Intelligent Management of College Students Based on Expert System

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Abstract. In order to improve the effect of intelligent management of college students, this paper combines the expert system to construct an intelligent management system for college students. In order to improve the accuracy of feature recognition for college students, this paper designs a field of view optical imaging system, and selects a fisheye lens as the large field of view optical imaging system. Inspired by the unique grouped retinal structure of elephant trunk fish, its structural characteristics are very similar to the condenser in non-imaging optics. Moreover, this paper studies the mathematical model and performance of the compound parabolic concentrator, and establishes a bionic light intensity intensifier based on the compound parabolic concentrator with circular cross-section. In addition, this paper constructs an intelligent management model of college students based on expert system. Through the experimental analysis, it can be seen that the intelligent management model of college students based on the expert system proposed in this paper can effectively improve the management efficiency of college students.

Keywords: expert system; colleges; students; intelligent management
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1 INTRODUCTION

When carrying out student management in School, managers should fully understand and master the students' world outlook, so as to fully understand the meaning of college student management. At the same time, it can help administrators have more ideas about student management. Student management initially belongs to the content of teaching management. When managing students, it mainly manages student status, grades, basic information of students and practical aspects of student cadres [1]. The higher education system has been deepened, which has a certain impact on the management methods of students. At this time, student management work has a broader meaning and is based on the original content. Among them, the guidance of students' mental health, the guidance of graduate and employment students, and the assistance to poor students are all important contents of college student management [2].

The theoretical research on student management in colleges based on the philosophical perspective can enable School to use correct scientific theories as support when conducting student management, and can solve various problems in student management. So that they can fully grasp the meaning of student management in School. At the same time, it is necessary to have a very correct cognition and in-depth understanding of the management of college students [3]. School should use philosophy as a guiding theory when conducting student management work. Moreover, it is necessary to set up some planned and organized work content for students in terms of guidance, consultation and service in accordance with the relevant requirements of the state, in accordance with the training of talents in School and related principles, so as to cultivate successors that meet the needs of socialist development [4].

We must use scientific and systematic management methods, fully implement the guidelines and policies issued by the education department, promote school reform and innovation, improve the quality of education, and make it promote student management, highlight key points, and use scientific and reasonable Sexual management promotes the continuous development of education, so that college students can develop comprehensively, continuously, stably and healthily [5].

The quality of managers themselves is an important content of whether students' management work can be carried out smoothly. It not only refers to humanistic quality, but also includes political quality and theoretical quality. It is the embodiment of the comprehensive quality of managers and belongs to the overall concept [7]. First, in terms of political quality, the purpose of all social activities is to serve political activities, so managers must have a certain degree of political quality [6]; second, in terms of theoretical quality, managers conduct management work At the time, there must be a very solid theoretical foundation, and the management work should not be carried out blindly, but should be carried out under the scientific theory; third, the ability and quality of the managers themselves should be highlighted and the ability and quality should be improved, which requires the managers to carry out specific In the process of management work, summarizing experience and lessons, checking and filling vacancies, and improving their own ability, this part of the content has become a very important part of management work [8].

The ultimate goal of managing students in School is to better serve students. Taking philosophy as the basis will further improve the management of college students. Their dominant position cannot be shaken [9]. The management work carried out by School can better guarantee the quality of students' learning, thereby promoting the all-round development of college students. In the case of student management, the management department of the school must allow students to have full freedom of choice, which has a very good role in promoting students' subjective initiative, and students can do what they are interested in, so as to give full play to the value of life [10]. The purpose of college student management is to cultivate outstanding high-level talents, so as to promote the healthy and comprehensive development of students. When conducting management work in School, it is necessary to adhere to the "people-oriented" management concept, so that students can have a relatively relaxed and harmonious learning atmosphere, so that students' creative thinking can be stimulated, and the management purpose of serving students can be truly achieved. Improve the teaching efficiency of School [11]. In a relatively relaxed teaching environment, students' subjective initiative can be fully stimulated, thereby cultivating students' innovative thinking. The relaxed and harmonious management atmosphere strengthens the relationship between students and managers, thereby improving the relationship between teachers and students. In the management of School, its work efficiency can be improved, and it can improve the creativity of college students, so as to truly serve students [12].

In the management process of School, a unified method cannot be used for management. Only in this way can we do specific analysis of specific problems and effectively do a good job in the management of School [13]. At the same time, when managing students, they should not be in a hurry. When managing students, School should be patient enough, have enough respect for students, fully understand students, and guide students in the development of their own talents. Differences among students are respected. In the management of School, there will be management problems that are difficult to solve, and finding an appropriate management method is also a process of finding the truth [14]. This process is not done overnight, it takes a lot of practice to get the final truth. Under the conditions based on philosophy, School should carry out continuous innovation and reform when carrying out management work, fully analyze the development of the times and social progress and the psychological characteristics of students, and operate scientific and reasonable management methods, so that the efficiency of management work can be achieved. Improve [15].

