



## REVIEW

# Research on Fire Safety Management System in Colleges and Universities

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### ABSTRACT

The smooth implementation of the fire safety management system in colleges and universities can not only further regulate the fire safety management of colleges and universities, but also prevent and reduce fire hazards and ensure the safety of life and property of teachers, students and employees in higher education institutions. This paper starts with the current situation of fire safety management in colleges and universities, combined with the laws and regulations of the Higher Education Institutions of Higher Education. The paper introduces the key points of the construction of fire safety management system in colleges and universities, and makes a simple exploration of the fire safety management system of colleges and universities from the aspects of innovative safety publicity and education mode, perfecting safety management platform and strengthening enforcement control.

## 1. Introduction

The term “fire protection” mainly refers to the elimination and prevention of floods and fires.

In the narrow sense, fire protection also refers to the elimination and prevention of fires, that is, fire prevention and control work for fire. “The fire and water are ruthless” and “the fire is fiercer than the tiger” have all described the dangers of fire and the threat to people’s lives. Colleges and universities bear the important task of cultivating high-level talents for the motherland and society. It is of great significance to strengthen the fire safety management of colleges and universities and to construct a sound fire prevention and control system for colleges and universities.

## 2. Current Situation and Problems of Fire Safety Management in Colleges and Universities

### 2.1 Insufficient Fire Safety Education

In the current stage of the development of colleges and universities, the overall education management model of colleges and universities is constantly changing and optimizing. In the process of fire safety education management, advanced technology is not used for education management. The too lagging and rigid college fire education management model not only affects the smooth progress of fire safety education management in colleges and universities, but also can effectively improve the fire safety awareness

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and fire prevention capabilities of college teachers and students and employees.

## 2.2 The Fire Protection System Is Not Perfect

At this stage, there is no relatively perfect fire safety management system within the university. Although the legal representative of the university has clearly defined the duties of supervision of the fire protection system in various departments within the university, however, at this stage, the supervision and management mechanism of colleges and universities still use the traditional housing safety management system, or blindly learn from the fire safety management system of other universities. The overall fire safety management system is theoretically lacking and is not suitable for itself. Coupled with the lack of effective punishment measures, it also directly led to the frequent occurrence of unstable fires inside the university.

## 2.3 Missing Fire Safety Enforcement Mechanism

The fire safety enforcement mechanism is the basis for the smooth progress of the university fire safety management system. At this stage, colleges and universities have not set up a perfect fire safety system implementation mechanism, which leads to the lack of scientific management of the fire management system. The lack of specific professional measures cannot guarantee the smooth operation of the fire safety management system.

## 3. Key Points in the Construction of Fire Safety Management System in Colleges and Universities

Firstly, according to the relevant provisions of the “Fire Safety Regulations of Colleges and Universities”, colleges and universities should improve the fire awareness of internal teachers and students and employees as the main work, further strengthen the publicity and education management of fire protection education in colleges and universities, and provide a basis for the smooth promotion of fire safety management system.

Secondly, colleges and universities can formulate supporting incentive mechanisms based on the previous fire safety management mechanism. In order to coordinate with the university security agencies, student departments and other departments to closely organize, combined with the supervision and management of college counselors to ensure the implementation of the fire safety management system.<sup>[1]</sup>

Finally, in the implementation process of the university fire safety management system, the existing micro-curriculum learning platform and the educational administration system are two modules that are separated independently. In addition, the existing university network environment cannot guarantee the smooth operation of the micro-class fire safety education platform. Therefore, relevant departments of colleges and universities should pay attention to promoting the cooperation between the fire protection agencies and the internal management departments on the publicity platform of the Internet fire safety management mechanism to ensure the professionalism and rigor of the fire safety management system in colleges and universities.<sup>[2]</sup>

## 4. Construction of Fire Safety Management System in Colleges and Universities

### 4.1 Innovate University Fire Safety Education Form

First of all, in the continuous evolution of Internet thinking, network technology has been widely used in various industries, especially in the field of education management. At this stage, China’s colleges and universities have established a preliminary and perfect network education model, such as MyCourse Online “safety micro-accompaniment” and other fire safety network education systems. In MyCourse Online “safety micro-accompaniment” fire safety network education system, by using “Easy Class” as the entrance to implement the safety micro-course education, combined with the setting of the “safety micro-accompaniment” module, it can provide a basis for the smooth operation of the Internet + fire education mode. The “safety micro-accompaniment” online learning mode is characterized by strong interest, rich content and diverse themes. Through animation + graphic + video education, It can explain the fire safety knowledge points for the teachers, students and staff system of the university, and comprehensively analyze the connection between fire safety and property safety and personal safety, so as to ensure that the teachers, students and employees of the university establish the correct fire safety concept.

