Application and Research of Media Information Retrieval Technology in Student Work Management Systems

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ABSTRACT

The development of the internet has promoted the improvement of media information retrieval technology, which has also been applied to the work management of college students. This paper mainly adopts media information retrieval technology, studies the function principle of this technology, and establishes a student work management system based on media information retrieval technology. Then, this system is applied to the student management of different grades, and the problems existing in the student work management of each grade are compared and analyzed, and the corresponding improvement measures are put forward. The results indicate that the student work management system can improve the efficiency of student work management among colleges and universities in different grades.

KEYWORDS

Application, Management, Media Information, Retrieval, Students

With the increasing progress of information technology, the network covers every corner of higher vocational colleges, and information tools have become the main carrier for teachers and students to contact. Student management is an important part of higher vocational education, and counselors are the main implementers of students' daily management. Vigorously promoting the information platform of higher vocational colleges' student management based on network application can have higher vocational colleges' students' work level and the overall quality of students' work department is also improved (Feng et al., 2021). Student management is an important part of education management in colleges and universities, and media information retrieval technology, as an emerging means of information acquisition and analysis, has an important role in promoting student management (De & Pedersen, 2021). This technology can help schools quickly obtain information about students' comments and activities on social media, conduct public opinion analysis and early warning, provide personalized care and guidance, and optimize the integration and delivery of educational resources. Therefore, the introduction of media information retrieval technology can help improve the efficiency and accuracy of student management, which is of positive significance to the improvement of school education management (Drenkow et al ., 2021).

In the traditional student work, the collection, statistics, and transmission of information are manually completed by relying on the original methods. A notice should be repeatedly notified to counselors and class teachers, and then to students. There is too much repetitive work, low efficiency, and poor timeliness. At the same time, there is a lack of unified planning for student management informatization, forming an "information island." Due to the lack of unified macroplanning of student management informatization by the school student management department, management institutions at all levels often adopt different working methods and different working standards (Lv & Li, 2021). "Segmentation" directly leads to communication obstacles between management institutions, forming "information islands." There is a lack of coordination between them, there is no unified standard, and the completed management work resources cannot be shared and coordinated, resulting in repeated construction and low overall level. Real-time, intelligent, and simple work management for students is made possible by the intelligent advantage of media information retrieval technology. Students can be effectively managed with the use of an online platform's management input, which will save time, cut down on needless hassles, and increase the effectiveness of student management.

In the management of student work, it is necessary to clarify the important content of student management, starting with attendance management, teaching management, student information management, dormitory management, message board information management, etc. College counselors should master the dynamic information of students in more detail on the student management system module (Liu, 2021). Once they find that students have problems in thought, study, and life, college counselors should carry out targeted management on students in the shortest time. The system administrator function can start from user authority management, function module management, and database management. The functional structure design of the head teacher can be started from the dormitory information management of students and the attendance information management of students (Tong et al., 2016). The design of teacher function module includes attendance information query, dormitory information query, teaching information query, student information query, and message information query. The student function module includes attendance information query, dormitory information query, teaching information query, message information management, and student information management (Liu et al., 2022).

With the optimization of student management, the current student management system should include the following modules: Party and league work management, reward and discipline violation management, student aid management, student comprehensive management, student daily affairs, cadre management online, cultural activity management, student summary, daily goods management, and fixed assets management.

- **Party and League Work Management:** This module includes party member development management and party and league organizational life (Wang, 2021):
  ◦ Party member development management can input the development information of a single student, including the time of submitting the application for party membership, the completion time of the party school, the completion result of the party school, the time of organization selection, contacts, and political review. Party member development query and party member development statistics can set conditions, query, and extract the results that meet the set conditions.
  ◦ Party and league organizational life can record the organizational life carried out and save relevant pictures and videos. Through the function of this module, counselors can timely understand the work data information of party branch recruitment and the personal basic information of activists, probationary party members, and party members (Yu et al., 2020). In the work of student caucuses, attention needs to be paid to the following points: Strengthening the ideological guidance of students, standardizing the construction of organizations, highlighting the orientation of problems, strengthening team building, and

complying with laws and regulations. These measures will help to improve the effect and quality of student party work.

- **Reward and Discipline Violation Management:** This module includes the declaration of collective awards, the declaration of awards and scholarships, special awards and scholarships, and students' disciplinary punishment. Scholarship evaluation, excellent individuals, advanced class selection, and other work that is directly related to the interests of students is an important part of the work of counselors (Dong, 2021). The statistics of this module facilitate the dynamic observation and tracking of students' various types of excellence evaluation and various violations of discipline, and can provide the basis for students' daily performance during the investigation of joining the party.
- **Student Aid Management:** This module includes student assistance management, work study management, and student loan management. Through the introduction of these data, it provides digital evidence for the evaluation of students and work decisions. It is important to pay attention to poor students, establish various types of inspirational scholarships, grants, poverty subsidies, and other files for them, set up work study posts for poor students, and further do a good job in helping the poor through understanding their various performances and abilities, so as to provide reference for solving the psychological problems of poor students (Shen & Wang, 2021).
- **Student Comprehensive Management:** This module includes student military training management, student examination management, and employment guidance management. The employment guidance management system can record the employment data of each graduate into the database, and the counselors can timely grasp the overall employment progress, automatic statistics, and analysis of the results, which improves the accuracy. This module includes the basic data statistics of several important links from enrollment to graduation, which greatly reduces the statistical workload (Dhar & Roy, 2019; Fabrianto & Faizah, 2020).
- **Student Daily Affairs:** This module includes student marriage, going abroad, student insurance, student file management, and special student management. Using this module can manage students' daily affairs more comprehensively (Jiang & Shi, 2021).
- **Cadre Management Online:** This module includes student cadre management, student cadre data, and student cadre management. On the one hand, this module can count the data of student cadres, and, on the other hand, it can summarize the data of student cadres, including cadre training, cadre assessment, cadre transfer, and scientific research. All data need not to be counted repeatedly during the year-end assessment, so as to observe the dynamics of the overall cadre team.
- **Cultural Activity Management:** This module includes students' cultural and sports activities, cultural lectures and forums, activity site management, and site use. This module records the performance of students' participation in activities, and the statistics of these data is convenient to provide a basis for students to get extra points in various excellent evaluations (Schroeder et al., 2008).
- **Daily Goods Management and Fixed Assets Management:** This module allows to register and manage the goods in and out of the warehouse, count the existing goods, and manage and scrap the fixed assets.

