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Appetite for Life Action Research Project 2008-2010

Research Report



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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Assembly Government

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Executive Summary

1. Following the launch of the Appetite for Life Action Plan in 2007² this action research study was launched in Autumn 2008 in 9 pilot schools across four Local Authority areas to explore the issues raised in moving towards implementing the Draft Guidelines for school food, so as to inform roll out of the Guidelines in 2010. Schools were chosen to give a broad sample including Primary and Secondary, rural and urban, mixed Welsh medium, different levels of Free School Meals (FSM) entitlement (as one measure of social deprivation), and included one special school.

2. Method

2.1 The action research study worked with a number of pupil groups in each school including School Councils, School Nutrition Action Groups, Eco Groups, specially convened groups including pupils making the transition from Primary to Secondary, more disaffected pupils as well as those from less advantaged backgrounds, and with school and catering staff. Researchers also engaged parents, Parent Teacher Associations, and, in each Local Authority area, worked with a 'Governance Research Group' which included Headteachers, school Bursars, Catering Services managers, public health officers, Elected Members, Local Authority directors, suppliers, and local healthy schools and Appetite for Life officers. During this study researchers visited each school at least twice a term, and met with Governance Groups once a term. As well as assessing the potential differential impacts of implementing the draft Guidelines on different stakeholder groups, the research was also aiming to identify lessons for partnership working.

2.2 A primary purpose of participatory action research is to produce practical knowledge that is useful to people in their everyday lives, and to contribute through this practical knowledge to the increased well-being of people and their communities. Action researchers work iteratively through cycles of action and reflection with groups who meet to identify and explore a question or questions of

² Welsh Assembly Government's Appetite for Life Action Plan (2007) sets out the strategic direction and actions required to improve nutritional standards of food and drink in schools in Wales.

mutual interest; in between meetings participants then undertake activities relating to their questions (e.g. surveying the school to find out what are the most popular sandwich fillings or identifying queuing issues in the canteen). The research group then meets again to share information and to reflect together, and through reshaping the question(s) based on their reflections, they move the inquiry forward.

2.3 For each school the learning from the research was gathered into a Learning History (Roth and Bradbury, 2008). A learning history is a ‘tale jointly told’ by participants and researchers together. This approach records the steps taken in making the required change; the pivotal moments, opportunities, key actions and individuals, successful as well as unsuccessful experiments, and the part played by chance and circumstance which are otherwise described or implied in case studies or ‘best practice’ as straightforward steps of progress. Two learning histories were developed for each school in the study, one in spring term 2009 and a second in spring term 2010. These histories along with research meeting reports, and termly reports as well as research notes and minutes from Governance group meetings were the source materials for this report.

3. Findings

3.1 In many cases, as research groups developed shared views about what was important to them in respect of their school’s food and drink provision, they grew in confidence that their voice was valued. Changes then began to manifest across the schools supporting moves towards implementing the Draft Guidelines. In several, though not all cases pupils also developed a more mature understanding of the complexity of change i.e. that changes they might wish for need to be understood from a number of different perspectives not only their own.

3.2 The themes under which this research gathers its findings will be familiar to readers of the wide body of research published on school food and drink. What pupils choose to eat and drink at school is influenced by a number of factors: food culture at home and in the community; their access to local food outlets offsite; the level of anxiety in the canteen; the length of queues and routines that impact

on queuing; the physical environment; peer relationships, the relationships between pupils and canteen staff; the degree to which the school sees lunchtime as a space to develop social skills; and the nature of choice itself. This study gives these themes depth and texture, and importantly makes many links between them, contributing to a picture of the school food system as an interconnected whole. The study argues that this understanding of context is vital if changes to school nutrition are to be a success.

3.3 The research found distinct differences in local food cultures across the research sample of schools and Local Authority areas. There are differences between more rural project areas and more deprived urban and semi urban areas. The differing reactions in these different areas to the withdrawal or restriction of certain foods suggest that changes to menus need to be managed taking local cultural factors into account, using every possible means to communicate with and engage both pupils and parents when deciding the pace of change.

3.4 The research found that engaging parents using a range of media can build understanding of menu changes and changes in pricing. Taster sessions were also helpful, as well as underlining the link between school food and the standard of cooking that can be achieved at home. Equally, parents can lift children's expectations of school food, and their feedback can influence canteen standards. At Primary level, children derived much pleasure and confidence from practicing their cooking skills and sharing the resulting foodstuffs and knowledge with their parents.

4. Conclusions

4.1 Pupils (in particular in Secondary schools) are caught in a paradox around choice. On the one hand they have the freedom to choose what they eat, or to eat nothing (indeed learning how to choose is considered part of growing up), yet on the other hand they are exhorted that they should make their choice a healthy choice. Furthermore, the ethos of action research to empower and liberate in fact supported pupils to behave as consumers with rights, who could influence the canteen to be more responsive to them as paying customers, the model both the canteen and pupils are familiar with from the high street. This presents a dilemma

for canteens who aim to offer variety, and do their best to imitate what is available on the high street but do not have the business models of their high street counterparts that would allow them properly to market their wares, or reinvest in their businesses and become fully customer facing. They are also prevented by regulation from offering the full choice of foods e.g. snack foods and soft drinks, which are so often popular with young people. In summary, pupils are neither fully ‘customers’, nor regarded as sufficiently responsible to make free choices.

4.2 Given the context for this research and for the Appetite for Life Action Plan in general, namely the growing body of evidence linking dietary factors to the development of chronic diseases, the study concludes that the school canteen, rather than being expected to behave as an extension to the high street (offering as much free choice as possible), needs to be understood as an extension of the classroom. The lesson of how to eat well needs to be digested in school. Canteens need to be recast as citizen-centred social enterprises, and their food co-produced and co-designed with pupils to allow them to innovate, to take ownership of change, to engage their peers and to make school food fun. We suggest that cookery lessons could pilot dishes for the canteen, through which pupils could learn about their nutritional content. Our findings suggest this could have a positive influence on what is cooked at home.

4.3 In order to further resolve the tension between pupils’ identities as recipients of education in the classroom and ‘customers’ in the canteen, schools need to plan to restrict all access to off-site eating, and to organise alternative, or mobile eating concessions elsewhere on the school site for years 11-13. Headteachers need to appropriately delegate or lead on engagement with pupils around school nutrition. Staff need to empower and resource pupil groups (including but not restricted to School Nutrition Action Groups) to collect data, build relationships with the canteen, influence their peers and effect changes to improve the canteen environment. They also need to facilitate pupils’ understanding of what choice means within the more restricted context of the canteen so as to build their capacity to make thoughtful choices away from school. As visible leaders, Headteachers need to present a compelling narrative to parents at every opportunity that makes the link between nutrition and worsening (local) health

statistics, and between good nutrition in school and concentration in the classroom.

4.4 School canteens also need support in making changes. Canteen staff need to continue to have access to training to help them design compliant menus. Where canteens are opted out and source their own meals, the school needs to be sure that procurement skills and waste management are optimised since these will have a direct impact on pricing and the flexibility around pricing. This study found that how each canteen manages business risk has an important influence on school menus, and for how long the canteen will try new foods. Yet it is well understood that pupils often need time and repeated exposure to get used to new choices. We suggest that the issue of business risk is too important to be left only to the canteen. Risk needs to be an item for regular consideration by school's senior management team alongside the issues and concerns that have emerged through engagement with pupils around the canteen and school food in general.

5. Recommendations

	Recommendation	Who?
1.	<p>Appetite for Life Draft Implementation Guidelines should be strengthened to:</p> <ul style="list-style-type: none"> • Reflect that the canteen is an extension of the classroom and therefore integral to education. • Encourage engagement of pupils, teachers and catering staff around changes to the school meal service and to explore and capitalize on potential linkages with the curriculum. • Encourage schools to ask themselves how does this 're-framing' of school food provision match our vision and mission. 	Welsh Assembly Government.
2.	In undertaking self evaluation, in the context of the wellbeing quality indicator of Estyn's Common Inspection Framework, schools should take every opportunity to draw on and make linkages with work undertaken in relation to Appetite for Life.	Schools.

3.	<p>A senior lead officer should be identified at Local Authority level to ‘champion’ and embed the importance of healthy school meals by working with and supporting partners, particularly Heads to understand and appreciate:</p> <ul style="list-style-type: none"> • The potential tensions around provision and consumption of ‘healthy’ and ‘local’ school food. • The latest evidence linking nutrition and educational performance. • The mounting evidence of costs to the public sector of ill health related to unhealthy diet. 	Local authorities.
4.	Inter agency working should be maximized in order to cross communicate messages about healthy eating, and to ensure consistency of agency aims and policy, and the integration of practice.	Local authorities and schools working with key partners e.g. Healthy School coordinators, Public Health Wales, NHS.
5.	School meal services should move from a ‘business’ (customer/provider) model towards a ‘citizen centred services’ model with a focus on engagement and collaboration with customers to deliver Appetite for Life.	School Meal Providers and local authorities.
6.	Responsibility for maintaining an overview of communication within individual schools should be held at a sufficiently senior level within that school.	Schools.
7.	<p>At least one lead from within the school staff, reporting to the Headteacher, should be identified to coordinate widespread engagement around school food within the parameters of the guidelines, incorporating a whole-school approach and pupil participation and bringing a learning dimension to this engagement. This learning dimension needs to include building capacity for:</p> <ul style="list-style-type: none"> • Pupil choice and decision making. • Participation skills. • Cookery and budgeting skills. 	Schools.
8.	Attention should be paid to the need for regular and good quality communication between the school Cook, the school staff and school meal providers.	Schools, School Meal Providers and local authorities
9.	Support should be provided for opted out schools to work towards Appetite for Life standards.	Local authorities and schools.

