Research on the Integration of Institutional Management and Emotional Management in College Student Management in the Era of Artificial Intelligence

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Abstract: Undergrad the board framework is a vital piece of China's advanced education framework. It isn't just the fundamental substance of the communist current college framework with Chinese attributes, yet in addition a significant assurance for working on the nature of China's advanced education. The student management system in colleges and universities is also an important institutional guarantee for cultivating qualified builders of socialism with Chinese characteristics and reliable successors. This paper aims to study the integration of institutional management and emotional management in college student management. It introduced the concepts of student management, institutional management and emotional management in colleges. In this paper, a particle swarm optimization algorithm based on artificial intelligence is proposed to optimize the management mode of college students. In this experiment, students in X University were taken as an example, and 600 questionnaires were distributed by random sampling to investigate the students' views on student management and students' satisfaction with the integration of institutional management and emotional management. The experimental results showed that before the integration of institutional management and emotional management, the satisfaction of boys is 70%, and the satisfaction of girls is 65%; after the integration of institutional management and emotional management, the satisfaction of boys is 85%, and the satisfaction of girls is 94%. It showed that girls are more sensitive to the student management system and most people are more satisfied with the student management after the integration of institutional management and emotional management.

1. Introduction

Understudy the board is a significant component that influences the nature of advanced education and limits the improvement of advanced education. It straightforwardly influences the procedure of administering the country by regulation and ability preparing. As an important part of modern university management system, college student management system is a unified system that

regulates and controls students' various interpersonal relationships and behaviors.

To advance the change of advanced education in the new time, the administration model should be imaginative. As the main body of college education management, the emotional management model must be added to college management. College management should build a harmonious campus environment through flexible management, so that college students can live in a free, equal, fair and just learning and living atmosphere.

2. Related Work

With the development of the times, more and more scholars have studied the management of college students. Jacksi K designed an efficient web-based attendance management system application to track students' activities in the classroom [1]. Muawanah M aimed to explain student planning, development and assessment in the High-Performance School of Mainsa Sendekiya Sepang Tangerang Banten. He explored the effectiveness of data and decision-making based on archive systems, then collected, interpreted and analyzed these data [2]. Djuraevna A Z introduced the concept of educational management. He introduced principles of scientific work and modern management used by scientists to study management problems. Djuraevna A Z also introduced the organization of the experimental work in the research process and the implementation of the research results in practice [3]. Pramartha C portrays how business process reengineering (BPR) assist with further developing instructive organization administrations [4]. Nonetheless, the inadequacy of their exploration is that the plan of the understudy the board framework actually should be moved along.

For the advancement system of molecule swarm enhancement calculation, Yang J M proposed an improved multi-methodology based multi-objective molecule swarm streamlining calculation (MIMOPSO), which further superior the intermingling and appropriation of the calculation [5]. Mehmet H proposed a multi-means particle swarm optimization algorithm for multi-layer feedforward artificial neural network training [6]. The weakness of these studies is the uncertainty of data quality, their calculation and analysis of massive data are very complex. Therefore, the construction of the model still needs to be improved.

3. Integration Method of Institutional Management and Emotional Management in College Student Management

3.1 Concepts and Theories of Teaching Management in Colleges and Universities

(1) College teaching management

The term management comes from the West, and it is the process of systematically planning, organizing, commanding, coordinating, and controlling certain people, wealth, and things. The management subject uses certain management methods to accomplish the goals achieved by the organization based on various resources of the organization [7]. Teaching management can be divided into broad and narrow senses. In a broad sense, it refers to the organizational leadership and management of various schools by educational administrative departments. From a tight perspective, it alludes to the preparation, association, order, coordination and control of showing work to accomplish showing objectives and accomplish showing objectives as indicated by the attributes and laws of educating. The essence of teaching management is to organize and use the school's human, material, and financial resources to manage teaching operations, teaching information, and the efficiency, benefit, time, quality, and procedures of the teaching process. Teaching management should ensure the coordination and unity of various system elements of teaching management, and should give play to the principle of flexibility in teaching management, pay attention to teaching

students according to their aptitude, and respect students' individuality. It promotes the individuation and pertinence of teaching management, the differentiation and differentiation of teaching management, and forms its own characteristics.