In recent years, with the increasing popularity of multimedia collection equipment and the rapid development of data storage, Internet, and other technologies, multimedia data such as images and videos have become the main media for people to obtain and disseminate information, and are penetrating into people's work and life in an all-round way (Li et al., 2021). Multimedia data have a huge scale and explosive growth, and their potential value is huge. They are an important part of the national big data strategic resources. Integrating media information retrieval technology with student assignment management systems can improve student learning efficiency and assignment quality. By integrating search tools, personalized recommendations, and automatic citation generation, students can more easily find information, access customized resources, and improve their academic writing

skills. At the same time, data mining can provide teachers with more comprehensive assessment and feedback to promote teaching quality. In summary, this integration will provide students and teachers with a more efficient, convenient, and personalized learning and teaching experience.

Information retrieval is the process of querying the information set of documents or records to retrieve the information content that can meet the information needs or interests of individuals or groups. Information retrieval technology is applied to the matching and comparison of questioning and document representation. According to the characteristics of the retrieved document set and its indexing method, it can be divided into two categories, namely, accurate matching technology and local matching technology (Chakraoui et al., 2022). Accurate matching requires that the demand patterns contained in the literature (i.e., identification) must match the expressed patterns completely before they can be used as hit literature. At present, the Boolean logic retrieval, original text retrieval, and string retrieval technologies used by most retrieval systems belong to this category (Li, 2021).

Media information retrieval completely virtualizes the information entity.In a networked environment, knowledge information can be conveyed through a variety of documents because these carriers can be easily converted to digital form., transmitted worldwide, and readers can browse and download online. In terms of information carriers, digital libraries provide a variety of electronic documents for readers to browse and download online. Electronic documents are stored on storage media in the form of bytes. Therefore, management is completely digital and paperless, and classification, production, and provision need to be carried out through computers. At the same time, as long as the digital library requires a few people to manage huge data resources, its management will also be fully automated (Zeng, 2021).

The problem people face is no longer the lack of multimedia content, but how to effectively retrieve the information they need in the vast multimedia world. Because the traditional database retrieval adopts the keyword based retrieval method, on the one hand, in many cases, the media content is difficult to be fully described with only a few keywords, and the selection of image features as keywords is also very subjective (Spositto et al., 2022). On the other hand, it is difficult for users to convert these information clues into some form of symbols. Therefore, the database system is required to analyze the content of multimedia data to achieve a deeper level of retrieval, that is, the so-called content-based retrieval. In order to better express the problems in the student work management system, in this paper the authors adopt content-based media information retrieval technology.

Content-based retrieval technology is generally used in multimedia database systems, and application systems can also be established separately. From the perspective of content-based retrieval, the system is divided into two subsystems: Feature base generation subsystem and query subsystem. In addition, when extracting features, the corresponding knowledge base is often needed to support the content processing in specific fields (Zhuo et al., 2021).

Yari and Noruzi (2021) established a student management platform based on Internet technology, which helps counselors better manage students and promotes the development of work management in colleges and universities. Zhou et al. (2021) established a student work management platform with multimedia retrieval technology and applied it to the management of students in different grades. Their results showed that the student management platform can promote the all-round development of students and reduce the burden of counselors, which is of positive significance. For improving the management efficiency of college students, Zhao et al. (2021) established a corresponding student management platform based on media information retrieval technology, which teachers and students had highly praised. Ji et al. (2022) compared the management efficiency of students under different student work management systems. Their results showed that media information retrieval technology can improve the management efficiency of students and promote the sustainable development of colleges and universities.

Based on this, in this study the authors investigated the principle function of media information retrieval technology, and established the corresponding student work management system. Then, they applied the student work management system based on media information retrieval technology

