

Smartcards for Payment of School Meals



London Borough of Waltham Forest Smartcards for Payment of School Meals

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1 MANAGEMENT SUMMARY

When launched in 2007, London Borough of Waltham Forest (LBWF) identified the opportunity to extend the existing OneCard for use in schools, particularly as part of the solution for cashless catering. It is a key principle that the more applications and users that come on board, the more useful and cost effective the card scheme becomes. This report focuses on cashless catering in schools and investigates the options available and the potential business case.

In Waltham Forest, the borough has embarked on a major rolling programme of refurbishment and renewal of facilities under Wave 1 of the Building Schools for the Future (BSF) initiative. Aside from the buildings, this will typically include the provision of new classroom and admin ICT. The contracts also make provision for cashless catering. It was therefore very timely to consider the wider picture of resident cards and alternative solutions for cashless catering.

Cashless catering in schools has drawn significant interest and comment over the last 10 years, however the following points are worth highlighting:

1. The UK lags with only 10-20% uptake compared to 80% of schools in the USA
2. Cashless catering helps remove cash as a source of bullying
3. Cashless catering can remove the stigma of free school meals
4. There are polarised views on the use of finger print scanning instead of cards
5. The business case is dependent on removing cash almost entirely from school
6. Cashless catering can speed up queues to pay
7. Significant effort and full commitment are required to introduce a scheme
8. Positive feedback and real behaviour change are the rewards to strive for.

During the course of this investigation, we have consulted the secondary schools, suppliers and other authorities with real experience of cashless catering. The consensus is that cashless catering is a very positive and constructive initiative, however it must be fully supported by all stakeholders (ie heads, governors, staff, pupils, parents and caterers), it requires funding to implement and commitment to ensure it continues to work. In the borough, only one secondary school has a cashless catering solution, however we found those we spoke to were aware and receptive to the idea. Several highlighted the opportunity to implement as part of the BSF programme.

Experience shows that schools expect to have the final decision on matters affecting their micro-community, however the opportunity may be missed to rollout a more exciting lower cost solution which can be used in the wider community.

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In Waltham Forest each school may decide whether or not to implement cashless catering. The schools will need to decide if they choose a method which is local to the school or one that looks beyond the school fence and is part of a community, regional and even national scheme. As the OneCard is available and will have additional services added, it would be appropriate to use this card with one of the cashless catering solutions. The alternatives are to implement a school-based solution using finger print scanning or a school card.

The following options have been considered and compared in this report:

- Do Nothing - In the short term this option would not incur any additional costs. However, over time this is not the most cost effective solution. It does not resolve the many issues of cash being brought to school. The wider benefits of cashless catering and pupil identification will not be realised.
- In School Cashless Catering Solution With Payments Via School Office - Although this option does take cash out of the dining hall it does not remove it from the school. The problem of cash collection is moved to the school office earlier in the day which becomes a source of frustration. This option could be implemented with biometrics, a local card or the OneCard. While the social benefits are partially delivered, there will be additional setup costs and the lack of savings will result in increased costs over time compared to "Do Nothing".
- In-School Cashless System with Web-based Payment - This solution incurs additional setup costs; however there are cost savings on handling of cash which over time offset the setup costs. This option could be implemented with biometrics, a local card or the OneCard. This solution realises many of the cashless catering benefits. The extent of these depends upon how well the policies are enforced. Those without internet access can pay via PayPoint with the cost covered by the Council.
- sQuidcard Off The Shelf Solution - This solution is a more cost effective solution with low setup costs as there is no back office in the school and it is simply an e-purse retail solution. It is less sophisticated as information on food choices may not be captured. The majority of the benefits of true cashless catering can be realised. While the sQuidcard can be used as an e-purse with participating retailers, it may not carry other Local Authority applications. The sQuid application is due to become available in April 2008 and will be piloted in schools in May/June 2008.
- Onecard With sQuid Application Loaded - This solution is potentially the most cost effective as it combines the low cost e-purse with the existing OneCard scheme. It can bring the benefit of other local applications (eg library and leisure access). A dedicated purse is used to ring fence money for school meals. Topping up via the web means this solution can realise all the benefits of cashless catering. It is estimated that this solution will be at least £3k per school per annum cheaper than an alternative in school account based solution. This solution is also dependent on the availability of the sQuid application.

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Conclusion

Most of the available solutions will deliver the non-financial benefits of cashless catering, however to maximise the benefit, payment from parents/guardians should be taken electronically and outside the school environment. The following table is an estimate of the comparative costs over 5 years:

	Option Description	Cost Index
1	Do nothing, continue to use cash	100%
2a	In school cashless catering with cash/cheque payments via school office (card)	172%
2b	In school cashless catering with cash/cheque payments via school office (biometric)	165%
3a	Webpay and school cashless system (card)	114%
3b	Webpay and school cashless system (biometric)	107%
4	sQuidcard off-the-shelf solution	80%
5	OneCard with sQuid application loaded	75%

Given the general concerns over biometrics and the added value of a card based solution, LBWF should recommend that schools adopt the OneCard with localised print design for each school. LBWF should also consider, once proven, the lower cost sQuid payment application as the recommended method for cashless catering.

UPDATE 06/03/08: LBWF has decided to introduce the OneCard in their first two BSF schools from September 2008. Other councils are recommended to follow this lead as the major refurbishment programme provides funding, infrastructure and the opportunity to introduce e-registration, access control and cashless catering. The key step is to agree with the BSF programme to have a single card scheme for residents, staff and pupils.

Note: *This report has been prepared by Smartran Ltd based on information provided by the Council, schools, suppliers and their representatives. The analysis, conclusions and recommendations are believed to be valid at the time of publication. Smartran cannot accept liability for decisions made as a consequence of information in this report where it is found that the source of information is incorrect or has changed.*

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2 BACKGROUND

This report covers the research and analysis of the business case for the deployment of smartcards for pupils to make cashless payments for school meals (or to authenticate their entitlement for free school meals) within London Borough of Waltham Forest. This will provide the basis for a business case for a specific group of schools.

