

Djanogly City Academy Serves Up Cashless Catering with Toshiba, MH Systems & Honeywell Security



Djanogly City Academy has installed a new breed of integrated pupil management system by linking its CMIS Management Information System (MIS) with the latest cashless catering and access control system provided by M H Systems in partnership with Toshiba and Honeywell Security.

Background

The academy was officially opened in August 2003 as one of the first of a new type of specialist state-funded independent schools, replacing the oversubscribed Djanogly City Technology College (CTC) and the Forest Comprehensive School.

Djanogly City Academy specialises in Information and Communication Technology and has one of the most advanced computer networks in the country with a student/computer ratio of less than 2:1. Most classrooms have networked data projectors, and innovative computer-based teaching and learning is delivered in every subject area.

The Challenge

When the academy opened its new centre for 11-14 year olds in 2005, designed by world-renowned architects Lord Foster and Partners, it operated three different stand-alone systems across its two sites – its own MIS, an access security system and a cashless catering scheme. However, operating three stand-alone schemes caused a huge administrative burden for Djanogly necessitating duplicate student entries onto each of the different systems. In addition, the catering and access control systems used different types of smart card so dual-interface cards were required, increasing running costs. The decision was taken to search for a fully integrated solution that could provide a seamless link between the MIS, cashless catering and access control systems using a single smart card.

The Solution

Djanogly City Academy sought the advice of Toshiba – its existing CTC technology partner, who had been supplying laptops, notebooks, tablets and more recently the latest state-of-the-art networked data projectors, for over 10 years. Toshiba was able to recommend M H Systems, a specialist in supplying cashless catering and cashless vending software management solutions.

The first phase was to install the incredibly flexible M H Systems "Chips" cashless catering system running on the stable Toshiba POS hardware. M H Systems was asked to create a link between the "Chips" software and the academy's own CMIS database so all record changes and new pupil's data was automatically transferred to the cashless catering database, thus removing the problem of dual entry.

This initial phase, completed in the summer of 2006, also involved the installation of card payment top-up machines throughout the school to enable students to load their card with money for use within the cashless restaurant environment.

Phase 2 involved M H Systems introducing the Honeywell WinPak door access control system which already linked with the "Chips" catering system. This achieved the final goal of complete integration between the school's MIS, catering and access control systems and the whole process was quick, painless and cost the school nothing in development fees. Students and staff now use a single interface Mifare smart card to gain entry to the site and purchase items in the restaurant. The cards are swiped on the Toshiba tills and the transaction is automatically deducted at the POS from the student's or staff member's individual account, avoiding the need to pay for lunches with cash.

Further cost savings come from the "Chips" system's ability to allow the academy to purchase blank cards and encrypt them as needed, reducing card costs to a minimum.

The Benefits

With the new solution, Djanogly now has a fully integrated seamless information system, enabling it to control its catering function whilst controlling access to both its sites. The system is simple and easy to operate and has removed the previous requirement for manual entry onto different systems, greatly reducing duplication of administrative effort.

The system also has the functionality for parents to limit their child's lunch spend per day, which can be child-specific, according to individual parent's requirements. Free school meal allowances can be automatically timed on the system, ensuring that children only use their meal allowance at lunch and not break times. A staff duty meal facility also ensures that the correct number of meals are allocated to duty staff and all issues regarding the VAT charged on adult meals are handled automatically.

The college has taken the decision to make the restaurant totally cashless, even though the Toshiba terminals do offer the facility for either cash or card transactions, encouraging students to take responsibility for taking care of their cards. Speed of service has increased as there is no longer a need to handle cash and give change; queues have reduced noticeably in a very short time. Management is confident that the service will be even quicker as staff become more experienced in using the system.

The restaurant management can pull off any number of reports from the Toshiba tills, such as sales, free school meals, top-up money, etc. Catering management can also interrogate the system for menu analysis and stock control, issues becoming ever more important for menu planning and wastage as the cost of meals continues to increase.

As Djanogly operates a wireless network, the academy is able to use one of the Toshiba ST-60 tills as a mobile unit. The versatility of the system means that it is possible to run a Toshiba Tablet PC (connected to a reader) as a till – extremely useful for events such as Sports Day, for example.

Commenting on the academy's latest technological implementation, Darren Frearson, Djanogly Academy, Assistant Head, ICT Development, said, "Our collaboration with M H Systems, Toshiba and Honeywell, has helped the academy in its continual drive to exploit ICT (Information and Communication Technologies) to develop intellectual capability, and to enhance teaching, learning and management through the academy's operations."

Latest Development

Djanogly is planning to extend the card access system to provide timed access to classes based around lesson times. Students will have limited time between each class to reach their next destination. Failure to reach class within these timeframes will detain the student in set access spaces necessitating a member of staff having to collect them. In this way the academy will be able to improve punctuality and set expectations of behaviour for students.

The "Chips" system also provides a complete reward programme for healthy eating, attendance, learning and sports achievements. The system allows a school to link with local municipal or private sports clubs to encourage pupils to attend coaching classes and participate in training programmes as part of school activities or extra-curricular interests. This combination of a healthy eating reward programme with a sports incentive scheme addresses the problems of both poor diet and low activity levels in one go.

Future plans also include working with Toshiba to trial RFID asset tagging and tracking, for the extensive range of 'state of the art' Toshiba ICT equipment on-site.

Our Partnership

The partnership between world-renowned POS manufacturer TOSHIBA TEC Europe, M H Systems Ltd, creator of the market-leading "Chips" (Cashless Health Initiative Processing System) and Honeywell Security, is a three-way initiative bringing the latest affordable pupil management solutions, linked with cashless catering, vending systems and access control, to schools in the UK.

CHIPS also provides the new national SWAPITS reward programme that gives incentives for pupils to choose healthier options but also increases revenue by attracting more pupils into the canteen.



TOSHIBA

TOSHIBA TEC Europe Retail Information Systems S.A

Campus 300, Spring Way, Maylands Ave, Hemel Hempstead, Herts, HP2 7GG

Tel: +44 (0)870 890 7200 Email: marketing@toshibatec-eu.co.uk

Fax: +44 (0)870 890 7350 Web: www.toshibatec-eu.co.uk



M H Systems Limited

6 Alexandra Road, Tonbridge, Kent, TN9 2AA

Tel: +44 (0)1732 367 227 Email: sales@gcgold.co.uk

Fax: +44 (0)1732 367 447 Web: www.mhsystems.co.uk