10	The school canteen's change strategy and its approach to business risk should be included as a regular agenda item for the schools senior management team meetings.	Schools.
11	Clear communication routes should be established between the school meal services and the school management teams.	School Meal Providers and School Management Teams.
12	Within the context of Appetite for Life, pupils should be engaged in decisions that will affect them about the school meals service for example: managing queues, introducing pre-ordering, where to site outside eating areas.	Schools and School Meal Providers.
13	As part of a whole school approach schools should consider: <ul style="list-style-type: none"> Restricting all access to offsite eating; and, Establishing (where possible within the school grounds) alternative selling points for pupils for whom eating off site is an anticipated privilege eg mobile concessions operating on the same principles as the canteen. Whether the lunchtime arrangements allow sufficient time for eating and other activities. Seating children (particularly Primary) together in friendship groups regardless of whether they are eating school meals or their own packed lunch. Experimenting with different approaches to managing queues. 	Schools working with School Meal Providers and local authorities.
14	Opportunities to engage pupils and parents in tasting sessions when developing/changing menus should continue to be utilized.	School Meal Providers working with schools.
15	Tasting sessions and trial periods for new menu should be planned and the information gathered used to 'tune' new menus and grow pupil (and staff and parent) ownership of the changes.	School Meal Providers working with schools e.g. SNAGs.
16	Signage and displays in the canteen should be updated regularly to reflect any changes in provision and to maintain interest.	School Meal Providers working with schools
17	Pupils should be engaged in: <ul style="list-style-type: none"> Informing and contributing to the design of the new food and drink on offer within the 	School Meal Providers working with schools e.g.

	<p>parameters of the standards proposed in Appetite for Life.</p> <ul style="list-style-type: none"> Developing creative ways of marketing menus and new foods around the school. 	SNAGs.
18	<p>Pupils and parents should receive clear and timely communication about the:</p> <ul style="list-style-type: none"> Rationale for canteen pricing and changes made to food provision. Content and quality of food that is available in school, and where food is homemade and/or made from local or school garden produce. 	School Meal Providers working with schools.
19	<p>Appropriate methods of communication (eg face to face, newsletters) to provide parents with information on healthy eating should be fully utilized; making linkages with food and drink provided and consumed throughout the school day. (This may require extra efforts where pupils are bussed in from a wide area).</p>	Schools.
20	<p>As part of a whole school approach, advice on healthy packed lunches should be provided to parents and pupils through periodic campaigns.</p>	Schools working with key partners e.g. Healthy School coordinators.
21	<p>Opportunities should be explored for discussions across groups like the School Council, SNAG and Eco Committee, to hold an on-going dialogue with the canteen, and to be a conduit of information and understanding to the wider school community.</p>	Schools.
22	<p>Skills required by school cooks (particularly those in opted out schools) to balance workload, demands of new menus, equipment should be recognized and these requirements reflected in regular training and ongoing support.</p>	School Meal Providers.
23	<p>School canteen staff should be provided with information and support to enable them to understand the context for making the changes to the food and drink provision.</p>	School Meal Providers.
24	<p>Dining room assistants and canteen staff should be equipped with the necessary skills and knowledge to communicate appropriately with all pupils, including those with complex learning needs, about healthy eating in the context of Appetite for Life.</p>	School Meal Providers and schools.
25	<p>Support should continue to be provided to school meal providers to facilitate the application of nutritional analysis software for the lunchtime menu cycle for all schools.</p>	National Food in Schools Coordinator

26	Within the Draft Appetite for Life Implementation Guidelines, explore and utilize flexibility to phase in the implementation of the proposed food and drink standards for all pupils including those with different dietary requirements.	School Meal Providers.
27	Information regarding specialist dietary needs, including the provision of pureed food, should be shared across school meal providers in Wales with the assistance of the National Food in Schools Coordinator. (This will not suit the needs of all children but can contribute suggestions and ideas for other schools).	School Meal Providers working with the National Food in Schools Coordinator.
28	Where pureed diets are required, sufficient time should be built in to plan and organize a variety of foods as alternatives to the main menu on days when main menu foods cannot be pureed.	School Meal Providers working with the school, parents, pupils and dieticians.

Because this report makes links between education and health in particular, as well as touching on the issue of local economies, these recommendations need to be considered within the commitment of the Welsh Assembly Government to make sustainable development its central organising principle (Welsh Assembly Government, One Wales: One Planet, a new Sustainable Development Scheme for Wales, 22 May 2009)

Note: School Meal Providers includes all providers eg. Local Authority school catering services; school run catering services and privately run school catering services.

1. Background

1.1 Background to the A4L Action Research Project

At the start of the new millennium, improving the quality and nutrient content of food and drink in schools was a high priority for the Welsh Assembly Government. Indeed, this was an issue of considerable importance across the whole UK, not only for improving the health of the population, but also for tackling the underlying causes of health inequalities and for social justice. This prioritization lay within a context where the importance of a healthy balanced diet for the growth and development of children and young people, and for their future health, was increasingly recognized as a global issue (WHO 1990).

In 1990, the World Health Organisation published *Diet, Nutrition, and the Prevention of Chronic Diseases*. This report by an expert study group highlighted the substantial international consensus concerning the strength of evidence linking dietary factors to the development of chronic diseases, including coronary heart disease, hypertension, stroke, cancer, diabetes, and osteoporosis. The report demonstrated the magnitude of health problems associated with dietary factors worldwide and provided advice on prevention along with a guide to the nutrient intakes needed to prevent all diet-related diseases in all countries throughout the world.

Soon after in the UK, the Caroline Walker Trust - set up in 1988 to improve public health through good food - published its first 'Expert Report': *Nutritional Guidelines for School Meals* (1992). These guidelines were widely used as the definitive guide to nutrient-based standards for school meals, and later they formed the basis for the statutory standards for school meals in Scotland and England.

Meanwhile, in Wales, the Welsh Assembly Government was actively promoting initiatives for health improvement in schools. The Welsh Network of Healthy School Schemes (WNHSS) was established in 1999 after twelve schools were involved in the European Network of Health Promoting Schools in a pilot from 1995-1997. Also, through the National Health Promotion Strategy, 'Promoting Health and Well-being in Wales' (WAG 2000), the Welsh Assembly Government emphasised the important contribution schools were making and could build further upon in tackling health inequalities and helping children adopt

healthy lifestyles. This strategy included goals to improve the nutrition of school aged children through initiatives such as breakfast clubs and fruit tuck shops.

Soon after, the Assembly Government set minimum compulsory nutritional standards for school lunches for children in all LEA maintained nursery, Primary and Secondary schools through the Education (Nutritional Standards for School Lunches) (Wales) Regulations (2001).

Elsewhere in the UK, the Department of Education in Northern Ireland published new compulsory nutritional standards for school meals within Catering for Healthier Lifestyles (DENI 2001). In this document, the importance of encouraging healthy eating habits among children and young people and the potential contribution of schools were asserted thus: 'Schools can make a very significant contribution to secure, maintain and improve children and young people's health, for example through the taught curriculum as well as the wider school environment: the types of food and drinks sold in vending machines, tuck shops and through the school meals service.' (DENI 2001)

In Wales, following implementation of the revised National Curriculum in 2000, the Welsh Assembly Government worked with the Food Standards Agency and Estyn (the education and training inspectorate for Wales) in developing guidance to promote the contribution schools could make to young people's understanding about the importance of food for health. The Guidance - Food in the School Curriculum in Wales (WAG 2002) - focused on how young people could be supported in learning how to choose, prepare and enjoy food for health.

Around this time, the Scottish Executive published the recommendations of their Expert Panel on School Meals entitled Hungry for Success (2002). This document set out a vision for 'revitalising the school meals service' in Scotland and presented far reaching recommendations connecting school meals with the curriculum as a key aspect of health education and health promotion. National nutrient-based standards for school lunches were proposed and mechanisms for monitoring the standards were set out. This report was hailed as 'the first step on a journey to a whole-child, whole-school approach to food in all schools in Scotland' (p4).

In 2003, in Wales, the Assembly Government issued guidance to schools and caterers on meeting the minimum standards required by the 2001 regulations (Nutritional Standards for School Lunches: National Assembly for Wales Guidance Circular Number 03/2003 (WAG 2003). This guidance included advice on healthy diets; the provision of healthy food that young people enjoy; ways of making healthy food an attractive option; and ways to develop a 'whole school approach' to healthy eating.

In the same year, the Government launched Food and Well Being – a Nutrition Strategy for Wales (WAG 2003). This strategy was developed in response to the increasing body of evidence concerning the importance of a healthy diet in preventing what were now the main causes of death in Wales: coronary heart disease and cancer (Targeting Poor Health: WAG 2001; Well Being in Wales: WAG 2002).

Food and Well-being aimed to improve the diet of the whole population through actions undertaken by local authorities, schools, health professionals, food producers and retailers, local health alliances and others, to help overcome barriers to people accessing a healthy diet and to tackle rising levels of overweight and obesity.

The Nutrition Strategy identified children and young people as a priority for action. Information was provided concerning the inadequacy of the diets of young people in Wales, with low intakes of fruit and vegetables, high intakes of snacks (mainly high fat, sugar and salt) and low consumption of breakfast. Specific vitamin and mineral deficiencies were also cited as common in certain population sub-groups (WAG 2003). The strategy asserted that healthy eating habits established at an early age could be maintained in the long term, and that some of the most effective interventions were to be found in schools.

Meanwhile the World Health Organisation published their Global Strategy on Diet, Physical Activity and Health (WHO 2004) in response to what was described as 'the alarming rise' in mortality, morbidity and disability attributable to the major non-communicable diseases. Over 60% of all deaths, 47% of global burden of disease were attributed thus, and this was predicted to rise to 73% and 60% respectively by 2020. These rising figures were understood to be the consequence of 'evolving trends in demography and lifestyle including those related to diet and physical activity.'

WHO member states were urged to develop actions to promote lifestyles that include healthy diet and physical activity, and which limit energy intake from fats, eliminate trans-fatty acids, increase consumption of fruit and vegetables, legumes, whole grains and nuts, and reduce uptake of free sugars and salt from all sources (p38).

In 2005, in England, the Department for Education and Skills established the School Meals Review Panel (SMRP) to address the nutritional standards of school meals. The Department also established the School Food Trust, which was given the remit to transform school food and food skills, to promote the education and health of children and young people and to improve the quality of food in schools. The SMRP published its recommendations in *Turning the Tables – Transforming School Food* (DES 2005). In this report the panel highlighted the need to address the serious concern that:

‘...the diet of our children contains far too much fat, salt and sugar, and the prevalence of obesity is increasing rapidly. Poor diet, coupled with lower levels of exercise, places this generation of children and young people at increasing risk of coronary heart disease, stroke and Type 2 diabetes which may affect their enjoyment of life as adults, and bring premature death’ (DES 2005 Appendix 1, p3).

Accordingly, the SMRP proposed radical changes to school meals which included the prohibition or restriction of food high in fat, sugar and salt or made with poor quality meat. Subsequently, the standards in England generally adopted the advice and recommendations of the SMRP and the School Food Trust. The Trust has since provided a comprehensive web-based resource and a succession of publications to help schools in England implement nutrient and food based standards.