The business case development is motivated by:

- Removal of cash handling in school canteens.
- Transparent authorisation of free school meals.
- The opportunity to leverage the existing investment in smartcards (the Waltham Forest OneCard).
- Provision of an infrastructure to support possible future or collateral services (access to buildings and facilities, payments for school trips etc).

Outline of requirements

- In April 2007 the London Borough of Waltham Forest successfully deployed 10 500 smartcards to residents to enable them to pay cash instalments of Rent and Council Tax at Post Offices and PayPoint outlets. A web Based Card Management System (Unicard) was put in place. Cards were Mifare 4k protocol, and procured through a framework contract provided for all London boroughs through London Connects.
- Waltham Forest have been moving forward on the second phase, which involves using the OneCard for staff ID and access to Council premises. We are now looking beyond that to other areas where the same OneCard facility seems to fit.
- The next such area for deployment may be school meals subject to a satisfactory business case, which is the subject of this report.

Specific Requirements

- Detailed survey of costs and overheads of existing cash collection and entitlement management in the Borough's schools.
- Higher level survey of further options for the use of OneCard in the school environment – access, other payments etc.
- Options for using existing OneCard infrastructure for making cashless payments for school meals. This could include options around types of payment mechanism, top-up options, card replacement and management.

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- Deployment costs and options including readers, backend system integration, smartcards, personalisation, payment support services, internal and external resourcing and other enhancements
- Return on investment in a maximum of three years.

This requirement is based on notes from the Post Implementation Review (PIR) for the first phases of the OneCard project. The meeting was held on 4th July 2007, with attendees from all the areas involved in the project.

3 INVESTIGATION APPROACH

3.1 Planning and Desk Research

The first stage of the investigation was to gather information from Waltham Forest Borough Council on the schools within the borough and determine their location. A meeting was held between Smartran and the Council to kick off the investigation and determine which schools should be visited to offer an insight into the different ways school meals are dealt with in the borough. Examples were sought of schools using in house caterers (run by the Council) and those using outside caterers. It was also desirable to have feedback from a school within the borough which had implemented cashless catering (Leytonstone).

In addition to the schools research, details of the existing school admin systems and canteen tills systems were sought.

An initial investigation of cashless catering suppliers was carried out using the internet to determine relevant companies offering suitable services.

3.2 Schools Questionnaire

The first stage of the research was to draft and pilot a questionnaire by visiting a sample of up to six school sites. This enabled the questionnaire to be amended for the next stage. The second stage involved the questionnaire being emailed to the remainder of the 25 schools. The questionnaire was designed to establish a database of information from schools including the following:

- Size of the school
- How many meals covered and school meals uptake
- Existing and preferred methods for administration of School Meals and Attendance
- How are free meals obtained

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- School administration systems
- Process for cash handling and overheads
- Payment services
- Current catering supplier
- Cashless catering solutions
- Feedback on benefits of cashless catering

3.3 Solution Suppliers

The following cashless catering system suppliers were contacted, namely Cunninghams, CRB Solutions, VeriCool, EasyTrace, Sharp Retail Systems, NRS and G2 Integrated Solutions. Information and costs have been analysed and compared – see section 5. These suppliers offer a variety of cashless system options covering both card and biometric methods of identification.

Providers of payment processes and e-purse solutions, namely, PayPoint, ParentPay and sQuidcard were also contacted in order to establish what they can offer and their relevance to this project.

Based on this information, five options were identified for comparison.

3.4 Investigation Business Case

The potential business case for using smartcards to pay for school meals is based on analysis and comparison of the implementation costs of the different options and potential cost savings.

4 INFORMATION GATHERING

4.1 School Visits

School visits were set up in order to gain a first hand view of the current situation regarding catering within a sample of schools and to determine the initial reaction to introducing cashless catering.

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As the requirement was to visit at least three schools, six schools were contacted by telephone in December in order to set up face to face meetings. The intention was to meet with the Head or Bursar from each school plus the catering manager, where appropriate. The purpose of the proposed visit was explained and alternative times and dates were suggested for each meeting. Despite it being close to the end of term, 3 meetings were confirmed and took place.

Visits were made to Holy Family and Leytonstone School in December, and Highams Park School was visited in January. Kelmscott School declined to meet as they understand cashless catering was being addressed by the BSF initiative. Norlington was not able to schedule a meeting until a new head was appointed and in place. Connaught School declined to meet as they are already at an advanced stage considering “pre-pay cashless system that registers students and deducts their payment with a biometric reader and has a facility for most parents to set up how they pay in advance online”.

The detailed findings from the schools visited are given in Appendix B. The findings are summarised below:

(a) The Holy Family Technology College

- Holy Family provide a breakfast club, morning break and lunch offering.
- They have a paper based recording system for school meals.
- Pupils pay mainly by cash (with some cheques).
- The money is counted daily by the Bursar and taken to the bank.
- To obtain their free school meal pupils are required to give their name in the canteen.
- The school uses the LBWF catering service.

(b) Leytonstone School

- Leytonstone is the only Waltham Forest School with e-registration and cashless catering (Cunninghams supplied), which was initially introduced to track attendance.
- Cards are bar-coded and include photograph and date of birth.
- The introduction of cards has improved throughput, which has offset the drop in take up due to healthier menus.
- The school has a linked leisure facility, which has no member cards currently.
- The school uses the LBWF catering service.

(a) Highams Park School

- Highams Park uses an outside contractor to provide school meals.
- The meals service is available during the morning break and lunch time.
- At present there is no breakfast club.