to the student management of different grades, they compared and analyzed the work management efficiency of different grades of students, and they put forward the measures to improve the work management of different grades of students. In short, this paper provides a certain reference value for the application of media information retrieval technology in the student management, and promotes the improvement of the efficiency of university management, which is of positive significance.
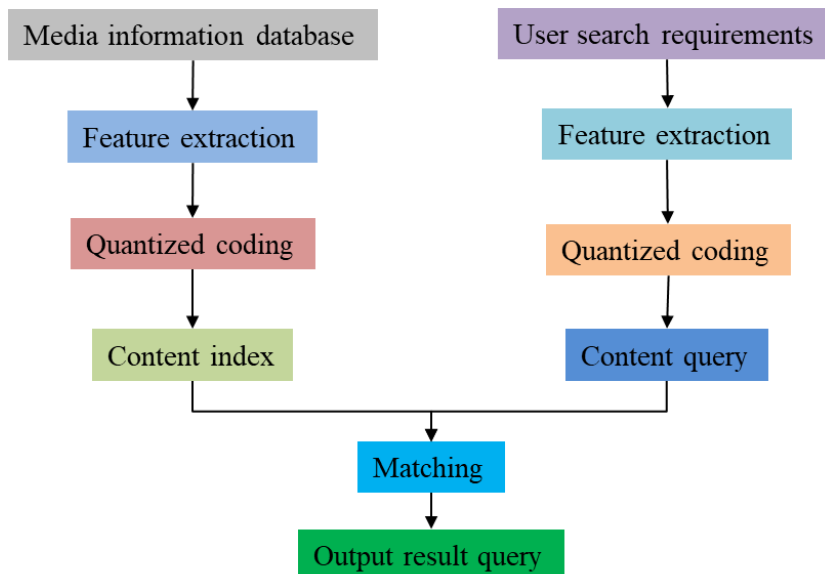
STUDENT WORK MANAGEMENT SYSTEM BASED ON MEDIA INFORMATION RETRIEVAL TECHNOLOGY

Framework of Media Information Retrieval Technology

In the early stages of media information retrieval, the primary focus was on text retrieval, characterized by its simplicity, slowness, and lack of timeliness. With the expansion of multimedia resources, the research of image retrieval, audio retrieval, and video retrieval is also increasing. The primary technique is text retrieval, which is supported by image retrieval, audio retrieval, and video retrieval. Accurate identification allows these methods to more precisely retrieve the needed information, enhancing the precision of media information retrieval technology. Therefore, Figure 1 shows the general architecture of media information retrieval. First of all, the media information retrieval system needs to process the multimedia information in the database, including extracting the descriptive characteristics of the media information, generating structured data expression through quantitative coding, and then establishing the content index between the media information content and structured data. Then, the media information retrieval system processes the retrieval requirements submitted by users, and performs feature extraction, quantitative coding, and other operations on the text, image, audio or video information to be retrieved to generate a standardized content query expression. Finally, the system matches the query expression with the structured data in the database, sorts the index content according to the similarity calculated by the matching model, and outputs the query results that meet the retrieval requirements.

Both feature extraction and quantitative coding are to establish the relationship between multimedia information content and structured data expression. Media information retrieval

Figure 1. Media Information Retrieval Technology Architecture

technology can identify each information feature, effectively extract the useful ability between each feature, and effectively combine it with data expression. For different multimedia information content, the feature extraction process is generally different. The main purpose of feature selection is to correctly identify the same type of content and effectively distinguish different content. Quantization coding is the normalization of extracted features. The commonly used word bag model is to normalize different features into several different categories by means of cluster analysis, and each category is equivalent to a word. Then, the multimedia information content can be quantified by the combination of these words. In the content query, the matching model is used to calculate the similarity between quantitative expressions as the basis for the output of search results.

Function Model of Media Information Retrieval Technology

The classic bag-of-words model is commonly used in media information retrieval due to its simplicity, effectiveness, and versatility. The classic word bag model can quickly identify people's emotional changes and accurately give solutions. It has the advantages of good responsiveness, high sensitivity, and easy to understand and accept. The classical word bag model uses the fixed length histogram of its quantitative features to represent each sample, in which each histogram corresponds to a codeword. The traditional word bag model is efficient, logical, and timely. Key information can be extracted from media retrieval, improving the accuracy of student management. In hard allocation, each feature is quantized to its nearest codeword, while in soft allocation, the weight of each feature to different codewords is calculated. In order to learn the codebook, for the feature vector set $S=\{X_i, i=1, 2, \cdots, N\}$ composed of N samples, clustering operation should be carried out first to divide the feature vector into different clusters. In order to encode the i-th sample, calculate the similarity between each feature vector x_{ij} and each codeword v_k, as the following Equation shows:

$$d\left(x_{ij}, v_k\right) = \exp\left(\frac{-v_k - x_{ij2}}{g}\right) \tag{1}$$

where the feature vector x_{ij} refers to the information of various indicators allocated in the classical bag model, reflecting the accurate recognition ability of things. Parameter g is used to control the quantization process. Hard allocation uses a smaller value (usually $g<0.01$) and soft allocation uses a larger value (usually $g>0.01$). In this paper, the authors chose $g=0.1$.

Then, because of the norm's ability to quickly identify and accurately indicate similarity, it can filter out irrelevant information and increase the function's accuracy. Therefore, the norm is used to normalize the similarity:

$$u\left(x_{ij}, v_k\right) = \frac{d\left(x_{ij}, v_k\right)}{d\left(x_{ij}, v_k\right)_1} \tag{2}$$

This vector describes the similarity between the feature vector x_{ij} and the codeword v_k.

Finally, histogram features can reflect the overall situation of media information retrieval technology, which is conducive to its fluctuations, concise and efficient. Therefore, the similarity of all samples in the feature vector set X_i of the i-th sample is counted to obtain the histogram feature, which is:

$$s\left(X_i\right) = -\frac{1}{N_i}\sum_{j=1}^{N_j}u\left(x_{ij},v_k\right)$$ (3)

These histogram features can be used to describe each sample for further sample retrieval. It should be noted that the training and coding process of the classic word bag model is unsupervised and does not require label data.

