The Evolution of Payments on Campus
Thinking outside the card

by Ron Farmer
Executive Director of Campus Solutions
Heartland Payment Systems

Perhaps more than any other market segment, the higher education industry has led the charge in payments cards with its multiple, campus-wide applications and rapid adoption of innovative technologies.

In the beginning, "campus cards" meant student IDs that doubled as a meal ticket and maybe a debit card at the college bookstore, cafeteria or snack bar. Today, those student ID cards open doors to residence halls and labs, earn discounts with local merchants, allow for purchases in the bookstore, substitute for loose change at vending and copy machines, and even pay for laundry. And as technology evolves even further, so does this ever-growing list of capabilities.

But before we determine where campus cards are headed, let's see where they've been. We'll accomplish this with the help of a pioneer and leader in the campus card industry, **Robert C. Huber, CMC**, now a campus card business consultant. For more than 30 years, **Huber** has been directly involved in the campus card industry, as a developer, installer, trainer, consultant, author, conference speaker and "campus card historian."

Introduction of Mag Stripe

According to **Huber**, while the 1960s saw the birth of campus card systems, it wasn't until 1972 when Amsec of Pomona, Calif. (founded by Gary Lorenz and John Darjany), developed and installed the first known card-based campus electronic card access system using magnetic stripe technology (low coercivity, or LoCo) at California State Polytechnic University. For many years following, magnetic or "mag" stripe—was the primary technology for campus card systems. However, noted **Huber**, the LoCo mag stripe became increasingly susceptible to fraud and accidental data erasure by common magnets. In the 1980s, most college ID cards were essentially typed labels, bar codes, and photos pasted on paper or brittle ID cards. Cards contained two mag stripes, one for online and another for offline systems, both using a LoCo mag stripe. Card system databases (freshman to seniors) were purged after commencement. Each fall, students stood in long lines at athletic centers to have new photos taken for new cards, and to

get their card numbers manually encoded and entered into systems. Card systems were housed either in big "refrigerator" cabinets (online) or inside readers (offline)—which required manually adding and deleting cardholder numbers at each reader.

Enter the "All-Campus Card" concept. Developed by **Huber**, the first "campus-wide system" debuted at Duke University in 1985. The "DukeCard" was engineered as a sturdy "four-year" card utilizing a single (high coercivity, or HiCo) magnetic stripe designed to prevent accidental data erasure. Even more revolutionary, the "multi-application" card provided a variety of campus-wide services (i.e., debit, meal plan, event access, door access) at food service, bookstore, convenience store, and retail locations throughout a campus.

"The campus-wide card was revolutionary in that it used one card for multiple services and accounts over multiple years," explained **Huber**. "It provided a new management tool with which administrators could now manage their campuses in a more efficient and customer-service-oriented manner."

Linking to Banks

The next significant shift in the evolution of campus cards came in 1990. With the guidance of Bill Norwood, Florida State University became the first public university to link their campus card (FSU Card) with a bank. In 1993, Northwestern University (Ill.) became the first private university to link its campus card ("WILD Card") with a bank.

The dawn of the new century ushered in several major advances in the campus card evolution, according to **Huber**. The first industry "IP addressable" card readers were introduced by The CBORD Group Inc., eliminating the need for direct wiring and LAN reader networks, while increasing card transaction speeds and stability. Associated new reader designs incorporated new technology, reduced reader maintenance and increased system reliability.

Concurrently, students on campuses throughout North America began using the internet to make deposits to their campus debit accounts. "The ability for students, and even their parents or Aunt Suzie to add money to student campus card accounts via the internet in a secure and convenient manner was a game changer," adds **Huber**.

Four years later, in 2005, General Meters Corporation (Colorado Springs, Colo.) integrated "wireless" door access card readers that gave campuses the ability to install access card readers on existing residence hall/office doors (i.e., without installing data and power wiring to the doors) as well as remote locations, athletic facilities, temporary locations and standalone parking lots.

Campus Payments on the Move

Fast forward to the present and the campus card industry, in its ongoing effort to stay ahead of the technology curve, has begun offering colleges mobile payment applications similar to those used by some of the world's leading retailers.

Mount Holyoke College in Massachusetts is currently implementing a new mobile payments app, *MyPay*, which enables students to pay for purchases around campus at bookstores, vending and laundry machines, dining locations, print and copy stations, and more. It is also used as a virtual campus ID card.

MyPay, for Android and Apple *iOS* devices, can reduce wait times since students can send their payment information to the point-of-sale terminal while waiting in a checkout line. "Cashiers simply press a button to complete the transaction," explains Fred Emery, vice president and general manager of Campus Solutions at Heartland Payment Systems, the developer of *MyPay*.

According to **Huber**, because of mobile applications, universities don't have to wait for special chips to integrate mobile payments into their systems. "It's an excellent technological and strategic approach of delivering more student services to the marketplace in an accelerated manner."

Emery added, "Many colleges are beginning to offer their students mobile apps for various campus resources, such as maps and events, and this is the natural progression. By offering mobile payment apps similar to those offered by some of the world's leading retailers, like Starbucks, colleges are giving students convenient, flexible payment options on the devices they use most often."

As one of the most cost-effective administrative tools and marketing vehicles for recruitment and retention of students and employees, campus cards have been representative of technological advancement at higher education institutions across the country. The advent of mobile payment applications on campus will certainly give colleges the competitive advantage they need to boost enrollment, retain students and employees, and develop better relationships with local businesses.