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- They have a paper based school meals system, however the Bursar was previously involved in the introduction of a card based cashless system at his last school.
- The school uses an external catering service.

The responses from the schools validated the requirement for some form of cashless catering based on the potential benefits which are summarised below.

Cashable Benefits	Non-Cashable Benefits	Other Benefits
Reduced Cash Handling (counting/banking/transport)	Catering Staff Time Savings (1 hour per day cashing up)	Faster throughput of Pupils / Speeds up delivery at POS plus shorter queues
Reductions in Fraud/Theft	Administration Time (& Cost) Savings	Improved Information Gathering & Usage
Increases school meal take up (c.20% on average predicted) improving economies of scale	Accounting Time (&Cost) Savings	Reduces incidence of pupils leaving school premises
Improved turnover through shorter queues	Reduced transaction costs	Automates back office functions
Increased average spend on school meals		Removes cash from playground thereby removing a cause of bullying and theft
		Removal of free meal stigma
		Payments to accounts can be made via Internet
		Cash collection and recording made quick and easy
		System management is efficient and effective
		Management reports generated automatically
		Additional Head Office centralised reporting

4.2 School Questionnaire

After analysing the findings from the school visits, a questionnaire was drafted and issued to the remaining schools within the borough during January, to gain an overall picture of their

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current situation. The questionnaire was sent to 25 Schools, and 3 responses were received in addition to the 6 contacted or visited already. A summary of all the responses is given in Appendix C.

Of those schools which responded, the majority were in favour of introducing cashless catering and only 1 was considering a biometric rather than a card based solution. The OneCard is therefore likely to receive a positive response.

Currently all schools which are supported by the London Borough of Waltham Forest use Capita Sims apart from:

- George Mitchell, which uses Capita FMS and Serco CMIS for pupil data
- Heathcote, which uses Serco CMIS
- Whitefield, which uses Pegasus

All the systems should be able to support a cashless catering function.

4.3 Consultation with Other Councils

Dundee District Council and Bracknell Forest were consulted as they have already deployed card based cashless catering which gave a greater insight into the mechanics and experiences. Further detail on the individual discussions and their input is available as part of the project documentation.

4.4 Suppliers and Information Providers

A sample of cashless system suppliers was researched in order to determine how the various solutions could be implemented. All of the following can be linked to ParentPay. All the cashless systems, except sQuid e-purse, require a back office system in each school which is accessed on-line to authorise transactions.

(a) Gladstone Education

Gladstone is a major supplier of systems in Leisure and entered the market for Education through an acquisition in 2007. They offer a system which integrates with Capita SIMS and provides both cashless catering and time & attendance functionality. They can offer both a biometric and card based solution. They install, train, launch and offer after-sales support.

They support Mifare cards which they can supply. Typically their solution reads the card chip number and does not require any data on the card.

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(b) CRB Solutions

CRB Solutions design, build and maintain cashless payment systems under the brand name IMPACT. They install, train, launch and offer after-sales support. IMPACT can identify its users by most types of plastic card and touchscreen name filters (with or without photographs). IMPACT can also be operated using finger print recognition. Cunninghams is the CRB Solutions partner and IMPACT distributor for England. The IMPACT system supports the use of smartcards and biometrics.

(c) G2 Integrated Solutions

G2IS is a supplier of integrated cashless, access and payment processing systems. G2IS have recently been acquired by Group 4 Technology (G4Tec), a wholly owned subsidiary of G4S plc. They use the MYRIAD web-loading system which offers cardholders the ability to “top-up” the value from any device, whether it is a vending machine, point of sale terminal or loading device as long as it is connected to the network. The system supports the use of Mifare cards.

(d) EasyTrace

EasyTrace supply cashless catering to the primary, secondary and tertiary sectors of education. Their cashless solution uses Windows XP-based software along with 15” hospitality touch screen POS tills. Administration of the system can be conducted at any PC authorised to do so. Each pupil is issued with a card/fob or Biometric print is taken that allows them to access any or all of the modules selected by the school. The system supports the use of Mifare contactless smartcards.

Included in the software is a reporting facility that is easy to access and use, and provides information for a detailed financial analysis of all transactions on the system. These reports can also show, for example, what a customer has eaten, how much they have spent and the stock currently held.

(e) Vericool

Vericool’s cashless catering vending uses biometric technology, which does not require a student to carry a swipe card. At the point of payment the student places their finger on the fingertip scanner, and once successfully verified by the Catering Point of Sale Operator, their account is debited. Due to customer demand, Vericool do offer a card based option which does not include smartcards (eg Mifare).

(f) Nationwide Retail Systems

Cashless catering systems from NRS Ltd can use biometric technology, cards or, as offered as a solution for primary schools, pictures of the class can be shown on the terminal and the vendor visually identifies the child, selects the appropriate picture to open the account and charges their meal. There are a number of additional features within the software including Healthy eating points.

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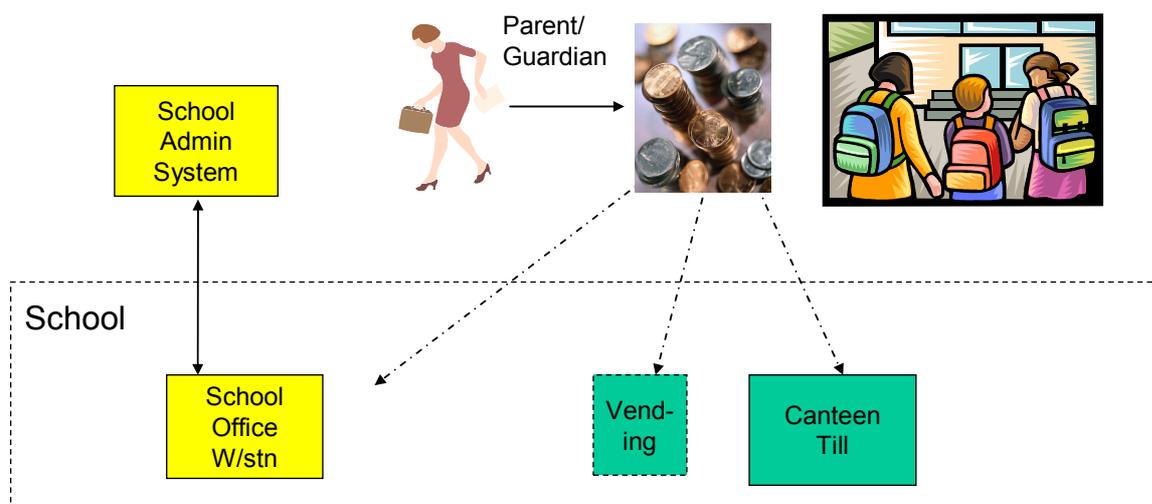
(g) Sharp Retail Systems