A cluster is a set of feature vectors in the classical word bag model, which represents the similarity analysis between feature vectors and has the function of accurate comparison. Therefore, in order to calculate the total energy of the histogram, the histogram feature vector $s(X_i)$ is first clustered into N_T clusters. Importantly, the centroid of cluster k is $c_k=\{k=1, 2, …, N_T\}$. Therefore, the energy of cluster k can be defined as:

$$E_k = \sum_{j=1}^{N_C}\left(p_{jk}\right)^2$$ (4)

where p_{jk} represents the probability that the image of the k-th cluster belongs to category j, and the different aspects of media information retrieval technology in its retrieval process are represented by clusters. It can more accurately reflect the intelligence and time-out of the technology by evaluating them. Its estimated value is:

$$p_{jk} = \frac{h_{jk}}{n_k}$$ (5)

where n_k represents the number of image histograms in the k-th cluster, and h_{jk} represents the number of image histograms belonging to category j and cluster k.

Thus, the total energy of the histogram is:

$$E = \frac{1}{N}\sum_{k=1}^{N_T}n_k E_k = -\frac{1}{N}\sum_{k=1}^{N_T}\sum_{j=1}^{N_C}\frac{\left(h_{jk}\right)^2}{n_k}$$ (6)

The total energy of the histogram indicates the total amount of students and can be used to reflect the detection amount of media information retrieval technology. Thus, in this paper, the authors took the total energy of histogram as the objective function, and the objective is to learn a codebook V that can minimize the total energy of histogram. However, since each $s(X_i)$ is a function of codebook V, the histogram overall energy function is discontinuous for $s(X_i)$. In this case, it is very difficult to directly solve the optimization problem of equation (6).

In order to make the energy function of the histogram continuous, the detection amount for students is continuous. It is necessary to introduce the continuous smooth approximation of energy, which leads to the clustering membership vector q_i. In order to solve this problem, the authors introduced the continuous smoothing approximation of energy. They defined a smooth clustering membership vector $q_i \in R^N T$ for each histogram $s(X_i)$, where:

$$q_{ik} = \exp\left(-s\left(X_i\right) - c_{k2}\right)$$ (7)

Accordingly, the normalized membership vector is:

$$q'_{ik} = \frac{q_{ik}}{q_{ik1}} \qquad (8)$$

Defining the binary variable π_{ij}, then:

$$h_{jk} = \sum_{i=1}^{N} q'_{ik} \pi_{ij} \qquad (9)$$

In this way, the total energy of the histogram can be:

$$E = -\frac{1}{N} \sum_{k=1}^{N_T} \sum_{j=1}^{N_C} \sum_{i=1}^{N} \frac{\left(q'_{ik} \pi_{ij}\right)^2}{n_k} \qquad (10)$$

Taking the above formula as the objective function, the gradient descent method can be used to solve the optimal codebook.

The retrieval technology based on media information is a kind of similarity retrieval, which is different from the exact matching method in conventional database retrieval. The results of media information retrieval are usually not unique or uncertain. Compared with conventional database retrieval, media information retrieval technology can find the acquired information features in time and screen the invalid information, so as to display the useful information features, which is of great significance. Therefore, the retrieval technology based on media information adopts the method of similarity matching to gradually refine. There is a circular process of feature adjustment and re retrieval of the retrieval results in the retrieval process. Figure 2 shows the schematic diagram of student work management system based on media information retrieval.
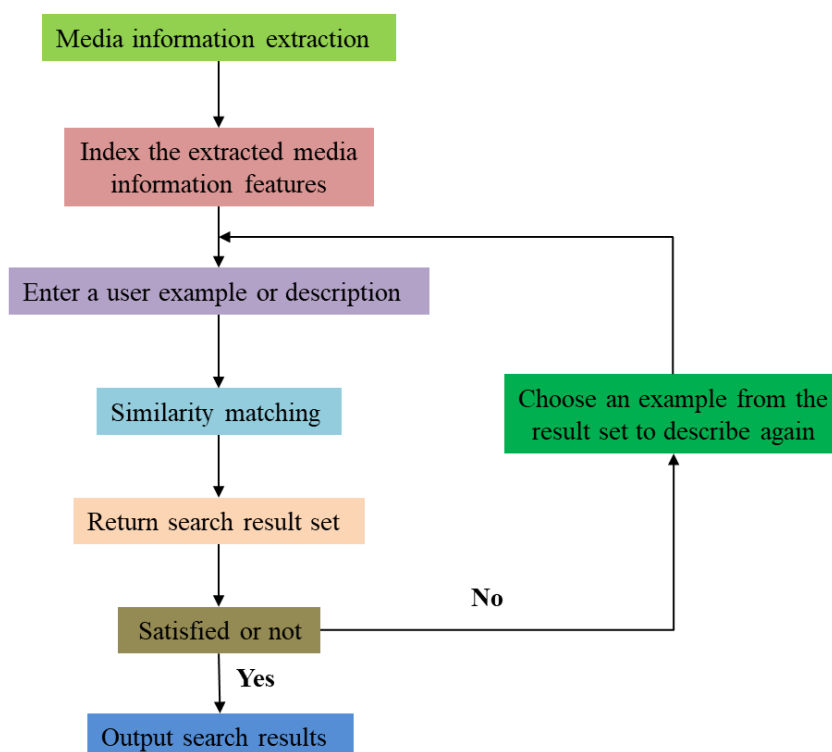
The student work management system uses the question method of example query to query some features that are difficult to describe. Users generally browse and select the examples provided by the system as query conditions. Then, it is possible to find the matching target by constantly modifying the instance. The researchers has to gradually refine the query results through interaction with users. Retrieval has undergone a cyclical process of feature adjustment and rematching, which can meet the requirements of multilevel retrieval. Content-based retrieval systems typically consist of a media base, a feature base, and a knowledge base. The media library contains multimedia data, such as images, videos, audio, and text. The feature library contains objective features entered by users and content features automatically extracted by preprocessing. The knowledge base includes domain knowledge and general knowledge. Knowledge representation can be changed to meet application requirements in different fields, and these databases can meet the requirements of multilevel retrieval.