In Wales, the Assembly Government added further stimulus to the whole school approach to nutrition by launching *Food and Fitness – Promoting Healthy Eating and Physical Activity for Children and Young People in Wales* (WAG 2006). This five year plan outlined a programme of work to secure the wellbeing of children and young people. It included recommendations for improving the food and drink consumed throughout the school day and for enabling children to develop skills in preparing healthy food. In support of the plan, the Assembly Government published *‘In Perspective: Food and Fitness’* (WAG 2006), which provided examples of good practice intended to inspire greater health promotion activities in schools around both food and fitness.

In July 2005, the Welsh Assembly Government established a Food in Schools Working Group to examine how to improve the nutritional standards of food and drink provided throughout the school day and how to ensure a consistent and coherent approach to driving forward improvements. During the period leading up to July 2005 when the Food in Schools Working Group was formally established 'it had become increasingly evident that a fundamental review of school meals was long overdue.' This increased awareness was due in part to the impact of the publication of 'Hungry for Success' in Scotland and the effect of Jamie Oliver's 'Food for Thought' campaign. The Food in Schools Working Group published its detailed recommendations for consultation under the title Appetite for Life in June 2006.(WAG 2006). The Group advised a radical overhaul of food in schools across Wales and it sought to introduce new minimum standards for all food and drink available throughout the school day, including recommendations to remove sweets, chocolate, cereal bars and processed savoury snacks like crisps.

The Assembly Government consulted widely on the proposals, including encouraging children and young people to respond from at least ten per cent of Wales' schools. Their comments, together with feedback from discussions with school caterers and information gathered from other parts of the UK, were all used to help inform the development of the Appetite for Life Action Plan (WAG 2007). This plan set out the strategic direction and actions required to transform the nutritional standard of food and drink in schools across Wales.

Around this time, the celebrity chef Jamie Oliver was also catching the public and media's attention with his Campaign Manifesto to Improve School Dinners (Oliver 2006). Oliver called for the UK government to develop a ten year strategy to 're-educate people about proper eating habits.' This included making cooking classes compulsory for all children, recruiting new cookery teachers, empowering head teachers to make schools 'junk food free zones,' educating parents about family cooking and nutrition, investing in training for school Cooks, and providing time for Cooks to prepare food with fresh ingredients. The interest generated by Oliver's campaign added momentum to the efforts of government and schools across the UK to bring about the necessary transformation in school food and drink.

As part of the actions to take forward Appetite for Life, a National Food in Schools Coordinator was appointed in April 2007 to provide practical support to local authorities, caterers and schools on implementing the standards recommended in Appetite for Life. A nutritional analysis software package was also procured to enable caterers to plan menus using their own recipes.

The Welsh Assembly Government issued guidance 'Developing a Whole School Food and Fitness Policy' (WAG 2007) for head teachers, school governors and healthy schools coordinators to support the development of whole school food and fitness policies in schools (WAG 2007). The guidance emphasised the importance of considering the school's ethos; the curriculum; the environment; links with the wider community; implementation; and monitoring as part of the school's policy development.

Furthermore, within the Appetite for Life Action Plan (WAG 2007) the Welsh Assembly Government acknowledged the critical importance of careful planning and consultation when introducing and managing change to the food and drink provided in schools. In light of this, the action research project that forms the basis of this report was initiated to test and help further develop the detailed guidelines for implementing the new food and nutritional standards. Alongside this work, funding was made available via a specific grant scheme to support, across all local authorities, those schools not involved in the action research project who wanted to progress to the new standards proposed in the Appetite for Life Action Plan. In practice the research would involve participants in schools, including pupils and teachers, parents and carers, school Cooks, governors and local authorities in a process of agreeing actions to support implementation of the Draft Guidelines, testing them out and reviewing the outcomes. The research project started work in August 2008, and in November 2008 the Appetite for Life Guidelines (Draft) WAG (2008) were issued and research activity in the four Local Authority areas was begun.

In the following section, we outline the approach taken by the research project as it seeks to use action research methods to explore the issues raised in moving towards the standards proposed in the Appetite for Life (A4L) Action Plan, in schools and at a Local Authority level.

2. Introduction

This section introduces the project, its aims and objectives (2.1), the approach taken by the study (2.2), and outlines the sample sites in which the study took place (2.3).

2.1 Aims and objectives of the research project

The broad purpose of the study was to test and further develop Draft Guidelines for implementing the food and nutritional standards proposed in the Appetite for Life Action Plan (Welsh Assembly Government, 2008) using an action research approach. As such its specific objectives were:

To explore the issues raised in moving towards the standards proposed in the Action Plan in Primary schools, Secondary schools, Special schools and Local Authorities.

The research project undertook action research within the schools involved in the study and at a Local Authority level plus disseminating learning across the participating schools and local authorities, and also with those authorities not participating in the research through stakeholder events, organised by the Welsh Assembly Government.

As well as assessing the potential differential impacts on different *groups* in the school food system³, the research was also identifying lessons from partnership working at the different *levels* in the system.

The research was also asked to assess changes in uptake particularly in Secondary schools and what is consumed in addition to served meals, as well as the potential of using local produce. The study was not designed to gather quantitative data, which was gathered outside of the action research project.

³ In this instance the term 'system' is used to describe the wider and interconnected system e.g. the school, the Local Authority, the Welsh Assembly Government.

In terms of the consumption of school meals the study has considered the impact of the school environment and the eating experience, including staggered lunchtimes, the impact of morning break, on/off site lunchtime policies.

The research design sought to address these requirements by working at three different levels in the system; that of the schools, the Local Authority level in the four study areas, and the Wales-wide level through a national steering group and stakeholder conferences.

2.2 Approach taken in this study

The Welsh Ministers specifically commissioned the research team to take an action research approach to test and further develop the Appetite for Life (A4L) Draft Guidelines.

Guidelines

A set of Draft Guidelines (Appetite for Life Guidelines, November 2008) were developed by the Welsh Assembly Government, to guide the implementation of the standards proposed in the Appetite for Life Action Plan. As part of their development, prior to the action research contract being in place, regional workshops had been convened by the Welsh Assembly Government with representatives from each of the 22 Local Authorities to identify the issues that stakeholders wished to see included in the Draft Guidelines.

The initial draft of the Draft Guidelines was still under development as the action research project commenced in Autumn 2008, these were made available to the schools and the research team towards the end of the autumn term (November 2008), so that the team started working with them in the schools in the spring term 2009.

Action research groups

Action research is particularly well suited to capture and transfer learning from attempts to make practical changes in real-life situations. A primary purpose of participatory action research is to produce practical knowledge that is useful to people in their everyday lives, and to contribute through this practical knowledge to the increased well-being of people and their communities at all levels. The research design sought to maximise local learning through the action research groups at a school and Local Authority level, and then to share (and add to)

this learning with the wider ‘system’ through a series of stakeholder workshops, and later a report and other dissemination activity.

In small group work, action research works iteratively through cycles of action and reflection. The group comes together to explore a question or questions of mutual interest, participants then undertake activities relating to those questions within and between group meetings (e.g. exploring what is being brought to school in lunch boxes, and what informs these choices). The group then meets again to share information and to reflect together, and through reshaping the question(s) in accordance with these reflections they move the inquiry forward.

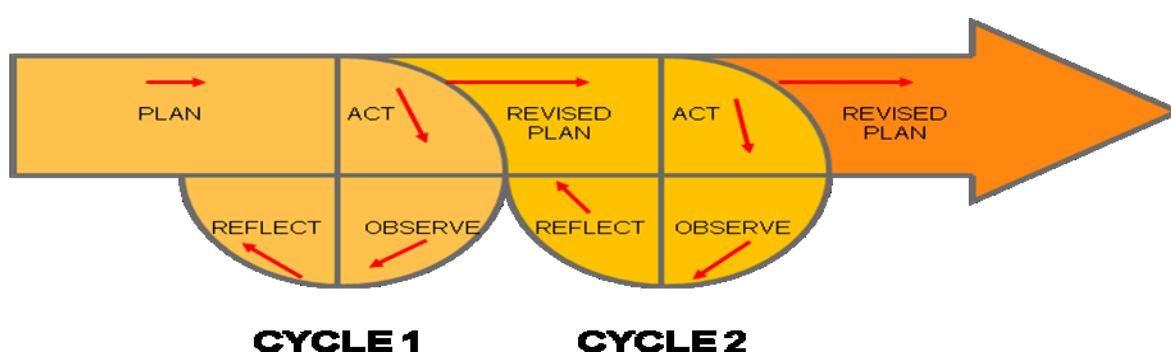


Figure 1 The action research cycle diagram.

There are three strands of activity in the study, all undertaken as action research:

- Action research inquiry groups in each school (with associated data gathering activity),
- one ‘governance’ action research group in each Local Authority area, and
- input into stakeholder workshops to share the learning Wales-wide.

We convened a minimum of two action research groups in each school, including pupils, school catering and other school staff (as appropriate), parents and governors.

In addition we convened one group in each Local Authority area including LA officers and suppliers, school heads/other representatives, school governors, local councillors, public and environmental health representatives. We refer to this as the ‘governance’ group, as its participants were all in a position to influence the participant services and organisations.

We say more about the research activity in section 3. Methodology.

Stakeholder workshops

Stakeholder workshops bring together a range of stakeholders with a common interest to work together to find solutions to shared problems, and through doing so to gain a better understanding of each others' perspectives and contributions.

Stakeholder workshops were convened by the Welsh Assembly Government at key points during the Appetite for Life action research project to share learning from the four Local Authority areas with a wider group of stakeholders, including representatives of the Welsh Assembly Government, Local Authorities not participating in the research, public health colleagues, food suppliers. Learning histories and presentations by the participating schools provided a focused and manageable way of transferring learning from each inquiry group into the stakeholder workshops for consideration, debate and further development.

Capturing the learning from the project

The study used a method called Learning History to capture the learning from the schools (Roth, G. and H. Bradbury, 2008). A learning history is a 'tale jointly told' by participants and researchers together. The role of the researcher is to draw out the capabilities, insights and shifts in perception that develop during the learning, that participants often find more difficult to communicate with each other or to recognise within themselves. It is a method that records the realistic messiness of introducing change such as the new food and nutritional standards. This approach enables progress towards bringing in change, otherwise described or implied in case studies or 'best practice' as simple steps of progress, to be revealed in their messiness, their chance encounters, key conversations, stumbles and passions. Learning History is particularly appropriate to working with the multiple perspectives within this project.