The Sharp system utilises a cash register with a smart card reader interfaced to it. The System has the facility to control hospitality / complimentary meals supplied as well as staff on a free meal entitlement. A number of security features have been built into the system which include the simple operation of hotlisting lost or stolen cards and automatically transferring any unused balances onto a new card. It is also possible to programme the users name onto a card which is displayed to the operator when used, a signature strip is incorporated and it is possible to add photo ID if required.

5 OPTIONS CONSIDERED

5.1 Do Nothing and continue to use cash

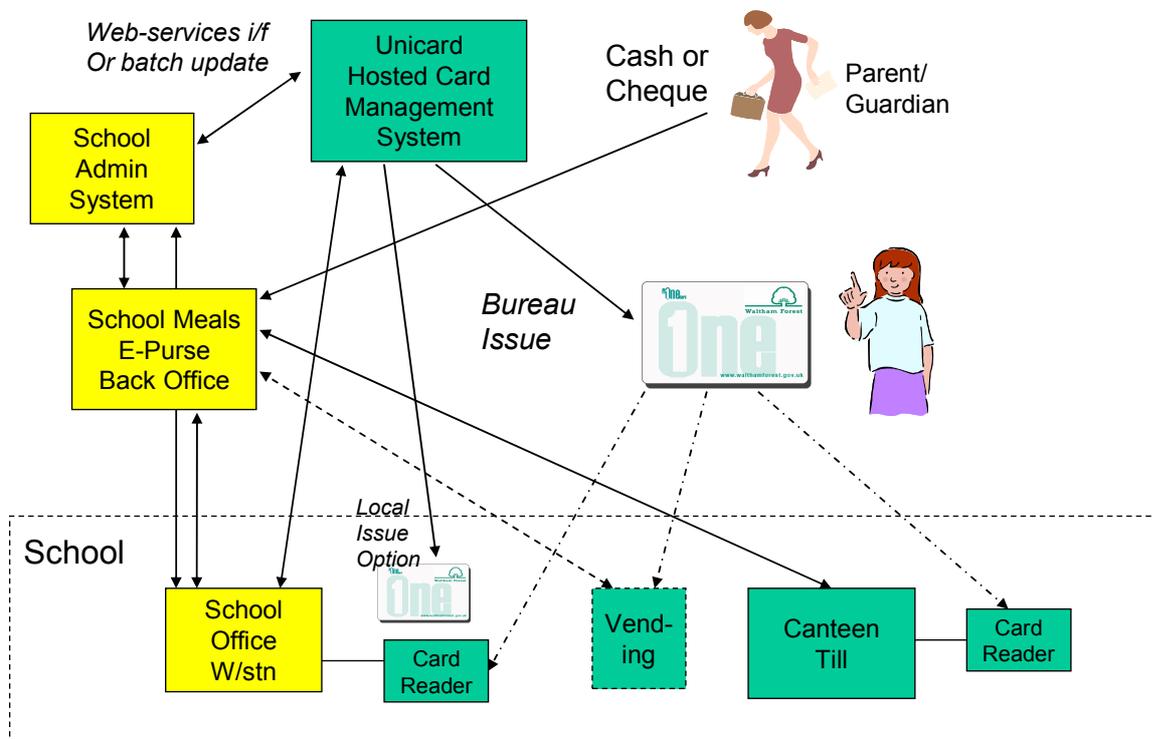
The current system in all but one of the borough's schools is cash based with money being brought to school by pupils to pay for their school meals each day. The money is counted and banked either by the caterer or the school. Those who are on free school meals generally give their name at the till to receive their meal or join a separate queue.



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5.2 In-School Cashless Catering (Card or Biometric)

In-school cashless catering removes cash from the canteen with pupils loading money onto their cards at the school office or via wall mounted load machines. Some schools opt for a finger print scan (biometric). Cards or finger scans are then used in the canteen to purchase meals. Those on free school meals have their daily allocation loaded onto their account by the school office. Money is still counted and banked by the school. Some of the available systems could be used in conjunction with the OneCard (ie the card is associated with the pupils account).