Contemporary college students should not only learn professional courses well, but also learn how to study and live, and more importantly, develop their own personalities, so as to lay a solid foundation for their future study, life and work. In the past, people paid more attention to "management", which led to conflicts between management work and students' individual pursuit, and management work was sometimes blocked or even stagnant. For example, the lack of guidance for students' self-management has led to the obstruction of some students' personality development and thinking development, which will seriously cause students to have a rebellious mentality, resulting in the inability to carry out their work. Respect, care and "service" for students are not enough [16]. In the usual student management work, more attention is paid to how to manage students. Although some sunshine care activities are also carried out, the overall consideration of how to care for, respect and "serve" good students is not enough.

Insufficient training of students' "non-intelligence factors". Students' non-intellectual factors such as motivation, desire for knowledge, enthusiasm for learning, sense of responsibility, sense of obligation, sense of honor, self-confidence, self-esteem, competitive spirit, persistence, self-control and independence play an important role in their all-round development. But in the actual management work, we need to strengthen the cultivation of these aspects [17]. It is necessary to change the management concept, change the thinking of "management" in the past, and form a system and mechanism of "management" and "management", so as to ensure that the management work develops in a healthy and orderly direction. Bai Juyi, a poet in the Tang Dynasty, said: "Those who touch people's hearts should not be touched first." If you guide students with sincerity and sincerity, it will be easier for teachers and students to live in harmony with an attitude of trust, friendship, tolerance and understanding, and the problem of management work will be solved easily. [18].

Under the current background, the educational management of college students needs to realize modernization and data management, integrate and process activity data information, and combine educational elements to continuously optimize educational work. Through the application of information technology, it can provide a favorable working environment and working mode for the personalized development of education management in School, and also improve the efficiency and quality of work development. In the context of the development of the era of big data, the personalized development of education management in School must find the right angle. The education management work in School should focus on the individual characteristics of students, and carry out practical activities related to it. It should fully consider the development needs of students, so as to ensure that the individual development needs and diversified needs of students are met. In the era of big data, this technology is used as the basis, and targeted education content and methods are adopted for students in different situations, so as to innovate the work mode [19].

This paper combines the expert system to construct an intelligent management system for college students to promote the management effect of colleges and improve the stability of college students' life and study in colleges.

2 INTELLIGENT RECOFNITION OF STUDENT CHARACTERISTICS

2.1 Bionic Fisheye Lens System

The principle of the fisheye lens is to imitate an optical system designed by fish to observe the target at the water surface. Compared with other animals, the lens of fish eyes is more prominent and closer to a sphere. Therefore, the fisheye generally has a large field of view, usually above 90°, and a large amount of information can be obtained in real time with reference to the fisheye visual system.

The entire fisheye optical system includes 9 lenses, 21 mirror surfaces, a focal length of 10mm, an image surface size of 36mm at the detector, a F-number of 5.6, and a system assembly of 170mm. The structure is very complex, as shown in Figure 1. The optical system of the fisheye lens can be divided into two parts with the diaphragm as the boundary, the front lens group and the rear lens group. The front lens group mainly plays the role of compressing the field of view to the range of the detector, and usually consists of 2 to 3 negative meniscus lenses, and the rear lens mainly plays the role of imaging. The doublet lens can help correct axial chromatic aberration and vertical chromatic aberration. In order to obtain a bionic fisheye lens system that meets the requirements, the front and rear lens groups can be designed separately using the principal light transmission equation.

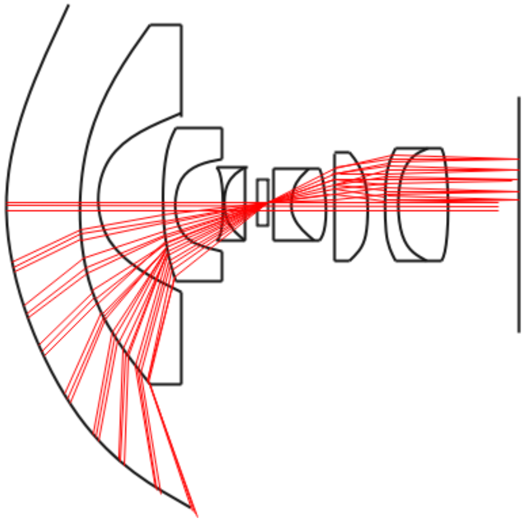

Figure 1: 220° fisheye lens.

