



Access Control in University Attendance Systems

ASSA ABLOY

Should student attendance
be monitored?

A discussion paper

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The global leader in
door opening solutions

Synopsis

“With a view to ensuring the welfare of our students and supporting their academic progress, and given the external pressures from both the UK Border Agency and the Student Loan Company for universities to monitor student attendance, Management Board has made the decision that an enhanced approach to recording the attendance of all students should be introduced.”

This quote is taken directly from the University of Nottingham website and is representative of the majority of University attendance policies now being implemented.

It highlights the increasing internal and external pressures on Universities to monitor and record student attendance, with all the associated cost and administrative burden.

Yet, at the same time, there are countervailing pressures, not least in the well expressed concerns about privacy and data protection plus the more philosophical debate about the purpose of higher education and the importance of students developing self learning and having the freedom to explore their intellectual boundaries without too many official constraints.

Wherever Universities, Departments or even individual tutors stand on this spectrum of opinion, the reality is that systems for monitoring and potentially controlling student access and attendance are going to be required in the future.

Rapid advances in technology means there is a plethora of potential solutions for each security and access challenge, but the fact the choice is so wide is, in itself, a problem for time constrained university estates and facilities managers.

In addition, these changes are taking place against a backdrop of severe public sector financial constraints, with further “real term” cuts in expenditure over the next 3-5 years. This means the competition for those scarce resources, time and money, is fiercer than ever.

The question therefore is simple: should student attendance be monitored or even made compulsory today?

The answers are complex and challenging but the issue is one of real importance for all Universities and by producing this Discussion Paper, ASSA ABLOY wishes to stimulate debate and encourage views and contributions from many voices.

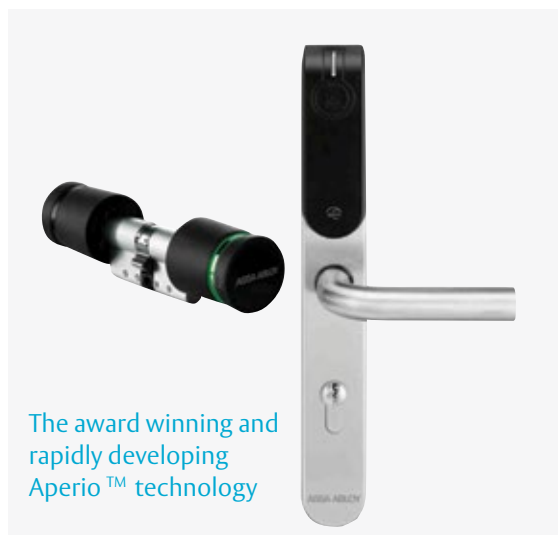
To contribute your opinion, experience or comment please visit: [facebook.com/ASSAABLOYUK](https://www.facebook.com/ASSAABLOYUK)

About the author

Damian Marsh has significant involvement in all aspects of security and integrated solutions, with over 20 years experience understanding the needs and requirements of individual market sectors. He has worked for ASSA ABLOY since 2011 and currently holds the position of EMEA Sales Director for Electronic Access Control and Managing Director of the UK Access Control business unit.

About ASSA ABLOY Access Control

The ASSA ABLOY Access Control business was set up in 2011 to bring new technologies developed by the ASSA ABLOY group to market. Currently the award winning, and rapidly developing, Aperio™ technology is a main focus.



The award winning and rapidly developing Aperio™ technology

The purpose of monitoring student attendance in Universities

1

There are a number of reasons why the monitoring of student attendance in Universities is now an important issue.

The UK Border Agency has introduced new legislation in recent years governing the immigration of students and teaching staff and this places onerous duties on “sponsors” such as Universities in terms of capturing and maintaining attendance data and making it readily accessible to the UKBA.

As recent well - publicised events have shown, UKBA and immigration officers are prepared to revoke sponsors licences and detain and deport students they suspect are not attending courses or fulfilling their duties as a student.

Given the economic importance of overseas students to the budgets of many higher education institutions, this can be a critical issue for the university institution as well as the student.

At the same time, the Student Loan Company is also taking an increasing interest into the legitimacy of students claims, especially for post graduate courses involving part time study, where the individual may have enough employment earnings to warrant making a repayment on their loan but are claiming continuing student status to defer any repayments.

A third factor is the University's own financial position, especially when they are also acting as the landlord or provider of student accommodation. Non attendance can be a useful ‘early warning’ sign of problems which can lead students to drop out of courses and a high percentage will leave unpaid bills for university facilities, services and accommodation. These debts are notoriously hard to recover with a high ‘write off’ factor.

In addition, to these ‘hard’ factors, Universities also have “soft” drivers for monitoring student attendance.

The primary one is concern for student welfare and safety. In a large University with 10,000 plus students, it is challenging for academic and pastoral staff to develop a ‘personal’ relationship with each student.