Learning histories were used for the purposes of capturing the learning from the study at a school level. This enabled information to be shared by the research participants, reflecting their multiple perspectives. Two learning histories were developed for each school in the study, one spring term 2009 and a second spring term 2010. Learning histories were not developed for the governance groups.

Information drawn from the Learning Histories, research field journals, termly reports and governance group notes has been brought together to inform this report.

2.3 Sample sites

Some development of the sample had been undertaken prior to the commencement of the contract. Four Local authorities had been selected by the Welsh Assembly Government for their diversity. The four participating authorities were Ceredigion, Merthyr Tydfil, Torfaen and Wrexham.

Preparatory work had been undertaken between Welsh Assembly Government officials and the coordinators in each of the Local Authorities to establish background information on schools that could be selected for the detailed research work. The possible sample schools were discussed in detail with the researchers at the first steering group meeting, and the research team finalised the selection of the schools for the sample after this meeting.

The original sample of eight schools was chosen to include:

- Secondary and Primary schools
- One Special school
- Urban and rural schools
- Schools which were opted out of, as well as schools supplied by, LA Catering service
- A diversity of social groups in catchment areas e.g. ethnicity, socio-economic group, local and more dispersed (causing children to be bussed into school)
- Welsh medium schools
- A diversity of kitchen and eating environments (e.g. catering equipment, training, suppliers, dining space, off site policy)
- Transition from Primary to Secondary

In addition to the original eight schools a ninth (School E) was added to the sample as it shared a kitchen with a neighbouring Primary school (School D), and so offered the opportunity to compare both a school kitchen shared between two Primary schools and the effects of different school cultures.

Pen pictures of schools participating in the study are included as appendix 1. They are referred to as schools A – I in the text to maintain confidentiality.

3. Methods

This section of the report describes: The research activity, who we researched with and where (3.1); the process of the research, what sorts of activity was undertaken to address the research questions, both in research meetings and between them (3.2); the ways that data were collected and analysed, and the validation process (3.3); and the benefits and challenges in the research process (3.4).

3.1 Research activity

The action research project involved activity at three levels; school, Local Authority area and Wales-wide. This entailed:

At a school level convening action research groups with pupils, school and kitchen staff, and parents and governors.

At a Local Authority level facilitating ‘governance’ level groups of staff from

- LA catering service
- Schools
- Public health
- Environmental health
- Suppliers
- Councillors
- Youth service
- Dental service
- Healthy Schools.

At a Wales-wide level

- Contributing to stakeholder workshops, convened by the Welsh Assembly Government to disseminate learning from the pilot project.
- Producing verbal and written reports and school level Learning Histories to inform and act as case study material.

For details of activity and group membership see appendix 2 Governance groups, and appendix 3 Schools based groups.

3.2 The research process

This is not a mechanical process of producing ‘solutions’, but one that explores the issues raised in trying to move towards the new standards developed as part of the A4L Action Plan, and the subsequent Draft Guidelines.

School based groups

Two researchers were allocated to each school in the study group, visiting each school on average twice a term. The research was officially launched in each school, usually via a presentation to a school assembly. This gave an opportunity for the researchers to engage as wide a range of pupils as possible in the research activity. Without this whole-school launch we would have been solely dependent on the pupils put forward by each school, which were usually the School Council (SC) and the Eco Committee (EC), and the School Nutrition Action Group (SNAG) where one existed. As the research period was spread over two academic years the older and younger pupils in the groups changed as some left school and others moved from Primary to Secondary school. However, in each case we maintained a core group of committed pupil researchers. Some schools had integrated groups, and others a specific Representative Group of pupils who were either disaffected and/or from more deprived backgrounds.

A normal research day at a school involved meeting with pupil researcher groups, as well as school staff (Bursar, Head, teachers), in addition to canteen staff, parents and governors and LA Catering service staff as appropriate. The range and number of participants changed according to the focus of the research group meetings, as can be seen from appendix 3.

Activity in schools

The researchers for each school tailored the methods used in research meetings to suit the age and interests of the pupils participating. Many research group meetings were planned and fitted the ongoing cycles of inquiry into topics such as how to reduce pressures and queuing in the canteen and exploring serving station options for the canteen. Others required the research team to be creative and/or opportunistic, e.g. attending a range of events that brought parents into the school.

These more creative approaches included:

Secondary schools

- Attending Fairtrade cooking event (part of International Week)- opportunity to meet with pupils, parents & teachers.
- Joint engagement evening meeting held for parents and others interested from schools.
- Use of food diaries to record pupils actual food choices.
- Conducting a school food survey with parents at introductory event for incoming Year 7s (new menus and lunch box contents).
- Attending whole school 'cook-in'.
- Opening of covered eating area, with celebrity chef.
- Surveys of peers by pupils.
- Surveys of parents by pupils and researchers.
- Mapping of areas used by pupils to eat (and consequent dropped litter).
- Integrating survey work into the curriculum (maths, statistics, marketing skills).
- Linking with Food Ambassadors⁴ programme.
- Linking with Healthy schools and Eco schools programmes.
- Meeting parents who might have been unlikely to attend Parents' Evenings in a neighbouring community development project.

Primary schools:

- Attending cold bar, lunch box event and School Cookery book launch with pupils, parents and 'friends of the school'.
- Art based activities such as collage and painting.
- Cartoon characters visiting school for fruit and vegetable tasting event.
- Surveys of peers by pupils.
- Surveys of parents in meetings, via mailings, at school sports days.
- Integrating survey work into the curriculum (maths, computer studies).
- Use of food diaries to record actual food choices and stimulate discussion.
- Attending tasting sessions – fruit and vegetables and new menu items.

⁴ The Food Ambassadors programme is a peer education project for Secondary schools.

- Activities relating to growing own food, integrating with school gardens.
- Linking with Healthy schools and Eco schools programmes.
- Cooking sessions, including cooking for parents.
- Attending oral hygiene sessions aimed at parents.
- Meetings with parents, grandparents and governors of schools – in research groups, over meals, and at community development sites.

The Special school in the sample worked closely with the research team to maximise pupil participation through the use of visual as well as verbal methods. Topics covered included identifying food preferences, surveys, exploratory food tastings, and designing the dining room redecoration. Access to parents for this group was also more difficult because of the wider geographical catchment. However, the research team utilised senior and junior school parents evenings to have discussions with parents.

Accessing parents' views proved difficult, as had been anticipated. As well as meeting with parents in groups convened via the school, research teams utilised parents evenings, sports days, carol services, school plays and cooking events. Using the opportunity presented to understand what the parents currently knew about the school menu, their understanding of the changes proposed and how supportive they were likely to be about the changes. We also gathered information about what parents thought constituted a healthy diet. This information has been shared with participating Local Authority catering services (or schools where opted out).

Group discussions usually started from explorations of 'What works well now?', and 'What might be better?', also 'What are your issues/questions, in the context of discussions about the standards outlined in the Draft Guidelines'. This was enabled by use of materials developed by research team members (e.g. food diaries) and some participating local authorities (e.g. Cartoon characters), and the materials produced for the original A4L consultation (some groups). Taking this approach encouraged pupils (and others) to engage because it identified aspects of the topic that mattered to them, rather than starting from an abstract group of standards which they might struggle to relate to their own interest. Story

circles⁵ proved very successful with some school groups, enabling everyone to share their experiences in the group. Researchers used providing fruit and other healthier foodstuffs such as chocolate-and-beetroot cake and fruit smoothies as a useful starting point for conversations about diet in general, and school meals in particular.

Promoting discussion and mutual learning is essential for this. Kemmis (2001: pp. 91-102) refers to this as “opening up communicative space” and says about beginning action research:

The first step in action research turns out to be central: the formation of a communicative space which is embodied in networks of actual persons, though the group itself cannot and should not be treated as a totality (as an exclusive whole). A communicative space is constituted as issues or problems are opened up for discussion, and when participants experience their interaction as fostering the democratic expression of divergent views.

Opening communicative space is a critical element of action research, and includes both communication between individuals within the group of researchers, and between the research group and the system around it. Research participants need to develop confidence from the experience of contributing, and their contributions being received and responded to and acted upon by the group.

This sometimes takes longer than anticipated, and the inquiry groups are likely to cycle repeatedly through this process in order to work productively together.

Research activity was most often initiated in the research group meetings, but relied on participants taking it forward between sessions e.g. surveys of other pupils to develop a pre-ordering system. This makes the progress of the research cycles dependent on a number of resources, the most important being the motivation of participants, availability of time and materials, and a sense of their own ability to act – often this needed to be endorsed by the schools through the backing and sometimes the participation of authority figures.

⁵ Story circles provide a format for each member of the group to tell a time limited story relating to the discussion topic, while other members listen in silence. Once all stories have been told there is group discussion.

Governance groups

The research approach in Governance groups was tailored by the team to local preferences. In one area the meetings were held immediately following a wider Healthy Schools focused meeting, and this attracted a wider membership. Two groups had meetings at which suppliers were present, and two groups had elected councillors as members. See appendix 2 for membership.

Although the frequency and fluctuating membership of (some) meetings made developing a sufficiently 'safe' atmosphere for disclosure and experimentation difficult, Governance group members succeeded in developing some shared inquiries.

3.3 Data collection and validation

The action research in this study was largely undertaken in research group meetings with facilitators, and by participants between meetings. Because of the range of settings a variety of recording methods were used, including:

In schools – action notes taken in research meetings and circulated to participants; audio and video recordings of research meetings and activities; photographs taken by the research team, pupils, teachers and others; field notes taken by the research team members (facilitators) and a reporting form completed for each group worked with at each visit.

In Governance groups – minutes and action notes taken in meetings and circulated to participants. Across the four Governance groups there was a mix of action notes taken by members of the research team and minutes taken by local professionals.

In stakeholder events – there was recording by the research team through the use of workbooks for use with learning histories, notes made of story circle discussions and flip chart material collected from small groups. School presentations for the second event were videoed for individual schools to view.

Validation of written materials e.g. reports and Learning Histories, was undertaken through meetings with schools and LA catering service staff.