The front lens group of the bionic fisheye lens system is mainly composed of a negative meniscus lens, as shown in Figure 2.

The thickness is d_1. If it is assumed that a chief ray is incident on the front surface of the negative meniscus lens at the object field angle of ω_0, the distance from the intersection of the chief ray and the front surface to the chief optical axis is h_1, the intersection is the normal line, the incident angle of the chief ray is α_1, the refraction angle is β_1, and the field angle of the image side is ω_1. That is, after passing through the negative meniscus, the chief ray is incident on the rear surface of the negative meniscus lens at an object-side field angle of size ω_1. At this time, the distance from the intersection of the chief ray and the back surface to the chief optical axis is h_2. Similarly, as the normal of the intersection, the incident angle of the chief ray is α_2, the refraction angle is β_2, and the field angle of the image side is ω_2. The image square distance s is [20]:

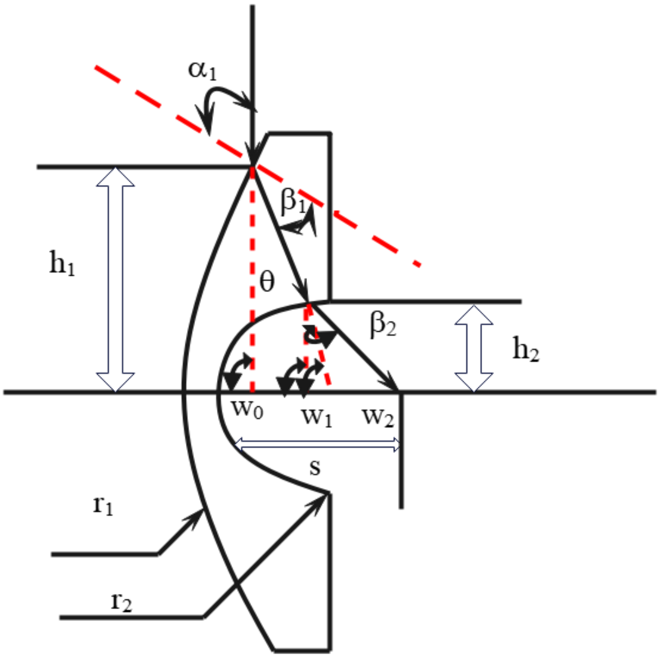

Figure 2: Schematic diagram of the principal ray of the negative meniscus lens of the fisheye lens.

$$s = \left[1 + \frac{\sin(\theta - \omega_2)}{\sin \omega_2} \right] r_2 \tag{2.1}$$

The following conditions are satisfied:

$$\sin \theta = \frac{h_2}{r_2} \tag{2.2}$$

The size of the field of view angle on the image side can be deduced by applying optical tracing analysis to each surface of the negative meniscus lens. The principal ray transmission equation is:

$$\sin \alpha_{i+1} = \frac{r_{i+1} + d_i - r_i}{r_{i+1}} \sin \omega_i + \frac{r_i}{r_{i+1}} \sin \beta_i \tag{2.3}$$

$$\omega_i = \omega_{i-1} + \beta_i - \alpha_i = \omega_0 + \sum_{i=1}^{i} (\beta_i - \alpha_i) \tag{2.4}$$

$$\beta_i = arcsin\left(\frac{n_{i-1}}{n_i} sin\,\alpha_i\right) \tag{2.5}$$

In formulas (3), (4) and (5), the parameter subscript i represents the i-th optical surface in the lens group, α represents the radius of curvature, β represents the incident angle, and d_i represents the refraction angle. d represents the thickness of the i-th optical surface in the lens group from the next optical surface, and ω represents the field angle of the image side. Among them.

In the actual design process, the requirements of the field of view and the compression ratio of the field of view in the lens design are known. According to formulas (1) ~ (5), the following equations can be obtained:

$$sin\,\beta_2 = sin\left(\theta - \omega_2\right) \tag{2.6}$$

$$sin\,\alpha_2 = \frac{sin\,\beta_2}{n} \tag{2.7}$$

$$\omega_1 = \omega_2 + \beta_2 - \alpha_2 \tag{2.8}$$

$$\beta_1 - \alpha_1 = \omega_0 - \omega_1 \tag{2.9}$$

$$sin\,\alpha_1 = n \cdot sin\,\beta_1 \tag{2.10}$$

According to the above equations and relationship, the relationship between the radius of curvature can be obtained:

$$\frac{r_2}{r_1} = \frac{sin\,\omega_1 - sin\,\beta_1}{sin\,\alpha_2 + sin\,\omega_1} \tag{2.11}$$

Considering that the thickness of the lens is generally around 5mm. If a negative meniscus lens cannot compress the field angle. Under normal circumstances, the half-height of the aperture light is generally 3~5mm, so the compressed field of view is as small as possible, which is beneficial to the imaging of the rear lens group.

