School lunches -Experience of implementing hot lunches in a small rural primary school

Jane K Philpott MA (Oxon), MSc, PhD

Introduction

This report charts my efforts to implement hot lunches in our small rural primary school in Somerset. The enterprise has been quite an education and not without its challenges, as outlined in the following account. I have been very heartened by the support I have received and by the sense of community engendered. Most of all, though, it has been the enthusiasm and gratitude of the children that has made the work so rewarding.

Background

In October 1999, the Government launched the National Healthy Schools Programme (NHSP)¹. The aims of the NHSP are:

- to support children and young people in developing healthy behaviours;
- to help to raise pupil achievement;
- to help to reduce health inequalities; and
- to help to promote social inclusion.

The Programme has four key themes:

- 1) *Personal, Social and Health Education*: which includes drug education (including alcohol and tobacco), and sex and relationship education.
- 2) *Healthy Eating*: children must learn about what kind of food is good for them and be encouraged to bring healthy breaktime snacks and lunchboxes to school. The Government is also strongly encouraging schools to offer the option of a nutritionally well-balanced hot lunch to pupils and has allocated grant money to individual schools to help to achieve this.
- 3) *Physical Activity*: children are encouraged to walk or cycle to school where safe and to participate in a wide range of physical activities.
- 4) *Emotional Well-being*: this includes learning how to resist bullying, learning about feelings and participating in school life via mechanisms such as circle time, school meetings or a school council.

In order to gain National Healthy School Status, schools have to provide evidence that they are taking a whole school approach to meeting a detailed set of criteria in each of these four areas.

As Vice Chair of Governors of Charlton Mackrell C of E Primary School in Somerset, I was asked to lead our school towards achieving National Healthy Schools Status. In addition, we aimed to develop a plan for provision of the option of a hot lunch to pupils by September 2008.

In the following account, I will explain how we have achieved this aim in our small village school and highlight some of the challenges faced and the solutions found.

Our village school

Charlton Mackrell is a civil parish in Somerset, situated 3 miles east of Somerton and 6 miles south of Glastonbury, amidst beautiful countryside. The parish consists of two villages, Charlton Mackrell and Charlton Adam, and has a population of about 1000. Charlton Mackrell C of E Primary School exists to provide high quality education for the children of the parish and currently has 86 on the school roll (the net capacity is 80). The children are taught in 3 mixed-age classes by 3 full-time and 2 part-time teachers, including the Head.

Like the majority of primary schools in Somerset, the school kitchen was removed after the 1980 Education Act gave Local Education Authorities (LEAs) the power to axe school meal provision (see inset on the *History of School Lunches*). Of 271 schools in Somerset, 156 were left without kitchens. The kitchen at our school was, however, never used to cook school lunches; these were always prepared elsewhere and delivered to school by the Local Authority. When school lunch provision was stopped by the LEA, all children brought packed lunches to school and have been doing so ever since.

Later, a small kitchen was installed for curriculum cooking; this contains a single electric cooker, a child-height sink and a fridge-freezer.

History of School Lunches in the UK

- **1889** Some 50 years after the Industrial Revolution, child mortality in Britain was still high and living conditions were overcrowded and insanitary. Organisations like the Salvation Army began offering cheap meals for children and the London Schools Board established a School Dinners Association to offer cheap, or free, school meals.
- 1897 Manchester became the first city to provide school meals for 'destitute and badly nourished children'.
- **1904** A Parliamentary Committee reported that many of the young men recruited for the Boer War were small, undernourished and generally unfit to fight. By this time, some 350 voluntary bodies were providing meals for undernourished children.
- **1906** The newly elected Liberal Government passed the Education (Provision of Meals) Act to ensure that British children could grow up healthily. The Act allowed Local Education Authorities (LEAs) to contribute to school canteen committees and, in some cases, to provide free meals for the poorest children.
- 1920 Over 1 million children were being provided with school meals across Britain
- 1924 Free milk was introduced into schools
- **1940** A National School Meals Policy was introduced across Britain as rationing was implemented. The Government was paying 95% of the cost of meals and recommendations on nutritional content, staffing levels and organisation of service were introduced.
- **1944** The Education Act made compulsory what had previously been performed by LEAs on a voluntary basis: every child in a maintained school had to be provided with a meal. 1.8 million children were now taking school meals.
- 1947 Atlees' post-war Labour Government met the full cost of school meals in all state schools.
- 1950s The price of school meals went up gradually from 6d to 1/-, or double.
- **1960s** Despite a doubling in the number of children taking school meals since the war, there was growing concern about the increase in child poverty in the UK. Concerns also grew about the increasing cost of school meals.
- 1967 The 100% governmental grant for school meals was withdrawn
- 1970s The cost of school meals continued to rise from 1s 6d (~7 ½ new pence) in 1967 to 12p in 1971.
- **1977** Take up of school meals fell but 61.7% of all school children still had a school meal at a cost of £380 million to the Exchequer. The Cockerill Committee reported that 'it is not safe to assume that all children have a satisfactory diet at home'.
- **1978** A Government White Paper targeted a reduction on expenditure on school meals to £190 million. This immediately reduced the quality of meals and service provided and convenience meals began to be commonplace.
- **1980** An Inequalities in Health Report (known as The Black Report) commented that nutritious school meals are vital to the health of children. It warned that '...To leave schoolchildren, especially young school children, to make their own free choices as to what food is to be purchased would be wrong. Children will frequently prefer to consume foods high only in sugar and other sources of energy. As an inadequate substitute for a nutritious meal, this is likely to lead to increases in obesity and in dental caries'. The Thatcher Government ignored the report and commented that '...poverty was not just the breeding ground of socialism but the deliberately engineered effect of it...'.
- 1980 The Education Act (Sections 22 and 23) gave LEAs the power to completely axe the school meals service.
- **1986** The new Social Security Act meant that families receiving family credit had the price of a school meal included in the benefit. Large numbers of children lost their entitlement.