The data were analysed by a combination of sense-making activity within the research groups, and the research teams examining the multiple sources of data gathered (meeting notes, video, reports) using Grounded Theory to identify patterns, themes or underlying meaning, and build theory. Themes and theories were discussed at research site level, within the research team, with the research sponsors (at contract meetings and the steering group) and with the wider system (at the stakeholder events). Grounded Theory (Goulding, 2002) is a systematic generation of theory from data. One goal of a Grounded Theory is to formulate hypotheses based on conceptual ideas. This means that rather than beginning by researching and developing a hypothesis, the first step is data collection, through a variety of methods. From the data collected, the key points are marked. The key points are grouped into similar concepts and from these concepts, categories are formed, which are the basis for the creation of a theory or theories. This is in contrast to the 'traditional' model of research, where the researcher chooses a theoretical framework, and only then applies this model to the studied phenomenon.

The Learning Histories

Our use of the Learning History tool was based on a belief that for learning to transfer it needs to a) remain in context and b) occur in a collaborative setting. The Learning History meets both of these criteria as the narrative retains context, and the process of action research provides the collaborative setting.

A Learning History has a number of characteristics that help to define it:

- It represents diverse voices, and makes overt the point that people have different experiences of the same situation – it models a non-authoritarian, non-homogenizing style of communication.
- Participants' voices are not artificially unified – this creates believability/sense of reality/being able to relate for the reader.
- Narrative-based. This is important as it paints visual images and creates a sense of encounter – the narrative mode of thought is argued to be very helpful for learning as it is on learners own terms and in context.
- Analytical and Narrative segments sit side by side (this appeals to both modes of thought and learning).

- A crucial point and different to other forms of action research– the researcher role is explicitly different to that of participants. The researcher collects, transcribes and then writes. In this process the role differs from that of some more conventional research approaches too in that the researcher role is one of mediation or representation rather than interpretation.
- ‘Reflecting back’/’reconstituting’ in a helpful way –leveraging researcher skills and benefitting from an outsider view placed alongside insiders. The aim is for a rich reflection provided back to the group as a result.
- The outsider researcher explicitly has a crafting role in forming a narrative and analysis from participant interviews and external information. This is the aspect that adds a lot of effort to the Learning History process and is what differentiates it from some other kinds of participative research.
- A key output in the Learning History journey – is a document used as a vehicle to then build conversation and learning around. This is usually presented in a two column format, one column for the participant’s narratives and the other for the researcher’s comments and observations.

Using this approach within A4L provided an exciting opportunity to catch some of the essence of the learning as it went along – producing a contemporaneous Learning History, as opposed to the more usual retrospective Learning History.

One challenging question then became: How do we create our narrative as we go along when we don’t know yet what is significant? True, we didn’t know what was significant, but by attending to events as being part of an unfolding history we were building in mechanisms for reflection, and the co-creating of narrative, and doing so in a way that ultimately could be passed on to other groups.

Even in a short time we could gather data that was multi-voiced, narrative based and messy. We could ask participants for vignettes – events, stories that illustrate the subject. We created a sense of history by mapping these to a timeline and ensuring the Learning Histories reflected the process over time.

Analysis is facilitated and presented as participatively generated analysis, not as an ‘outsider researcher’ analysis.

4. Results

The guiding principle of this research has been that changes to food and drink need to be understood within their context if change is to be sustainable, and that the best way to understand this context is to try and change it. The preoccupations of the different participants in this research around food and drink reflect the different levels at which they are engaged with nutrition, and affected by the issues surrounding any changes to its provision. Canteen staff are concerned with time pressures, staffing, take-up of school meals, whether foods sell, and worries that they will not be able to replace popular items if changes to the Draft Guidelines rule them out, as well as the behaviour of the pupils. Pupils inevitably are concerned with the choices on offer, price, presentation, time, queuing, quality and quantity. In this study we found that Bursars (in two opted out schools) are anxious to balance the impact on income to the canteen against the positive impact of the changes on pupils' health and well being. Catering Services are concerned with food standards and compliance, impact on budgets and protecting canteen jobs.

A major part of the effort on the part of the Catering teams during the two years of the Appetite for Life Action research project has been devoted to looking at the Draft Guidelines to ensure that new menu cycles are introduced, food standards can be applied, and generally that provision of food and drink over a menu cycle gives pupils an opportunity to access the optimum balance of nutrients, minerals and vitamins.

The themes under which we have gathered our findings will be familiar to many readers from the wide body of research published on school food and drink. Our research gives these themes both depth and texture, as well as making links between them giving a picture of the school food system as a whole. Where relevant, the findings from our work in schools will be given a wider context by referring to the deliberations and actions of the Governance groups in the four pilot authorities.

We have separated out our findings into three sections: **Schools**, which covers our findings from both Primary and Secondary schools, a section we are calling **Transition**, and a section devoted to **Special Schools**. A summary of the key learning points is presented at the start of each section/theme.

4.1 Schools

4.1.1 FOOD

‘This is a 25 year cultural shift’.

Catering Services Manager, Governance Group.

Although other factors, such as the dining room environment, have been significant in our study, the basic core of A4L is the improvements to the food and drink served in schools. In many of our project schools changes had already been made to provide healthier choices, including the provision of salad bars, fruit tuck at break times as well as the removal of confectionery from vending machines. In project Primary schools the changes were more advanced than in many Secondaries, and as such many of the changes to the menu may not have come as such a contrast to current provision.

However, Primary and Secondary school pupils can and do choose not to eat healthy foodstuffs (e.g. vegetables), and supplement the diet provided by bringing unhealthy options into school (e.g. in lunch boxes), or bought on the way in. Our work has explored these tensions around choice, as well as pupils’ reflections on attempts to coax and encourage them to try new and unfamiliar foods through novelty campaigns, cookery clubs and tasting trials.

Price

Learning Points:

1. Pupils in the areas looked at in the research are extremely price sensitive consumers.
2. Access to information from the canteen evokes in pupils a greater understanding and tolerance of price differentials between the canteen and the high street (e.g. on their operating constraints, through discussions in SNAG and other groups).
3. Canteen pricing has a significant impact on pupils, therefore, it should be considered at a strategic level by a school’s management team in schools that have opted out of Local Authority catering.

4. Price has emerged as a concern for parents in relation to portion size in Primary schools. Concerns were voiced that small portions for smaller children would be seen as poor value for money.
5. For some parents price has driven the decision to supply packed lunches.

Pupils in research groups compared canteen prices with supermarkets, take-away outlets, and local shops in particular. They noticed keenly any privileges within the school that disadvantaged them around price. In one project school for example pupils in the research groups complained that teachers were provided with sauce sachets free of charge, whereas each sachet was costing them a precious 10p.

In project school (H), a foundation school in which the canteen is opted out of the Local Authority catering service, pupils organised two themed days with the canteen in the Summer Term of the first year of the research. One dish – Spaghetti Bolognese (Italian Themed Day, featuring also the Food Technology teacher's favourite selection of Italian music) had been priced at £1.50 as a loss leader, to attract more custom. According to the Cook this strategy had been very successful. Pupils had been expecting this kind of approach to continue into the Autumn Term. They complained bitterly that the shop across the road was selling large sausage rolls for £1.00; that in school what they described as a similar meal, for example Pasta (Brand) here cost £1.75, which for the Free School Meal children at that time meant they couldn't afford to buy a drink to go with it⁶.

Wavering between making a protest and seeking to understand and collaborate with the canteen, one of the research groups, in this case the School Council, decided to form a Food Panel with representation from across all three research groups in the school and set out a number of their key issues to discuss with the Cook, including a proposal for a trial week of lower prices. The Cook explained to the Panel this was impossible on the margins she was operating, and that she had to meet a weekly wage bill. This level of openness from the Cook evoked in the pupils a greater maturity of thinking around change as we will discover later.

Reflecting on this conversation the pupils began to understand more about business risk (see more in Canteen Business Culture 4.1.7). The School Council decided it would like to give

⁶ However potable drinking water is provided free of charge in all schools.

the canteen its unspent budget to cover the risk of a trial period of lower prices. However, before this could happen, the research had come to an end and the School's management, reading of the pupils' passion for supporting the canteen to change in the school's Learning History, decided to ask the Cook to compare the school's canteen prices with other schools across the county borough. A complete review of prices is now planned with the Cook.

The challenges of price vary across the research sample. In one of the four project county boroughs school canteens are individually run units, each with their own pricing structure. The Catering Services Manager in the area's Governance Group pointed out that in her area the challenge of balancing prices that pupils and parents will tolerate with the desire of her service to provide an analysed meal deal, is proving, at the moment, '*nigh on impossible*'. In another of the four project areas where most canteens are opted in, Catering Services were pleased, after much hard work over the summer of 2009, that they could produce a choice of meal combinations (combos): a special daily two course meal for £1.95 (the free school meal allowance), or a choice of two single course meals for £1.60 or £2.10. Only the daily special has been analysed.

Change for compliance

Learning Points:

1. There are misunderstandings in some schools regarding the compliant menu, with some thinking this should relate to an analysed and therefore 'balanced' meal of the day, rather than 'compliance' applying across the menu cycle i.e. all food on offer on the menu.
2. Tasting sessions can help Cooks to 'tune' the menus.
3. Communication with pupils, school staff and parents is important when introducing and withdrawing foods, to prepare them for change.
4. There is anxiety expressed by LAs and catering staff in some study areas regarding their capacity to apply the nutritional analysis programme.
5. Pupil's awareness of food and its contribution to health can be raised/reinforced by work in school gardens.

A number of strategies have been adopted by the schools in our sample to providing new foods and withdrawing others. These have included: the use of images of celebrities (I); cartoon characters (A); making links to pre-existing work on the 'eat well plate' (D, E) and food technology (I); focusing on new foods to tempt consumers using tasting sessions (A, B, C, D, E, I)); making links to existing initiatives such as Fairtrade committees (A), CAFOD⁷ related projects (E) and Eco committees (D); as well as involving pupils through school councils to gain ownership of the changes⁸. All but the CAFOD initiative were linked closely to if not initiated by the research project.

Introducing the new foods needed to make up compliant menus has been made much easier by the provision of tasting sessions for both parents and pupils. This has enabled the Catering Services and the Cooks to 'tune' the new menus in response to feedback. Soups were introduced into two Primary schools, with tasting sessions provided for pupils and parents, which went some way to reassuring some parents who had expressed concerns that

"Soup wouldn't be enough for [my child], he needs more than just soup, I'd be concerned he'd not get enough to eat". Parent.

Withdrawing favourite foods such as chocolate cake, pizza, and chips from the menu was the cause of much discussion in research groups. In one school (A) this has been addressed creatively where, following assessment of the menus using the nutritional analysis programme, the local Appetite for Life Co-ordinator suggested adding cocoa powder to a muffin recipe instead of chocolate. Not only did this ensure compliance with the Draft Guidelines but the use of cocoa powder also introduced an additional source of zinc into the children's diets - and this meant that chocolate flavoured muffins could stay on the menu.