The rear lens group of the bionic fisheye lens system generally plays an imaging role. Therefore, the main consideration in the design of the rear lens group is how to eliminate the aberrations of the front lens group.

The formula for the third-order aberration of light at the image plane is:

$$x' = \frac{1}{cos\,\omega_g}\left(d_{100}x_g + d_{200}x_g^2 + d_{020}y_g^2 + d_{300}x_g^3 + d_{120}x_g y_g^2\right) \tag{2.12}$$

$$y' = h_{010}y_g + h_{110}x_g y_g + h_{210}x_g^2 y_g + d_{030}y_g^3 \tag{2.13}$$

In formulas (12) and (13), x' and y' represent aberrations, x_g and y_g represent the position coordinates of the last surface of the light in the system, ω_g represents the field angle of the image field on the last surface, and d_{ij0} and h_{ij0} represent the aberration coefficient.

The formula for color difference is:

$$W_{C1} = -\frac{1}{2}\left(\overline{\eta}^2 + \overline{\xi}^2\right)C_1' \tag{2.14}$$

$$W_{C2} = -\overline{y}\overline{\eta}C_2' \tag{2.15}$$

In formulas (14) and (15), W_{C1} and W_{C2} represent the wave aberration of axial chromatic aberration and vertical chromatic aberration, respectively. C_2' represent the aberration coefficients of axial chromatic aberration and vertical chromatic aberration, respectively. $\overline{y}$ represents the normalized object height, and $\overline{\eta}$ and $\overline{\xi}$ represent the normalized coordinates of the meridional and sagittal planes, respectively.

According to the requirements of the field of view and aberration, after the initial structure of the front and rear lens groups in the fisheye lens optical system is preliminarily determined, it is further optimized in the ZEMAX software. The optimization process is as follows:

(1) The algorithm sets the preliminary results according to the calculation results and related patented lenses;

(2) The algorithm sets the relevant lens as a doublet. Its purpose is to reduce the axial chromatic aberration and the vertical chromatic aberration, and secondly, it can increase the variables, which is beneficial to the optimization results;

(3) The algorithm optimizes the hammer shape of the glass.

The final optimization result is as follows: the fisheye lens has a total of 8 lenses, 19 mirrors, 3 lenses in the front lens group, and 5 lenses in the rear lens group. Furthermore, its field of view is 120°, its focal length is 1.0699mm, its F-number is 3, and its image plane is 2mm. Figure 3 is the optical path diagram of the fisheye lens, the wavelength range is visible light (380nm~760nm), and the angles of incidence of the light in the figure are 0°, 20°, 40°, and 60° respectively.

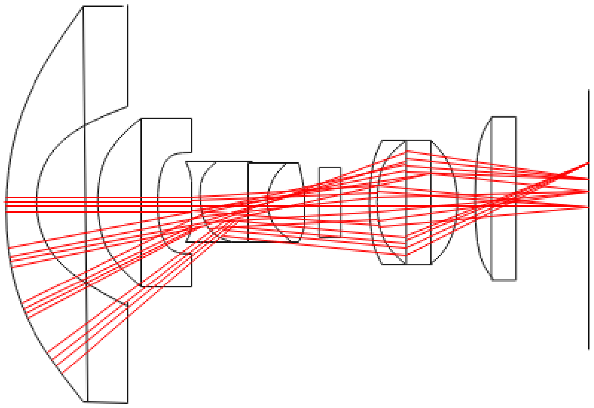

Figure 3: Optical path diagram of fisheye lens.

2.2 Bionic Fisheye Lens System

In the compound eye visual system, in addition to the large field angle and high motion acuity of the Drosophila compound eye, the compound eye visual system of some decapods also has superior optical performance. For example, the biggest difference between lobster compound eyes and Drosophila compound eyes is the difference in imaging principles. The compound eye structure of lobsters is a reflective superimposed compound eye. Moreover, the lobster compound eye forms an image by reflection, unlike the Drosophila compound eye, which is focused by refraction.

The reflective superimposed compound eye structure of lobster has great advantages: (1) the reflective superimposed compound eye of lobster has a large field of view; (2) the reflective superimposed compound eye does not produce axial chromatic aberration and vertical chromatic aberration; (3) multi-channel is helpful for imaging at any point of the retina; (4) the spherical symmetry of the compound eye of lobster, the imaging effect of any angle of incident light is theoretically the same.

In order to analyze the imaging characteristics of the lobster reflective compound eye structure, two hypotheses are proposed: (1) the lobster reflective compound eye is a perfect spherical surface; (2) the channel of the lobster reflective compound eye is an infinitely narrow channel, as shown in Figure 4.