Secondly, under the new situation, the safety education of university and college students is closely related to the construction of a safe campus and the improvement of the safety awareness of all teachers and students. Therefore, in order to ensure the smooth operation of the university fire safety management system, relevant university administrators can incorporate the micro-course platform

into the overall fire safety education system in the actual safety education management process. In combination with the operation of the official WeChat public accounts of various professional colleges, the platform for micro-course education in colleges and universities will be gradually established and improved. In the micro-course safety education platform of colleges and universities, colleges and universities can comprehensively carry out online education and learning of fire safety micro-course for all teachers and students in colleges and universities by setting up the “Safe Online” column. Based on the college micro-class safety education platform, the “Safety Online” column has the characteristics of strong logic, high interest and novel educational methods, which can effectively improve the fire safety awareness of students, teachers and employees in colleges and universities.

Finally, in the course of the actual fire safety publicity and education work, colleges and universities can also cooperate with the Ministry of Public Security, the Ministry of Education and other professionals to hold a nationwide fire knowledge education conference in the university area. Through the analysis of the fire situation in the near-stage period by the responsible person of the Fire Department of the Ministry of Public Security, combined with specific pictures or videos, explain the correct knowledge of fire prevention, and prompt the teachers, students and employees of the university to truly realize that: “Hidden dangers are in the open fire, prevention is better than disaster relief”. That is, as long as the teachers and students of the university master the basic knowledge of fire safety and establish a sense of safety responsibility in front of the fire, it can effectively avoid the fire.

In the process of Internet technology development, how to use the Internet network to better carry out fire safety publicity work has become the primary task of the fire safety management system in colleges and universities. In order to make better use of the micro-course platform, WeChat public accounts, MyCourse Online “safety micro-accompaniment” and other forms of safety education, in the actual fire safety management system promotion stage, colleges and universities can select micro-course related to fire safety education, or science column to provide sufficient resources for college students to learn online, such as “four understandings and four skills” and so on. Promote education through animation, video + game + graphic security system, transfer the correct firefighting methods, fire alarm procedures, fire prevention measures, correct use of fire extinguishing devices, initial fire suppression or escape methods to the university fire safety

education platform, and simultaneously improve the safety awareness and fire self-help ability of college teachers and students.

#### **4.2 Improve the Education Platform for Fire Safety Management in Colleges and Universities**

On the one hand, in order to ensure the smooth progress of the management of fire education in colleges and universities, colleges and universities should follow the principle of “prevention first, prevent elimination and combination”, conduct surveys on students of various professional colleges, absorb the opinions of students and teachers of various professional colleges, and gradually improve the internal fire safety management system. At the same time, the management personnel of colleges and universities can actively communicate with the representatives of the fire department of the public security department according to their own circumstances, and constantly optimize and improve the internal fire safety management system. On this basis, develop a fire safety management system that is consistent with its own needs.<sup>[3]</sup>

On the other hand, considering the main difficulties faced by fire safety management in colleges and universities at this stage, the fire safety management system of colleges and universities should be guided by the concept of “education first, implementation of responsibility system, perfect fire protection facilities, rapid and thorough handling of police”. On the basis of improving the safety education and publicity management, according to the legal level, the fire safety management of colleges and universities is fixed, and the fire protection facilities, fire brigade construction, fire prevention plans and exercises are gradually reformed and optimized, and a perfect university fire safety management system is constructed to provide a basis for the effective highlighting of the systemic characteristics of university fire safety management system. As in the fire plan and exercise module, in the fire safety management system, colleges and universities can clearly stipulate that the security departments of professional colleges should organize logistics personnel, professional classes, student dormitories, and faculty and staff to conduct fire drill training drills during the period of high risk of fire in spring and autumn. In the specific fire drill training exercise stage, it can be divided into three modules.

Firstly, organize small students to fire small fires within the limits of their ability; then, if it is not extinguished in time in the early stage of the fire, it will guide the teachers,

students and staff of the professional to call the fire alarm phone correctly, that is, clearly and concisely explain the specific location of the fire, the number of the house number, the quantity and type of burning substances, and the occurrence of the fire, whether there are people trapped by fire, contact information of police officers and basic information; finally, guide the personnel to evacuate the escape drill. Even with tools such as loudspeakers or whistles, organizers carry certain protective tools, such as masks, wet towels, etc., to the nearest safe exit, depending on the equipment such as the mobile evacuation indicator or the fluorescent screen. Through regular training exercises, teachers, students and employees of various professional schools can effectively improve their ability to deal with fires, minimize the risk of fire risks to the lives and property of internal personnel of colleges and universities; and fire protection products are the guarantee for the smooth development of fire safety management in colleges and universities. In the actual work development process, colleges and universities should set up the procurement, management and use specifications of fire protection products according to the fire safety management requirements of the college. For example, the organization of professional fire management personnel to purchase “ABC type” dry powder fire extinguishers, fire safety luminous evacuation signs and fire-fighting signs. And through the signing of a long-term cooperation agreement with the relevant fire products manufacturers, priority is given to the purchase of fire-fighting products with good fire quality to ensure the actual effectiveness of fire safety management in colleges and universities.