In project school (I) researchers noticed that changes to more compliant food and drink choices had a substantial impact on pupils. When they first visited the school in late 2008 pupils had complaints about the 'new' foods, and there was very little enthusiasm for them. It felt much easier for them to criticise the physical environment than to grapple with the healthy food agenda. However, a special effort from catering staff produced healthy flapjacks, chocolate-and-beetroot cake and fruit-based drinks, and the ice was broken.

⁷ CAFOD is the official Catholic aid agency for England and Wales.

⁸ The research teams worked with these pre-existing groups, as well as convening specific enquiry groups.

Generally, pupils were perceived as quite conservative in their food choices, being slow adopters of new menu items (see more in 4.1.8 Engaging Family and Home Culture). Early on in the research period tasting sessions were introduced for pupils, and later for parents, as well as themed days and weeks. These introduced pupils to unfamiliar flavours in a controlled way, and then researchers worked with the identified behaviours around choice (last minute choices, peer pressure, conservatism).

The research with parents at school (I) taught that parents can be very out of touch with the changes in the school in relation to food, and that often pupils are not the best communicators of information about what is available in the canteen, or even what they have been consuming themselves. The school has addressed this through letters home and newsletter articles (see also Engaging Families and Home Culture). This has enabled parents to prepare their children for a reduction in the snack selection at lunchtime. There are beef burgers available twice a week, and chicken pieces available on the remaining three days, this reduces the availability of the less healthy burgers. Meal combinations like stir fries and roast dinners, aimed at encouraging pupils to eat a more balanced selection are successful, and curries and Bolognese go down well. Meal Deals are £1.60 and Daily Specials (hot main plus pudding) are £1.95, *but of the latter they may only sell 2 a day*. Breakfast uptake is about 20 on average (out of 1,100 pupils on roll) particularly the younger pupils, and this number hasn't changed much since changes to the menu were introduced. The Cook will be monitoring this closely now. The monitoring may tell the project something more about how to manage the transition to higher standards. The Catering Services Manager told Governance group colleagues she is pleased that her service 'has made progress' with the food standards.

However, the school has changed from making sausage rolls available at break time, initially to providing a hot dog, then offering a better quality of sausage in a muffin, to currently reducing the number of days sausages are sold and making them available on alternate days to bacon baps. The transition in managing the expectations of pupils has been 'difficult' says the school.

'If the pupils have them [sausages or bacon] one day then they expect them the next'.

Cook.

From the canteen's point of view 'compliance' is equated with the nutritional analysis programme, the key tool for driving up standards and maintaining compliance over a menu cycle. In one research school (G), the Canteen Manager and the Business Manager tell us they have both been on the software training. But they would be concerned about continuing with this without ongoing support from the Local Authority.

'They (WAG) are so tight with what they want, particularly with the nutritional standards and putting them in the menus. I've struggled and I'm IT literate and because it's complicated I tend to forget how to use it. Schools may not use it [the software] if it's too difficult'.

Business Manager.

In another project area in which school canteens are opted in, unlike the school above, we hear from Catering Services at the local Governance Group meeting that though 'terribly time-consuming' they have accepted this analysis has to be planned into their work. They feel they have been ahead of the game here because stimulated by discussions in the Governance group, the group formed a nutrition task and finish sub group. Catering Services are aiming to be fully compliant by Autumn 2011.

Another way to promote healthy eating is through encouraging pupils to grow their own foods. One of the schools (D) has built a greenhouse out of plastic bottles, with the assistance of the Groundwork Trust. This has involved children and parents collecting empty plastic bottles, and the local community was invited to the grand opening of the new greenhouse by a celebrity chef. The greenhouse is used to grow a range of vegetables and herbs. Another school keeps chickens and has started an orchard (A), and all three project Primary schools have gardens. A school garden also offers potential for parents to become practically involved with their local school.

One regrettable thing has been the inability for some schools, to continue to use its own produce, grown as part of its WNHSS initiative, in the school kitchen. The Catering Service in one study area have advised schools that Health and Safety grounds, and specifically the recommendations of the Pennington Report (Pennington, 2009) require nothing to be used that has not been purchased via the Local Authority's procurement team. Other authorities

have interpreted the Pennington report's requirement for a trackable audit trail in ways that have enabled school grown produce to continue to be used.

Standards

Learning Points:

1. The restriction of some food items e.g. manufactured meat, is causing concern at a school and Catering Service level because of its impact on take up and canteen income.
2. Healthy eating informed procurement seems to be driving up standards of some manufactured meat and other products.
3. There is some difference across our sample in the way the guidance is being interpreted and suggestions as to how it should be redrafted: i.e. whether guidance should relate to the *category* of product (e.g. removal of manufactured meat products such as sausages), or on their *quality*.
4. Some foodstuffs are proving difficult to introduce e.g. oily fish.

The quote from the Business Manager in the section above illustrates the difficulties in some areas in delivering on food standards, particularly where Local Authority support for contractual and or historical reasons is at a lower level.

Following new A4L guidance the provision at break and breakfast times in project school (I) had to change, particularly the provision of food items containing manufactured meat. Draft Guidelines say that there should be a reduction in the availability of manufactured meats, though the majority of pupils don't seem to want the toast, cereal and fruit now on offer as an alternative at break times, although there is a good take up of hot drinks. Resistance to excluding manufactured meats at school (I) seemed to be at least 3 levels; pupils, the school kitchen, and the Borough's Catering Services. For pupils they said it was the taste, and being able to have the choice. For the school kitchen, the concern was the impact on revenue and not wanting to have to manage the negative responses from pupils. For Catering Services it was the impact on revenue and anxiety about staff jobs, which led to some arguing that A4L funds might have been used to buffer kitchens from the short-term losses of income when they made the changes. In addition, a regional procurement manager, a member of a Governance group in another project area, pointed out that the quality of individual meat

products is being driven up. Burgers are available with an 80% Welsh beef content, and both sausages and the oils for frying chips for example can be sourced without MSG and can contain less saturated fat.

Discussions often revolved around simple compliance with the Draft Guidelines, including the perceived guidance on quality of manufactured meat products (minimum meat content), rather than developing strategies to shift eating habits of pupils to only expect ‘unhealthy’ foods such as sausages occasionally rather than regularly.

An example from another project school (G) illustrates the tension between meal provision meeting the standard and likely consumption. The oily fish standard has been hard to implement for more than half of our sample schools. This Secondary (G) introduced a salmon stir-fry, which failed to sell and a salmon and broccoli pie that replaced it is doing somewhat better, but is still not selling many portions. Pupils in other schools have also told us that they do not like the taste of oily fish such as salmon or mackerel.

Presentation

Learning Points:

1. Presentation can influence both pupils preparedness to experiment and take up of new foods.
2. Prominent positioning affects take up.

‘Try to make it more fun. If people see you’re trying to give them an apple, it’s like it’s an apple, but if you have fruit on a stick its fruit on a stick!’

Pupil, Research group.

In project school (G), under the Coordinator’s influence in October 2009, the SNAG completed a survey of incoming Year 7 pupils and discovered that their favourite fruits were apples and bananas. There followed a concerted effort to introduce fruit to the entire school through a free food tasting. The cookery teacher took charge and showed SNAG how to chop fruit and vegetables. They spent two intensive hours chopping up fruits and vegetables and threading them onto skewers. They presented them in the canteen, and during the first sitting

most of the 500 portions of fruit skewers were eaten. The news spread fast, but however quickly Year 8s and 9s arrived for second sitting keen to try them, many found that they had missed out. The SNAG was thrilled with the success of their experiment.

'I can feed other people healthy food rather than eating junk food!'

SNAG pupil researcher.

The Catering Services manager in this area commented in the local Governance group that dried fruit had been unsuccessful across this project area. The range of fresh fruit that was available was generally '*unexciting*' and the fruit bowl not '*prominent*' on counters. Some sites were selling fruit in '*smallish*' bowls that '*look like they've been sitting on the counter for a while*', she added. The Service was now experimenting with clear plastic cups, hoping this might sell better, introducing fruit in pots on special offer, then later increasing them to full price.

In another project school (H) one of the first actions of a research group was to visit a neighbouring school which had recently invested in its canteen. They came back in raptures about the carpet, the comfortable and stylish furniture, the peaceful environment, the quality of the food display – the large variety of choices under lights (*'It was really like a restaurant'*) how the staff were so friendly, and the prices. In an unguarded moment, one pupil ruefully reflected '*Our canteen is pants*'.

Even small changes in presentation can make an impact. In another project school (B) the uptake in salads was described as '*huge*' even in January, since the positioning of the salad and pasta bars was switched. The change meant that the pupils had to queue past the salad bar before they got to the pasta servery and this simple repositioning was thought responsible for the increased sales of salad.

4.1.2 PHYSICAL and SOCIAL ENVIRONMENT

Signage and Queuing

Learning Points:

1. Pupils often ignore familiar signage and so remain unaware of the menu until in front of the servery. Novel marketing of the menu has been more successful

through the use of plasma screens, cartoon characters and posters but these need to be changed regularly.

2. Pupils have identified the lunchtime crush and bustle as causing anxiety, largely due to the pressure of queuing, behaviour issues, anxiety about the availability of chosen foodstuffs towards the end of a sitting and the sheer pressure on time due to shortened lunch breaks.
3. Queuing is a major factor in pupils' food choices, affecting both what is chosen in the canteen, and whether pupils prefer to bring packed lunches.
4. The design of the areas in which pupils queue is also an important factor in the choices made.
5. Teaching staff supervising at lunchtime can have a major influence on behaviour in the queues, creating a calm atmosphere in the canteen and backing up the work of the Dining Room Assistants.
6. Where more pupils stay in school to use the canteen, supervising staff can support the eating habits of more vulnerable children.

As we widen our focus beyond the food itself, we explore what our evidence tells us about the impact on food choices of the physical setting of eating. We describe several examples in this section which inter relate. What they have in common is a recognition of how the physical environment interweaves with the social and cultural aspects of eating.

We record that in one project school (I) since the start of the research project posters and signs in the dining room have increased. Two new flat screen televisions display the day's menu and promotional offers. Posters are now out in classrooms and corridors and information goes into the school newsletter. But the Cooks maintain that customers do not look at the information displayed. Comments put in the suggestion box would seem to bear this out as several of the requested items were already on the menu. Our findings suggest a link between the pressure on canteen space and how much information is absorbed in a busy environment. This school has 1,100 pupils on roll with seating for 300.