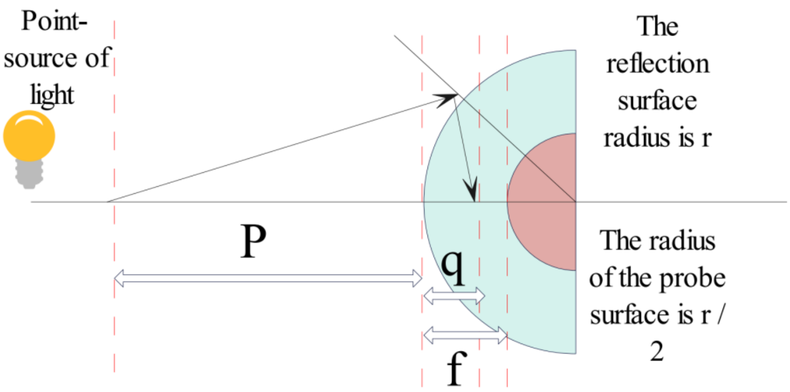

Figure 4: Imaging characteristics of lobster compound eyes.

The light is focused by reflection, and the reflection angle is equal to the incident angle. The lobster reflective compound eye can be compared to a thin lens for imaging analysis using the ABCD transfer matrix method, namely:

$$\begin{bmatrix} x_2 \\ \theta_2 \end{bmatrix} = \begin{bmatrix} A & B \\ C & D \end{bmatrix} \begin{bmatrix} x_1 \\ \theta_1 \end{bmatrix} \tag{2.16}$$

$$\begin{bmatrix} AB \\ CD \end{bmatrix} = \begin{bmatrix} 1-\frac{2q}{r} & p-q-\frac{2pq}{r} \\ \frac{2}{r} & \frac{2p}{r}+1 \end{bmatrix} \tag{2.17}$$

$$p-q-\frac{2pq}{r}=0 \tag{2.18}$$

At the same time, substituting the focal length $f=\frac{r}{2}$ into formula (18), there will be the following lens equation:

$$\frac{1}{p}+\frac{1}{f}=\frac{1}{q} \tag{2.19}$$

The magnification is M, that is:

$$M=\frac{q}{p} \tag{2.20}$$

According to the structural characteristics of the lobster reflection channel, a corresponding model is established in Solid works software, as shown in Figure 5. Figure 5 is a part of the overall model. The reflection channel is circular, with a total of 51 layers, the number of channels in each layer satisfies $n=6\times(m-1),m\geq 2$, the angle between adjacent channels is 1.5°, and the achievable field of view is $120^{\circ}\times 120^{\circ}$.

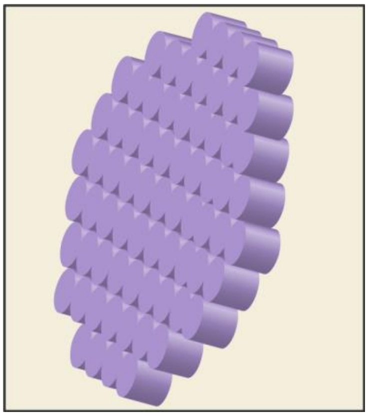

Figure 5: Solid works model of lobster compound eyes.

The above model is imported into Zemax software for ray tracing, as shown in Figure 6. The light can be divided into three parts from the figure. (1) The first part of the light has not been reflected and passed directly through the middle. (2) The second part of the light is collected together after reflection. (3) Even if the third part of the light is reflected, it cannot converge together. In general, this structure is very wasteful of light, the amount of light in the dark environment is very small, and even if the field of view is enlarged, it is difficult to observe the object.

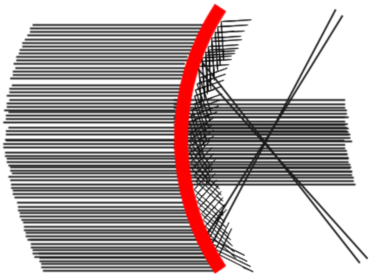

Figure 6: Ray tracing of the compound eye of a lobster.

2.3 Condenser

In the imaging optical system, the ray aberration diagram, the spot diagram, the field curvature and distortion grid diagram, and the optical transfer function diagram (MTF) are used to evaluate the quality of a system. Similarly, there are corresponding evaluation criteria in non-imaging optics, such as: theoretical maximum concentration ratio, concentration ratio, uniformity of light spot, etc.

(1) Theoretical maximum concentration ratio

If it is assumed that a series of energy losses caused by scattering, reflection, and absorption loss of optical materials are ignored during the propagation of light in the medium, and propagate in an ideal non-imaging optical system, the concentrator will reach the theoretical maximum concentration ratio, that is, the theoretical maximum concentration ratio.

