

Analysis on the construction of mobile campus platform

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Abstract

the construction of digital campus in Colleges and universities is developing rapidly. The construction of mobile campus platform is an extension of the construction of digital campus. It is not limited by time and space. It is popular among teachers and students. It is one of the basic platform of colleges and universities. This paper introduces the characteristics of mobile platform for campus construction, objective, the overall design and function module design, the construction of digital campus platform and wisdom campus platform construction to promote and use the mobile terminal to achieve the function of the business of digital campus subsystem, the teacher students provides many convenient and efficient service, so as to promote the informatization construction in Colleges and universities, also to other sectors of the digital system is constructed to provide a little inspiration.

Keywords

digital campus, mobile campus, function module, mobile educational administration.

1. Introduction

The rapid development of Internet and mobile communication technology, the traditional terminal such as desktop, laptop computers, and so on, access to information has been unable to meet the fast pace of modern people, and mobile terminals (mobile phones, tablet, etc.) to make up for the traditional terminal to the any time, any place can obtain information advantage by the people's Progaze.

In the era of digital campus construction, digital campus is based on digital information and network, and it is a kind of virtual education environment for teaching, scientific research, management, technical service, life service and other campus information collection, processing, integration, storage, transmission and application, so that digital resources can be fully optimized and utilized. From the environment (including equipment, classrooms, etc.), resources (such as books, handouts, courseware, etc.) to the application (including teaching, learning, management, service, office, etc.) all digital, in the traditional campus to build a digital space, to expand the real time and space dimensions, to enhance the efficiency of traditional campus, and expand the traditional campus business functions, and ultimately to achieve the goal of improving the management level and efficiency. Modern campus learning and life rhythm accelerate, teachers and students of the school's service requirements higher, the birth of the mobile campus services to meet the needs of teachers and students, then how to use mobile terminals to provide convenient and efficient teaching platform and resource services, campus information systems and mobile phone how to effectively combine, how to better planning and construction of mobile Internet era of digital campus, to meet the requirements of college information technology development of an important research topic.

2. platform construction purposes

Using mobile Internet to build mobile campus service platform for schools, students, teachers, managers of a variety of services to convergence and integration, teachers and students as the center, to provide the whole life cycle, can continue to improve, teachers and students really care, practical value, convenient, anytime, anywhere mobile information services, and through information technology to improve the management efficiency and management level, monitoring and optimization of service quality.

Mobile campus service platform is not limited by time and space, which avoids the use of the traditional service platform. It meets the requirements of the Ministry of education of the education management information standard.

3. platform needs analysis and design

through data sharing center and other business subsystems to sort out, determine the unified data standards.

collect the information of other university's mobile platform construction, go to the field research, study and learn from their experience in the management and development of the mobile platform project, summarize and sort out the demand report.

collect and arrange the needs of various departments in the school, collect and sort out the requirement report.

identify mobile platform development languages and tools.

determine the total architecture design and function module, and the school related departments to discuss the system function module once again confirmed.

background management module for desktop computer design, convenient administrator batch operation, data import and export. Use ASP or asp.net in the IIS platform on the internal network release, and front-end APP separation, improve security and ease of use.

using Mobile jQuery as a front-end framework for development.

using MySQL database as the system database. MySQL is an open source relational database management system, MySQL database system using the most commonly used database management language - Structured Query Language (SQL) for database management.

using ODI ORACLE tools to achieve data synchronization between and shared data centers. Data Integrator Oracle belongs to the Oracle Fusion Middleware product family, which solves the data integration requirements of the increasingly heterogeneous environment. It is a Java based application, you can use the database to perform a collection of data integration tasks, you can also extend the functionality to a variety of database platforms and Oracle database.

4. system function module design

The function module design of the mobile campus platform is the first to cover all aspects of the school's all affairs and process; secondly, the data of the normative, all business subsystem of the data is unified design, unified specification, unified dictionary and common use; again is the data access has unified user, authority role management.

Campus mobile platform function module: campus portal, academic, OA, e-mail, library management, notice notice, card, news polymerization, the school survey, the campus scenery, micro blog polymerization, lost and found, campus map, financial and other modules. The data of each module of the system is based on the business process.

educational administration system: the main contents include course management, course arrangement management, result management, learning management, teaching material management, classroom information and other functions. The announcement module, academic staff can be

released at any time the latest developments in educational administration system, teachers and students can be using the mobile intelligent terminal in any time, any wireless network coverage in place quickly and easily query to relevant academic information, convenient the educational administration personnel, fast and accurate the understanding of teachers and students feedback and educational administration information, teachers and students for academic information processing can anytime, anywhere, a greater extent play the main function of educational administration system of serving teachers and students.