(2) Elements of teaching management in colleges and universities

The substance of showing the executives in schools and colleges incorporates three viewpoints: everyday showing the board, showing security the board, and showing assessment the executives.

(3) Functions of college student management system

The understudy the executives framework in schools and colleges is a significant component to advance the improvement of universities and colleges, and it is additionally an indication of the accomplishments of undergrads' administration work [8].

(4) Principles of college student management system

The understudy the board framework in schools and colleges isn't static. During the time spent its turn of events, certain standards should be observed to direct and work on the framework, so it can adjust to the administration of understudies and genuinely serve the administration of undergrads [9]. Based on understanding the idea and content of the understudy the board framework in schools and colleges, this paper advances the rules that ought to be continued in the development, change and execution of the understudy the executives framework in universities and colleges, as displayed in Figure 1.
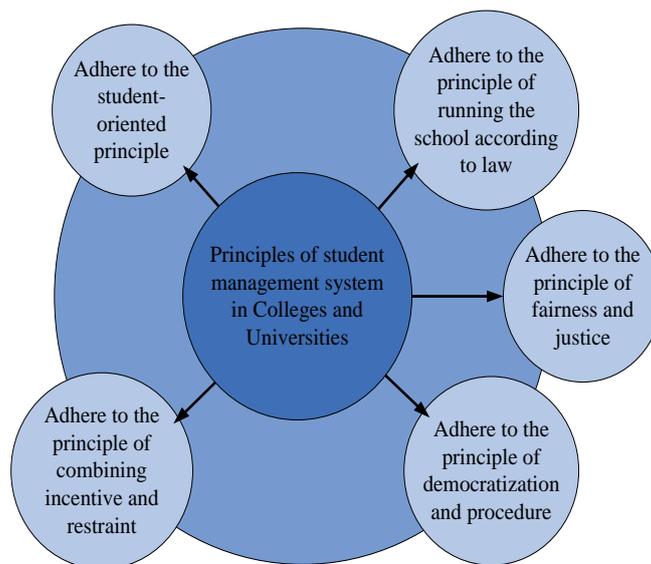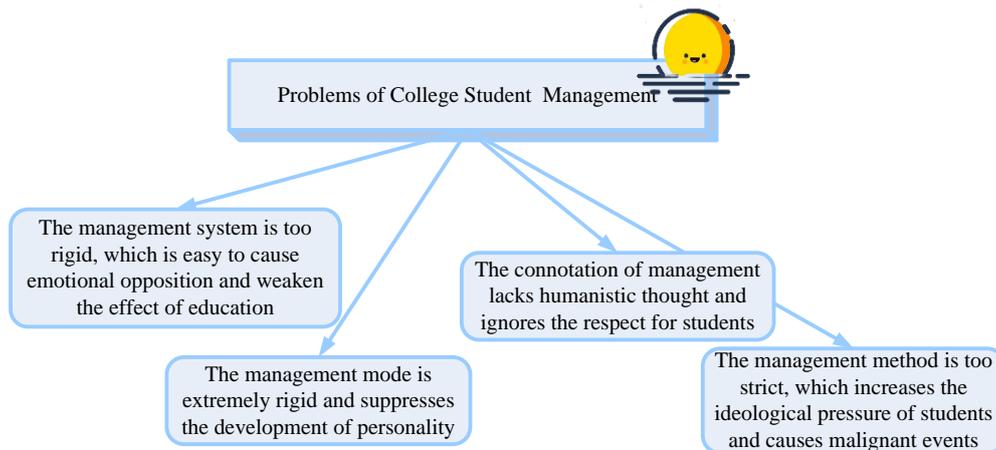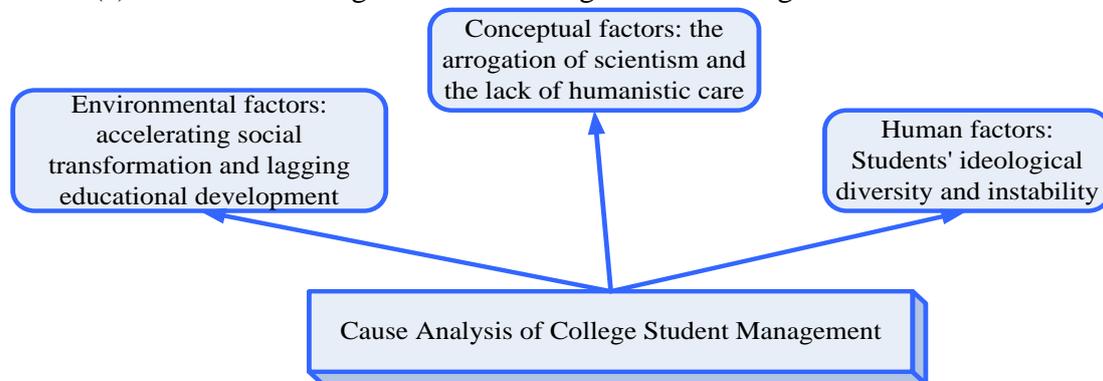