When researchers first met with catering staff in school (I) they were asking for *'crowd control ... lunchtime in the canteen is a horrendous experience'*. Some serving staff described feeling pressured by pupils, for example when foodstuffs had run out and pupils were frustrated after queuing. The chairs and tables in the canteen were fixed and the walls almost bare; fixed tables forced pupils to climb over each other and the furniture.

In another project school (G), one research group agreed the canteen experience could be described as a *'90% off sale at [a High Street cheap clothing store]'*. One of this group's actions, following a research meeting in the second term of the research, was to ask for signs for trays and cutlery. A few minutes after this research group finished meeting, the researchers walked into the canteen. There in front of them was a sign saying 'TRAYS', and beneath it were trays and cutlery. In all his years at the school, the Year 10 pupil who had first raised this issue of signage in the group, had simply not noticed it was already there. This is the same school in which serving staff told researchers two terms later even after a staggered lunch had been introduced: *'The Year 8s and 9s (who come in for second dinners) know there's nothing left (they want to eat) so they push and shove'* and *'You wouldn't think of speaking to someone the way some of the children speak to you here'*.

In a third school (F) the canteen has a seating capacity of just 75 for over 800 pupils. Lunchtime is 55 minutes but queues are long and pupils eat for 20 minutes at most. On research visits researchers often noticed that despite the space problems the atmosphere in the canteen at lunchtime was quite calm. Outside the small seating area a teacher was standing over a long line of neatly arranged chairs. On his signal a batch of pupils were coming into the canteen and queuing up in a relaxed manner. Once they were served many pupils took their food outside (in good weather) or into the hall. Managing queues like this takes a good deal of effort and focus according to the school.

In a fourth school (H), the Deputy Head is on duty almost every lunchtime, and though queues are long, they are orderly relative to other project schools. There is not the same level of anxiety in either of these schools that seems to pervade the atmosphere in the first two examples. The Deputy Head explained to the Governance group in her area that her lunch time commitment was helpful for information gathering too: *'You can keep an eye on those who are not eating and might be vulnerable as well'*. This school has a particular commitment to pastoral care; in fact has a teacher dedicated full time to this role. This

information gathering is less possible in another project school (G) where many more pupils than the Year 11's who are officially allowed to do so, leave the site at lunchtime (there are multiple exits making it difficult to police). In addition, an ice cream van has a concession in the school grounds to sell school approved items. Speaking to pupils eating here they explained they needed to escape the lunch time crush.

Social occasion

Learning Points:

1. Thoughtful and well spaced seating arrangements, designed flows for queuing, and canteen supervision and modeling by staff all contributed to making the eating space educational.
2. School leadership in the canteen often involved the Head or other senior member of staff on duty in the canteen. When consulted, pupils have requested more staff presence in the canteen, including requests for staff to eat with pupils.
3. Dining room furniture can enhance the social nature of lunchtimes, round tables enable better and more inclusive conversations.
4. Sitting Primary school children in friendship groups improves social interaction and builds social skills – all part of making meal times a positive social occasion.
5. Many reasons may put pressure on the length of lunch breaks, including playground behaviour issues. Ironically the desire to get out in time to play can also pressure lunchtimes, so a balance needs to be struck between protected time for eating, and time for physical/social activity outside at lunch time.
6. The design of canteens and dining rooms has an effect on the way pupils feel about and use these spaces. Pupils have responded well to being involved in choosing and designing the decoration of dining rooms. Similarly they have welcomed better cutlery and brighter tableware, and the removal of flight trays.

‘My ambition is to get them to eat a proper meal with a knife and fork’.

Head Teacher, Governance Group.

In a number of project schools, teachers and Heads expressed an ambition to bring a sit down culture to their canteens.

‘We want to encourage social eating, not grazing, we want eating to be a social occasion’.

Teacher.

In other schools this ambition pushes against a cultural tide, particularly in areas where project schools draw on catchments which are more economically and socially deprived (see 4.1.8 Engaging Family and Home Culture). In one project school (I) in just such an area, researchers recorded this in response to the complaint that Year 11s push in, and the year 7s get trampled on:

Pupil: *‘The teachers don’t eat in the canteen with us’*

Researcher: *‘Would you like them to?’*

Pupil: *‘Yeah, I would like that’*

The research has accumulated much anecdotal evidence that supports the perceived benefits of eating together, both from teachers across the research sample who have told us of how much better they get to know the pupils, and vice versa. We have also heard specifically from Year 7 pupils who are impressed by the example that adults can set in the canteen through conversing over food, and the pleasure the pupils can derive from having conversations with adults in this way.

Evidence from other studies

Existing reports from the School Food Trust and the Caroline Walker Trust support our empirical evidence of the benefits of making lunch times a more socially rich experience. The School Food Trust publication: *A Fresh Look at the School Meal Experience* (School Food Trust, 2010) considers in detail how the school meal experience might be improved and the benefits of improvements, including more positive social behaviour, happier and calmer pupils; better behaviour in class; improved communication skills and more. The Trust advise the promotion of social interaction suggesting schools *‘Allow children and young people having packed lunches and hot meals to sit together, promoting social interaction and*

allowing friends to socialise while eating.' Overall the emphasis seems to be on whatever helps the pupils to feel comfortable and which encourages good behaviour – and this includes a wide range of things such as the surroundings, the staff, the sense of ownership, the food presentation and opportunities for social interaction, encouraging table manners, teachers sitting with the pupils, reducing queuing and making sure the children don't feel rushed from the table. These are all seen as important factors in improving both behaviour and atmosphere (p44). In summary the publication advises that *'if you have an attractive dining space with a happy atmosphere people will want to eat there.'* (p3). Similarly two reports published by the Caroline Walker Trust *Eating Well in School* (Caroline Walker Trust, 2005) and *Eating Well for Under Fives in Child Care* (Caroline Walker Trust, 2006) provide evidenced based summaries of the factors associated with healthy eating and the influence of early years child care and schools. *Eating Well in School* states that *'Wherever possible school staff should sit with children and young people at mealtimes, choose from the same food selection, and encourage social skills at table to help young people develop confidence in eating with other people... school staff should not underestimate their influence as role models in choosing and enjoying a wide variety of good food'*. (p47). We go on to say more about some of the issues raised in these excerpts in the next sections.

Furniture, tableware, Dining Room Assistants and creating social learning spaces

In two of our project schools (D, E) part of the A4L grant was spent on buying new tables and chairs for the dining rooms. After discussion with the School council and other pupils involved in the research it was agreed to purchase round tables.

'We want new round tables to improve pupil interaction at lunchtimes.' Headteacher.

'Generally, in those schools where teachers sit down and eat with them, the pupils are more likely to experiment with new choices at lunch'. Catering Services Manager, Governance group.

The aim of the change to round tables had been to foster a culture of inclusion, which it has; friends can still sit together but less socially skilled pupils are still included or less isolated on

a round table. However, this has also made for a more ‘buzzy’ dining room – so the noise level has gone up. Teaching staff and dining room assistants felt that this was a price worth paying, and pupils have been delighted with the change to round tables.

Another simple environmental change in the project Primary schools has been the redecoration of the dining room, usually to a colour scheme and design chosen by pupils. In addition, in two Primary schools brightly coloured polypropylene bowls have been provided for soup, and old flight trays removed. Pupils have been appreciative of the new decoration and bowls, which they noticed immediately. However, caution needs to be exercised in the choice of illustration used. In response to the idea of pictures of animals in the dining room we heard:

“I don’t mind eating meat; I don’t mind knowing it’s an animal, but I don’t want to think about it in the dining room”. School Council member.

Friendship groups

At the start of the project one school (D) had a system at dinner times that separated those children bringing packed lunches from those having school dinners. In addition, children chose where they sat and who they sat with on a daily basis. In the school next door (E) it had been practice for some time to have ‘friendship groups’, allowing pupils to opt to sit together for a term, regardless of whether they took school dinners or brought a packed lunch. This has now been adopted at school (D), and pupils have said that they are very happy with the change.

The new set up enables pupils to seat themselves more quickly, and reduces the number of pupils ‘left out’ of conversations. However, initially it slowed down packed lunch pupils because they had to wait for their table to finish before being let out to play, whereas previously when they were segregated from pupils eating school dinners they would have left the dining room as soon as they’d finished eating. On the new mixed friendship group tables friends eating school dinners then felt obliged to rush their food. Since this was noticed the whole dining room now go out together to play, after finishing their lunch. This has positively affected behaviour, reduced wasted food and pupils rushing their meals. This

system relies on a rota of senior school staff supervising dinner duty alongside the Dining Room Assistants.

Research Example –the challenge of living the ethos

A member of one area's Governance group was the deputy Head of a local non-project Primary school. The school he explained had a deep commitment to following ecological principles, which included making lunch a social occasion. He expressed concern that kitchen staff were frying food in the canteen, anxious that what was being offered in the canteen should be consistent with the school's ethos. (Representatives from the local Catering Services were present, and the issue of fried foods was subsequently progressed satisfactorily).

But later in the meeting the deputy Head informed the group that the school was about to cut lunch break to 50 minutes in order to accommodate the school bus timetable as, because the pupils had to wait for the buses after they had picked-up from the Secondary schools then discipline problems occurred in the playground. Many group members expressed surprise at this clash with the school's stated values, and were concerned that cutting the lunch time would impact not only on the children's lunch experience but also on the kitchen staff.

Tensions between social eating/learning and play

Discussions in one Governance group also addressed the issue of pupils bolting their food to get out to the playground. It was proposed that links should be explored between schemes working on playground leadership and playground sports and the school lunch time, so that pupils would know that structured activities awaited them that they would not miss out on. Some pupils in one of the research groups in school (D) felt one of the reasons food was wasted was because some pupils wanted to get out to play quickly, and they suggested appointing waste monitors. However, it was another factor, rather than Waste monitors, which made a greater impact; at the summer break a system of playground leaders and extra games kit was introduced. Pupils are now less desperate to get outside immediately they have finished eating, and this has made for a more orderly lunchtime, knowing that there is someone organising the distribution of games equipment. In order to do this the school joined with the Local Authority's WNHSS initiative to obtain training for the school's playground

leaders and peer coaches. Several thousand [Supermarket] vouchers were collected by families to fund the additional games equipment.

