HID®

One campus card for education institutions

Helping Higher Education Maximize Value Using a "One Card" Solution

Overview

Educational institutions have their own set of unique requirements. They are faced with satisfying today's demands while providing the foundation to meet future needs for a very technology savvy group of consumers: Students.

Leveraging the capabilities of a student card for student's daily-used applications in order to provide convenience not only on campus but also off campus and keeping the campus safe in as cost-effective manner as possible are on the agenda of every campus office.

Getting the Most Value From One Campus Cards

Protecting students, faculty, staff and property is one of the university's most important responsibilities. Campus security can be achieved using contactless smart card technology and the greatest efficiency and convenience comes from a single card access control solution that also enables other value-added applications.

Here are some examples of the many applications that can increase the value of a single contactless campus ID smart card:

- **Facility Access:** Students, campus staff, and faculty can use their card to open doors to dorms, library and media centers, the fitness center and on-campus healthcare facilities, cafeteria, and computer labs. The card can also be used to access entertainment venues and athletic events.

- **Data Security:** Contactless smart cards also can be used to control access to campus data such as exam results, research data, healthcare information and other sensitive campus records. Combining contactless and chip technology, Crescendo® credentials from HID Global can be used in combination with HID Global's iCLASS SE® reader platform. These smart cards provide students, teachers, faculty, and staff with secure access to buildings as well as data on campus networks with the enhanced security of multi-factor authentication.

- **Cashless Payments:** Contactless smart card technology provides the necessary security not only to get through cafeteria turnstiles but also to make meal plan purchases. It also can be used to pay for laundry, printing, copying and other campus services. Additionally, it can be used to redeem discounts and participate in loyalty programmes and to make debit and other cashless payments in partnership with financial institutions.

- **Parking and Transportation:** Contactless smart cards help campus parking facilities function smoothly, safely and reliably, with the option of electronic access control to eliminate the need for

guards at entrances. Students, faculty and staff can also use their cards to access buses, rail systems and other transportation services, as well as car and bicycle sharing systems.

- **Security and Convenience Everywhere:** A single card solution can also work with both wired and wireless locks installed on secure storage receptacles like cabinets and gym lockers. These locks can be connected to the building's online access control system for near online and near-real-time control. Cards also can be used to protect and monitor even higher-value resources like fleet vehicles, and industrial, laboratory or other equipment.

- **Protecting High-Security Areas:** Contactless smart cards can implement additional factors of authentication where needed. Institutions with high-security R&D labs, for instance, might wish to deploy biometric technology, as the University of Arizona has done in selected areas of its campus. It is important to note that biometric templates can be included directly on cards, which simplifies deployment while speeding the authentication process as compared to storing all templates on all biometric readers. Finally, new legislation or regulatory requirements might also prompt the need for this or other types of multi-factor authentication.

- **Time and Attendance Monitoring:** There is increasing pressure for universities to monitor and record student attendance. One of the most sensible options is to integrate these processes into an existing access control system, thereby optimizing value and minimizing cost, disruption, and system duplication. Attendance-taking at classes, lectures or other events is much faster if students can use their cards to quickly check in as they enter the room.

- **Cost and Sustainability Initiatives:** Another important card application is secure document management and printing, which reduces paper, toner, maintenance and energy costs, while ensuring that authorized users access resources properly. Cards can also be used for building automation programmes to control access to lighting and HVAC systems, and they can be used to secure campus Electric Vehicle (EV) charging stations and service equipment, making it easy for eco-conscious campuses to support these emerging clean transportation initiatives.

Trends Influencing Student ID Card Deployment and Management in Higher Education

Mobility: There is a strong trend for students to move from one university to another within the European Union (EU) during their studies. "Learning mobility" consists of going abroad to study or undertake training. EU Ministers have agreed to double the proportion of higher education students completing a study or training period abroad to 20% by 2020 and support for mobility is a core focus of the EU programme for education and training. With this initiative, the requirement of a campus card used in various campus facilities across different countries is growing. The members of the European Campus Card association (ECCA) therefore launched a project to work on a concept of developing a European standardised campus card system. Research done by ECCA clearly identified the need for interoperability and mobility across the EU. The creation of a standardised campus card system will facilitate secure access to a range of campus services. It will also provide academic mobility by allowing Higher Education institutions to share information using a common identification card.

Figure 2.11: Projected growth in international student enrolments in the UK
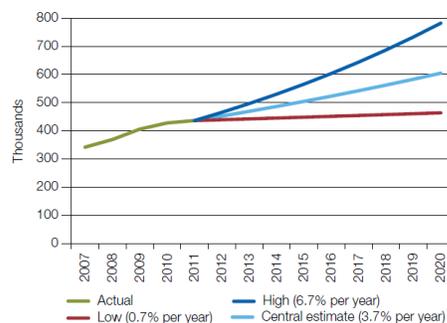
Source: HESA Student Record & BIS calculations

Increased use of mobile devices: In addition to the "learning mobility" trend, the use mobile / smart devices for multiple applications, in place of the traditional student ID card, is also growing in popularity. Universities in the United States market mobile access as a point of differentiation when attracting students and, at the same time benefit from a convenient, streamlined ID card management process.

