

St Michael's School - Otford

St Michael's School was founded in 1872 as an orphanage in Hatcham, New Cross. In 1925 the school moved to a Victorian mansion in Otford near Sevenoaks. The school is set in 90 acres of lovely Kent countryside. St Michael's has grown considerably over the years, with the addition of new facilities, including a sports hall and swimming pool complex. St Michael's now has in excess of 400 pupils, both prep and pre-prep.

Christine Young, the bursar of St Michael's, wished to improve the security of the school and have better control over who had access to particular areas. There was an electronic access control system in place, but Christine says, "The existing system was not providing the flexibility of control we required."



Mole Electrics of Fawkham, Kent were one of the companies approached to recommend a solution. Mole Electrics have extensive experience in specifying and installing access control equipment. Declan Molyneux, the proprietor of Mole Electrics, discussed the key issues with Christine Young.

Free access was required through the main entrance and the perimeter doors that are required for student access during the normal school day. The majority of the classrooms and corridors also give free access during this time, allowing movement of both staff and pupils around the school. Out of hours, a key requirement was to be able to control who had access to the building, when, and to which areas. The school hires out their swimming pool to local clubs, and also has function facilities for hire. The aim was to be able to give access to people for those areas while restricting their access to other parts of the school.

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Declan recommended Net2, a network access control system manufactured by Paxton Access. Paxton Access is his preferred supplier due to the ease of installation and use. St Michael's accepted Declan's recommendations and Mole Electrics was awarded the project.

Paxton Access Net2 now controls 48 doors across two buildings on the site. The Net2 systems on the buildings are connected over the school's network using TCP/IP converters, allowing both buildings to run as one system with central control over both. To save on wiring in the main building, TCP/IP converters are also used on the main building between floors.

The original mansion houses the preparatory school. It is an attractive building with a great deal of character. The main entrance hall, although imposing, has the same friendly atmosphere found everywhere in the school. There is a wealth of wood panelling and original doors, so Declan wished to make the installation as discreet as possible. He used Paxton Access vandal-proof readers throughout, both externally and internally. Declan explains, "These readers are buried into the doorframe, leaving only a marker where the access token should be presented. They are very unobtrusive and great for use on a building like this."

The old stable block has been carefully converted into the pre-prep school. The playground in this area is gated and has access control, as does the reception office on the outside of the gated area. The access control on the gate is timed to allow free access in school hours. Vandal-proof readers have again been used for the pre-prep school. There were some challenges here with sourcing appropriate locks for the large stable doors, but Declan overcame all of the difficulties.



Once installed and the Net2 software set up, Christine found the system very easy to learn and manage. She says, “Anyone familiar with Windows applications would have no problem with the software.” Christine controls the setting up of the different access levels, which provide the flexibility of when and where someone is allowed access. The headmaster, caretaker and the reception office in pre-prep all have permission to view and make some changes in the software.

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The controlled doors throughout the school buildings are set to unlock during specific times to allow free movement of both pupils and teaching staff. There are a couple of exceptions to this rule. The science classrooms are kept locked by the access control system until one of the science teachers unlocks them with their access card. The other teaching staff do not need to access this area and their access permissions do not allow access through these doors. The other exceptions are the gym and swimming pool areas, both of which require an authorised user to unlock.

Outside of those specific times, the controlled doors all revert to locked and staff still working need their access tokens to move around the building.

The swimming pool is hired out to local clubs and at times for other events. The way the system has been planned means that now Christine can issue tokens to these visitors, which allow access through the corridors to the pool area and through the door to the pool, but the doors leading to other parts of the building are not accessible. The doors in the pool area that lead to the terraces are fitted with door contacts linked to the Net2 system and an audible and strobe light alarm. If these doors are left open an alarm is generated in the Net2 system and a visual and audible alarm is triggered in the area. Christine says, “In the past if the pool area got hot, there was a temptation to open these doors. This was not only an issue for security, but also the cost of maintaining the pool temperature is high, and spending it to heat the outside world was not in my plans!” This system has completely solved the problem.”



“It is also now possible to limit access to particular areas when parts of the school are used for outside functions. There has never been malicious intent, but we did get people wandering off around the school and I felt we should know visitors whereabouts. The areas we hire out for functions can now be made accessible to our visitors, while maintaining the security through the doors in the rest of the school.”

“The flexibility of the system is very useful,” explains Christine. “For example, usually all the main doors into the school lock at a designated time. If we have a parents evening I can just change a setting in the software to allow these doors to remain unlocked for longer on that evening.”

“The staff are delighted - they do not have to carry large bunches of keys around”

The school are happy with the system. Christine says, “If needed I can bar a token from the system and it will not then allow access on any of our doors. The staff are delighted - they do not have to carry large bunches of keys around. They just need their access token on which Mole Electrics print the staff photos. I like the flexibility, and the fact that I can check movements in the building out of hours, either from my office here or by using my remote desktop from home. We have more control and traceability and I feel the school is more secure.”

Christine is talking to Declan from Mole about other work and the school. She says, “I would like to extend the system as budgets allow.”

System user	St Michael’s School
Installer	Mole Electrics Ltd, Kent (www.mole-electrics.co.uk)
Type of site	Split site
Type of system	Net2 PC based system
System description	2 Buildings, 48 doors