

# Research on the New Mode of Campus Express Based on WeChat Platform

Yan Bai

Shandong Jiaotong University, Jinan, China  
Correspondence: 85661417@qq.com

**Abstract:** Campus express has become a crucial part of Last Mile delivery. This paper proposes to utilize the campus express official account platform to connect the campus express service center to complete the campus express service and to provide fast, convenient and intelligent express service for teachers and students.

**Keywords:** campus express; WeChat platform; new mode

## 1. Introduction

With the development of WeChat technology, the expansion of WeChat market and the diversification of WeChat service are also enhanced to some extent. Enterprises can build their own network platform with WeChat official account platform. It is an inevitable trend to establish a unified campus express delivery service center based on the present situation of many and miscellaneous couriers on campus [1]. Therefore, this paper proposes a new mode of campus express service center based on WeChat official account platform to provide better campus express service for college teachers and students.

## 2. Campus Express Service Center Based on WeChat Official Account Platform

After researching and analyzing the campus express delivery market, we find that there are many problems in the campus express delivery market, for example, many express agency points, poor door-to-door delivery service, long picking-up time, pick-up congestion and the unsound campus express information platform and so on. We are committed to the use of Internet campus express new ideas to develop offline campus express market [2]. Developing a new mode of campus express delivery service center based on WeChat official account platform is not only the general trend of the industry, but also an effective way to solve the problem of campus express delivery. The architecture diagram of campus express service center based on WeChat official account platform, as shown in Figure 1.

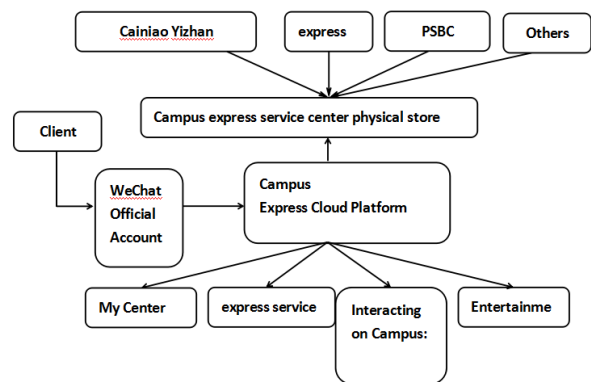


Figure 1. Campus Express Service Architecture Diagram.

### 2.1. Campus Express WeChat Official Account Platform

Set up the WeChat official account with campus as the unit [3]. The services of the official account include: logistics inquiry, group pick-up, self-delivery, free courier enter, campus mutual assistance, leisure and entertainment, campus dynamics, etc. The custom menu of the official account contains three first-level menus, namely express service, personal center and function pool, and each level menu contains multiple secondary menus.

Users scan QR code to follow the campus express official account and select the personal center menu to register personal information [4]. The platform will give members credits and coupons based on the extent to which they use the official account service.

In addition to the campus express service, the campus express platform also provides campus mutual aid, leisure and entertainment and campus dynamics and other functions. The platform integrates a variety of functions to provide rich content and strive to become an online platform for college students' campus life.

### 2.2. Campus Express Service Center Physical Store

Offline with campus express service center entity stores. The campus express service center takes the campus as the target market, integrates multiple express agency points in the school together and makes full use of the express resources in the school and carries out the unified and specialized management.

While integrating multiple courier agencies on campus into campus express service centers, we integrate all kinds of express parcels together to facilitate the delivery and pick-up. Express service center aims to integrate all

the post express, JD.com express delivery, Taobao express delivery, VIPSHOP express delivery and all other campus express for various types of express delivery allocation of the corresponding area.

### 3. Campus Express Service

#### 3.1. Pick-up Service

First of all, students can pick up express delivery in the campus express service center. Secondly, students can choose group pick-up on the campus express service center official account platform.

Official account platform launched "package" service to ensure that the majority of teachers and students better enjoy the door to door service. Students choose a package service on the platform and submit an order, the system will show the package fee, the larger the number of package, the lower the price of a single package. At the same time, campus express platform also provides part-time jobs for college students, students can apply to join the platform of free delivery for the whole school teachers and students to provide delivery and other door-to-door service and earn distribution costs. After applying to become a free courier, students can deliver package couriers to the platform. Free express can make a reservation on the package delivery service on the public platform, and then go to the campus express service center for distribution after the scheduled success. If the courier does not receive the courier during the delivery period, the courier will be taken back to the express service center. The platform converts package information to a non-package state. The sender can go to the express delivery service center to receive express delivery or re-apply for door-to-door delivery service. Free couriers can recycle packaging materials after providing door-to-door delivery service. The package pick-up mode greatly saves the time of picking-up, relieves the pressure of express delivery storage and improves the efficiency of delivery.

#### 3.2. Delivery Service

We have learned from the survey that the number of deliveries per day on campus is about 300. Although the number of consignments per day is small, the delivery time is concentrated after school. It takes about 5 minutes to mail a courier, and students line up in a cramped room to fill in the message. Because of the crowded staff, the clutter express delivery and the low work efficiency at the express agency, student sends the piece to spend the time far longer than the collection time, especially after the online shopping carnival, the online shopping returns the express delivery to increase abruptly, the sending item efficiency is even lower.

Campus express WeChat official account platform effectively solved this problem. All the mailing information is completed on the campus public platform, no manual paper delivery form is required. Students can fill in the message in advance to save time. The sender adds the campus express WeChat official account, registers as a member, selects the personal center,

perfects the personal information, selects the self-contained post of the express delivery service center, fills in the sender's information and the recipient's information, and then select the delivery company and delivery product type, payment method, so as to complete the delivery information, which can regulate the completion of orders and reduce the number of special items.

The student only needs to send the goods to the express service center and handed it to the staff. At the same time, students can also send the goods to select the campus closer to the express cabinet and received by the staff.

The sender can calculate the cost by volume (only for packages within 5 kg). For example, the minimum express cabinet is 5 yuan, the middle is 10 yuan, and the maximum is 20 yuan. Parcels over 5kg should be posted to the express delivery service center. After sending out the order successfully on the campus express WeChat official account platform, the students will receive a message with a mail code, enter the mail code in the express cabinet and then the corresponding express cabinet door will automatically open. After putting in the express package, the student closes the express cabinet door. After staff processing, the student can receive waybill information on the platform.

### 5. Conclusions

Based on the present situation of the campus express delivery market, we find the problems in the campus express delivery market. Given the problems existing in the campus express market, we combine the express agency point into the campus express service center and put forward the WeChat public number platform on the line express on the campus to provide one-stop express service for teachers and students in the school and provide a new idea for the development of campus express delivery.

### References

- [1] Schoonover, Dan, M. Siriwardena, and R. Jones. Library Express Delivery Service: The Evolution of a Campus Delivery Service at Florida State University. *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*, **2013**, 23(4-5): 201-212.
- [2] Liu, Xiao Han, et al. Research on the Campus Logistics Optimization Problems. *Advanced Materials Research*, 2014, 1030-1032: 2621-2624.
- [3] Xingyu, Feng, et al. Construction of Qixun Tongchuang Campus Logistics System. *Forest Engineering*, **2011**.
- [4] Liu, Zhihai, et al. Application Research of QRCode Barcode in Validation of Express Delivery. *Communications in Computer & Information Science*, **2011**, 143: 346-351.

**Yan Bai** Female, 36 years old, China Shandong. Bai is currently working in Shandong Jiaotong University. The main research area is logistics engineering.