# Recycling and Utilization of Household Garbage in College Students' Dormitories

# -- Take Express Delivery and Takeaway Delivery Packaging as an Example

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## Abstract

This paper investigates the current situation of garbage classification in Longhu East Campus of Anhui University of Finance and Economics by means of questionnaire survey, field survey and literature data. The survey results show that the number of garbage cans in the campus is small, and the garbage classification has not been implemented. The school does not have closely related strategies and systems in this respect, and the students lack the knowledge of garbage classification and do not develop the habit of garbage classification. In order to change this situation, suggested that schools take various measures to cultivate students consciously garbage consciousness, formulate policy rules, establish incentive mechanism, strengthen publicity and education, improve the related facilities, appropriate increase rubbish, to arouse the enthusiasm of all parties, lay a solid foundation for the real implementation of garbage classification.

## **Keywords**

Garbage Classification Status; Recycling; Relevant Policies and Regulations; Relevant Publicity and Education.

# 1. Reference Check

In accordance with the instructions of the 19th National Congress of the Communist Party of China, we should quickly advance the reform of the ecological civilization system, implement the strategy of sustainable development, strive to build a better China, and vigorously promote green development. With the growth of population and the gradual improvement of economic level, the volume is 248.69 million tons; the year-on-year growth rate is 5.77%. As a small society, there are often tens of thousands of people on university campuses in China. In recent years, due to the increase in the number of students, the environmental problems caused by campus garbage are increasing. Since last semester, the school has further added classified garbage cans in campus public places such as dormitory buildings, teaching buildings, libraries and campus roads. In order to cooperate with the off-campus garbage dump for garbage sorting and recycling, the property management agency on the campus also requires the garbage cleaning workers to classify and load the garbage. It is observed that the effect of the above measures is not ideal. In the face of the "quiet" "new changes" in the campus, some students on campus still "go their own way" and do not put garbage according to the garbage can logo, which not only makes it difficult to achieve the goal and original intention of relevant departments, but also brings "trouble" to the relevant personnel in the work.

# 2. Measuring Method

#### 2.1. Questionnaire Method

This questionnaire was conducted online. After considering various relevant factors, the questionnaire was given to all interested students. After the distribution of 150 respondents, a total of 128 valid questionnaires were found, and the recovery rate reached 85%, exceeding the expected target of the group.

#### 2.2. Literature Survey Method

In view of the current situation of garbage classification on campus and the measures to be improved or related solutions, consciously and purposeconsult relevant literature.

#### 2.3. Field Method

The campus garbage is divided into two parts: teaching area garbage and dormitory garbage. The type, quantity and volume of these wastes; record the specific location, dryness, moisture, status and smell, and analyze the results. In addition, affected by the outbreak rebound, the team will cooperate with the designated garbage collection point, the campus set up garbage collection point, changed to set up the campus garbage collection WeChat public, and released on the public, campus garbage collection information, actively convey national guidelines on garbage collection, on this basis, the team members use spare time to campus reasonable and positive field research, in-depth practice, enrich the content of the public, improve the operation effect.

## 3. Analysis of Survey Results

#### 3.1. Analysis of the Results based on the Questionnaire Findings

This questionnaire has 13 questions, including 11 optional questions, 10 questions related to the survey content, and 2 open-ended text questions. The following will focus on summarizing and analyzing the results corresponding to the key questions in the questionnaire. In order to complete the survey, a total of 150 questionnaires were collected, and a total of 128 valid questionnaires were found by screening the required valid questions for analysis. Among them, there were 42 male students (32.8%) and 86 female students (67.2%), with more junior students, accounting for 67.2%.

## 3.2. Satisfaction Survey and Analysis of Campus Garbage Classification Measures

The results showed that 73 percent of students appreciated the campus garbage classification method, while 27 percent were dissatisfied, indicating that the effect of campus garbage classification is not ideal. According to the survey results, 83% of the students believe that in order to better manage the garbage on campus, garbage collection facilities with different classification functions should be designed according to the characteristics of different areas, and garbage bins should be set up in each area. After in-depth investigation, it is found that although the garbage cans on campus can be handled in time, when people flock to the teaching building from the canteen, the garbage cans in the teaching building often overflow. In contrast, the campus landscape areas with less traffic are often distributed in three to four or more garbage cans. The survey results show that the garbage cans on campus only meet the requirements of simple garbage in a certain period of time. At the same time, the classification and layout of garbage cans in some areas are often empty, which will cause a certain waste of campus resources.