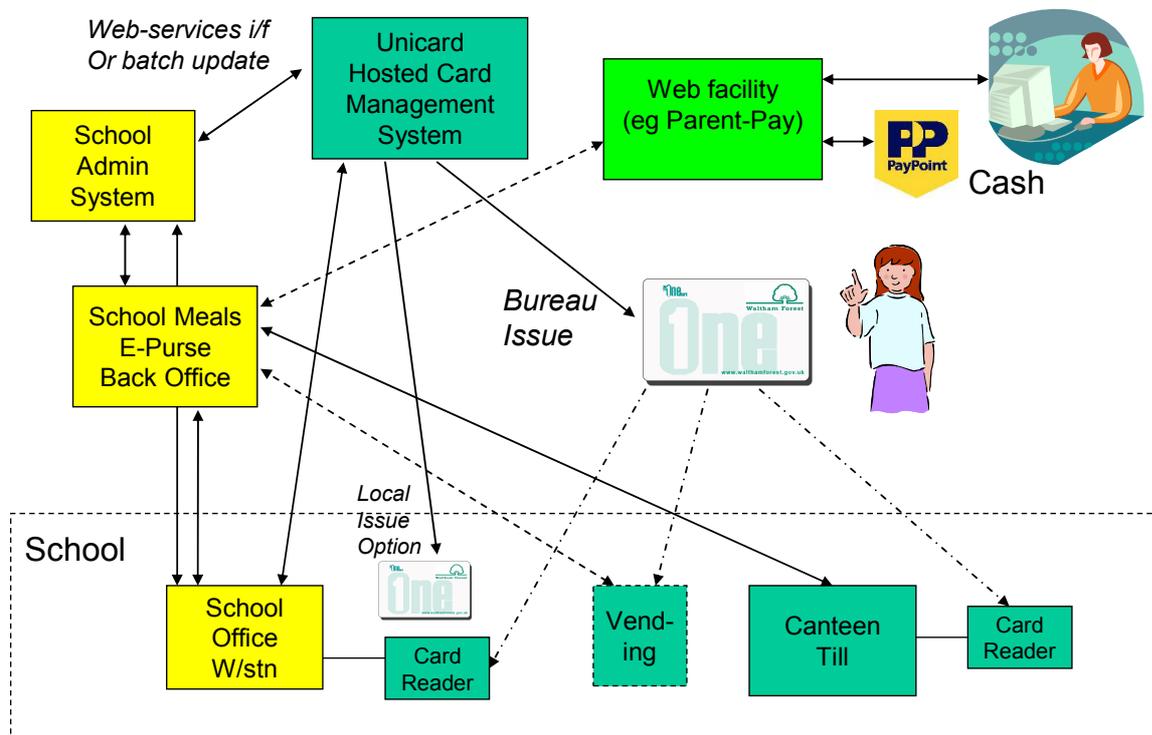
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5.3 In-school Cashless System and Web-Payment (Card or Biometric)

This is the same as Option 2 with the addition of Web Payment (eg ParentPay). This is a web service which allows the collection of payments. Parents use the Internet to make online payments for school meals by credit or debit card. Parents can also pay for trips, music lessons, clubs, uniforms etc. ParentPay links directly to cashless catering systems to top up the pupil accounts automatically and the money goes directly into the school bank account. Payments are reported directly to the cashless catering system in each school.

With ParentPay there is centralised management information and reporting. For parents who do not wish to pay via the internet, there is the option of paying cash at PayPoint outlets in local convenience stores.

It would be possible for LBWF to set up its own service to receive payments, as Surrey County Council has done. While there may be a business case to do this, the functionality may not be as rich (eg ability to see current account balance) and the schools would be dependent on the Council setting up and maintaining the service.



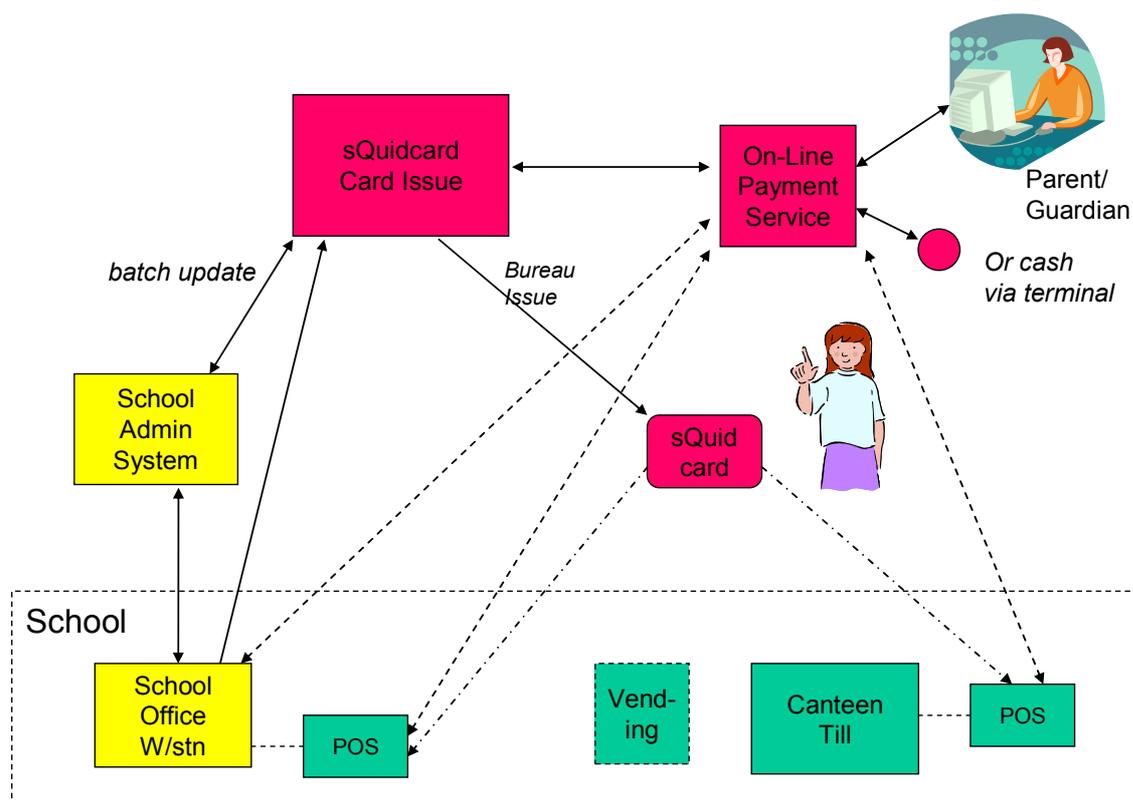
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5.4 SQuid Card Turnkey Solution

sQuidcard is offering a solution for schools which was piloted at a school in Wiltshire in April/May 2008.

