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### Relying on Social Media to Improve White Pollution in Schools

### -- Take WeChat Mini Programs as an Example

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### **Abstract**

In the university campus environment, plastic waste does not exist in the daily life of students all the time. Whether it is packing bags in the school cafeteria, or the garbage bags and express bags that students often use, they produce a large amount of white garbage, which is harmful to the whole campus. The environment is causing great pressure. Use WeChat environmental protection applets to influence students' daily life habits, solve problems at the source stage of white waste generation such as dining and shopping, and use the incentive mechanism of environmental protection applets to encourage college students to use environmentally friendly shopping bags in restaurants and shopping scenes, etc., Reduce the probability of college students packing lunch boxes and using plastic bags, and subtly influence students to improve their environmental awareness, and achieve the purpose of reducing white pollution on campus.

### **Keywords**

Social media; Spam classification; WeChat; Applet.

### 1. Analysis of the Status Quo of White Pollution on University Campuses

Analyzing the causes of white pollution problems in university campuses and the problems existing in the governance process can help relevant departments to better complete the governance work, reduce white pollution sources, and improve the overall environmental quality of the campus.

### 1.1. Causes of White Pollution on University Campuses

#### 1.1.1. Students' Personal Habits Lead to White Pollution Problems

According to relevant data, each student generates an average of about 1kg of garbage per day, and the student population on university campuses is very extensive, so the garbage pollution generated by it will reach tens of thousands, which is extremely heavy on the environment. Burden. From the perspective of each area of the school, the canteen and dormitory produce the most extensive amount of garbage, which can account for almost 80% of campus garbage pollution. Compared with the white pollution in school cafeterias, the proportion of dormitory garbage is more extensive. The main reason is that many students will pack meals from the cafeteria and take them back to the dormitory for consumption. The white garbage generated is also natural. Will be thrown in the trash can in the dormitory. At the same time, courier bags are an important part of the dormitory garbage. Many students often unpack them in the dormitory after receiving the courier. The plastic garbage bags included in the courier boxes also bring a lot of white pollutants. The long-term personal habits of students have caused white trash to be widely scattered on campus, gradually causing serious environmental problems.

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#### 1.1.2. Plastic Products Meet the Needs of Students

In the university campus environment, a large part of the use of plastic products is concentrated in shopping bags and packaging bags. The two types of plastic products can be widely used mainly because of their practicality for student groups. The spending power of student groups is relatively limited, and supermarkets on campus often rarely provide shopping bags of other materials. Compared with cloth bags and paper bags, it is cheaper and more cost-effective, so it can be widely used in campuses. Packing bags and packing boxes meet the needs of students to go back to bed and eat, and are convenient, fast, and easy to carry. They are widely used in campuses. Such packaging plastic products often cannot be reused, and the daily consumption is extremely large, which poses a serious burden on campus environmental governance.

### 1.2. Existing Problems of White Pollution Control on University Campus

### 1.2.1. Publicity and Education Work Is Not Deep Enough

At this stage, some schools have paid attention to the importance of white pollution and can effectively manage it from both the software and hardware perspectives. From the perspective of software management, some schools that pay attention to such problems can provide education and guidance to students in their daily lives, including the analysis of the status quo of the white pollution problem and the popularization of its negative impact. However, this kind of publicity and education work only stays on a relatively simple ideological level. Many schools have not systematically understood the acceptance of students, nor have they perfected relevant feedback channels to deeply explore the specific problems and improvement measures. This indirectly leads to the fact that students still pay less attention to such issues, and it is difficult to take the initiative to reduce the use of plastic products, which is not conducive to the development of subsequent related management work.

### 1.2.2. The Management System Still Needs to Be Improved

In the management system of white waste, many schools attribute it to the responsibility of the logistics department, but in fact most logistics departments are only responsible for the post-treatment of pollution sources, but they have no substantive control authority. Therefore, when encountering related problems, the logistics department cannot effectively control bad behaviors in accordance with the existing rules and regulations. In addition, due to the vague management system, schools are often inefficient in solving such problems, and it is difficult to achieve the desired control effect in a short time. In the current campus environment, the types of white pollutants and their causes may be different from the previous ones, but many schools have not carried out effective research on the status quo, resulting in poor adaptation of the existing management system and difficulty in achieving management effects To maximize.

### 2. The Innovation of the Campus Environmental Protection Mini Program

The Wechat Mini Program, the English name Wechat Mini Program, is based on Wechat. It has strong traffic endorsements and high user stickiness. Information products are easier to reach users, development costs are lower, and it is convenient for small-scale trial and error and rapid update iterations and cross-cutting. Outstanding advantages such as platform communication. In this part, after investigating the status quo of garbage classification in the school, the team combined the needs and the mini program to try to realize the three functions of building campus culture, application in dining and background activity monitoring and feedback through the mini program.

