HHC: Hand-Held College

Mobile.CC for the Mobile College Student

ABSTRACT

The "**Hand-Held College**" or "**Mobile.CC**" is a project that aims at implementing an instructional delivery strategy to enhance students' success potential. The project goal is to provide students with access to media-rich content through the use of PDAs, to bridge the educational mobility gap that exist among most educational providers and the new breed of mobile learner, for whom a mobile solution still remains elusive, students who find even a laptop an inconvenient device to carry. While smart mobile devices have become pervasively trendy at colleges (e.g. iPhone, iPad, Droid, etc.) their capacities as learning tools remain, as yet, largely untapped in achieving greater levels of engagement in academic and campus life among the new mobile learners. For that reason, the Mobile.CC project envisions the development of systems that enable colleges to empower students literally and effectively, ***to carry the College in their pockets***. In this sense, Mobile.CC strengthens the mission of student success and access, at the same time that respond to the student's expectation and demand for convenience.

PROJECT RATIONALE

The gap between the inflation rate and college tuition costs continues to widen; meanwhile, Quality and affordability of access to higher education remains an elusive target for institutions, whose students now find even a laptop inconvenient to carry – if not affordable. The Mobile.CC project proposes a ―hand-held college model, which provides students with *access to quality and affordable online learning* through the use of price-wise accessible personal digital assistants, mitigating to some extent the issue of affordability for students.

The Mobile.CC is a pioneering project that will have a tremendous impact on student life and pedagogical practice. While smart mobile devices have become pervasively trendy at colleges, their capacities as **learning tools** remain, as yet, largely untapped in achieving greater levels of student engagement in academic and campus life. The research team anticipates a broader Mobile.CC utilization by a new breed of ***mobile learner***; The Mobile.CC model envisions enabling students ―to carry the college in their pockets. The model integrates digital media and information systems technologies to create highly engaging learning environments. The Mobile.CC model's ultimate purpose is to enrich students' learning experiences and campus life, while raising levels of student success. The researchers' principal goal is to increase retention and graduation rates by effectively enhancing students' interaction and campus social networking capabilities via PDAs, in support of all aspects of campus life. To this end, the proposed model integrates three ―virtual mobile environments--: the Academic Center, the Student Life Center, and the Business Center.

PROJECT CONTEXT

The context for this project is the result of the convergence of the social need to make quality education more accessible with regard to time and location and abrupt progress in mobile technology. Smart phones, book readers, iPads, and other PDAs has become common on college campus, adding a new dimension to the convenience of mobility.

A convergence of trends in higher education indicates that times are ripe for developing a real-life environment based on the Mobile.CC model. First, the Sloan-C Foundation reports that more than one-third of college students in the United States are taking online learning courses. There is also an accentuated trend among post-Internet learners of incorporating mobile technology into college life; cell phone ―texting, picture exchange, and video and audio streaming are widespread activities among them. These students are especially adept at multitasking and keen to understanding connected worlds (e.g. Twitter, MySpace, Facebook, YouTube, etc.).

As a complement, advances in communication technology facilitate a transition to the Mobile.CC model. Devices such as iPods, iPhones, Blackberrys, Android, and other PDAs progressively yet swiftly more closely resemble netbooks in terms of capability. Additionally, mobile devices have unique advantages that facilitate distance learning, communications, remote transactions, ubiquity, and ease of data collection, security, personal companionship, and connectivity to various networks. Interfacing these devices with campus servers is entirely feasible, since they are based on such common ground technologies as XML, HTML, Java, Flash, as well as many other standard programming and delivery tools.

SIGNIFICANCE, IMPACT AND CONTRIBUTION OF THE PROJECT

The Mobile.CC project involves research that will advance knowledge in digital media technologies, instructional systems, and design. While smart mobile devices have become pervasively trendy at colleges, their capacities as learning tools remain, as yet, largely untapped in achieving greater levels of engagement for mobile learners in academic and campus life; indeed, Mobile.CC envisions enabling students to ***—carry the College in their pockets***. One the major contributions of the Mobile.CC is the integration of digital media and information systems technologies, to create highly engaging learning environments, to effectively enrich students' learning experiences and campus life, and ultimately (and significantly) increase the number of successful students in terms of student retention.

