

Synchronised timekeeping means more learning time for students

“It goes without saying that core resources such as excellent teaching and support staff are critical to ensure high standards, but schools are finding other creative ways to improve efficiency” says Richard Manby, managing director of Bodet Class Change Systems.

Schools are constantly under pressure from both Ofsted and LEAs to improve standards and efficiency. They are very people-focussed organisations, with larger secondary schools having in excess of 1000 students and more than 100 teachers on site at any one time. Getting staff and students to the right place at the right time can be a major logistical problem, especially in schools that are spread over a large site and have a multiplicity of buildings.

Punctuality is a critical factor in the smooth running of a school, not only because arriving late for class has a disruptive effect for both staff and students, but also installing an ethos of good timekeeping is important for students later in life, especially when embarking on the employment ladder.

Learning time

Most classrooms have clocks, but these can be several minutes out, and even a couple of minutes can make a big difference to the time available for learning. A two minute delay in starting a class can result in a loss of 1 hour teaching time every week for each pupil, based on 6 classes per day. Over a 40 week year, this amounts to more than a full week of potential learning time that can be gained, simply by having clocks that are accurate and synchronous.

Lycee Francais Charles de Gaulle is a French school based in London. Facilities manager Frederic Lavocat commented “Clock and class change systems are essential for a school environment to enhance punctuality and make sure children benefit from all their learning time.”

Neil Whitton, facilities manager at St George’s Academy explained, “Ours is a large site with 16 blocks spread over 35 acres, and ensuring that every clock shows the same time was almost impossible. However much we checked and adjusted them there was inevitably a variation between clocks around the site. Every Spring and Autumn we would also have to

alter every single clock on site when we change from GMT to BST which only exacerbated the problem.”

Cecelia Irons, business manager at Farnham Green Primary School commented, “Being a growing school which is spread over a very large site, it’s a real challenge to get staff members to the right place at the right time so they can carry out their duties expediently. This applies not only to class changes, but to breaks and lunchtime duties.”

Modern timing systems link every clock on site to a central master clock which can either run independently or be driven by the school’s IT system. This ensures the whole school, from teaching and support staff to students all work to the same time frame.

Lavocat added, “We have now installed a system where the clocks are all synchronised by radio signals from a central computer. All staff and students work to exactly the same schedule and ensures the whole school runs efficiently and to time.”

Whitton commented, “Since we installed the automated radio controlled clock system, we can guarantee that every clock on site shows exactly the same time and class changes occur synchronously throughout the whole site. We don’t even have to make any changes in Spring and Autumn. The master clock is controlled by the IT system so it automatically changes to Summer or Winter time and this is then immediately replicated by every other clock on site”

Avoiding disruption

Many schools use bell systems to announce class changes and this is often the same bell used for fire alarms. This can compromise the safety of staff and students as there is no distinction between alerts for a routine class change or for a real fire.

Hampton Vale Primary School’s site manager Martin Redman said, “We had a synchronised clock system linked to the fire alarm, but the fire bell would then ring for a full 9 seconds which was not only disruptive, but meant we couldn’t distinguish between a routine class change and a real emergency situation. We tried to reduce this time but the outcome was that the fire panel would need to be updated. The cost to carry out this work was not that different to changing over to a new Bodet system.”

Lycee Francais Charles de Gaulle used to announce class change times with alarm bells. Lavocat added, “With the bell based system there was no clear distinction between normal

class changes, wet breaks or any emergency situations that may arise. For example a gas leak requires immediate evacuation of the site, but other security issues may arise that demand a lockdown. We felt that the safety of the children and the staff would be improved if we were able to broadcast specific messages across the whole site.”

Mrs Irons added “At Farnham Green Primary School we have over 600 children, so we need four lunch sessions to accommodate them all. Alarm bells just don’t communicate sufficient information to ensure everybody is aware of what’s happening and where they need to be.”

Tailored Alerts

By their nature, fire bells are loud, and when used routinely, they can cause alarm (no pun intended!) in some children, especially those with special needs. In such situations customised alerts can be beneficial.

Linda Carter is facilities manager at The Chiltern School, a school for children with special needs. She commented, “Harsh sounds like bells can be quite disturbing for children with special needs and they find it very confusing if the same sound is used for different events. They respond much better to musical tones than voice instructions and they learn quite quickly to associate specific tones with particular events. With the new system we are able to tailor different sounds to differentiate between breaks, end of playtime and the end of the day and it works extremely well. It’s been a great help to us in communicating to the children what they need to do and we wouldn’t be without it.”

The latest generation of class change systems are run from a central PC and incorporate different tones, melodies or even voice announcements which are stored as MP3 files. The software can be programmed to use specific announcements for different alerts such as class changes, wet breaks, lunches or end of day. In addition, zones can be set up so announcements are broadcast or bells are rung only in specific areas of the school. If an emergency situation arises it can be automatically triggered by the alarm system and voice warnings and instructions broadcast throughout the whole site.

Lycee Francais Charles de Gaulle installed a voice-based class change system which linked directly to their synchronous clock system. Lavocat commented “Our new system stores a range of pre-recorded voice commands so whatever emergency situation arises, it triggers specific announcements so everybody on site knows exactly what’s happening and what actions that they need to take.”

Redman said, "The system we installed uses less intrusive tones for class change alerts, and completely different sounds for other situations so it avoids any confusion. As its radio based, there are no wires so the system is less vulnerable to fire damage or vandalism. There is another benefit in that we can also activate or disable the system during holiday periods, and this can even be done remotely from off-site"

Mrs Irons added "The new system we installed uses pre-recorded voice announcements so everybody knows exactly what they need to do and when. Some of our teachers stay on site after school hours planning, marking and preparing for the next day. They often get so involved that they simply lose track of time, but now it's easy to alert everybody on site that it's 5.30 and the caretaker is about to secure the site".

Cost saving

Modern automated systems have additional benefits as they can incorporate relays to operate other systems such as lighting, heating and security. This not only saves site management time but they can be programmed to activate and deactivate utility services so they run more efficiently and the savings in energy costs can then be utilised to fund additional education resources.

Whitton commented, "At St George's Academy we now have a Bodet automated class change system which is controlled from a central computer. Not only do the class change alerts occur automatically, but it's easy to deactivate them during holiday times so we don't have bells going off when the school's closed."

He added "The new class change system saves a huge amount of time for the site management staff. The system runs smoothly and the only thing we have to do is change the clock batteries once a year."

We spend much of our time teaching young people that IT and digital technology can bring real improvements to everyday life. Should we not practice what we preach and apply these technologies to our own environment? Well proven systems such as Bodet's Class Change not only provide better communications and improve efficiency in our schools but also demonstrate to the students the practical benefits these new technologies can bestow. In addition, the savings in administration and management time, gains in learning time and potential reductions in energy costs means it can pay for itself many times over.