Texas Schools Embrace Smart ID Card Attendance



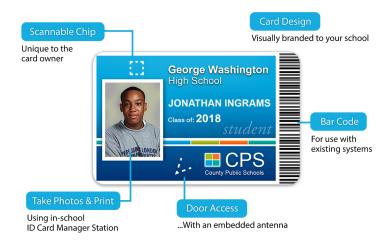
Changes in technology bring about changes in school processes and procedures: taking daily school attendance using tech is a recent topic addressed in the Texas Education Agency's 2016-2017 Student Attendance Accounting Handbook.

Improvements are helping to streamline the attendance process in timely, cost-effective ways, and administrators are being introduced to new concepts like smart ID cards and dual factor authentication. But what do they mean, and how do they apply to your school district?

SMART ID CARDS IN EDUCATION

In the 1970s, ID cards were introduced on college campuses; they typically had a magnetic strip on the back which allowed students to charge purchases against their meal plan, provide access to dorms, register for classes, and take books out of the library. Separate credit cards were used to pay for purchases made at the bookstore, and classes were paid by check at the Bursar's Office. Still in use today, these cards are considered dumb: they have a magnetic stripe or bar code and do only simple things like release a door, or pull up a food service or library account.

Smart ID cards, however, use a chip that is embedded with a globally unique ID number assigned to one individual. It is the back-end computer that maintains detailed information on the student or staff member to whom the ID is issued, so administering the program is simple and straightforward. Cards can be activated and deactivated on demand and only one card is active at any time, which increases security when students graduate or instructors leave.



PASSIVE AND ACTIVE SMART ID CARDS

School districts have to strike a delicate balance between protecting students when they are on campus, and protecting a student's right to privacy. In 2012, a Texas school was at the center of legal controversy when a student refused



to wear her active RFID (Radio Frequency Identification) card to school; in 2018, Texas schools are embracing passive RFID cards, which do not invade privacy.

Active ID Cards

An active RFID card has a transmitter and its own battery which is used to run the card's microchip circuitry and to broadcast a signal to a reader (the way a cell phone transmits signals to a base station). These are also used in toll booths or inventory trackers. In a school, the tag allows a student's or teacher's card to be read at any time: it can hang around a person's neck, held onto his or her belt loop or in their backpack, and the reader picks up its signal, as long as it is within a particular, wide range.

Because the card transmits data, badge holders can be tracked and found anywhere, at any time. And while this is an enticing scenario, there are legal limits on what constitutes a person's right to location privacy, as evidenced in the Texas lawsuit. Active RFID cards are also heavy, expensive, and need significant maintenance.

Passive ID Cards

Passive tags are lighter and have no battery. Instead, they draw power from the reader, and require a student to take an action like tapping it on a screen so it can be read. This process makes it very easy to track where students are, and you can get an accurate count of how many students (or teachers, or staff) have checked in at any particular time. However, because it is a passive process, these ID cards do not infringe on privacy. Also, passive cards are more secure, less expensive, and last longer, hence they have lower overall cost. Their form factor is identical to standard cards, making adoption easier, too.

Readers can be placed at each building door, classroom or office, and are often installed on moveable kiosks for specific events for taking large group attendance at basketball games, theater events, special lectures, and the like.

DUAL FACTOR AUTHENTICATION

Dual Factor Authentication is a security process that requires two separate forms of identification to be presented before something happens. At an ATM, for example, you must 1) present a bank card; and 2) enter your pin number before you can access your account.

In the 2016-2017 Texas Education Agency's Student Handbook, new attendance rules call for dual factor authentication if a school uses RFID cards. When a student taps into the classroom with their smart ID card, the teacher authenticates their attendance in real time. It's a way to make sure that counts are taken accurately and the data collected can be audited.

A SECURE COMBINATION

These new policy changes offer you an opportunity to increase your attendance accuracy while keeping student data private and protected. And you can incorporate passive RFID smart cards with dual factor authentication affordably: students tap, teachers verify, quickly and easily, and attendance is reported in an accurate and auditable way.