PROJECT'S FURTHER POTENTIAL

The potential to replicate the project at other Colleges is great, particularly at small institutions and at colleges that serve underprivileged populations.

PROJECT GOALS

The ultimate goal of the Mobile.CC project is to increase student retention, satisfaction, and achievement by creating friendly and engaging environments for students through the use of digital media and smart PDAs. We propose the creation of a feasible model for an —accessible college, where students become engaged in an academic dialogue that promote learning, and a mobile world that support the old as well as an array of new forms student life activities.

PROPOSED MODEL

The Mobile.CC model will focus on ***three virtual centers*** encompassing major college functions: an Academic Center, a Student Life Center, and a Business Center will be designed, developed, and implemented based on the following strategies:

The Academic Center will allow students to access course syllabi and instructional materials for all courses through mobile devices, attend fully online courses through a hand-held device, download mini-lectures, remotely participate in conferences, make self-evaluations and teacher evaluations, collect field data for special courses, request books and journals from the library, and schedule meetings with counselors, advisors and instructors.

The Student Life Center will augment the students' awareness of and motivation for student life activities, facilitate the creation of and participation in study groups, and promote more student contact with tutors. Students will be able to receive and send messages to student communities, receive daily College announcements, download music, participate in collaborative games, buy and sell —in-campus, check the cafeteria menu, and schedule their College activities.

The Business Center will be a customer relationship management platform for conducting all significant transactions with the College through a hand-held device. This includes processing transactions related to admissions, department inquiries, registration, financial aid, work-study, transcripts, reference letters, purchasing, job applications and many other daily transactions.

***Common Features*:** These three centers will share common features such as:

- Automated calendaring and scheduling, with reminders being sent to users
- Social networking features
- Downloading any resource from the web
- Capabilities to work interactively with productivity tools and consult reference databases; and
- Web-casting and pod-casting functionality

MANAGEMENT PLAN, ASSESSMENT AND TIMELINE

The Mobile.CC project's major strength lies in the interdisciplinary and experienced team of faculty and staff who will execute the project; their knowledge and experience are highly pertinent in a complex endeavor like the Mobile.CC.

To pilot the Mobile.CC, the proponents will spearhead teams of teachers and technologist to build it in the first six months of the project, after which the system will be tested using controlled experiments. After one year, both groups will be compared regarding indicators of college success, such as retention rates, grades, GPA, credits gained, overall satisfaction, academic engagement, and, library inquiries, and completion of administrative transactions. A comprehensive report will assess the Mobile.CC model and present recommendations for sustainability.

Two major tasks in the work plan involve a system customization via the development of interfaces with the Student Information System and the Learning Management System. It also involved the design of a pilot course for PDA delivery. The customization of the system to respond to the Mobile.CC specifications, goals, functionalities, and strategies is essential to the success of the pilot

EVALUATION PLAN FOR THE Mobile.CC MODEL

The evaluation of the Mobile.CC project will be a three-stage process. First, the project team will carry out a College-wide survey to determine utilization patterns and students' preferences regarding the types of interactions they perform via PDAs. Concurrently, a technology viability study will be performed to explore first tools suitable to building interfaces among Learning Management Systems (e.g., Angel, Blackboard, etc.), customer relationship management systems, and an ERP/integrated information system such as PeopleSoft; and second, the suitability of a reduced set of existing mobile devices (e.g. iPhone, Blackberry, Android, Microsoft-based smart phones, etc.).

In the next stage, the outcome evaluation will take place in the form of a quasi-experimental study. The project team will recruit an experimental group of 100 students to whom smart PDAs will be distributed. These students will have full access to the three virtual centers of Mobile.CC and receive frequent messages through their devices. A control group of 100 students will have access to the virtual ―Campus-Life centers through the web, but not through PDAs. For two semesters, researchers will collect and compare performance indicators regarding retention, academic achievement, student engagement, satisfaction, and cognitive and attitudinal outcomes. The hypothesis is that students working with PDAs will outscore the other group in measured averages, after controlling possible sources of bias.

Finally, an impact evaluation will involve pre- and post-surveys to students and faculty *vis-à-vis* the critical aspects of instruction, student life, and those College business that Mobile.CC is intended to change. A comparison of results will allow for an identification of quantitative and qualitative improvement opportunities.

Contact Information:

Al.Valbuena@learning-centric.net