- **1987** Only 49.4% of children took up a school meal. Since 1970 there had been an average of a 1% reduction in school meal take-up every year.
- **1991** Introduction of Compulsory Competitive Tendering led to many school meals services being contracted out to the private sector which was accompanied by reductions in the quality of the meals.
- 1995 Less than half of all school children took a school meal.
- **1998** The newly elected Labour Government introduced the Working Families Tax Credit (WFTC) and campaigners called for families who were eligible for WFTC to receive a free school meal.
- **1999** The National Healthy Schools Programme (NHSP) was launched. This covers personal, social and health education (including sex and drugs education), healthy eating, physical activity and emotional well-being (including bullying). The Government strongly encourages schools to offer the option of high quality hot lunches to pupils.
- **2001** National research from the Child Poverty Action Group and the Department for Education and Skills showed that take up of school meals is affected by fear of stigma and bullying, poor quality of food and lack of awareness by parents of their family's entitlement.
- 2001 The Government introduced new compulsory National Nutritional Standards for School Food.
- **2003** Child Tax Credit replaced WFTC an additional 75,000 children became entitled to free school meals under the new system.
- **2005** The Government introduced the School Food Trust as a body made up of school food experts to advise the government on the future of the service.
- **2006** Introduction of new Standards for School Food across all schools in the UK ensuring all school food meets basic standards set out by the School Food Trust.

References:

Orrey, Jeanette (2005). The Dinner Lady. Transworld Publishers, London.

Action For School Meals. http://www.schoolmeals.org.uk/

Options available

Before doing anything, I decided to investigate how other rural primary schools in our area were tackling the task of offering pupils the option of a hot lunch. My research involved detailed discussions with the Heads of ten primary schools in Somerset and revealed that various different approaches were being adopted:

1) Contracts with the Local Authority Catering Service

2) Contracts with local commercial catering businesses

3) In-house cooks.

1. Contracts with Local Authority Catering Service

Some schools had established a contract with Somerset Catering Services (SCS) – a department at County Hall - to deliver lunches cooked in secondary school kitchens. These lunches are transported to the primary schools in insulated containers which keep the food warm for 2-3 hours without the need for reheating. On a Wednesday, parents return a form to the school specifying which days in the following week their children would like hot food and which menu choice they require. Meals cost £1.80 per child and £2.30 per adult. In the schools adopting this approach, about 30-50% of pupils are taking up hot lunches.

The advantages of this system are that it is already up and running and the standard of the food is reported to be "generally very good", although customer satisfaction is variable. There are inevitable problems with the quality of vegetables that have been transported up to 10 miles from the source kitchen and kept warm for some time. In addition, some dishes are less resilient than others to being kept warm, for example, pasta can congeal.

Some schools had encountered problems with insufficient quantities of food being delivered and, for one school, SCS had been struggling to find a secondary school with kitchen capacity to provide them with lunches.

Unless a school can guarantee the purchase of an average of 45 meals per day every day of the school year, they do not qualify for the full SCS service, which includes provision of transport and collection of the dirty dishes. For many small rural schools, it is very difficult to achieve that level of take-up, so the schools have had to employ additional staff to drive up to 8 miles away to collect the food, bring it back, serve it and wash it up. At one small school I spoke to, the lunchtime supervisor drives to the nearest secondary school to collect the food and at another, the man who drives the delivery van does the washing up. There is also an additional administration cost. Some school secretaries reported spending an extra 2-3 hours a week on organising menu choices and payments. No additional revenue budget has been made available by the Government to cover these additional staff costs, so these have to come out of the ordinary school budget, thus reducing the money available for other aspects of the children's education.

2. Contracts with local commercial catering businesses

Other schools had set up contracts with local pubs to provide their food. The meals are more expensive than those provided by SCS, costing \pounds 1.95 to \pounds 2 per child. The schools have been delighted with the quality of food but it is not particularly profitable business for the pubs, so time will tell if this approach is economically sustainable.

Like the first option, this approach also potentially involves driving food considerable distances across country. This is not in line with the Government's Sustainable Schools Framework which states that, "by 2020, the Government would like all schools to be models of sustainable travel, where vehicles are used only when absolutely necessary"².

Assuming I could find a local catering business willing to provide lunches for our school, I would still have to address the problem of transporting the food, serving it and washing up.

3. In-house cooks to prepare the meals freshly on the school premises or as close to the school as possible

To my surprise, I discovered two local schools who had decided to go it alone and cook their own lunches. The schools had hired their own cooks, who prepare the food, serve it and wash up on the school premises. In one school, 68 out of 77 pupils were taking up the lunches and in the other about 100 out of 200 had signed up on a regular basis. Both were charging £1.80 per child and £2.35 per adult and the income covers the costs of both labour and food.

The advantages of this approach are that it is more controllable and sustainable than the other two options; it is also less of a burden on the school budget as the staff costs are met by the revenue generated.

In its Sustainable Schools Framework², the Government states that, "*by 2020, it would like all schools to be model suppliers of healthy, local and sustainable food and drink. Food should, where possible, be produced or prepared on site. Schools should show strong commitments to the environment, social responsibility and animal welfare. They should also seek to increase their involvement with local suppliers.*" In-house provision of lunches allows schools to select their own local suppliers and control exactly what foods are used in the meals.