#### 3.3. A SPSS Analysis of the Survey Findings

1) The results showed that only 28.9% of the students could clearly realize the importance of garbage classification, which indicates that most of the students lack the basic knowledge and skills about garbage classification. The results showed that 61.7 percent of the students had taken courses on garbage sorting. After investigation, most of them (76.4%) have not received the correct publicity and education on garbage classification. Therefore, it can be seen that there are many defects in the current way of garbage classification publicity, such as low publicity effect and lack of practical publicity content. Therefore, we should strengthen the publicity of garbage classification to improve the public awareness, in order to achieve better environmental protection effect.

2) Chinese college students have begun to realize the importance of garbage sorting. The survey aims to explore how college students recognize the importance of garbage sorting. According to the survey results, 64.8% of the students had a positive attitude towards garbage sorting, while 25.6% and 9.6% showed less positive or negative attitudes. Practice has proved that 31.4% of the garbage is effectively classified, and the proportion of the garbage collected by a garbage bag is even higher, reaching 60.5%, which is far more than the proportion of other garbage. A variety of garbage bags reached 8.1%, while 22.5 percent of non-recyclable items were discarded. From the perspective of garbage classification, most people still adhere to the traditional garbage classification behavior and consciousness, and only a few students can effectively implement garbage classification. After investigation, most people still insist on sorting garbage according to different types, but their behavior has not been fairly evaluated. This shows that the current problem is that the efficiency of garbage classification is low due to the lack of reasonable classification standards and necessary classification conditions. Most people are able to sort their garbage correctly, but some people still lack awareness. Although some people have a certain awareness of garbage sorting, this behavior can still occur without sufficient knowledge and skills.

## 3.4. Field-based Analysis of the Results

In the school dormitory and classrooms, most of the garbage is not sorted. The proportion of recyclables and perishable items is very high, accounting for about 75 percent. Although a small number of plastic bottles, paper and cans are collected and sold to scrap stations, large quantities of plastic bottles, paper and cans are mixed with perishable and other hazardous waste, even burned or buried. In the two typical areas of classrooms and dormitories, there are many kinds of garbage, from paper and plastic to catering, with the largest proportion of catering, reaching 37%, accounting for the vast majority. The garbage disposal in the dormitory is very strict, mainly from food, fruit and other packaged food residue, accounting for as much as 40%. In addition, most paper, around 33 percent, is usually napkins, laptop supplies and delivery boxes. About 21% of the amount of plastic is composed of beverage bottles and packaging bags. Other types of garbage are the least, at about 6%.

After investigation, it is found that the total weight of recyclable garbage is the highest, followed by perishable garbage, while the proportion of other garbage is much higher than the hazardous waste, so is the total calorific value, which indicates that recyclable garbage plays an important role in environmental protection; it is found that the amount of garbage in girls 'dormitory is significantly higher than that in boys' dormitory. On weekends, whether in boys or girls' dormitories, there will be a lot of garbage, which is more obvious than usual. According to the survey results, the use of garbage bins in classrooms and dormitories is not ideal, and there are obvious problems. Although school support staff provide sorting bins for each dormitory and classroom. Although most students have some knowledge of garbage classification, many people still fail to correctly comply with relevant norms such as storage, placing and classification due to their habitual behavior. The results show that the primary classification of garbage is less efficient, while the manual secondary classification increases the time and energy costs. Despite the difficulties in sorting garbage, cleaners still recycle as much reusable garbage as possible, such as delivery boxes and beverage bottles, to increase their income and reduce the students' burden on garbage sorting.

## 4. Conclusion

With the increasingly severe global warming, all countries and regions have begun to pay attention to garbage classification and management. Through scientific and reasonable waste classification and strict management system, it can effectively reduce the environmental burden and promote the sustainable utilization of resources. In order to protect our earth, more effective methods must be taken to protect the resources. We should strengthen the management of campus garbage classification in order to achieve effective reduction, recycling and even achieve the goal of harmless. In a word, the effect of campus garbage classification and treatment reflects the cultural literacy of a school. Through the implementation of school garbage to the environment, maintain the cleanliness of the campus, but also can significantly reduce the cost of harmless garbage treatment, so as to realize the recycling of resources, and better respond to the national policy call. Schools should take more measures to improve the environmental awareness of teachers and students, including strengthening the publicity of campus garbage classification and recycling, increasing the investment in recycling facilities, and improving the management mechanism, so as to build a harmonious and beautiful campus.

## References

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