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## 2.1. Relying on WeChat to Accurately Push Messages to Build A Civilized Campus Culture

In the survey of college students' awareness of garbage classification by Jiang Hongchuan and others, it was found that most college students paid more attention to garbage classification. Among them, 80% of college students paid more attention to garbage classification, and 20% of college students paid little or no attention to garbage classification. 93% of college students believe that it is necessary to sort garbage. College students' general awareness of waste sorting is helpful to the sub-topic of waste sorting—how to control the spread of campus white waste on campus. Based on the fact that students already have a certain level of environmental protection propositions, related activities and publicity about how to control campus white pollution can be found in the WeChat small Within the program.

In the publicity of daily activities, the WeChat applet can basically realize the settings such as sending to friends, sharing to Moments, favorites, adding to my applet, adding to the desktop, etc., and it is easy to promote marketing communication in the social acquaintances. The effect is also conducive for students to collect and open the mini program again. In addition, the WeChat Mini Program runs in parallel with the WeChat subscription account and WeChat service account, and links with the school's existing official accounts to publish content, which can also further improve the effectiveness of the campus white pollution control proposition.

### 2.2. With the Help of the Point System and Real-time Seat Map, Increase the Dine-in Rate

The WeChat applet is used in the dining of students, mainly through the real-time seat viewing function and the points system. The former combines JavaScript scripting language to generate the remaining seat map in real time according to the student's check-in status for dine-in meals, and the latter obtains points through check-in at dine-in meals. Students can get free recyclable cloth bags printed with school elements in the Mini Program Points Mall (which will be discussed later) or redeem other products in the Points Mall to encourage students to eat in the classroom.

The first is the real-time seat viewing function of the mini program. In the preliminary investigation, the team will classify and count the seats in the school canteen, and generate and paste a QR code for each table, and the technician will design it into a thumbnail of the canteen seat. Before each registered user and student come to the canteen for dinner, they can enter the mini program in advance to check the remaining status of the canteen seat in advance, and choose to pack or eat in according to their needs.

If the student chooses to eat in, the system will automatically recognize it as the first check-in after the meal is started. After the meal is over, the system will automatically check in for the second time after leaving the range of the canteen set by the system. The minimum interval between two check-ins is set to 15 minutes. Those with the condition system will automatically be regarded as "dinner dining success" and will be rewarded with points, otherwise it will be regarded as take-out and no reward will be given. Note that each check-in situation can be checked by the student's personal center.

Students check the remaining seats through a small program before eating, and choose the appropriate seat type and whether they need to join the table according to the number of peers. This greatly avoids the embarrassment and inconvenience of communicating with the people who are already seated when the student is dining in the dining hall. , Separate each seat, you can check the vacancy situation in the small program, avoiding communication costs. At the same time, the check-in points mechanism can also promote direct dining and table-to-table dining for students, and relatively reduce the packing rate.

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In view of the plastic bags used to buy fruits in the canteen, the plastic bags raised when shopping in the shopping mall, and the plastic bags brought by students when ordering takeout, you can start with the shopping center to reduce the use of shopping bags.

There are two shopping malls in our school, which can increase the difficulty of purchase by increasing the unit price of shopping bags, and provide reusable cloth bags. According to the plan drawn up by the team, the number of recyclable shopping bags provided to students in the first batch is 100, and students can redeem them after checking in through the applet to obtain the corresponding points. Afterwards, students of batches of recyclable shopping bags can use the points to redeem them through the Mini Program Mall. In consideration of increasing the frequency of use of recyclable shopping bags, try not to discard them. The school LOGO and related patterns will be printed on the recyclable bags, which are designed by our team members to ensure beautiful and practical.

## 2.3. Based on the Background Data of the Applet, Real-time Monitoring of the Effect of the Activity

Designing campus environmental protection mini-programs and constructing online and offline integrated campus environmental protection activities, not only can use the Internet to implement activities more conveniently, but also through observing background data information, more quickly grasp the data of students' meals, use of environmentally friendly shopping bags, and analyze Activity implementation effect. In addition, this time the campus environmental protection mini program is intended to be a feedback area for designers and students, so as to directly understand the shortcomings of the mini program design or the service facilities on the campus.

# 3. The Realistic Dilemma of Campus Environmental Mini Programs in the Post-epidemic Perspective

In the post-epidemic era, environmental protection applets that use WeChat as an application scenario have some problems in the practice of garbage classification and dissemination, lack of application sites and application groups, and lack of environmental protection classification equipment and support.