APPLICATION ANALYSIS OF MEDIA INFORMATION RETRIEVAL TECHNOLOGY IN THE STUDENT WORK MANAGEMENT SYSTEM

Use of Media Information Retrieval Technology in the Student Work Management System of Different Grades

The student management of college counselors is the key of college management and the backbone of sustainable development. After all, college counselors cannot only understand the dynamic
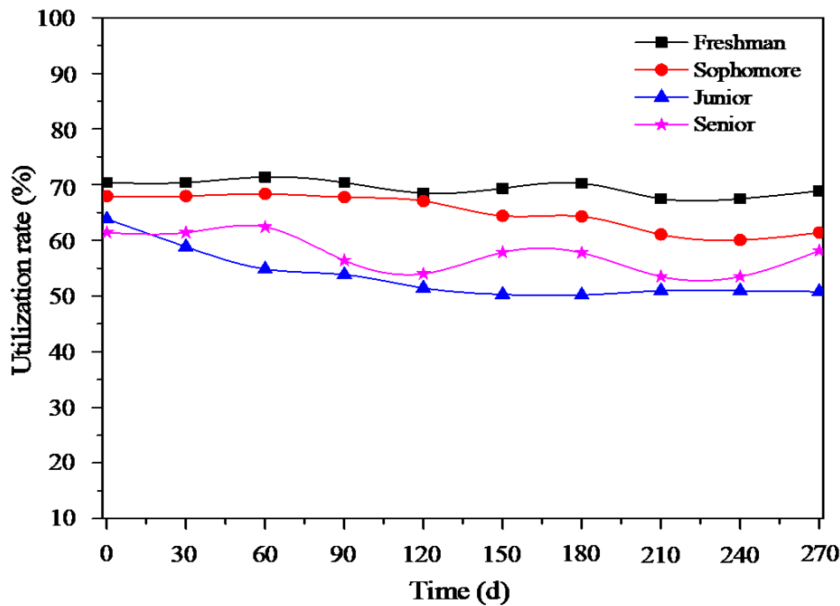
Figure 2. Schematic Diagram of Student Work Management System Based on Media Information Retrieval

information of students' thoughts, study and life, but also cultivate students' good professional quality. Especially in today's diversified development of society, students' concerns are more inclined to social dynamics and Internet technology. If advanced Internet of things technology is applied in the student management system, it will inevitably add icing on the cake for the student management work of college counselors. Media information retrieval technology has many advantages in the application of student management system, which can promote the efficiency and quickness of college counselors in managing students, and reduce the work intensity of college counselors.Therefore, when applying media information retrieval technology to the student management system, it is essential to meet the specific requirements of the system., determine the structure of the student system, and put into the main functions of each module in the system application, which is bound to be the icing on the cake for the student management work of college counselors.

Figure 3 shows the utilization rate of media information retrieval technology in student work management system of different grades. It evidences that, with the increase of teaching time, the utilization rate of student work management system in different grades is different. For freshmen and sophomores, the utilization rate of media information retrieval technology is high, and the fluctuation range is low, while the utilization rate of the third grade shows a downward trend, and the utilization rate of the fourth-grade student management system shows a sharp fluctuation trend. The main reason may be that the main tasks of students in different grades are different. The main tasks of freshmen and sophomores are learning and living, so the utilization rate of student work management system is high, while junior and senior students mainly focus on internship and job hunting, so the utilization rate of student work management system is low. Hence, to enhance the utilization rate of the work management system across various grades, college counselors should establish student work management systems tailored to each student's characteristics based on local

Figure 3. Utilization Rate of Media Information Retrieval Technology in the Student Work Management System of Different Grades
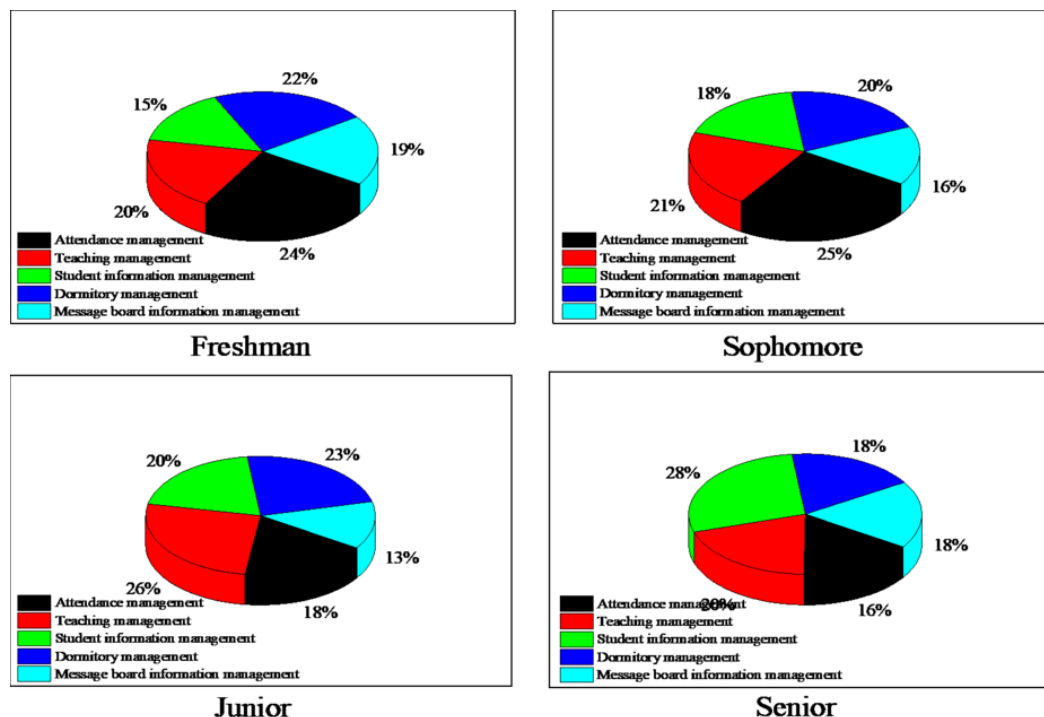