The disadvantage of this approach is that it is necessary to recruit cooks and establish an in-house catering operation, which requires significant effort to organise.

Consultation

Armed with this information, I went back to our school Governing Body and presented them with the available options. There was unanimous support for investigating further how these options for lunch provision might work in our own school and for issuing a questionnaire to parents seeking their views.

The questionnaire to parents elicited responses from 25 families, representing about 50% of the children in the school. Of these, 24 families said they would be interested in hot lunches, with cost, quality of food and menu choices being the main factors that would influence their decision to sign up. With regard to the three options for provision, 19 families said they would prefer in-house cooks, 3

didn't mind which option we pursued, and 2 voted for a contract with a commercial catering business. In terms of frequency, 12 families said they would purchase lunches every day, and the rest indicated that they would buy lunches between 1 to 3 days per week.

Feasibility of options

Next, I spoke to Somerset Catering Services (SCS) to establish whether it would be feasible for them to supply lunches to our school, should we decide to pursue this option. They confirmed that our nearest secondary school, Strode College, did have capacity to supply us with lunches but, as expected, we would not qualify for their full service. This would mean employing someone to drive 6 miles to collect the meals, serve them and wash up afterwards.

I then set about investigating whether there were any local catering businesses who would be willing to supply us with lunches. The pubs in our village and the neighbouring villages indicated that they were not interested in providing school meals due to the unprofitable nature of the business and a lack of kitchen capacity. Similarly, the caterers who provide food for the Naval Airbase at Yeovilton, which is 3 miles away, were unable to help, nor were other local catering businesses, such as National Trust kitchens, who were contacted. It may have been possible to find a suitable contractor further afield but this would have raised issues with regard to sustainability.

So what about the feasibility of providing a lunch service in-house?

Our existing small school kitchen was clearly not up to the specification required to produce lunches on a large scale. I therefore contacted the Senior Catering Adviser at County Hall to ask if he would be willing to come and inspect the kitchens in our two village halls to advise on their suitability for producing school lunches. He did so and concluded that the kitchen in our Community Hall, half a mile from school, would be fit for purpose. He advised that if we were to use it in the longer term, we should consider installation of a professional catering oven rather than the existing domestic double oven, as well as an industrial dishwasher and a hand-wash basin.

I then attended a Community Hall Committee meeting to ask if they would be willing to hire the kitchen to the school on a regular basis for the purpose of preparing lunches. They enthusiastically agreed and, furthermore, decided to waive the rental charges for the first five sessions and then to charge only £5 per session for the following term. It was very encouraging to feel strong support from senior members of our community for this enterprise.

Cooking in-house

At the next Governing Body meeting, I reported back on progress. By this stage, the evidence suggested that there was both parental and community support for hot lunch provision at school, with a large majority voting for doing this in-house rather than contracting out. We also had a suitable kitchen close to school available for use.

The main reasons for selecting the in-house option over the use of contractors were:

- 1. Ability to control menu choices and recipes, using only high quality, fresh, locally-produced ingredients
- 2. Ability to select local suppliers who are committed to the environment, social responsibility and animal welfare
- 3. Ability to minimise the distance over which the food is transported, thus meeting sustainability goals
- 4. Ability to use the revenue generated to off-set staff costs
- 5. Strong parental support for this option

The Governing Body agreed that I could go ahead and advertise for two cooks. This I did and was delighted to receive applications from four local women with relevant experience. The two that were selected both have experience of high volume food production – one in a busy restaurant and the other in a school and a nursing home.

On the advice of the Local Authority Senior Catering Adviser, we decided to do two 'trial runs'. The aim of these was to identify any significant weaknesses which could either be resolved to enable a longer term supply, or would force us to rethink the idea of using the facilities, thereby reducing the risk of any misdirected expenditure. We decided to do the two trial runs on consecutive Thursdays and to offer the service free of charge to the children in order to encourage as many as possible to try the food.

Food hygiene regulations

Before proceeding any further, I had to register our operation as a food business with the District Council Food Safety Team. I then invited our local Environmental Health Officer (EHO) to visit the Community Hall kitchen and school to check that there were no major issues that we needed to address before starting. He made a number of recommendations on improvements to our facilities, which I subsequently addressed through the Buildings Committee of our Governing Body and the Community Hall Committee. The EHO gave us a copy of a document called "Safer Food, Better Business". This food safety management pack has been developed by the Food Standards Agency to help small catering businesses comply with new regulations introduced in January 2006. From 1 January 2006, Regulation 852/2004 of the European Parliament on the Hygiene of Foodstuffs requires that: *Food business operators shall put into place, implement and maintain a permanent procedure based on the principles of hazard analysis critical control points (HACCP)*.

The HACCP principles consist of the following:

- Identifying any hazards that must be prevented, eliminated or reduced to acceptable levels
 Identifying the critical control points at the step or steps at which control is essential to
- Identifying the critical control points at the step or steps at which control is essential prevent or eliminate a hazard or to reduce it to acceptable levels
- Establishing critical limits at critical control points which separate acceptability from unacceptability for the prevention, elimination or reduction of identified hazards
- Establishing and implementing effective monitoring procedures at critical control points
- Establishing corrective actions when monitoring indicates that a critical control point is not under control
- Establishing procedures, which shall be carried out regularly, to verify that the measures outlined in the above paragraphs
- And, establishing documents and records commensurate with the nature and size of the food business to demonstrate the effective application of the measures outlined in the above paragraphs.

Thus, in order to meet current food safety legislation requirements, the Food Hygiene Regulations 2005 and other relevant legislation in force in the UK that relate to manufacture, storage and distribution of food, I had to write a Food Hygiene Policy to cover our school lunch operation. This policy also needed to meet the requirements of the Somerset County Council Food Safety Policy. The purpose of the policy is to ensure that all food offered at school lunch is safe to eat and of a quality the children, their parents, staff and visitors expect.