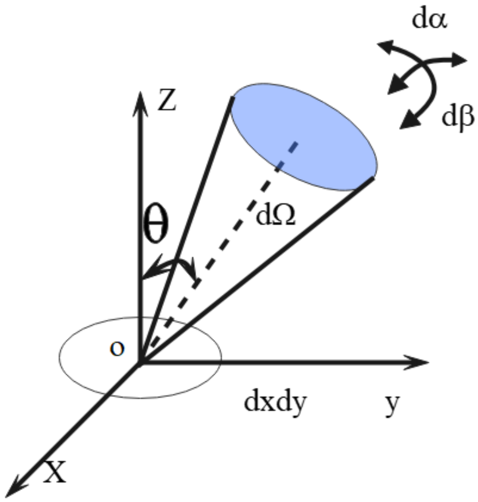

Figure 7: Geometrical schematic diagram of etendue.

In order to verify the theoretical maximum concentration ratio of the concentrator, the concept of etendue is introduced here. The etendue surface describes the geometric properties of a light beam. As shown in Figure 7, the size of the cross-sectional surface element of the beam is dxdy, and the range of the exit angle is dαdβ. If an ideal concentrator has no energy loss, the following formula holds:

$$n^2 dxdyd\alpha d\beta = n^2 dAd\alpha d\beta = n^2 dA\cos\theta d\Omega \tag{2.21}$$

Integrating the above formula, we get:

$$E = n^2 \iint cos\theta dAd\Omega \tag{2.22}$$

In an ideal concentrator, according to the law of etendue conservation, we get:

$$E = n^2 \iint cos\theta dAd\Omega = n'^2 \iint cos\theta' dA' d\Omega' \tag{2.23}$$

Figure 8 shows the theoretical model of an arbitrary two-dimensional concentrator.

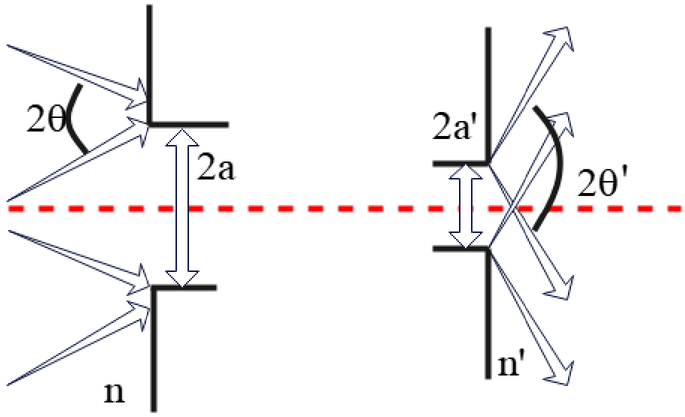

Figure 8: Theoretical model of 2D concentrator.

According to formulas (22) and (23), it can be known that:

$$E = \int ndydL = ny\sin\theta \tag{2.24}$$

$$na\sin\theta = n'a'\sin\theta' \tag{2.25}$$

At this time, the concentration ratio is:

$$\frac{a}{a'} = \frac{n'\sin\theta'}{n\sin\theta} \tag{2.26}$$

In formula (26), because of $2\theta' \le \pi$, the theoretical maximum concentration ratio is:

$$C_{max} = \frac{n'}{n\sin\theta} \tag{2.27}$$

In a three-dimensional axisymmetric concentrator, the theoretical maximum condensing ratio is:

$$C_{max} = \left(\frac{n'}{n\sin\theta}\right)^2 \tag{2.28}$$

(2) Concentration ratio

The main reason for the concept of non-imaging optical system is to focus light. Condensation ratio is an important evaluation criterion for non-imaging optical systems, and the size of the concentration ratio can directly reflect the performance of the condenser. The concept of concentration ratio is various, and the concentration ratio mentioned here refers to the most widely used geometric concentration ratio and optical concentration ratio.

The input port receives the incident light, and after passing through the condenser, the light exits from the output port. The geometric concentration ratio is defined as: the ratio of the area of the entrance to the exit of the condenser, namely:

$$C_{geo} = \frac{S}{S'} \tag{2.29}$$

In formula (29), S represents the condenser entrance area, and S' represents the condenser exit area. From this point of view, the geometric concentration ratio is only related to the area of the entrance and exit, so the concentration ratio must be described under ideal conditions: (1) the light energy has no loss in the process of propagating through the concentrator; (2) when the light enters/exits at the entrance/exit port, the spot should be kept absolutely uniform.