conditions, and track in time, so as to improve the efficiency of student management and promote the common progress of students and schools.

Design of Media Information Retrieval Technology in the Student Work Management System of Different Grades

The comprehensive design of a student management system utilizing media information retrieval technology should outline the module structure, beginning with attendance management, teaching management, student information management, dormitory management, and message board information management. College counselors, as administrators, should have a detailed understanding of students' dynamic information within the system. When issues related to students' thoughts, studies, or daily life arise, counselors must promptly implement targeted management strategies. System administrators can oversee user authority management, function module management, and database management.

Figure 4 shows the design and management of media information retrieval technology in student work management system of different grades. It is evident that the proportion of design management of student work management system in different grades is different. Among them, freshmen and sophomores pay more attention to attendance management, junior students' work management system accounts for the highest proportion of teaching management, and senior students pay more attention to student information management. It is worth noting that the proportion of message board information management in the four grades is low. The main reason may be that the learning tasks and life planning of students in each grade are different. Freshmen and sophomores mainly focus on learning, while sophomores are the key stage of learning professional courses, and sophomores strive to find jobs and write graduation thesis. Thus, it is crucial for college counselors to tailor the student work management system to the specific conditions of each grade, comprehending the primary responsibilities of students in each grade. By doing so, the design of the student work management system can effectively enhance the management efficiency of students across colleges and universities.

Figure 4. Design and Management of Media Information Retrieval Technology in the Student Work Management System of Different Grades
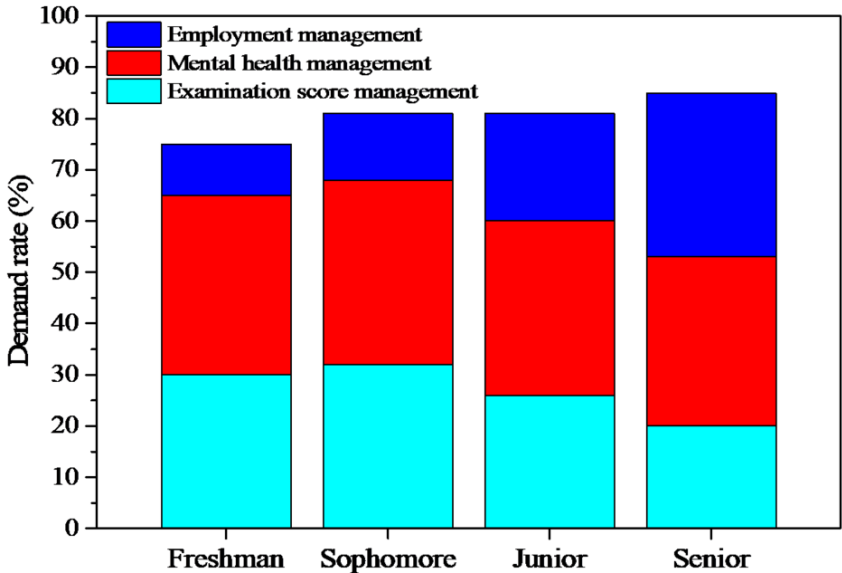

Student Demand of Media Information Retrieval Technology in the Student Work Management System of Different Grades

With the construction of information technology in colleges and universities, school administrators and teachers have long been separated from the traditional paper-based way to record student information. On the other hand, as higher education in China has developed very quickly in recent years, both the enrollment rate and educational spending have increased dramatically. Encouraging a large number of professional students to enroll in colleges and universities is imperative in order to develop the talent that the nation needs. On the contrary, the informatization construction of schools has not been matched with it. Although most colleges and universities have various systems to assist daily management or teaching management, such as educational administration system, course selection system, and library system, these systems are often independent and their functions are not perfect. Meanwhile, the management of students' examination results, mental health management, and employment management have not been adjusted, and the development is much lagging behind. Using the combination of two technologies to analyze and study the original data is helpful for improving the modernization of education and educational administration of colleges and universities, more conducive to students' employment and future life growth, so that students can make contributions to society and the country after graduation, and realize the value of their own life.