With advice from the LEA Senior Catering Adviser, we used the "Assured Safe Catering" system which was developed for and with caterers, in association with the Department of Health, to control food safety problems in catering operations. It is based on the principles of HACCP but is less formal. The system is "generic" in nature and does not require detailed product/ingredient knowledge. Foods which have similar hazards and risks and require similar control measures can be grouped together, for example: fresh, raw joints and cuts of meat; dairy products; fresh fruit and vegetables; and frozen meat and fish products. We then examined our operation by preparing a flow chart of the catering steps and identified and analyzed the hazards at each step for each food group. Controls to minimise or eliminate each hazard were also identified and the control points critical to food safety were determined. Controls were then established, as well as a system to monitor the controls. Finally, we set up a file to record the monitoring of checks and a system to ensure periodic review.

The food hygiene regulations also require that food handlers are supervised and instructed and/or trained in food hygiene matters commensurate with their work activities. Both of the cooks had obtained food hygiene certificates in their previous employment but it is recommended that these are

renewed every 3 years. I thus had to arrange for food hygiene training by an accredited Training Provider. Several national bodies offer accredited food hygiene training courses and can provide information on trainers, for example, The Chartered Institute of Environmental Health (CIEH), The Royal Institute of Public Health & Hygiene (RIPHH) and The Royal Society for the Promotion of Health (RSPH). Fortunately, the Chair of Governors of one of the local primary schools is an accredited trainer so I was able to arrange a course especially for our school, including some of the Learning Support Assistants as well as the cooks.

Menu Planning and Nutritional Standards

Having addressed the food hygiene requirements, we could begin to think about planning our menus. I thought this would be the easy bit but, in fact, there are many issues to consider. Not only do you have to comply with Government nutritional guidelines and use healthy recipes, but you have to consider how to produce meals that are attractive to children within the designated budget. Specific dietary requirements, such as food allergies or religious needs, must also be taken into account.

Government Nutritional Standards

On 19 May 2006, the Secretary of State announced a suite of new nutritional standards for school lunches, as well as for food and drink served at other times of the day. These standards combine the recommendations of the School Meals Review Panel (SMRP) and the School Food Trust (SFT). New regulations for school lunches mesh with the existing standards in the Education (Nutritional Standards for School Lunches) (England) Regulations 2000³.

There are two sets of standards for school lunches:

a) *Food-based*, which define the types of food that children and young people should be offered in a school lunch and their frequency; and

b) *Nutrient-based*, which set out the proportion of nutrients that children and young people should receive from a school lunch.

The first set of *food-based* standards came into force in September 2006 and applies to all local authority primary, secondary and special schools in England. The second set of *nutrient-based* standards will apply from September 2008 for primary schools and from September 2009 for secondary schools. Introduction of food-based standards for all other school food and drink comes into effect from September 2007.

These healthier products should be on the menus			
Fruit and Vegetables	Not less than two servings per day per child must be provided; at least one should be vegetables or salad and at least one should be fruit.	√	
	A fruit-based dessert shall be available at least twice per week in primary schools		
Meat, fish and other non-dairy sources of protein	A food from this group shall be available on a daily basis.	\checkmark	
	Red meat shall be available twice per week in primary schools, and three times per week in secondary schools.		
	Fish shall be available once per week in primary schools and twice per week in secondary schools. Of that fish, oily fish shall be available at least once every three weeks.		
Starchy foods	A food from this group shall be available on a daily basis.	\checkmark	
	Fat or oil shall not be used in the cooking process of starchy foods on more than three days in any week. On every day that a fat or oil is used in the cooking process of starchy foods, a starchy food for which fat or oil is not used in the cooking process shall also be available.		
	In addition, bread with no added fat or oil shall be available on a daily basis.		
Dairy products	Dairy food shall be available at lunchtime every day	~	
Drinking Water	Free, fresh drinking water must be provided	✓	

a) Food-based standards

Healthier
DrinksThe only drinks permitted during the school day are plain water (still or sparkling), skimmed or
semi-skimmed milk, fruit juice or vegetable juice, plain soya, rice or oat drinks enriched with
calcium, plain yoghurt drinks, or combinations of the above. Tea, coffee and low calorie hot
chocolate are also permitted

NO Confectionery	Confectionery such as chocolate bars, chocolate-coated biscuits and sweets must not be provided.	×
Salt and Condiments - RestrictedSalt must not be provided at lunch tables or at service counters. Condiments, such as ketchup and mayonnaise, should only be available in sachets or indi 		×
Snacks – Restricted	Snacks such as crisps must not be provided. Nuts, seeds, vegetables and fruit with no added salt, sugar or fat are allowed. Savoury crackers and breadsticks can be provided at lunchtime as part of meal when served with fruit, vegetables or dairy food.	
Deep-Fried Food – Restricted	No more than two deep-fried foods, such as chips and batter-coated products, in a single week.	
Meat Products – Restricted	A meat product (manufactured or homemade) from each of the four groups below may be provided no more than once per fortnight provided the meat product also meets the standards for minimum meat content and does not contain any prohibited offal: Group 1: Burger, hamburger, chopped meat, corned meat Group 2: Sausage, sausage meat, link, chipolata, luncheon meat Group 3: Individual meat pie, meat pudding, Melton Mowbray pie, game pie, Scottish (or Scotch) pie, pasty or pastie, bridie, sausage roll Group 4: Any other shaped or coated meat product.	×

b) Nutrient-based standards

Energy	30% of the estimated average requirement (EAR) ¹
Protein	Not less than 30% of reference nutrient intake (RNI)
Total carbohydrate	Not less than 50% of food energy
Non-milk extrinsic sugars	Not more than 11% of food energy
Fat	Not more than 35% of food energy
Saturated fat	Not more than 11% of food energy
Fibre	Not less than 30% of the calculated reference value
	Note: calculated as Non Starch Polysaccharides
Sodium	Not more than 30% of the SACN ² recommendation
Vitamin A	Not less than 40% of the RNI
Vitamin C	Not less than 40% of the RNI
Folate/folic acid	Not less than 40% of the RNI
Calcium	Not less than 40% of the RNI
Iron	Not less than 40% of the RNI
Zinc	Not less than 40% of the RNI