A monitoring system that flags up that a student has missed several day's lectures in a row, could trigger an investigation into whether the student is ill, has met with an accident or has other personal issues that need support. This also helps the University demonstrate compliance with its Duty of Care responsibilities.

Universities are also keen that students achieve a good academic education, as that is their core purpose and, in an increasingly competitive university market, “league table” scores are now a factor in student choice of University. Many studies have shown that failure to attend is a strong indicator that a student may be struggling with their course and may be about to fail a module or paper.

Finally, with the increased costs of a University education both students and their parents are increasingly behaving like “consumers” of education and are far more aware of their rights and prepared to negotiate or litigate for financial compensation if they believe they University has not delivered what the student has paid for.

The ability to monitor student and indeed staff attendance can provide valuable data when these awkward discussions arise. A student complaining that staff did not attend to give a lecture or a study group/seminar can easily have their complaint verified or rejected.

Equally, when a parent is complaining that their child has been given poor grades, the fact that the student has a 35% non attendance record can paint a very different picture .. especially when this fact comes as news to the parent!

The challenges to effective student monitoring

2

The main challenges faced when assessing student monitoring systems fall into a number of areas.

First, the University has to decide on when to monitor and how they monitor attendance. This can range from a formal registration system or 'clocking in' at each lecture/science lab/seminar etc through to a system based on a specified number of formal "monitoring points" per term.

For example, at the University of Warwick, their "Good Practice Guide on Monitoring Student Attendance and Progress" identifies a minimum of 11 formal monitoring points over an academic year (three in the first two terms, one is exam attendance, in the third term.)



The monitoring points can include student attendance at teaching sessions, meetings with staff, work submission, exam attendance and, although email/online contact is acceptable, a "significant proportion should be via face to face contact." Warwick then goes on to identify that action should be taken when a student misses three monitoring point and upwards with a series of escalating interventions.

In other Universities, there are central guidelines but the specific actions and policies are left to each individual school or department. This has advantages given the very different nature of arts/humanities courses of study and the more intensively "on campus" laboratory based science courses. However, not having common cross-department standards can lead to confused data and may also lead to some students, studying dual honours or similar cross - departmental courses, falling through the net. For example, someone studying physics and philosophy may have exemplary attendance in the lab but have missed their last three philosophy tutorials.

Universities then have to consider the different study and attendance patterns of postgraduate and research students and students attending part time courses. Another complication can arise when students are on a multi centre course, where they may be studying abroad for certain periods. And, of course, the whole growth area of online learning brings new complexity to the question of 'what is attendance?'

The second challenge to implementing a student attendance and monitoring system is behavioural, both with students and with staff.

The problems can range from the stereo-typical student "doziness" and lack of punctuality through to a far more aggressive form of non - compliance and active resistance, perhaps inspired by libertarian and anti-authoritarian belief systems. The 1984 "big brother is watching you" meme remains a powerful call to protest for many student groups. This problem can be compounded by staff attitudes, where many higher education staff hold the opinion that registration and monitoring "infantilises" students is contrary to the point of the University experience, where students learn both the benefits and pitfalls of "independence".

These concerns by students and staff are closely allied to the growing awareness (and misunderstanding) of the issues surrounding personal data, personal privacy, data protection and confidentiality, where attendance monitoring joins access control and CCTV on the list of "bête noires" for many groups.

The final and perhaps most significant challenge today is the cost of implementing a student monitoring system, both the in the direct costs of any technology and equipment and the in-direct costs of storing and accessing the data and then using and interpreting the data to make informed interventions.

Core issues in implementing effective monitoring

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There are many 'stand alone' attendance systems on the market ranging from a manual register through to sophisticated timeclock "check in and out" technologies.

One of the most sensible options is to consider integrating as many of the student attendance monitoring processes into an existing access control system, thereby optimising the value and minimising cost, disruption and system duplication with all the redundant overhead cost in terms of training and maintenance.

At its most basic level, access control is a system for enabling or preventing people from entering or exiting a location, whether a whole site or a single room or cupboard. A secondary function may be to record the movements in and out of locations and provide a data trail for audit, traceability, compliance or improvement purposes, which is precisely what a student attendance monitoring system requires.

The majority of access control systems rely on the person or transiting in or out of a location being recognised and validated, usually by a "credential".

This credential may be something the person has (key, card, identification tag or within the next 12 months, a smartphone with an access control "App"), something they know (password, PIN) or something intrinsic to them (biometric data such as iris recognition, fingerprints).

In many systems, more than one layer of credential may be required and some systems require a second party credential (second keyholder, visual recognition by an approved inspector via CCTV link.) The more layers and sub systems, the greater is the complexity of integrating the systems and storing, accessing and making use of the data.

