Dear Parent/Carer,

Biometric Cashless Catering System

I am pleased to inform you that towards the end of the academic year we will be implementing a new *biometric* cashless catering system at The Avon Valley School. This means that your child will be able to make food and drink purchases, by simply swiping their finger instead of a dinner card.

Biometrics is a technology that has been used successfully by thousands of schools and, after some consideration; we are convinced that this is the right way forward for our school.

To operate the system, when your child has credit in their school meal account, he/she can make purchases against it simply by pressing their finger against a biometric reader. **Please note however, that from September, all payments to the school must be made by parents and carers using the School Gateway, an online payment system, and we will no longer accept cash or cheque payments for crediting your child's account.**

I'd like to take this opportunity to dispel any fears that you may have about recording your child's finger data. **Fingerprint images will not be stored by the system** (instead, a set of coordinates is translated into a string of numbers and encrypted). The encryption method used by the system is a high level, industry standard method. **The data held could not be used to recreate a fingerprint image, nor could it be used in a forensic investigation.** Avon Valley School will comply at all times with the Data Protection Act and with the guidance given by the Information Commissioner's Office regarding the use of biometric data.

Some of the benefits of the new system include:

- Reductions in queuing times

- Reductions in administration time and cost, dealing with lost or forgotten cards

- Elimination of the need by students to remember their cards for food and drink purchases.

- Improved information to parents and carers concerning their child's purchases.

- Supporting the school's cashless ideology

More detailed information regarding biometric technology, and our use of it, is attached.

Please complete the attached consent form and return it to the school so that your child can benefit from using our new system.

If you would like more information, please contact our office staff.

Yours faithfully,

Alison Davies
Head Teacher

Biometric Cashless Catering System

Parent/Carer FAQ

A cashless system allows for parents and students to top up their own accounts before entering the canteen, allowing for quicker serving times. The system will: recognise each individual student, hold individual cash balances, record cash spent and cash received, and record where money is spent on what food, on any specific date and time of day.

How are students recognised by the system?

Each student will have their finger image registered which will then be translated to an Alpha Numeric number. The image is then discarded, but the Alpha Numeric Number will enter them into the system program and identify them by a number.

How is this then used to obtain a school meal?

The student simply places their finger on the Biometric reader at the point of sale; a display will show the server the student's name and the current cash balance held within the system. The selected food items will be entered into the system from an itemised keyboard while the amount spent, and the new cash balance, will show on the display.

How is money entered into the system?

By Online Payments (School Gateway) - A parent / carer logs-on to the School Gateway, using a secure user name & password to 'top-up' their child's account online.

How does a student check what is their current balance?

By using the balance checker. Place their finger on the Biometric reader to display the current cash balance. There is no need to deposit any money, just press the reset button to finish.

How much can be spent in one day?

By default, a daily spend limit of £5.00 will be set for all students and no food above that limit can be bought. On request, an individual student's limit of your choice could also be set, to include a school dinner and break time snacks.

What about students entitled to a 'free school meal'?

The system works exactly the same for all students whether they pay or have a free school meal. All students 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 by the software daily.

The system will then allow on a daily basis the required cash amount for each individual student to be allotted to their current cash balance. However, any under spend or missed dinner will be identified by the system and will not be added to the next day's balance.

Parents and carers can also add extra credit to their child's balance in the system by using the School Gateway, to enable a greater daily spend on the school dinner than allocated by their free meal allowance. As the free school meal allowance can only be spent on a school dinner, extra credit added into the system can also be used for break time snacks.

Will students have problems in using this system?

Some students 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.

Main Benefits

* Convenient way of paying for school meals. No more looking for change every morning.

* Discourages the misuse of school dinner money through spending in shops outside of the school grounds.

* Alleviates many of the associated problems with the use of cash in schools. i.e. Loss or theft.

* Specific food allergy ingredients can be barred automatically.

* Healthy eating is encouraged.

* Queuing times are reduced through increased speed of service.

* Automatic free meal allocation with the student remaining anonymous.

What is BioStore?

BioStore is a central database located within a school, which stores the information which identifies students uniquely to each of the applications used at the school.

BioStore requires each student to register only once, usually by placing a finger on a fingerprint scanner.

Why use BioStore instead of other existing identification methods?

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 at the school.

With a Biometric system, students cannot borrow or steal credentials from each other, reducing the opportunities for theft. Queues are reduced, because the rate of identification of students is quickened. 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 students because the need to replace lost cards and forgotten passwords is eliminated.

Does BioStore record images of individual fingerprints?

BioStore does not store images of fingerprints on its system, and never will. Only mathematical representations of certain points of a finger image are recorded, typically between ten and sixty depending on the characteristics of the finger. This mathematical data is encrypted and is called a template. The data is extremely secure in its encrypted form, and 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 little data for the original print to be reconstructed.

How secure is the stored data? What would happen if somebody stole it?

The BioStore database is protected by a licence key, meaning that the database and any backup of its contents can only be accessed on licensed hardware. The 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 bank card then it can be replaced. But I can't replace my finger. If a template is stolen, have I lost my identity forever?

The simple 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.

Could the police or a court of law use the fingerprints stored in a BioStore database?

BioStore does not store fingerprint images. The recorded templates are comprised of a set of numbers which represent each person. This set of numbers will be unique within populations of hundreds, or a few thousands, of people. However, in a wider population the system is not accurate enough for the templates to be usable for forensic matching with any degree of certainty. A court of law would not be able to use this information as evidence.

What happens about twins, or someone 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 fingerprints. Occasionally someone's fingerprints may deteriorate 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.

Is there any alternative for students who are unable to provide biometric data for some reason, such as a disability?
Students unable to provide biometric data will be provided with alternative means of identification.

The Avon Valley School & Performing Arts College

CONSENT FOR THE USE OF BIOMETRIC DATA IN SCHOOL

Please complete this form if you consent to your child using the biometric systems until he/she leaves the school.

Once your child ceases to use the biometric recognition system, his/her biometric information will be securely and permanently deleted by the school.

I give consent to The Avon Valley School & Performing Arts College for using my child's biometric finger data for the purposes of a school recognition system.

I understand that I can withdraw this consent at any time in writing.

Name of student …………………………………………………………………

Tutor group …………………………………………………………………

Name of parent/carer …………………………………………………………………

Signature …………………………………………………………………

Date …………………………………………………………………

Please return this form to   **Sara Anstee**
Office Manager
The Avon Valley School & Performing Arts College
Newbold Road
RUGBY
CV21 1EH