Figure 5 shows the demand rate of media information retrieval technology in student work management system of different grades. It evidences that freshmen, sophomores, and juniors mainly need examination score management and mental health management, and the proportion of examination score management and mental health management in sophomores is the highest. The

Figure 5. The Demand Rate of Media Information Retrieval Technology in the Student Work Management System of Different Grades
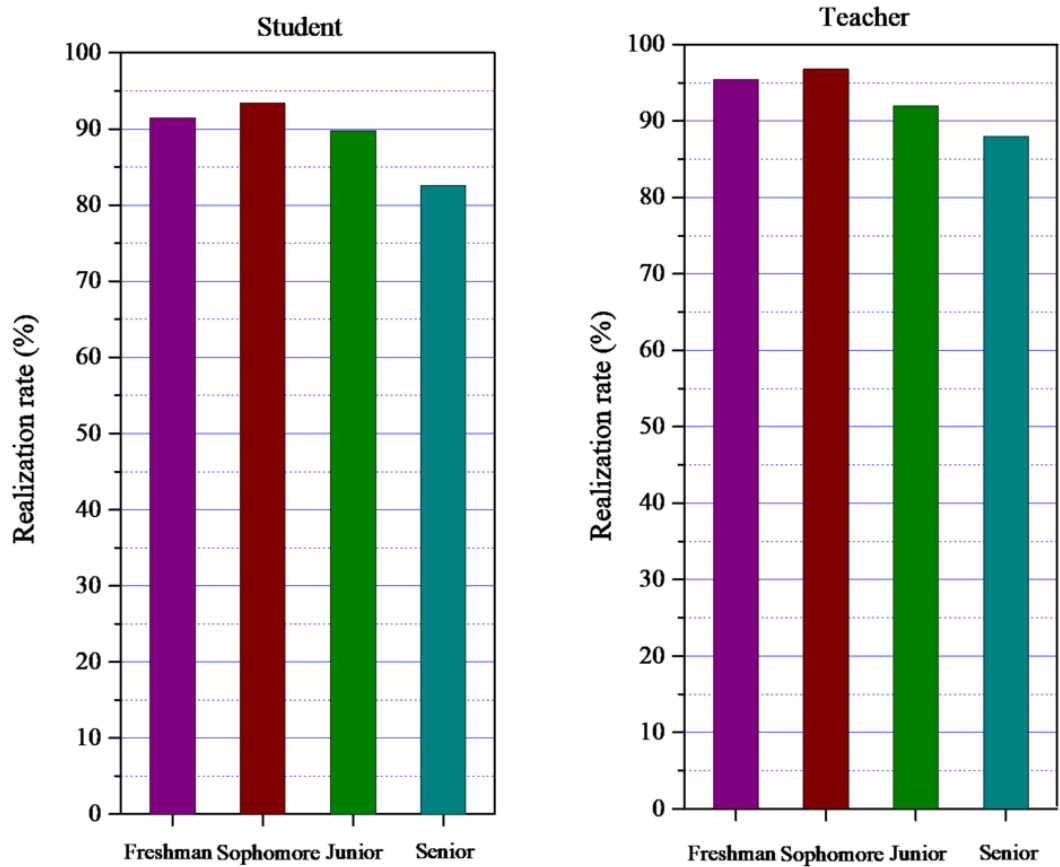

employment management in the senior student management system is the highest, and the proportion of examination score management is the lowest. The main reason for this phenomenon is that the main task of freshmen, sophomores, and juniors is learning, accompanied by certain psychological pressure, therefore, institutions must enhance the management of these two aspects. The fourth grade is characterized by employment pressure and psychological challenges stemming from job hunting and completing graduation theses. It is imperative to implement corresponding measures for employment management and mental health management. Hence, to enhance management efficiency, college counselors must concentrate on the primary issues and incorporate them into the student work management system based on the particular requirements of students in each grade. Only in this way can they help to improve the work management efficiency of students in different grades and promote the progress and development of colleges and universities to a certain extent.

Implementation Rate of Media Information Retrieval Technology in the Student Work Management System of Different Grades

The main objects of the student system are the management personnel of the student management department and the secondary department and the main body of the students themselves. Therefore, the design principles are based on the following points: First, it can ensure the interactivity of complex functions and the ease of use of general functions; second, it can simplify some client programs; third, it can ensure the security of data, especially the operation of modifying the database and adding new records; in addition, it makes the system development layout reasonable and easy to maintain. The foundation of the student work management system is the student information management system, which covers all the data information generated by students in school. At the same time, student information management is the most primitive and basic work. Through this management system, teachers and students can clearly know their own implementation, which can save teachers' energy.

Figure 6 shows the realization rate of media information retrieval technology in student work management system of different grades. It highlights that the implementation rate of students and teachers in the student work management system is different, and the implementation rate of teachers

Figure 6. Realization Rate of Media Information Retrieval Technology in the Student Work Management System of Different Grades

in different grades is higher than that of students. At the same time, for freshmen, sophomores, and juniors, the implementation rate of student work management system is higher than 90% for both students and teachers, and the implementation rate of sophomores is the highest, while the implementation rate of seniors is the lowest. The main reason for this phenomenon may be that the tasks of students in different grades are different. The main task of sophomores is to study professional courses. Sophomores are in the stage of exploratory learning, and sophomores begin to pay attention to information such as looking for a job. Sophomores are in the critical period of writing graduation thesis and looking for a job, and the work tasks of teachers and students in different grades are different. Therefore, this also leads to the difference in the implementation rate of students in different grades in the student work management system.