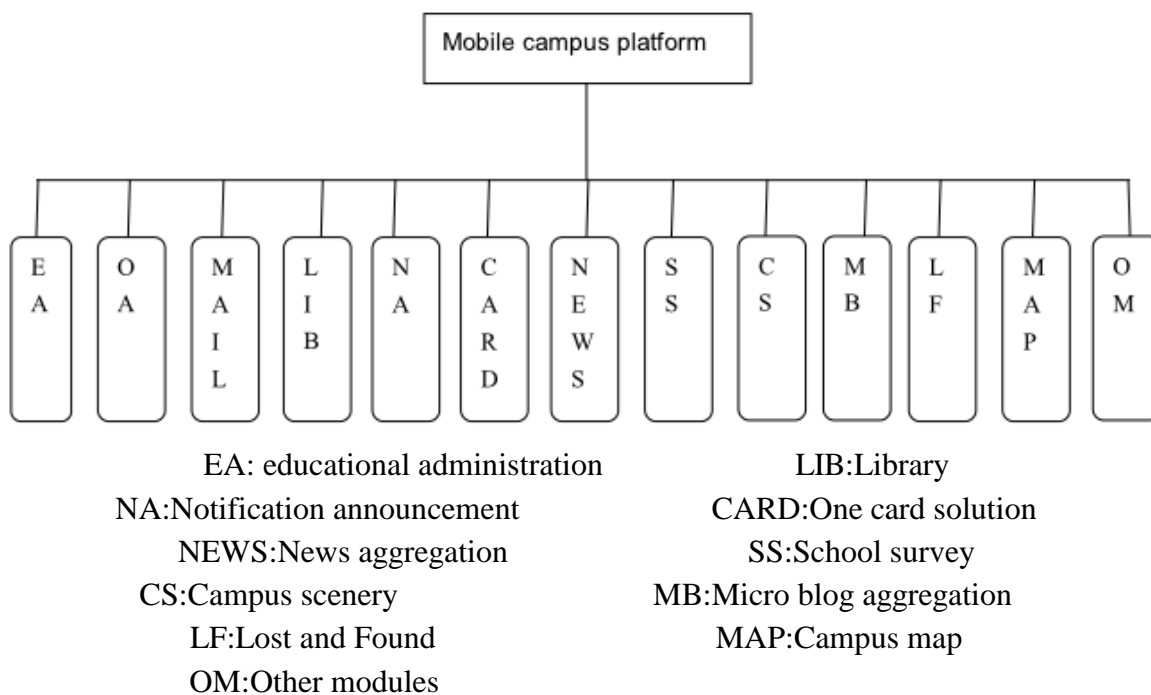


Figure 1 mobile campus platform function module design

mobile OA: main contents include document management (receipt management, document management, supervision management, request the report); daily official (for assigned by the co sponsors, vehicle management, vehicle applications, management of meeting room, the meeting agenda, meeting request); personal affairs (a to-do list, the leadership agenda, personal agenda, personal settings). Leaders can use mobile terminal at any time in the mobile OA review, approval, decision making, teachers and administrators can landing mobile OA always check your to-do reminders and other office information, mobile OA to leaders and teachers provide convenient mobile office service, greatly improve the office efficiency.

mail system: to facilitate teachers and students to send and receive e-mail at anytime, anywhere.

mobile library management: for the majority of teachers and students provide view the borrowed books information, extended under book and delinquent tips, online search of library book information and other services. Teachers and students can use the mobile intelligent terminal, at any time, any place with a wireless network coverage quickly and easily query to the relevant library information.

campus scenery: the campus scenery for the school to provide a window to show the image of the school, including the school campus scenery, department introduction, admissions, etc., and the teachers and students can be good campus related pictures or other information upload, the administrator for approval after the release, this module greatly raised the teachers and students of the school image of the community.

mobile finance: including booking reimbursement, real-time wage inquiries, such as real-time financial information to declare the situation. Teachers can use the mobile intelligent terminal, at any

time, any place with a wireless network coverage quickly and easily query to the relevant financial information.

card query: consumption can query the cardholder, including the consumption of time, location, amount and the balance of the card. Teachers and students can use the mobile intelligent terminal, at any time, any place with a wireless network coverage quickly and easily query to the relevant card information.

school survey, notification announcement, news aggregation and micro blog aggregation: these features can be from the school home page in real time to grab, to facilitate teachers and students at any time to understand the relevant information about the school.

the lost and found: is the school more people can find their lost property and design a module of convenient. Teachers and students can will be lost and found relevant information is sent to the management end and issued after the examination and approval of the administrator, the owner can release the lost information in this module, administrator approval after the release, the owner can also be anywhere, anytime to view their missing items is based on the relevant information, so as to rapidly retrieve items.

campus map: show the campus of each campus and its buildings, the location of the location, convenient for teachers and students to query.

5. Concluding remarks

The construction of mobile campus platform improves the traditional education and management mode. It is an extension of the construction of digital campus platform. It improves the timeliness of information communication between schools and students, improves the management efficiency of the school, and promotes the teachers and students to grasp and use the information system. The construction of mobile campus platform is an innovation of the development of university information. It provides a little inspiration for the construction of other industries, such as the study, life, entertainment and other services. It should be vigorously promoted and perfected.

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Reference

- [1] Liu Kaiwen, Zhang Liechao. Design ideas of mobile digital campus based on data sharing [J]. Journal of Wuhan Technical College of Communication, 2015, 17 (2):16-19.
- [2] Shang Jin. The construction of the mobile campus of Xi'an Electronic and Science University [J]. Shaanxi education high education, 2014:115~116.
- [3] Li Zongheng, Li Jianwei. The development status and Prospect of main smart phone operating system [J]. mobile communication, 2010, 28 (Z1):115-118.
- [4]Cha Daichun.Research on the construction of mobile learning mode under.3G background [J]. Journal of Jiangxi Radio&TV University, 2010, (3): 47-51.