Figure 1: Principles of college student management system

(5) Problems of College Student Management

In general, university student administrators also rely too much on the rules and regulations under the rigid management model. They focus on teaching students and neglect to solve problems by means of equal communication; they are accustomed to the identity of elders and managers, but are not used to the identity of friends and servants. In management practice, it is still accustomed to revolve around system managers, and the use of emotional management is too little [10]. Considering this, while examining the adaptable method of the understudy the board framework in schools and colleges, talking about the lacks in the rigidization of the understudy the executives framework in schools and universities is additionally important. The over-organized understudy the executives framework in schools and colleges has the accompanying inadequacies (Figure 2).

(a) Problems existing in student management in colleges and universities

(b) Analysis of the causes of problems in college student management

Figure 2: Analysis of problems and causes in college student management

3.2 Theories Related To Emotion Management

(1) The concept of emotional management

Emotion is an important motivating factor in school management [11]. Emotion is a special feeling belonging to the spiritual realm that people can experience every day in daily life. Because this feeling is quite different for different people, the interpretation of this concept is also quite different. It is generally believed that emotion is a person's emotional attitude towards a specific thing or phenomenon under specific conditions." From the basic connotation of emotion, emotion is "awareness" in terms of reaction, which can express or represent emotional experience and feelings. Because emotional management is also a kind of emotional care in essence, it requires managers to establish a harmonious and harmonious emotional relationship between managers and students by means of communication, tolerance, understanding, and incentives based on the basic emotions of people. It is necessary to form a healthy living and learning environment in which managers and students interact, cooperate and support each other, so that the apartment becomes an important part of the entire educational environment in colleges and universities [12].

(2) Theory of emotion management

The research on emotion management mainly focuses on starting from the field of psychology and guiding it to modern management science, which has become an important branch of modern management science. In management psychology, social psychology, organizational behavior and other disciplines, there are also new breakthroughs and focuses. These research results also provide important references for the implementation of emotional management in college apartment

management. Theorists in pedagogy have also begun to pay attention to the nature of human emotion and its internal mechanism, and have strengthened the development and research of human potential from the perspective of emotion [13-14].

3.3 Theoretical Elaboration of the System

(1) Relevant connotation of the system

System management is the foundation of modern school management. The connotation of the system is relatively rich, but generally speaking, it refers to the code of conduct that members of the organization are required to abide by [15]. From the perspective of the composition of the system, "system" originally meant cutting and cutting, and later it was extended to restrain and restrict. And "degree" is a measuring instrument, and then extended to scale and standard. Then these two words together refer to the standard that restrains people's behavior. Rules and regulations are the embodiment of laws and policies. They are more operable than laws, and they are the norms of people's actions, and they play an irreplaceable role in maintaining social order. However, any organization or institution must take the law as the basis when formulating rules and regulations, and must not violate the provisions of the constitution and laws, otherwise it will be regarded as invalid.

(2) The main features of the system

1) Unity and Diversity

No matter what kind of system, it has a natural soul of unity, and the system must have the characteristics of unity; the diversity of the system is also reflected in its richness and diversity in form and content.

2) Normative and binding

The normative and restrictive features of the system can be clearly seen from the connotation alone.

3) Democracy and fairness

Constitution and laws, including the formulation of rules and regulations or the result of public participation in discussions, revisions, formulations, or the sublimation of certain living standards. In any case, it is by no means a reflection of the manager's personal will. The system must have the characteristics of fairness, which is the key for it to become an organizational norm and to be universally binding [16].

(3) The importance of the system

The management system of colleges and universities does not exist naturally, but is designed and created by people, and has a certain normative effect on people. In the past, it was managed by experience and preaching, but now it is regulated by systems. Practical experience also shows that if there is no system, the management of the school will be in chaos, and the education and teaching activities will not be carried out normally [17].

