BioStore Cashless System

Introduction

The school uses a Biometric system (BioStore) to facilitate catering payments in the canteen and for registration for some year groups.

BioStore is a central database which stores the information which identifies pupils uniquely to each of the applications used within the school. It requires each pupil to register only once, usually by placing a finger on a fingerprint scanner, although other identification methods are available.

BioStore's centralised system speeds up the registration process - each student need only register once, no matter how many applications requiring identification are in place in the school. With a biometric system, students cannot borrow or steal credentials from each other. Queues are reduced, because the identification of students is speeded up. Students need no longer carry cards, remember PIN numbers, or use cash to buy a meal. Biometric systems save time and money for both school and pupils because the need to replace lost cards and forgotten passwords is eliminated.

Does BioStore record images of individual fingerprints?

BioStore never stores images of fingerprints on its system, and will never do so. Only mathematical representations of certain points of a finger image are recorded, typically between ten and sixty depending on the characteristics of the finger. The mathematical information is encrypted and is called a template. This data is extremely secure in its encrypted form, but even if it were not encrypted it would be impossible to recreate the original fingerprint image from the stored data.

Is it possible to recreate a fingerprint from the data stored by BioStore?

No. The BioStore system only stores a short string of encrypted numbers - too few numbers to provide enough detail for the original print to be reconstructed.

How secure is the stored data? What would happen if somebody stole the data in some form?

The database is protected by a licence key, which means that the database and any backup of its contents can only be accessed on licensed hardware. The licensed hardware is stored in the school's own secure facility, so that the encrypted data is only available to the registered licensee. Even if a school's security were to be compromised and a backup of the database stolen, the encrypted data would still be unreadable, even by another school.

If I lose my bankcard then it can be replaced, but I can't replace my finger. If a template is stolen, have I lost my identity forever?

The answer is no. The fingerprint template stored in the database is merely a string of encrypted numbers. If this string of numbers were to be removed from the database, it would be useless, because it cannot be recognised as a fingerprint. A fingerprint scanner checks for a real finger -it does not recognise a string of numbers, unlike a bank machine, which will accept a bank card from anybody who happens to know the PIN number.

Does everybody have a fingerprint? What happens about twins, or people with a disability that prevents them from providing biometric data, or somebody who has hurt their finger?

Even identical twins have different fingerprints, and will not be mistaken for each other by BioStore. In very rare cases there are people who are born without prints. Occasionally somebody's fingerprints will

degenerate because of exposure to some chemical products, and sometimes temperature changes can cause reduction in fingerprint quality. However, a cut finger would not cause any problem for BioStore, unless it resulted in major disfigurement.

Will there be any alternative for pupils who are unable to provide biometric data for some reason, such as a disability?
Alternative identification methods, such as smart cards and name and photo look-up, are always available in BioStore systems. Pupils unable to provide biometric data can opt to use one of these methods, as can any pupil who prefers not to use biometrics.

If I object to my child being fingerprinted, what will happen?
The school will issue any pupil who wishes to opt out of the biometric system with an alternative method of identification. BioStore recognises a number of identification methods, including smartcards, PIN numbers, passwords and name and photo lookup.

BioStore and Cashless Catering

How is the fingerprint used to obtain a school meal?
The Pupil simply places their finger on a scanner at the point of sale; a display will show the server the pupil's name, class and current cash balance held within the system.

How is money entered into the system?
Via the online parent-pay system

How will the pupil check their current cash balance?
By looking at the till display at the end of a transaction.

Can we set a daily limit?
A daily spend limit of £6.00 is set for all pupils and no food above that limit can be bought. On request, an individual pupil limit of your choice could also be set, to include a school dinner and break time snacks

What if the pupil does not hold a sufficient cash balance one day to pay for a school dinner?
No pupil will be refused a school dinner because they have insufficient balance. The school will allow the pupil credit for one day. However, the pupil would be expected to get the balance topped up quickly, either through ParentPay or by bringing money the next day and using the Revaluer

What about pupils entitled to a 'free school meal'?
The system works exactly the same for all pupils whether they pay or have a free school meal. All pupils have their own account to use in exactly the same way. The amount allocated for the free school meal will be entered into the system automatically each day and will only be accessible that day. Unspent amounts from the Free Meal allowance are not carried over.
The pupil can also add extra cash in the same way as other pupils to enable a greater daily spend on the school dinner than allocated by their free meal allowance. Extra cash added this way can also be used for break time snacks.

What is meant by 'dietary control'?
Should the pupil have a specific food allergy, or be a diagnosed diabetic, this medical information can be coded into the system, preventing foods with allergy ingredients from being served to a particular pupil.

Will pupils have problems in using this system?
Some pupils may find it difficult to control their accounts for the first couple of weeks, but because of a daily spend limit, most learn this important life skill very quickly and will enjoy being in control of their account.

Will we be able to have any information on how the system is being used?
Reports can be obtained from the system giving comprehensive information on all aspects of use for each individual pupil.

Legal Basis
Background to the use of biometrics in school
For the sake of clarity, biometric information is information about someone's physical or behavioural characteristics that can be used to identify them. There are many possible biometrics, including for example, a digital photograph, fingerprint, or hand shapes. As part of our identity management systems, we will record a biometric measurement taken from a finger, but not a fingerprint image. The information is stored in a highly secure database and will only be used by the school to confirm who is using a range of services. In future we may use other biometric services where appropriate. Our chosen solution allows us to use a secure database holding biometric data for use with a range of services. This means we will store the least amount of data possible. This reduces the risk of loss of data. The data that is held cannot be used by any other agency for any other purpose. The school will not use the biometric information for any purpose other than that stated above. The school will store the biometric information collected securely in compliance with the Data Protection Act 1998. The school will not share this information with anyone else and will not unlawfully disclose it to any other person.

Current Legislation - The Protection of Freedoms Act 2012
This legislation requires schools to:
- Inform parents about the use of the biometric systems in the school and explain what applications use biometrics.
- Receive written permission from one parent if the school is to process biometric information for their child.
- Allow children to choose an alternative way of being identified if they wish.
- Children under 18 who do not have permission by September 2017 will not be able to use existing or new biometrics when using services in the school.

If you do not wish your child to use the biometric system or your child chooses to use an alternative form of identification we will provide reasonable alternative arrangements that allow them to access current and future services. Please note that when he/she leaves the school, or if for some other reason he/she ceases to use the biometric system, his/her biometric data will be permanently deleted. If you would like to discuss this in more detail, please contact the school office on 01922 720696.