EAR = Estimated Average Requirement – the average amount of energy or nutrients needed by a group of people. Half the population will have needs greater than this, and half will be below this amount

 ${\rm RNI}$ = Reference Nutrient Intake – the amount of a nutrient which is enough to meet the dietary requirements of about 97% of a group of people

SACN = Scientific Advisory Committee on Nutrition. For details of figures for the dietary reference values and derived amounts for nutrients for children and young people see Crawley (2005), with the exception that the derived reference value for fibre for boys aged 15-18 years should be capped at 18g.

1 Nutrient values except for sodium are based on: Department of Health (1991) Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO

2 Scientific Advisory Committee on Nutrition (2003) Salt and Health. London: The Stationery Office

c) Standards for all school food 'other than lunch'

The government believes that similar standards should apply to all school food 'other than lunches', as recommended by the School Food Trust. This means that:

- No confectionery will be sold in schools;
- No bagged savoury snacks other than nuts and seeds (without added salt or sugar) will be sold in schools;
- A variety of fruit and vegetables should be available in all school food outlets. This could include fresh, dried, frozen, canned or juiced varieties;
- Children and young people must have easy access at all times to free, fresh drinking water in school.

The only other drinks available will be:

- Water (still or sparkling)
- Milk (skimmed or semi-skimmed)
- Pure fruit juices
- Yogurt and milk drinks (with less than 5% added sugar)
- Drinks made with combinations of the above
- Low calorie hot chocolate
- Tea and coffee

Our meals

In order to maximise the uptake, we knew it was vital to ensure that our first few meals were a real hit with the children and that cost should not be a factor for parents. We decided that the first two meals would be offered free of charge. We then consulted with the cooks at Baltonsborough C of E Primary School in Somerset to find out which meals had been most popular with their children. Fortunately, they had kept detailed records of how many children had chosen each menu option, so we were able to see immediately that roast lunches were the real winners, followed by the most frequently consumed dish of the British public - spaghetti bolognese. We decided to offer both a meat and a vegetarian option at each meal, as well as a choice of fresh fruit salad or a hot pudding for dessert. Despite the fact that it was rather ambitious for our first attempt, we agreed to launch our operation with a roast. The children would have a choice of:

• Roast beef and Yorkshire Pudding

or

• Roast turkey with pigs in blankets

or

• Vegetarian nut roast

served with roast potatoes, carrots, broccoli, petit pois and gravy

followed by

• Fresh fruit salad

or

• Chocolate sponge with chocolate sauce

Then the following week we would offer spaghetti bolognese (meat or vegetarian), followed by fresh fruit salad or pineapple upside down cake.

We sent the menu choice forms home to parents and by the deadline for return, 70 out of 82 children had signed up. Despite the fact that the meals were free, some parents believed that their children are such fussy eaters that they would not try the home-cooked food and would prefer to bring in a packed lunch as usual. Undeterred, we asked the Head Teacher to see if she could persuade the recalcitrant children to change their minds. After she had 'worked her magic', we had 80 out of 82 children on roll signed up.

In my initial discussions with the Head Teachers of other schools, I had been told of insurrections amongst lunchtime supervisors over hot lunches. I decided to take preventative action by inviting

some senior members of our local community to come in and have lunch with the children to provide some extra adult supervision, particularly for the Infants. They accepted with alacrity. The Head Teacher then met with our lunchtime supervisors to discuss what we were trying to do and to seek their input on how best to organise the logistics.

Now we were nearly ready to start. We had cooks, a kitchen, knowledge of the food hygiene regulations, knowledge of the government's nutritional standards, some local market information on children's food preferences, menus planned, 80 children and 10 adults signed up for lunch, and some additional volunteer helpers. All we lacked were pots, pans, utensils and the food itself.

Local suppliers

At the outset, one of our stated aims was to use fresh, high quality produce from local suppliers. We wanted to support local businesses and demonstrate our commitment to sustainability by buying food from local farms and other local shops with high standards in terms of quality, environmental impact and animal welfare. In Somerset, we are very lucky to be surrounded by a significant number of farm shops and other rural businesses which supply fresh locally-produced meat, poultry, fish, fruit and vegetables, dairy products and bread, including an increasing range of organic produce. Having surveyed a number of local farm shops, we selected one, which is about 2 miles from school, that was willing to supply us at wholesale prices and deliver directly to our kitchen. Bread would come from the local bakery 2 miles away, and milk and eggs from our village shop. Other foodstuffs, such as dry ingredients like flour and pasta, we decided to obtain wholesale from a company that supplies various local restaurants.

One of the problems we encountered was the system for paying invoices. Unfortunately, the set-up of our lunch operation coincided with the appointment of a new School Secretary and Administrative Assistant. Neither of them had yet received training in the County Council IT system for finance, so it took a while for them to learn how to submit the invoices for payment. Once the invoices are in the system, it takes at least 30 days for the County Council to pay them. I was concerned about this relatively lengthy process because small rural businesses have little financial flexibility and may decide either to stop supplying us or to increase their prices. So far, however, we have received no complaints but time will tell how well this will work.