Therefore, in order to obtain real justice, in the management of colleges and universities, we should also insist on paying equal attention to the system and human feelings, and apply them together in the management of colleges and universities. If the system is at odds with human feelings, it is necessary to analyze specific problems in detail, and adjust measures according to the situation and individual conditions, according to the actual situation or according to the situation or the law. For those violators whose subjective viciousness is not very serious, but there are indeed some objective factors behind the incident, appropriate human care shall be given to them, and they shall be dealt with as appropriate within the scope of the system. Of course, if it is those who ignore the system or even violate the law because of their personal interests, they must strictly enforce the law and never tolerate it (Table 1).

Table 1: Characteristics of Institutional Management and Emotional Management

Student management type		System management	Emotion management
relationship		Consistency, contradiction and balance	
influence	Positive impact	It is conducive to the formation of stable and orderly campus order	Meet emotional needs and stimulate work enthusiasm
		It is conducive to the improvement of management efficiency	The flexibility of human feelings can better adapt to the rapidly changing environment
	Negative influence	It is not conducive to the formation of harmonious interpersonal relationship	Personal relationships undermine the fairness of university management
		Prone to coping psychology and short-term behavior	Excessive human affection induces corruption
Causes of the conflict between system and human feelings in University Management	Root cause	The transcendence of human affection over system -- the conflict between system and private affection	
		System's neglect of human feelings -- the conflict between system and people's feelings	
	Internal causes	Due to the defects of the system itself	
		The fairness supremacy of the system is incompatible with human compassion	
		Because of human nature	
		The deficiency of the current political system leads to	
		Influence of national culture	
		Impact of market economy	

3.4 Teaching management evaluation of improved particle swarm optimization algorithm based on artificial intelligence

(1) Basic particle swarm optimization algorithm

Assuming that the search is performed in the N-dimensional space, and a particle population is formed by m particles, the current position of the i-th particle can be expressed as a vector.

$$X_{id} = \left(X_{i1}, X_{i2}, \cdots, X_{id}\right) \tag{1}$$

Its velocity can be written as a vector

$$W_{id} = \left(W_{i1}, W_{i2}, \cdots, W_{id}\right) \tag{2}$$

The optimal position of the individual searched so far is

$$Pbest = \left(Pbest_1, Pbest_2, \cdots, Pbest_{id}\right) \tag{3}$$

So, the basic particle swarm optimization algorithm (PSO) is a special case of inertia weight $\varepsilon = 1$.

The linear decreasing formula of inertia weight ε is:

$$\varepsilon = \varepsilon_{max} - t.\left(\varepsilon_{max} - \varepsilon_{min}\right) \div T_{max} \tag{4}$$

Among them, ε_{max} and ε_{min} represent the maximum and minimum values of the inertia

weight, respectively, $T_{\max}$ represents the maximum number of iterations, and t represents the current number of iterations.

2) Particle swarm optimization algorithm with shrinkage factor

The second standard molecule swarm streamlining calculation is to bring a shrinkage factor into the speed term of the fundamental molecule swarm enhancement calculation, which was proposed by Clerc. This standard particle swarm algorithm mainly controls the values of inertia weight ε, learning factors S_1 and S_2 to ensure the convergence of the particle swarm algorithm. The speed formula is as follows:

$$W_{id}(t+1) = \eta\left(W_{id}(t) + S_1 R_1\left(Pbest_{id} - X_{id}(t)\right)\right) + S_2 R_2\left(Gbest - X_{id}(t)\right) \tag{5}$$

And there is no upper limit for the value of speed.

4. Experiments on the Integration of Institutional Management and Emotional Management in College Student Management

Due to the complexity of management activities in colleges and universities, in order to balance the relationship between the system and human feelings, the two tend to be balanced. This paper will put forward specific and targeted suggestions from three periods before the management activities, during the management process and after the management is completed [18].