SATISFACTION ANALYSIS OF MEDIA INFORMATION RETRIEVAL TECHNOLOGY IN THE STUDENT WORK MANAGEMENT SYSTEM OF DIFFERENT GRADES

The information management is a complex project, involving students, teachers, administrators, and many other aspects. Based on media information retrieval technology, it is possible to not only have a deeper understanding of the relevant knowledge of data warehouse and data mining, but also further

consolidate the specific process of project development, furthermore, this endeavor aims to foster the advancement of scholars' theoretical expertise and enhance their research capabilities. Looking ahead, it is anticipated that these efforts will lead to further progress in the future., business-based data mining algorithm is the focus of research, and a deeper understanding of the needs of university information construction, technology and business will be better combined to develop a perfect system.

Figure 7 shows the satisfaction of media information retrieval technology in the student work management system of different grades. It evidences that the satisfaction of teachers and students in different grades is different, and the satisfaction of teachers is higher than that of students. For freshmen, sophomores, and juniors, the fluctuation of job satisfaction of student work management system is low, while the fluctuation of teacher and student satisfaction of seniors is high. The average satisfaction of media information retrieval technology in the student work management system of different grades (Figure 8) shows that the average satisfaction of freshmen and sophomores is higher

Figure 7. The Satisfaction of Media Information Retrieval Technology in the Student Work Management System of Different Grades
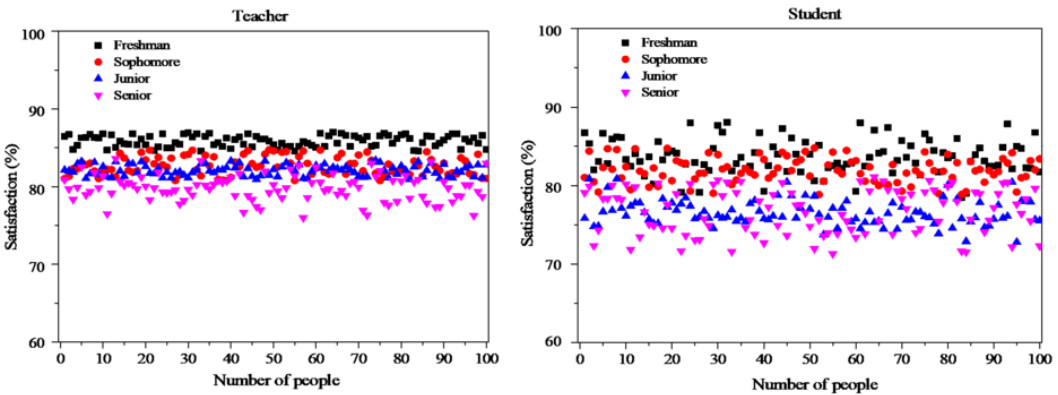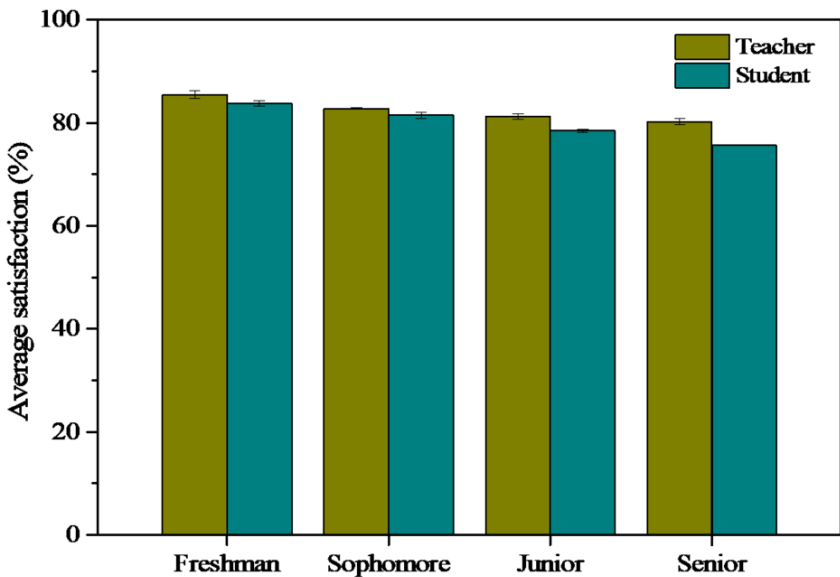

Figure 8. The Average Satisfaction of Media Information Retrieval Technology in the Student Work Management System of Different Grades

than 80%, while the average satisfaction of seniors is the lowest. The possible reason is that the teaching and learning tasks of teachers and students in different grades are related, which will change the satisfaction of teachers and students with the student work management system. Therefore, for improving the satisfaction between teachers and students, it is advisable to adjust measures to local conditions, divide tasks by the actual situation, and maximize the management efficiency.

CONCLUSION

Media information retrieval technology has the advantages of fast response, high accuracy, and accurate retrieval information. It is widely used in the management system of major universities or companies. In this paper, the authors adopted media information retrieval technology, studied the function principle and model of this technology, and established a student work management system. Then, they applied this system to the work management of students in different grades. By analyzing the advantages and disadvantages of student work management in different grades, the authors put forward targeted measures to improve student work management, which is of positive significance. As a whole, this paper provides technical and experimental support for the student work management of major colleges and universities, which is helpful to improve the efficiency of student work management.

DATA AVAILABILITY

The figures used to support the findings of this study are included in the paper.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

FUNDING STATEMENT

ACKNOWLEDGMENT

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