Equipment

In our kitchen at the Community Hall, we have one domestic double oven, a double sink and two small fridges. There is some crockery and cutlery, but not enough for the whole school. There are no pots and pans or general utensils such as whisks, potato peelers and serving spoons. We also needed insulated containers for transporting the food from the Community Hall to school, as well as hats, aprons and other work clothes for the cooks. It was clear that we needed to acquire some equipment.

The Government has allocated *c*. £1000 per year for 3 years to each school in order to set up their lunch operations. We had already spent over £600 of the first 2 years' funds on cooled water dispensers for the 3 classrooms, as schools have to ensure an accessible supply of fresh water for children throughout the school day. This did not leave us with a great deal of money, particularly as we had decided to give a 100% subsidy on the first two meals. I approached the Friends of the School to ask if they would be willing to contribute any funds to support the purchase of equipment for school lunches. They were not keen to do so on the grounds that if the Government has introduced this policy, then it should provide the necessary funding and not leave it up to parents. In any case, at this stage we felt reluctant to spend significant sums because we had no idea whether our school lunch enterprise would take off. We therefore set about trying to borrow what we needed.

Members of our local community proved themselves to be extremely kind and generous. One of the Governors is very involved in the Guiding Movement and lent us all of the pots, pans and baking trays that they use on camp, as well as a whole bag of dish cloths. One of the mothers who has her own catering business lent us 100 plates, bowls, knives, forks and spoons. She also lent us a huge insulated container which was designed for hog roasts and thereafter became known as the 'pig coffin'; this fitted exactly into the back of a Volvo Estate. The Environmental Health Officer was not very keen on this particular item but agreed that it did maintain the food at the required temperature, so would be

fine for the trial runs. Another senior member of our community lent us her hostess trolley to enable us to keep the food warm at school whilst serving. We also received an anonymous donation of \pounds 50 from someone in the community to support the school lunch project. All of the other utensils and equipment we needed such as knives, whisks, food processor and potato peelers were the personal property of the two cooks and myself. The only items we bought were a set of colour-coded chopping boards and a huge tureen which would be large enough for spaghetti bolognese for over 70 people.

First Trial Run

At last the big day had arrived. The meat, fruit and vegetables were delivered at 09:00 by the farm and the cooks brought the dry ingredients with them. We did have some teething troubles though: I had to make at least 3 journeys home and to the village shop for items we had forgotten and one of the cooks had to go back to the farm to pick up the broccoli. Fortunately, the mother who lent us the crockery and cutlery arrived at about 10:00 and transported 2 tables from the Community Hall to school as we didn't have enough tables at school to put the food on for serving.

We quickly filled up the oven with trays of roast potatoes and meat and realised that it wasn't such a clever idea to organise a menu with a baked dessert as well as a first course that required oven space. In spite of this, we managed to cook 90 roast lunches and the desserts by 12:00, which was quite an achievement given our facilities and borrowed equipment. The logistics of loading all the food trays and saucepans containing the cooked food into the insulated container, transporting it to school and unloading it at the other end were difficult. By the time we had sorted ourselves out, it was 12:30 – half an hour past the usual start of lunch. The children didn't seem to mind. In fact, most of them were ecstatic about having an extra long lunch break that day.

The room designated as a 'hall' in our small Victorian school is not large enough to seat the whole school at one sitting. The staff decided that we would feed the younger children first and the older children would be enticed to wait by the prospect of being allowed 'seconds'.

We soon realised that our meal was quite complex to serve, with choices of main course, vegetables and desserts slowing the queue down, and resolved to ensure greater simplicity in future. We had lengthy debates about whether we should allow the children to choose which vegetables to have, or whether they should all be given the same. In the end, we decided that the experience would be more pleasant for the children if they weren't coerced into eating things they really didn't want to. Many of us had bad memories of school dinners for this reason and felt that allowing the children some control would be more successful in the long run. As it happened, the children ate so many vegetables that we ran out and I had to make an emergency dash to Somerton to buy some more half way through. Furthermore, 50% of the children selected fresh fruit salad over the chocolate sponge, which was a pleasant surprise. Of course, most of the children had forgotten what they had ordered, so we had to print off our order list and check each child against this list, which didn't help the efficiency of the process. Having two sittings meant that we had to clear away the first course, serve dessert, then retrieve the first course again for the second wave of children, which also slowed us down.

The teaching staff very kindly helped the lunchtime supervisors by shepherding the children through the process and encouraging them to try the food, even if they had never eaten it before. We were very grateful for their help although we had not asked for it, but some members of staff were unhappy about spending their lunch break with the children. At Baltonsborough School, the lunchtime supervisors manage the process on their own so I felt confident that it would not be necessary to involve the teaching staff at lunch in the long term.

Then came the washing up. This was a nightmare because we decided to try to do it at school rather than take the dirty dishes back to the Community Hall. Our facility at school comprises a single child height sink and no dishwasher, which is wholly inadequate. This meant that it took until 15:00 to clear up. Clearly this was an area we needed to target for improvement.

All things considered, we were very pleased with the way the day had gone, particularly with the fact that there were so many empty plates and that some children had come back for 3 helpings. Whilst feeling delighted with the end result, the cooks and I had found the day very stressful and exhausting,

as we were anxious for the lunch to be a success, and were trying to overcome a number of teething troubles whilst producing meals for 90 people.