4.1 Investigation Objects and Methods

The assessment object of this paper is the school students of X University. The method for unpredictable analyzing is embraced, and the surveys are scattered in the library, focus on room, etc as paper overviews. A total of 600 overviews were scattered and 592 were returned. Notwithstanding invalid studies, there were 558 significant surveys. The specific information is shown in Table 2:
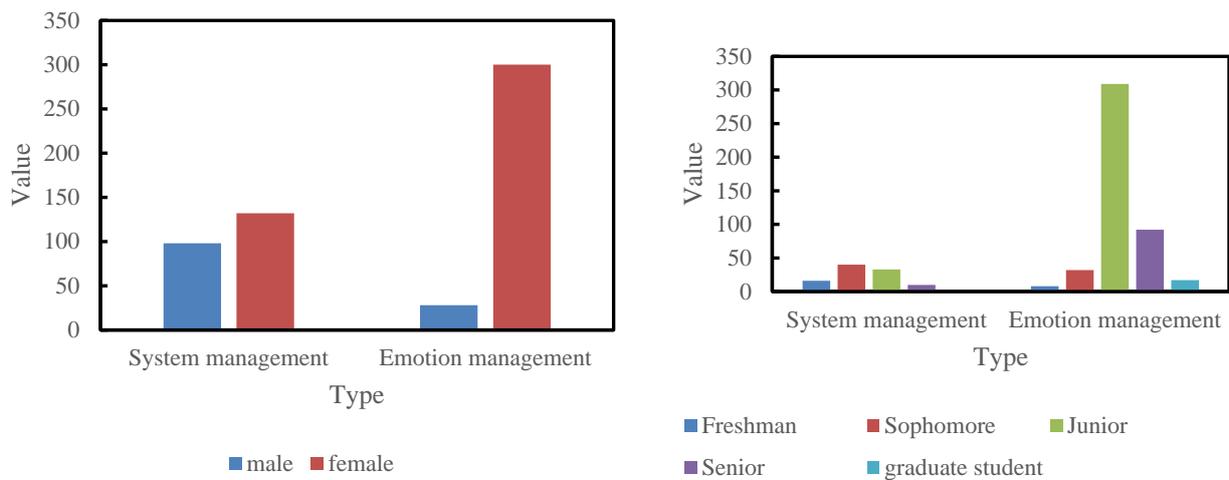
Table 2: Composition of a valid questionnaire

personal information	category	Number (person)	Proportion (%)
Gender	male	126	22.58
	female	432	77.42
major	Literature and history	408	73.12
	Science and Engineering	150	26.88
grade	Freshman	24	4.3
	Sophomore	72	12.9
	Junior	342	61.29
	Senior	102	18.28
	graduate student	18	3.23

In this paper, SPSS17.0 information investigation programming was utilized to direct measurable examination on the study information. It utilizes elucidating investigation strategies to investigate the general fulfillment of understudies in school showing the executives and the fulfillment assessment of different angles, and uses change examination and T test to break down the distinctions in school showing the board with regards to orientation, major and grade.

As shown in Figure 3(a), 98 boys chose institutional management and 28 emotional management; girls chose institutional management and 300 emotional management. It shows that boys pay more attention to system management, while girls are more inclined to emotional management.

As shown in Figure 3(b), most people choose emotional management, 16 people choose system management in freshman year, and 8 people choose emotional management. The reason why freshmen choose system management is more likely because the freshman has just left high school and is not yet familiar with college life, which hopes to be managed by teachers like high school. In the second year, 40 people chose system management, and 32 people chose emotional management, 33 people chose system management and 309 people chose emotional management. The possible reason is that the third year is already familiar with the university's "laissez-faire management" and began to deviate from emotional management. 10 seniors choose institutional management, 92 emotional management; graduate students choose institutional management, 17 emotional management, indicating that most students prefer emotional management.

(a) Gender differences in institutional management and emotional management choices   (b) Differences in institutional management and emotional management choices of different grades

Figure 3: Differences in institutional management and emotional management choices by gender and grade

4.2 Descriptive and Statistical Results of the Overall Survey of Student Satisfaction in Teaching Management in Colleges and Universities