The sQuidcard eMoney service consists of a reloadable, contactless card on which a user stores value. Parents and staff register online and use a web portal to manage funds and view transactions made with the card.

The preferred method of payment is via the Internet using BACS or a debit card. If parents prefer to pay cash this can be done via the school office (cash or cheque), which will have a terminal to load the card. Those on free school meals have their daily allocation loaded onto their card. If the daily entitlement is not used it is not carried over. The card is read in the canteen, admin office or shop by a contactless reader connected to a terminal or a till EPOS. The readers are securely linked to the sQuidcard back office and payments engine via the school internet connection. There is no back office within the schools and the terminals can accept payments for up to a day without being connected (ie comms failure).



The school/Council will operate the scheme and the caterer is classed as a merchant. The system can report on reader location, time and amount. Cards are ordered on-line and delivered to the school for distribution to students and staff.

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sQuidcard does not currently support vending machines, however this is planned to be added in the future. Currently this is not an issue as LBWF schools do not have vending machines.

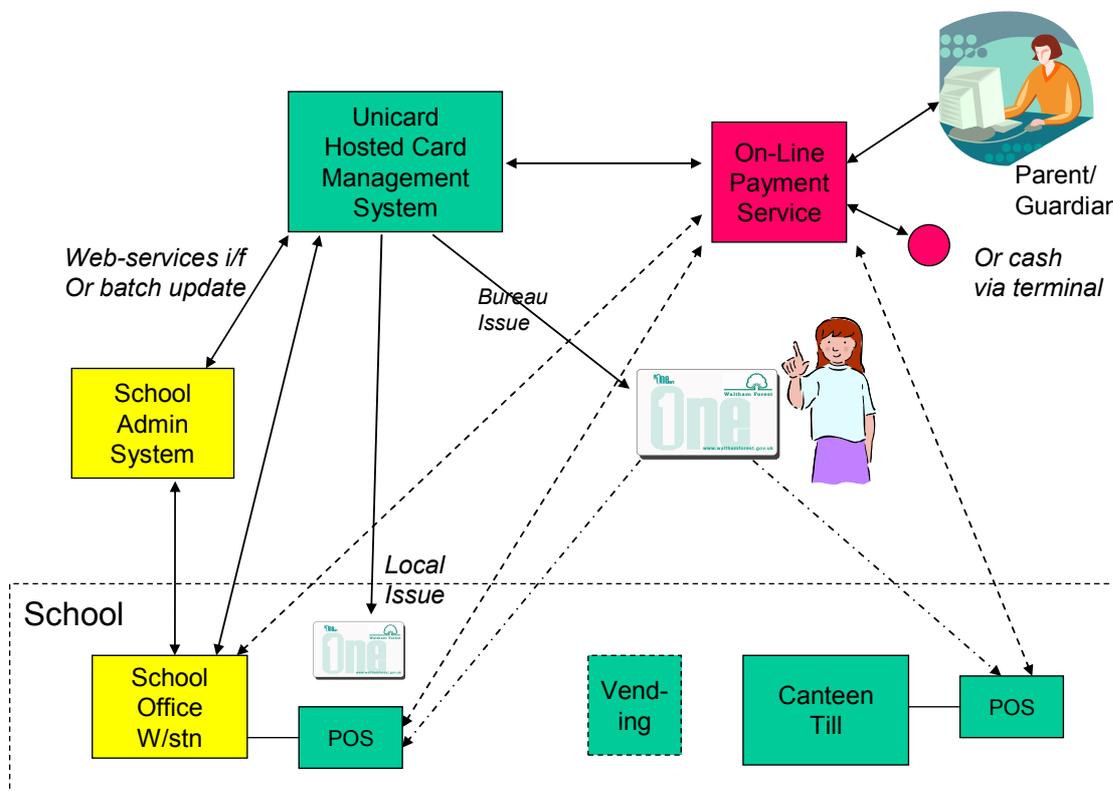
The known security limitations with Mifare technology is not expected to be material in a school environment where the payments are small and from known individuals.

5.5 OneCard plus sQuid

This option uses the Waltham Forest OneCard with the sQuid e-purse as an additional application. Cards could be issued to pupils with a photo and a school specific design.

This option would use the existing OneCard card issuing and management services. It would be possible to issue cards locally; however the additional cost and necessity should be considered carefully. Temporary cards could be created for the situation when a card is left at home or awaiting replacement. Parents or Guardians can top up the card online or cash can be added in the school office or, when available, high street locations.

This solution does not require a back office in the school, however there is only limited integration with school admin systems and catering (ie simpler, lower cost and less sophisticated).



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6 COMPARISON OF OPTIONS

6.1 Biometrics V Cards

Issues regarding the use of biometrics as an alternative to cards are emotive due to the sensitivity surrounding the taking of fingerprints. Views on which solution is the best for cashless catering tend to be polarized, based on individual reactions. The DFCS and suppliers are at pains to advise schools to consult early and sympathetically about the use of biometrics.

Data Protection law allows the authorities to use data held about individuals when conducting a legitimate investigation. While suppliers state that their systems are not retaining full finger print scans, they are providing a system which can identify the closest match from the school roll when a finger print scan is presented to the system.

The table below is a summary of the main pros and cons of both cards and biometrics.