### 3.1. Lack of Environmental Protection Infrastructure and Multi-party Support

With the "beautiful China strategy", major colleges and universities have set up waste sorting hardware settings, but there are still unreasonable situations, such as too few types of waste sorting bins and too low distribution of campus dormitory content, which directly affects student waste The behavior of classification, and the lack of specific supervision and implementation departments on campus, such as specific extension personnel and traffic support, makes it difficult to standardize the application scenarios of campus applets. In addition, since the outbreak of the new crown epidemic, in the special stage of the living environment and crowd communication, it is necessary to reduce the requirements for crowd contact, which will directly affect the utilization rate of students in the dining area, which is not conducive to the use of environmental protection mini-programs, and because of the isolation stage, students need Destocking materials, increasing the use of express delivery and the use of plastic waste will also indirectly affect the normal use of environmental protection mini-programs.

### 3.2. Weak Promotion Effect and Lack of Offline Activities

In recent years, with the widespread use of small programs, people have gradually become accustomed to and are willing to use this WeChat function, but it is not easy for the large number of users on the WeChat platform to transform into the users of the small program itself.

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In the application stage, how to promote and use is a big problem. On the one hand, there is a lack of official support from the campus and lack of negotiation strategies for specific cooperation venues. The other part of the promotion is only concentrated on the forwarding of the campus public platform, lacking convincing power, and it is difficult to realize the mini program. Quick promotion. Relying only on the maintenance of online platforms, it is difficult to ensure the utilization rate of the student user group, and it is difficult to supervise the specific usage. If forced to use, it is likely to be counterproductive. At this time, offline activities on campus are needed to support, such as The environmental protection competitions and publicity held are lacking in the implementation stage of the campus environmental miniprograms. Without specific and effective offline publicity activities, it is difficult to reach student users in the first time and affect the use of the mini-programs.

### 4. Promotion Strategy of Campus Environmental Mini Program

### 4.1. Seek School Support to Promote the Construction of Facilities and Services

The promotion of mini programs is closely related to offline docking. The key to the smooth operation of mini programs lies in the completeness of offline facilities and services. In the early days of the mini-program, the organizer can seek relevant departments of the school to open service points in cafeterias, supermarkets and other places, and arrange staff to introduce and guide them at various points. Compared with the publicity work, the construction of spot facilities is the key to the operation of the event, and the improvement of the facilities requires the support of funds and policies. Therefore, seeking school support is the primary link in the promotion of the mini program.

# 4.2. Relying on the Advantages of Wechat Platform to Enhance the Promotion Of Mini Programs

On November 12, 2020, Tencent released its financial report, officially announcing that the current number of WeChat users is 1.212 billion. According to the 46th "Statistical Report on China's Internet Development Status" (CNNIC), as of June 2020, the number of Internet users in my country has reached 940 million. This shows that WeChat users basically cover all netizens in my country.

As a social media platform that occupies most of the network traffic in the social media era, WeChat has unparalleled advantages in social media promotion. The use of campus environmental mini programs is mainly on university campuses, so the promotion of mini programs is mainly In the relevant official account of the university campus or alumni group.

### 4.3. Use Marketing Methods to Plan Offline Activities

The campus environmental protection mini program is a mini program that needs to be connected to offline services. Therefore, in addition to relying on the WeChat platform for online promotion, you can also use marketing methods and offline activities to promote the mini program. Different from online one-way promotion methods, offline promotion methods can better communicate with users and obtain good promotion effects in a short time.

Compared with the online communication method of the WeChat platform, the placement of publicity personnel at offline service points can more directly guide students and teachers to use the mini program, and quickly obtain user feedback by observing the user's usage, and solve it on the spot. Users have intricacies regarding the use of small programs. In addition, you can also set up reward activities in conjunction with other consumption points in the school. For example, new users can register for a small program to get coupons for a certain restaurant or shop, which can quickly expand the user group and increase the number of consumers at other consumption points. Complementary resource advantages with one bird's eye. If you get the support of the school, you can also promote through campus environmental protection lectures,

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or use the theme of campus environmental protection to plan a campus-wide event marketing activity. The specific method of the activity can be to take photos and check in by running, etc., every place Check-in points can also set relevant rewards or prizes in the mini program to encourage students to actively participate.

### 5. Conclusion

Under the "Beautiful China Strategy", college students, as part of the high-consumption group, should help the development of waste sorting and environmental protection. Environmental protection is an eternal survival problem for human beings, white pollution is an important existing problem of environmental protection at this stage, and garbage classification is the prerequisite for the realization of garbage resource recovery. In the future environmental development process, the campus should improve the infrastructure and hardware equipment, formulate corresponding management mechanisms, and cooperate with the use of WeChat environmental protection applets to subtly cultivate the awareness of garbage classification of college students, and strengthen the publicity strategy and supervision of environmental protection knowledge. We will work together to reduce white pollution and build a beautiful campus and a beautiful China.

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