In order to truly understand the concentration ratio of the condenser, researchers have introduced the optical concentration ratio. The optical concentration ratio is defined as the ratio of the radiant energy density per unit area of the exit port to the energy density per unit area of the entrance port after passing through the concentrator, namely:

$$C_{opt} = \frac{W'}{W} \tag{2.30}$$

$$C_{opt} = C_{geo} \cdot \eta \tag{2.31}$$

In the formula, C_{opt} represents the optical concentration ratio, C_{geo} represents the geometric concentration ratio, and η represents the concentration efficiency.

(3) The uniformity of the spot

Edge ray theory has good flexibility and applicability in designing concentrators, but for 3D modeling problems, edge ray theory has certain defects. In view of the limitations of the edge ray theory, researchers have proposed the streamline method by referring to the relevant theories of fluid mechanics. The theory represents the propagation of light in terms of streamlines, namely:

$$nds = p_1 dx_1 + p_2 dx_2 + p_3 dx_3 \tag{2.32}$$

In formula (32), n is the refractive index, ds is the optical path of the light in the medium with the refractive index n, $x = (x_1, x_2, x_3)$ is the generalized coordinate of the light, and $p = (p_1, p_2, p_3)$ is the generalized momentum of the light. If it is assumed that energy conservation is maintained before and after the light passes through the concentrator, the components of the vector flow J in all directions in space can be expressed as:

$$J_1 = \int d p_2 dp_3 \tag{2.33}$$

$$J_2 = \int d p_1 dp_3 \tag{2.34}$$

$$J_3 = \int d p_1 dp_2 \tag{2.35}$$

The surface integral of the vector flow J is:

$$J = \int \vec{J} d\vec{A} \tag{2.36}$$

The streamline method uses the principle of conservation of vector flow to make up for the defects of the edge ray theory. The streamline method uses a large number of vector calculus operations, which is very complicated in the solution process.

The basic premise of the design of the beam section method is the same as that of the streamline method. It is assumed that the condenser is an ideal optical system, there is no energy loss, and energy conservation is maintained before and after. The beam section method is suitable for use in point light sources or in the design of condensers where the size and shape of the light source are negligible. The point light source radiates outward at a solid angle and illuminates a certain surface. The first reference surface illuminance is E (x, y) and the area is dA.

The second reference surface illuminance is $E'(x', y')$ and the area is dA'. They satisfy the following relation:

$$E(x,y)dA = E'\left(x',y'\right)dA' \tag{2.37}$$

(4) Simultaneous multi-surface design theory

Figure 9 shows a schematic diagram of the design of a transmissive concentrator using the synchronous multi-surface design theory.

E_1E_2 is the light source surface, R_1R_2 is the receiving surface, and P is the point on the outer surface of the concentrator. The light source point E_1 emits an edge ray r_1, which is incident at point P_0 on the front surface of the condenser, exits at point P_1, and is finally received at point R_2. The optical path of light from E_1 to R_2 is:

$$\Gamma = \left[E_1,P_0\right] + n\left[P_0,P_1\right] + \left[P_1,R_2\right] \tag{2.38}$$

In the same way, the optical path of other rays can be solved repeatedly, and then the two-dimensional contour of the concentrator can be obtained by numerical calculation and curve fitting, and finally the final design result can be obtained by axisymmetric rotation.

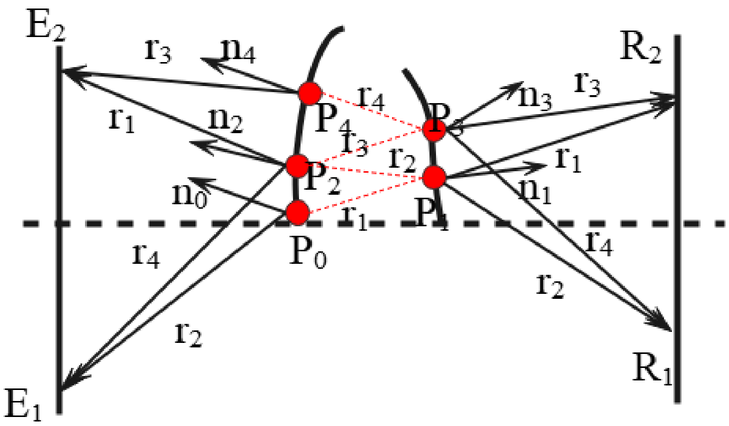

Figure 9: Schematic diagram of the design of the transmission concentrator.

3 INTELLIGENT MANAGEMENT OF COLLEGE STUDENTS BASED ON EXPERT SYSTEM

The system consists of front-end cameras, dedicated video network, video monitoring center, application terminal and other parts, as shown in Figure 10.