In addition, on the basis of the formulation of the fire safety management system, colleges and universities can formulate supporting penalties according to the problems in the fire safety inspection. For example, in response to fires caused by the use of high-power appliances in student residences, the students should be financially punished with the students and notified of criticism.<sup>[4]</sup>

### **4.3 Strengthen the Executive Management of Fire Safety Management in Colleges and Universities**

Firstly, according to the relevant requirements of the “Fire Safety Management Regulations of Colleges and Universities”, in the specific fire safety management process of colleges and universities, the legal representative of the university is the person in charge of the fire safety of colleges and universities, which is responsible for the internal fire safety system of the university, and according to the fire protection laws, Formulate a fire safety responsibility mechanism and

a fire safety management system that are consistent with the university education model. At the same time, it approves and implements the annual work plan and annual budget of the university fire safety, and provides regular security funding guarantee and organizational guarantee for the implementation of the university fire safety management system in conjunction with the regular convening of the university fire protection work conference. On this basis, the legal representative of the university also needs to supervise all levels of departments and professional colleges, Sign a fire safety responsibility agreement with the responsible person of the secondary institution of the university, and rationally divide the responsibilities of the departments at all levels in the fire safety management, and pre-execute the fire and fire emergency evacuation plan. Regularly carry out fire safety inspections to rectify major fire safety hazards within the university to ensure that major risks related to fire safety are dealt with promptly and effectively.

Secondly, the management personnel of colleges and universities should help the legal representative of colleges and universities to carry out the management of fire education in colleges and universities in accordance with relevant laws and regulations. And further refine the fire safety management system of colleges and universities, through the internal fire safety annual plan of each professional college, the annual budget of fire safety work, fire safety inspection standards, fire hazard rectification measures, fire protection facilities and equipment maintenance inspection period, fire organization team setting, etc.<sup>[5]</sup> In combination with the setting of full-time fire management positions in various professional colleges, regular training on fire protection knowledge will be organized for college volunteer firefighting teams to further promote the prevention and management of fire safety technology in colleges and universities. In addition, the management personnel of colleges and universities and the members of the voluntary fire protection organization also need to carry out the work according to the fire inspection and acceptance work in the university. In the form of fire protection work files or fire safety hazard accounts, this report is made to the fire department of the public security organs in the region, and cooperates with the fire control agencies of the public security organs in the region to provide a basis for the smooth development of fire safety education management in colleges and universities.

Thirdly, at the grassroots level of university fire safety management, in the form of a three-level fire safety working group, under the guidance of the grading work

system, various fire safety management work is carried out. The fire protection team's first-level working. The fireprotection second-level work office is the fire-fighting volunteer group of each professional college. It needs to be based on the fire plan formulated by the Security Office of the colleges and universities, to refine the specific tasks, and clearly define the responsibilities of the student management offices of various professional colleges; the fire protection work level is the student management office of each professional college. It needs to carry out fire safety popularization according to the fire safety management regulations, and conduct regular fire safety inspections for students' dormitory, teaching area, teacher office, logistics management area and other areas.<sup>[6]</sup>

Finally, in the process of running the specific Internet fire safety management education platform, in order to improve the attention of college teachers and students and employees on the Internet publicity and education model of colleges and universities, college and university administrators can incorporate college fire safety management into the student credit system, or combine with the annual or quarterly student comprehensive assessment results. That is to say, through online Internet course evaluation, teacher and student online WeChat platform, etc., carry out fire safety knowledge popularization work, gradually innovate safety management mode, and combine the setting of class fire safety management personnel to build a grid-type high-tech fire safety education management platform. On this basis, colleges and universities can require all professional colleges to develop a student-dorm linkage rotation duty mechanism, combined with online information interaction, to transform the past passive fire accident treatment into active prevention of fire risk, and maximize the effectiveness of university fire safety education management.<sup>[7]</sup>

In addition, in the actual fire safety management process, teachers, students and employees of all units of the university also need to actively fulfill the responsibility of fire protection facilities maintenance, fire warning, and firefighting; the fire department of the public security department in the region shall, in accordance with relevant laws and regulations, conduct regular supervision and examination of the implementation of fire safety management work in institutions of higher learning to provide guidance for the orderly development of fire safety management; the relevant education administrative departments also need to regularly supervise the fire safety management of colleges and universities, and provide a

basis for the implementation of the fire safety management system and safety responsibility system of colleges and universities.

## 5. Conclusion

In summary, in the rapid development of Internet technology, the Internet has become one of the main channels of publicity and education. Therefore, in the stage of promoting the fire safety management system in colleges and universities, colleges and universities can also develop new forms of Internet publicity and education.<sup>[8]</sup> Through the micro-course + WeChat public accounts + MyCourse Online "safety micro-accompaniment" education mode, teachers and students and university and college staff to master the basic knowledge of fire safety, and consciously follow the fire safety mechanism. Combine the pre-reform of various fire safety hazards to minimize the probability of fire in colleges and universities, and create a safe and harmonious living, learning and working environment for teachers, students and employees.

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