We waited with bated breath for the next morning when the feedback would start trickling in. There was no need to worry - the children had enthused to their parents about the lunches. One girl in Year 5 went home and told her mother that it was the best day she had ever had at school. Some parents were unable to believe that their children had eaten anything at all, never mind all of it.

Follow-up

The following week was much calmer as we had sorted out some of the logistical problems we had encountered, and two mothers kindly offered to help with the washing up. The children loved the spaghetti bolognese.

After the two trial runs, we were ready to embark on delivering meals on a paying basis. The meals cost £1.80 per child and £2.50 per adult. The eligibility criteria for free school meals were circulated to all families and 3 children applied for these. We decided to continue with hot lunches on just one day per week whilst establishing the service.

Costs

So now for the moment of truth - would parents be willing to pay for hot lunches for their children? Apart from the small capital injection of £1000 per year for 3 years, there is no other Government subsidy to support school lunches. Our operation thus has to be self-funding. Labour would cost £80 per day and the hire of the kitchen £5 per day. Just to cover these costs alone, we would need to sell 47 lunches. On top of this, we would need to purchase the food, and using locally-produced fresh produce is not a cheap option. Assuming a price of £1.80 per meal and fixed costs of £85 per day, how much could we afford to spend on food? Some simple calculations revealed the following:

Numbers taking up lunches	Budget available per meal
50	10p
55	25p
60	38p
65	49p
70	59p
75	67p
80	74p
85	80p
90	86p
95	90p
100	95p

It is thus clear that our ability to break even and provide quality meals for the children depends heavily on the level of uptake. Unless uptake of 65+ is achieved, the operation is unlikely to be viable without subsidy. In order to be able to buy quality locally-produced ingredients and meet the Government's nutrient-based standards and sustainability goals, it is likely that an uptake of at least 75 is required. With a total school roll of 82, could this be achieved? I felt it was possible but would not give us much margin for error. I therefore decided to contact the Head Teacher of a school in a neighbouring village to ask if she would be interested in purchasing lunches from us. As she had not yet managed to arrange provision for her school, she was enthusiastic about the idea. She also mentioned that another school a bit further away might also be a potential customer and offered to contact the Head Teacher. Both schools decided that they would like to send representatives over to sample our lunches before making any decisions.

Thus, in the first weeks of operating on a paying basis, we found ourselves serving meals to 73 children and adults from our own school, as well as 22 additional meals to children from Long Sutton and Kingsdon Primary Schools, making a total of 95 meals per session. We were delighted with this level of uptake so early in the life of the project.

The visitors from the other schools enjoyed the food so much that they asked if they could return the following week. After this, one school confirmed that it would order 10-12 meals on an ongoing basis (total school roll is 20) and the other that it would order 30-40 meals on an ongoing basis (total school roll is 118). This was excellent news, although if numbers rose much beyond 100 in total, we would have insufficient capacity in the kitchen and may require more labour, so there is a delicate balance to be reached. Clearly, there would be work to be done in arranging transport of the food over to the other schools but this was a bridge we could cross a bit later.

On learning of the possibility that we could become a contractor, the LEA's Senior Catering Advisor decided to come and inspect us against the various regulations relating to food hygiene and nutritional standards outlined earlier. He was reassured by what he observed but recommended that we ensure that our own system for lunch provision is thoroughly established and robust before we start extending provision to other schools. This seemed eminently sensible as we were still experimenting with logistics and still needed to procure equipment, such as insulated containers that are compliant with the food hygiene regulations.

Feedback

Formal feedback from parents at our school has not yet been sought as it is still early days, however, we will do this early in the 2007/08 academic year. We have, however, received unsolicited positive feedback from teaching staff and children. The Deputy Head of our school sent me the following email:

"Well done, Jane. Another great triumph. I thought you would like to know that I had various discussions with the children over lunch about the best lunches, and how they felt about them. Anita said she felt much better in the afternons, that it was worth waiting for, always. They loved the jacket potatoes and quiche last week, and actually loved everything. Sarah politely not quite so sure about todays vegetarian dish (though I loved it). They adored the pink trifle. Some of them had had fruit salad every week, and said it was the best fruit salad they had ever had, and they loved it. Opinion is very positive all round, and I can see a difference in the children. Congratulations on all your efforts. Nice to see the other children here today. Jacky"

The Head Teachers of Kingsdon and Long Sutton schools wrote:

"The feedback was extremely positive from children and staff alike – they thought the meals were excellent. "

"Thank you very much for today, we really enjoyed the food, so much so we would like to come back. I reckon we would have around 30 to 40 pupils who would want hot meals on a regular basis".

The future

Our plan for the next academic year is to increase provision of hot lunches from one to two days per week. At present, we do not envisage doing any more than that as parents have expressed concerns about affordability. Although \pounds 1.80 per meal is very reasonable, some families have 2-4 children at the school and costs for them would become significant.

We also need to make some improvements to our facilities in the short term, particularly with regard to washing up. The landlady of the pub in our village has recently refurbished her kitchen and kindly donated an old industrial dishwasher to the school. This needs to be installed in the small kitchen at school, along with an adult height double sink. We also need to install a hand-wash basin in the Community Hall kitchen to meet food hygiene regulations.

As highlighted earlier, the Government's Nutrient-Based Standards for School Food will come into force for primary schools from September 2008. In order to be ready for this, I have begun to use my Dietary Analyst skills to examine the nutrient content of the meals we have already produced, using DietPlan6TM. The outcome of this analysis is being used to help with planning of future menus. The standards consider the nutrient content of all meals delivered over the period of a week. In our case, the menus over 5 consecutive hot lunch days are included in the analysis. It is possible that I may be able to provide a similar service for other schools on a consultancy basis in the future.