In addition, many Universities prefer to keep the number of credentials required by any one student to a minimum, (reducing the problems and costs associated with loss/replacement.)

This way, the same credential may be used to authorise and monitor access to study areas, laboratories, sports facilities or as payment/authorisation for the use of facilities like libraries, gyms, swimming pools, restaurants and dispensing/vending equipment.

And with an integrated system, a student can have a single "credential"...card, fob, mobile phone app etc ...which would grant or deny them access to sites, to individual building and to specific rooms and at the same time the system would capture and record the time and location data.

It is then relatively simple to write software routines to give exceptional reporting and action routines based on the data captured; by example,

"Student A did not enter building B on the morning of Friday 2 March when he was due to attend Chemistry advanced seminar 23"

"Student A has now missed 3 academic sessions"

" Action: email alert sent to student liaison officer and academic tutor"

The advantage of combining the attendance monitoring with access control in this way, using just one credential, is that carrying the credential soon becomes 'second nature' and so compliance increases.

In addition, in extreme cases, where a student needs to be excluded from certain facilities, perhaps because of financial arrears, then their access can be denied remotely.

Options and solutions

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Faced with this complex balance of competing priorities, how can those responsible for student attendance monitoring navigate an effective way forward, within the financial and technical parameters of their premises?

As discussion points, the following may provide useful indicators:

- Implement an up to date risk assessment using the free survey services provided by many leading monitoring and access control providers, and by engaging in a serious debate within the governing and management structure within the University about the necessary systems and policies.
- Any risk assessment must start with the likely level and frequency of student monitoring, quickly followed by the attendance monitoring of academic and other staff, and other visitors and users of the site.
- Implement a “bottom up” approach to monitoring and access control. At its simplest, start with the most important entrance and exit points and the critical access points inside the buildings.
- Select appropriate technologies. The latest ‘all singing and dancing’ monitoring and access control systems offer a bewildering array of sophisticated options, all at a price.
- Where a complex already has an existing access control system that can be extended to include new additions and extensions, consider using “bridge” or interim technologies which can link and connect existing mechanical or electromechanical locks to the main access control system in a very cost effective manner.

These technologies can help to extend both the monitoring and protection offered by system to new areas and zones, without the need for full system replacement.



Summary

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Student attendance monitoring in Universities is now a complex and challenging issue, given the background of rapid changes taking place in the University 'ecosystem' and the severe financial constraints in public finances.

The external drivers from the UK Borders Authority and the Student Loan Company, added to the University's duty of care for student safety, welfare and academic performance, mean that the issue is now a prime concern for the governing and management bodies.

There are many solutions available but choosing the right solution requires careful analysis of the purpose and approach to student attendance monitoring that each body believes is appropriate for their institution given their student population, history and culture.

Some institutions will adopt a campus wide monitoring system that monitors attendance and student movement on a constant cycle across all premises; others will take a 'de minimis' approach and simply do enough monitoring to comply with the statutory regulations.

Which means that the first and perhaps most challenging question to answer is " should all student attendance be monitored on a compulsory basis?"

Action Point:

To add your voice to the debate, please visit www.facebook.com/educationsecurity and share your views and opinions.

Thank you.

To contact the author, please email: accesscontrol@assaabloy.co.uk



Appendix 1

ASSA ABLOY is leading provider of doors solutions used in many access control systems

Aperio™ is a new global ASSA ABLOY technology that enables mechanical locks to be wirelessly linked to a new or existing access control system without any need to modify the door.

The heart of Aperio™ is a short distance wireless communication protocol designed to link an online electronic access control system with an Aperio™ enabled electronic cylinder or escutcheon.

This means that

- Additional doors can be integrated into access control systems at a low cost
- Aperio™ can be combined with new and existing access control systems
- Easy to install with no structural alterations to the door
- Standard RFID technologies are supported
- Battery-operated Aperio™ cylinders and escutcheons provide an RFID-Card reader
- Aperio™ can update room access authorisations online and in real time

The open architecture of Aperio™ provides a convenient way of connecting with most access control systems via RS485 or Wiegand interface. The Aperio™ cylinders or escutcheons communicate via an encrypted wireless link to a communication hub that is wired directly to the system.

Aperio™ locking technology is also able to upgrade master key systems to instantly introduce access control convenience to any premises.

The ability to integrate into an existing master key suite, provides end users with a high quality and secure solution, with all the benefits of access control where it is required.

By utilizing Aperio™ in this way, requests for access control can be achieved, whilst retaining existing card credentials and removing key control issues, providing an overall cost effective solution, with minimal modification to doors and premises.

Aperio™ can be used to develop a truly bespoke cost effective security solution, which is quick and easy to install, that offers the additional convenience and flexibility inherent with an access control solution, whilst also solving key management issues.

For more information please visit www.assaabloy.co.uk

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