	Biometrics (finger print)	Cards
Pros	<ul style="list-style-type: none"> No card to lose or forget No card borrowing or theft from account Optimised to be effective in school community 	<ul style="list-style-type: none"> Used for other applications eg discounts from wide variety of outlets including shops, cafes, cinema, bowling, library, leisure etc Students learn to use, retain & respect cards Can hold data & applications
Cons	<ul style="list-style-type: none"> Concern over use of biometrics (eg Police requests) Long-term reliability 	<ul style="list-style-type: none"> Cards lost, damaged, stolen & left at home Cost of cards

In Scotland, where cashless catering has already been introduced in many schools, the dilemma over which method to use was considered centrally. A decision was taken by the Scottish Government officials against the use of biometrics for access to public services and they made a statement that they considered it to be inappropriate for service delivery, for example, catering in schools. They were also able to argue that the issue of cards provided access to a wider range of services and potentially a future rewards scheme.

The Young Scot Card, which can encompass many applications including cashless catering, has become desirable for anyone under the age of 26 and is now subsumed into the Scottish entitlement card. This card allows the user to claim discounts at numerous outlets including shops, cafes, leisure centres, cinemas and museums, to name a few. Due to the benefits of

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the Young Scot Card the cardholders treat it with respect to ensure that it is not lost or damaged.

6.2 Functionality

The following table shows the main functional differences between the options considered:

	Description	Payment Method	Cards?	Biometrics	Web Access	Other Services
1	Current	Cash	No	No	No	N/A
2	In-house & cash to school office	Cash/ Cheque	Barcode Some Smart	Yes	No	Limited; Card only
3	In-house & Web-Pay (eg Parent Pay)	Debit/ Credit Card/Cash	Barcode Some Smart	Yes	Yes	Limited; Card only
4	sQuid proposition	BACs/ Debit	Smart	No	Yes	Yes
5	OneCard + sQuid	BACs/ Debit & £ retailers	Smart	No	Yes	Yes

The following points need to be considered when selecting a solution:

- Branding of card, print design and encoding

This will depend upon which option is implemented and the functionality on the card. In addition, local considerations agreed between the schools and the Council need to be encompassed.

- Biometrics v use of Cards

There are polarised views as to a preference for biometrics or cards. The key benefit of cards over biometrics is that they offer greater diversity of use outside the school environment.

- Data held on card (age, DoB etc)

Photographs and personal details can all be incorporated onto cards. The extent to which personal details are stored on the card will have to be agreed. IDs are required to access services (eg Swift, Card No, Pupil No etc)

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- School requirements v broader application set to enable future phases of integration

Opening up the solution to a broader set of applications gives greater value to the card and (as proved in Scotland) ensures that the cardholders treat the cards with greater respect.

- Policy and practice for dealing with lost, forgotten and stolen cards.

6.3 Cost Comparison

The setup and ongoing costs have been compared for an average size of school and on the assumption that 5 schools adopt cashless catering from the same supplier. The comparison table is in Appendix B. The following table shows how the 5 year costs compare to “Do Nothing” as the baseline.

	Option Description	Cost Index
1	Do nothing, continue to use cash	100%
2a	In school cashless catering with cash/cheque payments via school office (card)	172%
2b	In school cashless catering with cash/cheque payments via school office (biometric)	165%
3a	Webpay and school cashless system (card)	114%
3b	Webpay and school cashless system (biometric)	107%
4	sQuidcard off-the-shelf solution	80%
5	OneCard with sQuid application loaded	75%

The following factors have been identified which determine the lifetime cost:

- Cash handling, transportation and banking.
- Requirement for a back office system in each school
- System installation, configuration and initiation.
- Transaction charges for parent top-ups and/or payments made.
- Flexibility and complexity of solution

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The cost of Options 2 and 3 is largely due to the £25-30k setup costs per school quoted by a number of suppliers. This includes back office systems, tills, installation and training.

It is assumed that biometrics and cards have similar costs, as the higher cost of the finger scanners is offset by the removal of cards from the solution.

The cost of cash handling is key, such that any solution which is to maximise benefits and provide a business case must remove the majority of cash from a school. Schools have reported load machines as being unreliable and found that the handling of cash is simply moved to the school office in the morning. The most effective solution is when parents pay weekly/monthly via the web. Clearly allowance has to be made for those unable to pay via the web and above the threshold for free school meals. Hence accepting cash payments via PayPoint and/or sQuid terminals is desirable.

The sQuid e-purse is a more cost effective solution as it does require a back office in the school to handle transactions. When combined with the OneCard, we expect costs to be lower still as the issuing and management infrastructure is in place and the card costs could be shared with other service areas (eg Libraries). The sQuid solution is not yet proved, however implementation risks are lower in a school environment.

6.4 Other Linked Opportunities

	Descrip- tion	Register/ Attend.	Access Control	Library/ Leisure/ After Sch	Public e- Purse	Rewards	Healthy Eating Tracking	Trans- port
1	Current	No	No	No	No	No	No	No
2	In House	Yes	Yes	Yes if smartcard	No	Yes if smartcard	Yes	Only on smartcard
3	Web-Pay (eg Parent Pay)	Yes	Yes	Yes if smartcard	No	Yes if smartcard	Yes	Only on smartcard
4	sQuid proposition	Possible Add-on	Possible Add-on	Possible	Yes	Possible	Possible via POS	Possible
5	OneCard + sQuid	Possible Add-on	Possible Add-on	Yes	Yes	Yes	Possible via POS	Yes 2010

When we considered the potential for other applications, the picture is quite simple. A biometric solution will be limited to applications within the school as verification of finger print is unlikely to be made available to third parties and is dependent on fast network connections. A card based solution has the potential to be used to access other services

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particularly if it is a smartcard. The OneCard is expected to be extended for use in Library and Leisure facilities which will increase its value to the individual.

In order to get free and discounted travel on public transport, accompanied children under 12 require an Oyster Card. Currently this is a separate card issued by TfL. There is the possibility of linking cards like the LBWF OneCard into the Oyster Scheme in the future (anticipated from 2010). This is more likely to be possible for a borough card than an individual school's card.

