].

6. Conclusion

This study mainly aims to explore where the ethical boundaries of digital transformation lie in the daily behavior management of college students and what governance paths there are. It is necessary to establish a theoretical connection between digital transformation and ethical governance, identify the core ethical dimensions in the transformation process, and then construct a scientific ethical framework. By analyzing the ethical risks existing at the data and technical levels and the causes of these risks, a clear, collaborative and relatively comprehensive ethical governance system has been constructed. The results obtained from the research can provide theoretical support for solving the ethical dilemmas encountered in digital transformation and clarifying the ethical boundaries. The governance system proposed in this article can provide practical guidance for universities to achieve a balance between technological empowerment and ethical constraints, and can promote the digital transformation of student management to develop in a healthy direction. In future work, the focus should be placed on continuously optimizing this governance system so as to adapt to the development of digital technology.

Disclosure statement

The author declares no conflict of interest.

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