In the longer term, our goal is to install a suitable kitchen on the school premises, as transporting food even a short distance across the village is logistically complex, inefficient and not in line with the Government's National Framework for Sustainable Schools. Estimates by Allsop and Pitts suggest that the cost of supplying and installing catering equipment for a kitchen to produce around 100 meals would be in the region of £27,000. I have submitted an application for a grant to cover this from the Transforming School Food Budget, which is administered by the Local Authority. I have also applied to our Parish Council for a contribution. At present, the school's Governing Body is investigating a range of possibilities for increasing the space available in school to provide adequate ICT facilities, hall space for PE, Dance, Drama, Orchestra etc, and a kitchen. Various options are being researched and costed with a view to wider consultation with key stakeholders in the next academic year. Whichever option is pursued, it is clear that no significant additional capital funding will be available from the Local Authority, so the school will have to raise the majority of the funds required itself.

Conclusion

In this account, I have illustrated that there are many issues to consider before managing a school meals service in-house. The work required to provide a compliant service in terms of financial control, staffing, menu planning, nutritional standards, food hygiene, food sourcing and procurement is significant.

Some of the key issues and responsibilities for provision of an in-house service are:

- Personnel recruitment and supervision of catering staff, and providing cover during absences
- Payroll payment to staff on an agreed frequency, National Insurance contributions etc
- Legislative Compliance Health & Safety including Food Hygiene, Food Act and ensuring the kitchen and dining areas are fit for purpose.
- Training compliance with legislation and expected levels of qualifications required, including on-going personal and professional development
- Budget Preparation monitoring spend against targets, including free school meals provision
- Cash Collection including open book accounting principles and banking of monies
- Menu Planning to meet Government nutritional guidelines, healthy eating recipes and best practice as well as curriculum activity
- Administration collating food orders in order to allow estimation of quantities of food required
- Procurement of foodstuffs of the right quantity, equipment at the right price and quality
- Food ensuring that it is of high quality with assurances as to its origin
- Ordering and Invoicing placing orders with suppliers and making payments
- Equipment repairs and maintenance, purchasing and scheduling its replacement, in addition to addressing future requirements.
- Marketing image and promotional activity

Despite the complexities, we have proved that it is possible to set up an in-house service in the context of a small rural primary school. Research indicates that an increasing number of schools intend to go down this path, particularly in the light of the Government's agenda on Sustainable Schools.

Some advantages of the in-house approach are:

- Control the school takes full control and can respond to the needs of the school, the children, parents and the wider school community.
- Sustainability and local support it is possible to consider environmental sustainability and animal welfare in food sourcing, including sourcing food locally, which also contributes to the health of the local economy

- Community cohesion in our experience, a real community spirit has been generated, with senior members of the community offering significant support to the younger members
- It can be self-funding, minimising the drain on already stretched school budgets
- It is proven to work there are many successful examples of schools running their services inhouse and anecdotal evidence of satisfaction with the outcome.

Some disadvantages of the in-house approach are:

- The need for suitable facilities this is a challenge for schools that were left without a kitchen after policy changes in the 1980s
- Administrative burden the issues are complex and running a meal service is a big responsibility. The work required to provide a compliant service from menu planning to health and safety is significant. Real challenges are presented to schools when they set up in-house services and commence trading in isolation.
- Possibility of failure there are a number of examples of schools experiencing difficulties running the service and considering returning to a local authority arrangement
- Risk the school has to take all the risk of delivering a service, including being able to cover for staff absences.

Our School Food Policy states that:

"The Governing Body of Charlton Mackrell School recognizes the important connection between a healthy diet and a child's ability to learn effectively and achieve high standards in school. We also recognize the role a school can play, as part of the larger community, to promote family health, and sustainable food and farming practices. We believe that sharing food is a fundamental experience for all people; a primary way to appreciate our cultural diversity; and an excellent bridge for building friendships, and inter-generational bonds."

Despite all of the challenges, I feel that the hard work which has been done largely on a voluntary basis has been worth it, and that we are putting into practice the values articulated in our School Food Policy. The children love the meals, the teachers have already begun to see a difference in the childrens' ability to concentrate in the afternoon and a positive community spirit has been engendered.

Acknowledgments

Warm thanks are extended to the Head Teacher of Charlton Mackrell School, Mrs Gilly Kempton, for her support and practical assistance with the school lunch enterprise. Mrs Lesley Fenwick, Head Teacher of Baltonsborough C of E Primary School and her senior cook, Mo Thorner, generously gave their time to inspire us to follow their example, and we greatly appreciate their help. Dean Waller, the Senior Catering Adviser at the Somerset LEA, has provided invaluable guidance, advice and encouragement and we would not have been able to negotiate our way through the regulations without his input. The two cooks, Denise Burks and Denise Lock, have never wavered in their "can do" approach and I am extremely grateful for their practical skills, energy and initiative. We are indebted to the Charltons' Community Hall Committee for allowing us to use their kitchen, and particularly to Angela Morgan for her enthusiasm, help and moral support. Thanks are also extended to all the parents and members of our community who have supported us in different ways by lending or giving us equipment, helping with the washing up, and encouraging the children to eat up their vegetables, particularly Midge Hopkinson, Anne Bull, Sophie Hicks, Karen Kent, Karen Thrippleton and Helen Field. Last but not least, I'd like to thank the children for tucking in with such gusto and making all the effort worthwhile.

¹ http://www.foodinschools.org/schools_support/healthy_schools.php

² http://www.teachernet.gov.uk/sustainableschools/framework/framework detail.cfm

³ http://www.opsi.gov.uk/si/si2000/20001777.htm