There is also a possible opportunity to link to Swapits and offer tokens as rewards for healthy eating, etc. This is most suited to a card based solution.

In Scotland, the Young Scot card is incorporated with the Euro<26 scheme which provides access to additional discounts and benefits. See example below:



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APPENDICES

- A Summary Visit Reports and Questionnaire Responses**
- B Cost/Benefit Comparison**

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APPENDIX A - Summary Visit Reports & Questionnaire Responses

School Name:	Willowfield	Heathcote	George Mitchell	Leytonstone Business and Enterprise Specialist School	Holy Family	Highams Park
Completed by (name & position):	Eva Gallagher, Bursar/Business Manager	Yvonne Smith, School Manager	Tracy Doyle, Bursar	Wendy Woodroof, Bursar	Visit Report	Visit Report
School Visit Carried Out	No	No	No	Yes 19/12/07	Yes 13/12/07	Yes 21/01/08
Question	Response	Response	Response	Response	Response	Response
How many pupils in school?	600	881	600	900	1080	1480
How many staff in school?	90	120	70	140	120	200 & casual
Do staff use a card as Staff ID and/or Access?	ID Cards	Access	No	Cashless catering	Yes	No plans
Are there any other card / tokens used in the schools?	Free School Meal Tokens	Prepaid cards for students	Door entry fobs for staff	No	prox ACS for staff	Existing 6th form biometric
Is there an existing Building Access Control System?	Yes	Yes	Yes	No	Yes	No
How many pupils use the canteen per day (%age or No)?	320 approx	Difficult to quantify	Pls check with WFCS	600	1080	250-600 per day, not good data £1-1.2k per day
Do you offer breakfast and/or breaktime snacks?	Yes	Yes	Both	Yes	Breakfast club, morning break, and lunch	break, lunch & afternoon service
Do pupils pay cash at till?	Yes	Yes	Yes (some, most are free meals)	No	Yes	Yes
How is the free school meals entitlement conveyed?	Free School Meal Tokens	Card prefixed FSM	Students ticked off on register	software	Name given at canteen	Allowance & deducted at till with no visible signs
How many offered free school meals and what is uptake?	212 Quality & 85% take up approx	200 85%	Pls check with WFCS	30%	30%	100 80%
Who does the catering? Details?	LBWF	Harrisons	LBWF	LBWF	LBWF	ISS Caterhouse
Who checks and cashes money?	Cook	Catering Managers/collected by security company	WFCS	Kitchen supervisor	check or cash posted in safe with letter box, emptied then counted and taken to the bank by the Bursar	caterer cashes up and passes to bursar for collection by bank. Also manage change.
How long does cash handling and banking take/day?	Speak to LBWF Catering	3 hours	Ask WFCS	1 hour	1 hour/day	1hr/day overall effort
Are there vending machines? How many and locations?	No	No	No	Yes Sports centre only	No	No
What is current school admin system? (eg SIMS)	SIMS	Facility CMIS	CMIS	SIMS and Cunninghams	SIMS ran by Capita	SIMS
What type and model of till do you use in canteen?	Speak to LBWF Catering	Casio Lynpak	Ask WFCS	Cunninghams touch screen	TBA	TBA
What methods of payment can be accepted?	Cash, Cheque	Cash (Cheque for prepaid cards)	Cash only	Cash and Cheque revaluation machines only	Cash and Cheque	Cash
Would the school be interested in cashless catering?	Yes/Possibly	Yes	If at little or no cost	Existing in house system	Yes	Yes if biometric
Would you participate in the LBWF review of options?	Yes/Possibly	Yes	Yes	Yes	TBA	TBA

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Appendix B

LBWF School Meals Business Case

Cost Model Assumptions

	Rate	Number	Notes
No of schools participating		5	This is used to share setup costs
Pupils		1100	
Staff		150	
Ave Price		£2.00	school meal price
Days pa		195	school days pa
Uptake (incl FSM)		50%	
FSM at %age of meals		20%	
Daily t/o		£1,250.00	
Cash (excl FSMs)		£1,000.00	
Annual t/o (cash)		£195,000.00	
Cashing Up	16	£3,120.00	1hr/day
Banking Cash	0.25%	£487.50	
Transport Cash	£25	£4,875.00	
sQuid 1.5%	1.5%	£2,925.00	
Web Pay trans fees		£2,509.65	40 ave payment
Re-value terminals		£5,000.00	
Cards - no		1250	20% pa churn
Leisure/Library on OneCard		30%	Reduction in number of cards to be issued
sQuid card revenue share		0	Assumed nil as no commitment to rollout in community

Parent Pay cash top up cards

Cards 330

Charges for top-ups

PPt	0.65	20%
CC	0.672	40%
DC	0.29	40%
Ave	0.5148	

Option Comparison

	Card Cost	Setup	Year 1	Year 2	Year 3	Year 4	Year 5	5 year	Rating
1 Current (cash)	nil		£0	£8,483	£8,483	£8,483	£8,483	£42,413	100%
2 In school - card		2.2	£27,750	£9,033	£9,033	£9,033	£9,033	£72,913	172%
In-school biometric		0	£27,500	£8,483	£8,483	£8,483	£8,483	£69,913	165%
3 In sch card with webpay		2.2	£28,380	£4,000	£4,000	£4,000	£4,000	£48,378	114%
In-sch web-pay & biometric		0	£28,130	£3,450	£3,450	£3,450	£3,450	£45,378	107%
4 sQuid		1.8	£12,250	£4,375	£4,375	£4,375	£4,375	£34,125	80%
5 OneCard & sQuid		1.8	£9,575	£4,460	£4,460	£4,460	£4,460	£31,875	75%

5 year saving over 10 schools

£105,375 compared to cash

5 year saving over 10 schools

£165,032.50 compared to webpay

£3,300.65 per sch pa