Understudies' general fulfillment with showing the board isn't high. In the essential overview of the poll, a general assessment of school showing the executives is set up to quantify understudies' fulfillment with showing the board in universities and colleges (Table 3):
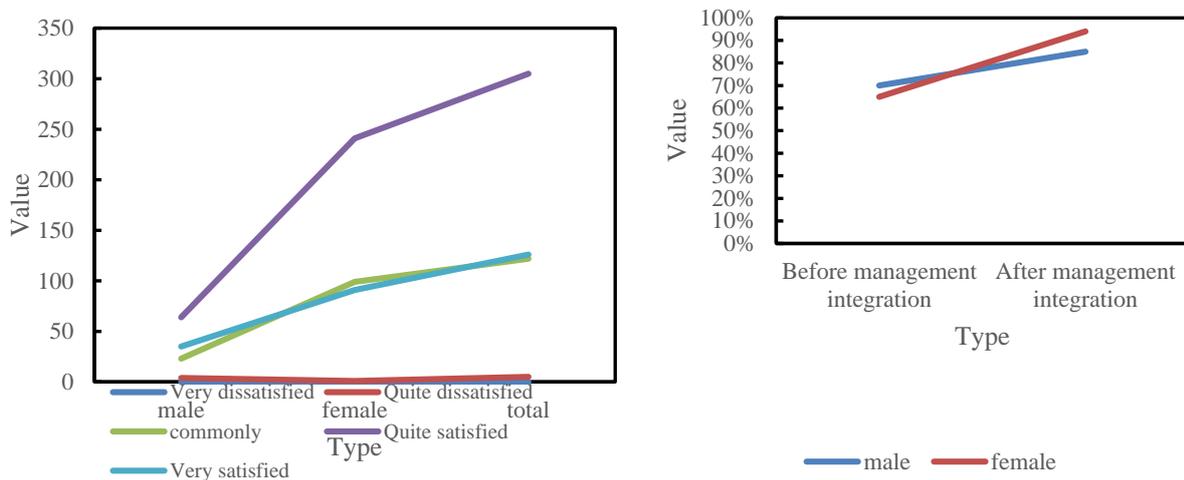
Table 3: Generally speaking Evaluation of Student Satisfaction in Teaching Management in Colleges and Universities (N=558)

option project	Overall satisfaction
Very dissatisfied (%)	4.1
Relatively dissatisfied (%)	14.25
General (%)	65.84
Relatively satisfied (%)	14.61
Very satisfied (%)	1.2
mean value	3.05

The above survey uses a five-point scale from 1 to 5, with a theoretical 3 as the medium expectation. It can be seen that the overall satisfaction with school teaching management is 3.05,

which is slightly higher than the moderate expectation. And only 14.61% were very satisfied or relatively satisfied with teaching management. The normal worth of fulfillment with showing the board in schools and colleges isn't extremely high, and it is important to additionally work on the fulfillment of educating the executives.

4.3 Satisfaction of Students after Institutional Integration and Emotional Integration

(a) Student satisfaction after the integration of institutional management and emotional management
(b) Comparison of student satisfaction before and after the integration of institutional management and emotional management

Figure 4: Comparison of student satisfaction after the integration of institutional management and emotional management and student satisfaction before and after the integration

As can be seen from Figure 4(a), after the integration of institutional management and emotional management, the number of students who are dissatisfied is 0; 4 boys and 1 girl feel very dissatisfied; 23 boys and 99 girls think that they are in general; there are 64 boys and 241 girls who are satisfied; 35 boys and 91 girls are very satisfied; it shows that most people are still very satisfied with the integration of system management and emotional management.

As shown in Figure 4(b), before the integration of institutional management and emotional management, the satisfaction of boys is 70%, and the satisfaction of girls is 65%; after the integration of institutional management and emotional management, the satisfaction of boys is 85%, and the satisfaction of girls is 94%; the management system is more sensitive, and the satisfaction degree of girls changes more after the integration of the two management systems.

5. Conclusions

When talking about the ideological decision of the idealized university executive structure, this paper expounds that the ideal university board of directors structure should adhere to the concept of combining the board of directors structure with deep management. This paper discusses the value dimension of improving the intelligent management system of college students, and clarifies that a perfect intelligent management system for college students should have five main aspects: the unity of artificial intelligence and humanities, and the unity of the rule of law and morality. The unity of fairness and efficiency, the unity of education and intelligent management, and the unity of service and development. This paper discusses the improvement and implementation path of college students' intelligent management system. After clarifying these, it is necessary to analyze the current

traditional college student management system, deeply analyze the unreasonableness of the current system, remove the dross, and take the essence. In this way, it makes up for the shortcomings of the current college student management system, and develops a relatively well-designed college student management system based on artificial intelligence.

Acknowledgement

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