



## ID Management in Education



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## Introduction

Identity card solutions in the education sector do more than just provide visual security. If leveraged correctly, they can help provide a secure and efficient environment for learning. For example, in a nursery, children's ID credentials should identify them as individuals and put stops and checks in place against unauthorised individuals fetching them from school thereby enhancing their safety. On the other hand, for a university student, their ID credentials should give them access to various facilities on the campus, including library networks, the ability to make payments in the cafeteria and to hold details of sports and social club memberships for example.

The reality however is that there is a dearth of effective ID management solutions in the education sector and this holds true from nursery to tertiary levels. There are quite a few challenges that make implementation of ID management solutions in education a daunting prospect starting with the fact that there is no 'one-size fits all' solution.





## Challenges which make the education sector unique

### One user, multiple roles

Every business has users with multiple roles, but this is exacerbated in the education sector. Take for example a parent who may also be an alumnus of the institution, or a staff member who is also a student. Each one of these roles enjoys different rights and hence demands different access and privileges that need to be configured with their ID credentials.

### Huge inflow and outflow of users in the system

Each new term brings in a fresh influx of students as an equal number of students in the form of the graduating class leave campus. Then within different semesters, students may change their classes and tutors, and of course, the teachers themselves may change roles and institutions. To keep pace with all these developments and make changes manually or on a case by case basis can create logistical problems. The identity system in use needs to facilitate quick and automated provisioning/termination of access on the campus. It also needs to cater to temporary guests like substitute teachers or students taking online courses.

### Diverse user profiles – by age and technical skill

Every organisation experiences diversity in user profile and nowhere is the age and technical expertise gap as extreme as it is in an educational institution where users can range from nursery school students to older faculty members and parents. The identity system must be simple enough to provide a good user experience for both a 5-year-old and a 50-year-old and yet be complex enough to meet different provisioning requirements.



## Key applications

Traditionally, ID cards have been used in education purely as a means of identification in its simplest definition – for example to indicate which school an individual is from, which event they are attending, if they belong to a particular group on a school trip and so on. This visual identification – which is little more than labelling – cannot serve much of a function beyond this.

However, current student ID cards are capable of much more than basic photo identification thanks to advancements in ID card technology. Many universities now utilise magnetic stripe, smart card, and proximity card technology to integrate student IDs with everything from access control systems to meal plans and laundry machine operation. Some IDs even work as debit cards for purchases both on and off campus.



Some of the key applications are:

**Access control** – is this student or member of staff allowed in this part of the building or campus?

- Being able to set individual rules around authorisation allows institutions to control who can go where, and so reduces the risk of unauthorised people having access to restricted areas and equipment whether intentionally or accidentally.

**Attendance monitoring** – record attendance automatically

- Allow for classroom clock-in /-out and in the event of a student going missing, track when they entered the building and at which location. This has the subsidiary benefit of saving staff time on reporting.

**Making payments** – preload the ID card with credit or link to an account

- Students can pay for food in the cafeteria or purchase on-site print services without having to carry cash with them

**Improved processes** – increased convenience, speed and efficiency

- Instantly replace lost or damaged badges, complete with full colour photo, a signature, a barcode and can even have a programmable smart chip for electronic security.



## Benefits

### Protecting people

When children leave home and come to school to learn, they should be able to do so feeling safe and secure, knowing they are surrounded by people who belong in the same area. In primary and high school settings, photo identification makes it easier to recognise potential threats on school grounds and in the US for example, it is becoming increasingly common for schools to require all students, faculty, staff, and visitors to wear ID badges. By making the badges mandatory, all visitors who step foot on school grounds must first register at the reception area. These badges then indicate that the person has the right to be there.

The ID badges can be identified by the watermark or access control level pre-programmed into their badge. Access control cards also facilitate logging the time and attendance of students arriving for class. They can be issued quickly, so they are ready to be distributed as soon as a new student registers with the school or a visitor enters the school premises.





#### Protecting buildings

The primary goal of an access control system installation is to monitor who can access a building, room or network and when they do it. Students and teachers can both benefit from having a pre-programmed access control card, specifically designed for their department or building. Having access control cards programmed to each individual can limit access only to those who are meant to be in the building.

A school or university utilising access control pads on all external doors could experience a significant improvement in security. Anyone without a card would not be able to gain access through the protected doors. Additionally, anyone within the building would only be able to access the areas their own personally programmed card would allow.

#### Protecting information

A card used for access control can do more than determine the access levels a person has to specific buildings and rooms. They can also limit the people who can gain access to digital files. School databases contain a lot of personal information about students and their entire academic records. Having the added protection of an access control card allows schools and colleges to minimise the risk of unnecessary exposure by only granting access to specific members of their workforce.

**Leveraged correctly, smart cards can help provide a secure and efficient environment for learning.**







## Case Studies

### Instant issue of a multi-application alumni membership card for two sets of audiences

**Challenge:** The Alumni Association of a leading North Carolina based university has a large and growing membership base comprising current students and alumni. The membership provides a variety of services and activities, vendor discounts and career support but since the Alumni Association until recently only issued generic membership cards, it was difficult to track specific members at an event or identify which services members used. Without official identification, members also faced difficulty proving their eligibility for the vendor discounts and other benefits offered by the association.

**Solution:** The Alumni Association recognized the need for a membership ID card and more importantly the importance of issuing two types of membership cards on demand. Student membership cards would be issued to current students at the university who belong to the Alumni Association's student branch and include the student's name, ID number and an identifying barcode on the reverse of the card. Lifetime membership cards for Alumni would include the member's name, lifetime ID number, a personal ID number and an identifying barcode.

**Benefits:** The new system is simple and powerful – for one it clearly distinguishes between the sets of membership making tracking and recording attendance an easy task. Also, since printing of these cards with all personal information can be executed on location (at events) and is done within seconds, it has simplified operations allowing the association to seamlessly grow its membership base. With a solid ID mechanism in place, members can benefit from special discounts and services the membership entitles them to, both on- and off-campus.







ID Card that facilitates secure, multi-application use around campus

**Challenges:** A leading institute in Austria required an efficient ID mechanism that would enable students to use various facilities on campus in a hassle-free manner.

**Solution:** ID cards are printed with all personal and visual identification of the student. The cards are encoded with several segments that enable multi-application use on campus.

**Benefits:** The ID cards are used as 'all-in-one' cards - in addition to serving as official student IDs, they double up to enable food & beverage payments at the canteen. The cards also provide logical access i.e access to library facilities, convenient physical access such as opening entrance gates as well as enabling time management with easy clock in/off options. Since cards can be printed on demand and are linked to the campus student database they can easily be replaced by the office, simplifying working processes.





## Conclusion

Educational institutions of all shapes and sizes are implementing ID card programs to not only increase security, but also to provide a multitude of other unique and convenient functions. One just has to look at how functionality of the cards keeps getting enhanced year after year to realise that ID solutions provide an effective answer for schools and universities to reduce risk, increase efficiency and improve accuracy.

