

Should RFID Be Used to Monitor Students?

Radio frequency identification is a technology currently found in supermarkets, the retail supply chain, and even baggage handling. Districts in Japan and Denmark have recently implemented this hi-tech tracking system in their schools, while in California, a pilot program using RFID in an elementary school was suspended last year because of pressure from parents and civil liberties groups.

Yes

Last year Brittan Elementary School in Sutter, California, received national attention when it was forced by a handful of parents to discontinue its plan to monitor student attendance using ID badges. Parents and critics had a heyday in the news media, claiming that children were being treated like “oranges” or “cattle” because the badges contained short-range radio frequency identification (RFID) tags, a technology often used for tracking inventory or livestock. The book of Revelation was even invoked as some parents claimed RFID tags were the “mark of the beast.”

Unfortunately, most criticisms of the program lacked a basic understanding of RFID technology. For example, opponents spuriously claimed that student information could be stolen for nefarious purposes even though the RFID tags contained only a number and neither stored nor transmitted any personal information. Likewise, critics argued that students could be



By **Scott McLeod**

No

One of the things students need to learn is individual responsibility. The more we implement monitoring systems that override that responsibility, the less they will believe in their own individual roles in managing their personal behavior. Responsibility must be practiced, not just taught.

The RFID card is a technology with many excellent and logical uses. But just because it can be used for something doesn't mean that it should be. Advocates for using the technology in schools identify several uses for the RFID cards. They include:

- Attendance, tardiness recording
- Library check-out
- Bookstore purchases
- Cafeteria purchases
- School bus travel



By **Allan Jones**

RFID can be used for all of the preceding purposes. But so can a low-tech plastic student ID card with a bar code.

tracked off school grounds despite the fact that the RFID tags had a transmitting range of no more than a few feet. Claims about cancer-causing radiation were similarly fictitious. Most concerns about the tags either confused RFID with GPS (Global Positioning System) technologies or were against the idea of name badges themselves, distinct from the fact that RFID tags were embedded in those badges.

Critics also failed to acknowledge that student privacy rights already are quite limited in schools. In thousands of schools, students carry ID cards with bar codes or magnetic strips that can be used in swipe card or keyless entry systems and to check out library books. They ride GPS-equipped buses, walk through metal detectors that scan their bodies with electromagnetic pulses, are monitored with security cameras in hallways, and use fingerprint scanners to buy their

lunch. Many of these technologies are more invasive than RFID technology, but any controversy that once accompanied them died away long ago. Parents not only allow these privacy incursions to occur, they're actively clamoring for them. Parents' desire to keep students safe and secure has long since trumped student privacy concerns.

Many adults use employee IDs as entry cards. When we buy groceries or gas or drive through toll booths, we use fingerprint scanners or key tags or windshield cards that are linked to our credit cards. We actively seek out GPS technologies in our cell phones, cars, and watches that allow others to pinpoint our location within yards. We voluntarily do this to ourselves. Why then is there such an outcry when we propose doing this with students at schools that already are required to know their whereabouts?

Any school that didn't know where students were at all times during the school day would be pilloried in the court of public opinion. Students cannot wander school freely. If monitoring student whereabouts can be handled efficiently with technology rather than with expensive human labor, why not employ the technology and realize the time savings?

The issue is not whether we should keep students safe. It shouldn't matter whether we use less-expensive computers or more-expensive school personnel to monitor student attendance and location. RFID tracking of students within school buildings is a non-issue.

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If a school has money to spend on technology, most analyses will show that there are better ways to spend it than on RFID for tracking students. Bar code readers are less expensive than RFID transceivers. A bar code can be added to an ID card at almost no additional cost when the card is created. Embedding a chip into each card costs about \$3 per card. So, the RFID system is more expensive at no incremental benefit. And incidentally, the bar code requires the card carrier to pass the card over the reader, thereby giving the carrier knowledge of the monitoring activity. RFID readers can be installed without an individual's knowledge and require no deliberate act by the person carrying the RFID to be read. That is far too Orwellian for my sensibilities.

So why are some people advocating RFID use? Some of their reasons strike me as disingenuous. If the

purpose is to take attendance, then why would they install readers on the entrance to the bathroom? Why did Spring, Texas, spend \$180,000 to install an RFID system—including on the school busses—to fight kidnapping when the town has never had a kidnapping?

Are there some students in a school who will break the rules? Certainly! Would it be nice to be able to track the whereabouts of those students throughout the day? Absolutely! Should every student in the school sacrifice a portion of individual freedom so we can monitor the few miscreants? Absolutely not! Given the weakness of the arguments for using the RFID over less intrusive technologies, it is difficult not to be suspicious of the true motives of those who advocate the use of RFIDs. To them I would say, put more energy into

teaching values and responsibility. If you do it well, you will teach the importance of these subjects. At that point, hopefully, you will see the dichotomy of also implementing an RFID system.

Benjamin Franklin said it very well more than 200 years ago, "Those who give up liberty for the sake of security deserve neither liberty nor security." In today's world, I frequently find myself thinking, "Please protect me from those who would protect me from myself!"

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