Several recent pilot projects in the US illustrate how universities can offer mobile phone access as an alternative to or complement to traditional contactless smart cards. One example is the mobile access pilot undertaken by HID Global at Arizona State University, USA. According to Arizona State University's director of business applications and fiscal control, Laura Ploughe, "Leveraging a campus card solution means putting technology in the hands of students that fits their needs, is convenient, is secure and is as mobile as they are." Ploughe played an instrumental role in the execution of an ASU-based pilot of HID Global technology that enabled smartphones to carry digital keys. It is expected that the trend to use the mobile smartphone for multiple applications will grow. For the coming years, mobile access control solutions will co-exist with ID cards on the typical campus, enabling institutions to implement a choice of smart cards, mobile devices or both.

Universities are increasingly leasing dorm rooms as an additional income stream during summer months. A mobile solution simplifies the issuing/revoking process as well as overcoming the issue of lost or misplaced cards.

Convenience leading to "off-campus" usage: In addition to moving multiple new applications onto smart cards, smartphones and other mobile devices, there is a growing requirement to use campus cards across different facilities from one country to another.
Some banks, including Santander Universities offer campus card and credit card combinations. Campus cards can also be used for public transport to avoid additional ticketing. Most off-campus use cases depend on business relationships between campuses and third-party providers and authorities (which can vary from country to country).

Efficient photo ID badging: Customised with a photo, a student ID can be used not only as proof of the student attending the university but also as an International Student Identity Card (ISIC). Student cards are issued centralised or decentralised, depending on the country. Decentralised card issuance requires an investment but will enable flexibility and efficiency when issuing cards to a high volume of students every year as it eliminates the need for students to stand in line for hours during registration.

Additionally, each card is expected to last for the lifecycle of the student's involvement with the institution. Secure issuance that supports fast photo badging should be intuitive and require little or no training. Printers on site should also be field-upgradable so they can meet new requirements, as student ID systems need to change and evolve. They should incorporate critical visual and logical technologies for trustworthy authentication and to help deter tampering and forgery. For administrators, it should be easy to synchronize card encoding information with the student enrollment database and eliminate the possibility of errors.

Secure Visitor Management: Students, faculty and staff aren't the only people on campus. Because most college campuses are open environments with many people moving around, it can be very challenging for administrators to monitor visitor and guest activity. If higher education is looking at way to capture visitor data more quickly, accurately and automatically at main halls (while reducing the cost of theft, vandalism and other risks associated with unauthorized guests) visitor management solutions such as HID Global's EasyLobby® can be used. As an example, campus cards can be issued to regular visitors for door access. The card is automatically deactivated once the visitor's approved access time has expired. The visitor's card access can be easily reactivated for future use and authorized visitors can be managed, monitored and audited.

Campus expansion

As universities expand, new buildings need to be integrated into existing access control and facilities management systems. Students need to be able to use the same ID cards in old and new buildings, or from one university campus to another.

The access control system and its access control devices (readers and badges) should therefore support the use of one campus card across different universities and between old and new buildings.

As an interoperable, highly adaptable and open standards based access control platform, HID Global's iCLASS SE® platform provides universities with the option to migrate seamlessly from one credential technology to another. This makes it easy to streamline access from one building to another that may use different card technologies (either legacy or new technologies). At the same time the iCLASS SE platform offers upgradability for future applications and advanced technologies as well.

Designed to meet the increasing trend to use mobile/smart devices iCLASS SE platform, powered by Seos®, makes it possible for smartphones to carry mobile IDs for opening doors, and a full range of additional campus applications. Interoperable with iPhone and Android smart devices, universities should seek mobile access solutions that also provide data confidentiality and strong authentication with state-of-the-art cryptography for mutual authentication and data encryption, protecting the privacy of contactless communications.

Enhanced security protecting learning assets: Digital signature with the Student ID Card

Digital signature solutions help educational institutions save money by replacing slow and expensive paper-based approval and singing processes with fast, low-cost, and fully digital solutions. This means that staff and students can spend more time focusing on their curriculum and studies rather than spending time physically signing documents.

Digital signatures can help organisations comply with security and privacy regulations and guidelines as defined under general European law (including the EU wide Data Privacy Directive). Digital signatures can provide legally enforceable electronic records and are specifically designed to protect document integrity. Digital signatures can be stored securely on smart campus cards and can be used by staff members or students to digitally sign important documents such as examination and lab results.

HID Global solutions and services for educational institutions are developed from the ground up to facilitate convenience and give security officers the confidence that their infrastructure can enable students, staff and faculty for many applications for years to come without compromising security.

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