The system is mainly composed of video data management, model management, classroom management, behavior analysis and early warning, data statistical analysis and other functional modules. Among them, model management includes model training, model classification, model iteration, etc., and is a key link in the technical design and development of this system. Classroom management mainly binds classroom video recordings to teachers, including main fields such as teacher information, class information, course information, and teaching time. The technical architecture is shown in Figure 11.

Based on the above model, the intelligent management system of college students based on the expert system proposed in this paper is simulated and verified, and the effectiveness of the system in this paper is counted, and the results shown in Table 1 are obtained.

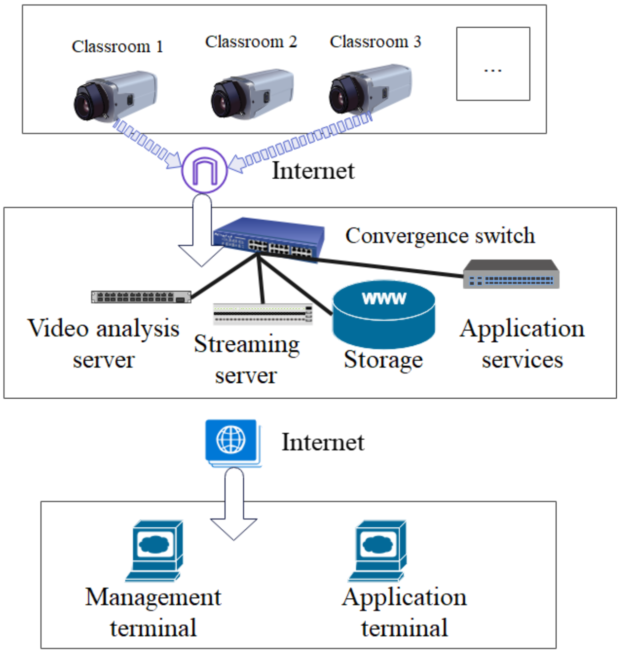

Figure 10: System framework.

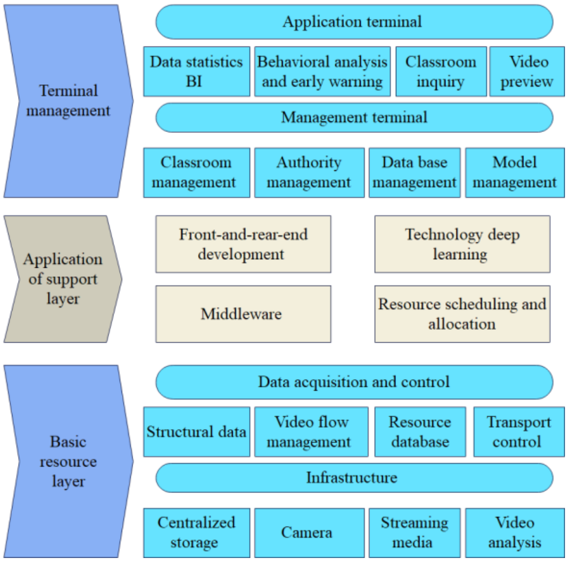

Figure 11: Technical architecture.

NO.	Management effect	NO.	Management effect	NO.	Management effect
1	79.65	18	78.51	35	82.82

2	83.91	19	80.22	36	85.17
3	80.12	20	83.65	37	84.03
4	83.00	21	84.35	38	84.00
5	78.93	22	79.31	39	82.41
6	78.92	23	81.56	40	81.61
7	78.58	24	81.90	41	80.63
8	85.01	25	81.84	42	83.43
9	79.99	26	83.61	43	85.29
10	85.72	27	84.86	44	81.53
11	80.18	28	84.51	45	80.34
12	78.51	29	84.40	46	82.76
13	84.82	30	80.84	47	78.36
14	85.66	31	82.47	48	84.53
15	80.01	32	82.59	49	83.73
16	82.77	33	85.87	50	79.66
17	82.86	34	82.21	51	82.79

Table 1: The management effect of intelligent system of college students based on expert system.

4 CONCLUSIONS

There are many ways to manage students in School. Among them, using the philosophical perspective to guide the management of college students should use the world outlook and methodology, and use the dialectical unity concept to highlight the meaning of practice. Moreover, practice is the only criterion for testing the truth, and it is also the source of all management work. The management work in School is mainly summed up through the long-term work experience of managers. In addition, the development of student management mainly includes the management of students' study and life. In essence, the results of student management are closely related to the stability of the school, and the quality of personnel training is closely related to the long-term development of the school. This paper combines the expert system to construct an intelligent management system for college students to promote the management effect of School. Through the experimental analysis, it can be seen that the intelligent management model of college students based on the expert system proposed in this paper can effectively improve the management efficiency of college students.

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