4.1.3 CHOICE

Learning Points:

1. Stressful conditions in canteens impact on pupils' meal choices. Pupils can be less discriminating about the foods they are choosing if they experience anxiety caused by extended periods of queuing, peer pressure and behaviour/bullying issues. Some will choose packed lunches to avoid queues.
2. Creative responses to queuing like pre-ordering arrangements and splitting queues (particularly allowing a separate queue for those only wanting cold food) widen the choices pupils make at lunchtime.
3. Changes in the physical environment – new serving areas and covered queuing areas can keep pupils on site to choose school meals rather than eating off site.
4. Well thought through marketing campaigns that appeal to the pupil age group seem to be successful at influencing choice.
5. Pupils respond well to being given choice, and particularly well to exploring alternatives that relate to or arise from their own suggestions. SNAGs have been engaged successfully as market researchers to collect other pupils' views.
6. Pupils can be effective peer educators if they have a sense of ownership of the proposed changes. The Food Ambassadors programme⁹ has been successful in one study area.

As mentioned, our findings suggest that pupils are often initially conservative about new food and drink items, but that novelty can be made attractive with skill, for example the use of cartoon characters to 'sell' the idea of eating fruit and vegetables. We also identified the need to accept that changing choice can take time.

⁹ Food Ambassadors programme has been used successfully in one study area where year 9 pupils have been trained in nutrition education through the Food Ambassadors Toolkit. Year 9 students then share their knowledge and influence their peers through talks, interactive games and social lunchtime gatherings promoting a healthy balanced diet and food choices as part of a whole school approach.

'I'd never eaten Pasta [BRAND] until I came here and it took me a year and a half to try that but now I eat it nearly every day'. Pupil Researcher.

Evidence from other studies - conservatism in food choice

In the *Welsh Assembly Government's Nutrition Strategy for Wales, Food and Well Being (WAG 2003)* there is an appendix entitled 'summary of background evidence' where, under the heading 'Barriers to dietary change,' culture is identified as a barrier in the following words: 'Cultural barriers include cooking and eating new dishes that do not conform to the cultural norm...' (p29). The School Food Trust publication *A Fresh Look at the School Meal Experience (2nd Edition 2010)* – also advises that children and young people can be 'encouraged to enjoy healthy options' through organising 'regular taster sessions for parents and students/pupils, and encourage young people to try a little of something new, whenever possible. With patience, children and young people's palates can change and they will be less likely to say no to new things in the future' (p32). Also mentioned is the potential for themed days to promote different kinds of healthy food – and having extra activities around the themes – as these can promote changes to the menu and encourage everyone to get involved (p43).

Pupils respond well to being given choice, and particularly well to exploring alternatives that relate to or arise from their own suggestions and they can be effective peer educators if they have a sense of ownership of the proposed changes.

Our evidence does point to the level of anxiety in the canteen having an impact on choice. In the first example above (I), talking to the canteen serving staff they reported that many pupils seemed to leave the choice of what they were buying until the last minute, spending time dithering in front of them so holding up the queue. Pupils at the school also told researchers that the long wait meant they were more influenced both by what the person in front of them had chosen, and by what was immediately visible, rather than by any considered choice they may have intended to make. There was also an acknowledgement that many pupils ate the same thing every day, and were very resistant to change in relation to food (see also 4.1.8 Engaging Family and Home Culture). In another school (H) familiarity was also key, but it was also hunger that drove them to the familiar. Pupils admitted they get fed up with the queuing and just go for the quickest option – potato wedges, burger, chips or pizza.

Voices from project school (B) make the link again, but add a further nuance. The queues can drive them off-site for their food choices.

“It depends on the length of the queue – I didn’t have a panini because the queue was too big.”

“Sometimes, if the queues are too long, you can go over to the leisure centre and buy chocolate and a [sports drink].” Pupil researchers.

In project school (I) parents were also aware of the problem. On the three occasions researchers met with them the topic of queuing was raised, particularly the effect it had on pupils’ meal choices and whether they chose to take packed lunches:

‘My child comes home from school some days having had no dinner because of the queue or no food left’.

‘I would very much like C to use the school canteen and have often urged him to do so. However, he doesn’t use it because of the queues. He says it takes up too much of his lunchtime’.

‘Queues are too long, not enough time to eat her dinner. She was coming home saying she hadn’t eaten anything’.

Some parents (a total of 57) were surveyed at a recent Yr 9 parents evening in February 2010. Of those giving a reason for bringing packed lunches two mentioned the cost, while eight mentioned the time spent queuing, explaining there was a knock-on effect of lack of time for other activities, and for those arriving later a lack of selection of food by the time their child was served.

Queuing was therefore a major preoccupation for action amongst research groups. In (H) pupils pointed out they had to wait in the same queue even if all they wanted was a drink. The groups had in any case identified in their research meetings that they wanted to broaden the choice of drinks. This they did, inviting in a drinks supplier and working with the Local

Authority's A4L coordinator to select compliant products. They had also met with the Cook and discussed a wider selection of sandwiches. As a consequence of both actions, the cold bar began to sell drinks, not only salads, and expanded their range of sandwiches and rolls. Pupils wanting a sandwich and drink could now go straight to the cold bar. Pressure was immediately taken off the main queue.

In another school (I) members of the Eco committee (also one of the pupil research groups) spent most of 2009 enquiring into the desirability and feasibility of introducing a pre-ordered food system. Initially this grew from a suggestion to reduce the problem of long queues and hasty decision making. Pupils threw themselves into a round of surveys to test the idea with their peers. Years 7 to 10 were surveyed and were generally supportive of the ideas of ordering lunch at break time, being able to collect their orders at a dedicated serving station, and even switching from packed lunches to school dinners if the pre-ordering system was available. Researchers noticed that the younger the pupil, the more interested they were in the proposed change. Pupils concluded that one reason was that older pupils were more interested in eating outside the school premises. In any case it was likely that the older pupils were the net 'winners' in the current system, being more able legitimately to queue jump (being prefects for example), or just being more skilled at doing so.

Pupils at School (I) can now pre-order a 'box clever' meal deal, which comprises of a daily choice of hot meals served in a box. Meal choices include: Cajun chicken, spicy wedges and corn on the cob; curry, rice and naan; plus aquajuce carton; chicken skewer, spicy wedges and corn on the cob; sweet chilli noodles; Cajun chicken, spicy wedges and coleslaw. These are priced at £1.95. They can also pre order hot paninis, hot baguettes, and jacket potatoes, and they can design their own sandwich to preorder. This last development was launched after results from surveys of Years 7, 8, 9 and 10 showed a large majority in favour, wanting a range of breads as well as fillings. The system has been so successful that the catering management have agreed to put in an outside hatch to reduce queuing and the need for those pupils to go into the canteen, thus reducing crowding inside the canteen. Pupils have reported benefits such as a reduction in bullying and in length of queues.

'You can see loads of brown bags [for pre-ordered sandwiches] in the canteen now'.

'[Its] good to be doing it not just saying it'. Pupil Researchers.

Food Ambassadors at school (I) are working as peer educators towards pupils making more considered and healthy choices of food and drink. They are supported in doing this with a training programme and dedicated materials with which to work with other pupils.

Pressure for a staggered lunch is now paying off too. The school will shortly be introducing a staggered lunch service where boys and girls alternate as to who eats first. This was introduced successfully at another neighbouring high school and school (I) discussed the idea in the School Council with the aim of introducing the system.

Another research school (B) was intent on making the canteen choices appeal to older pupils, such that they would be drawn to eating there instead of fringe eating in town during the lunch break at outlets selling chips, pasties, chocolate, pastries and sweet drinks.

‘Our aim is to get 6th Formers back to eat dinner - make the food tempting enough – and the canteen environment. The dining room extension should make a big difference. They could eat in the dining room 10 minutes earlier (than others) before they go to town.’

Chair of School Governors.

The Governors and School Cooks at (B) considered this issue to be very important and one of their most significant challenges – this, and stopping pupils using the confectionary and soft drink vending machines in the Leisure Centre.

Changing these choices they felt needed a change in the physical environment. Using a combination of grant funding from Appetite for Life, and the school’s own funds, a complete re-vamp of the canteen was undertaken. It was redesigned, redecorated and given a new image. The pupils were invited to be involved in selecting a new name for the facility. Outside a new extension was created. This was designed to be a covered but open-sided structure where pupils could dine at tables when the weather permitted, however, due to the location of the site, the open-sided nature was not practical and the final structure included walls, with additional funding from the school. An additional server hatch was created from the kitchen opening out directly into this space, from where baguettes and sandwiches are served. This was designed to appeal to those desiring ‘fast’ food, especially the Year 12 and

13 pupils. It was also intended that this new servery would reduce the queuing length and time for meals inside the main dining room.

By the final term of the research the Cooks told researchers that they have noticed a few more Year 11 and 12 pupils having lunch - especially buying paninis. The Headteacher observed that a group of Year 12 pupils were now eating regularly in the canteen. He noticed they preferred one part of the canteen - the corner furthest away from the hustle and bustle - and he had put forward the idea of redesigning the seating of this section for them, perhaps with some comfy chairs and sofas, as in coffee bars. According to the school, queues have effectively been split and waiting times made shorter. Meanwhile, new furniture has been provided - including high stools to enable children to sit around the edge of the canteen.

'[You need to] do what you can to make it fun for the children to attend the canteen'.

School Cook.

4.1.4 AWARENESS to inform behaviour change

Learning Points:

1. Behaviour change towards healthy food choices can be encouraged by making links to Food Standards Agency initiatives such as the Eatwell plate, and making links into the curriculum.
2. Marketing and information can utilise the best from commercial marketing such as anti littering campaigns using photographs of celebrities.
3. Tasting events for new foods and cookery sessions can successfully promote new menus and foodstuffs. Involving parents in these alongside pupils starts to make the link between what's eaten at home and what's learnt at school.
4. Parents can often be unaware of the quality and choice of food served in school, despite being concerned about their children's diet.
5. Interagency working can create opportunities for shared campaigns and access to parents who might otherwise be hard to reach.

The discussions with school pupils throughout study schools have shown that they have an understanding of a healthy diet through the work already done by the WNHSS, but that this is often disconnected from the food choices they make in the dining room. The knowledge is one thing, the behavioural change that puts the knowledge into practice for the individual is often another.

In one Primary school (A) a magnetic poster of the Eatwell plate¹⁰ was designed locally to connect up theory and practice at the point at which the pupil makes choices as to what they put on their plates. The day's menu could be displayed against the food groups. This has served as a reminder to pupils when making their mealtime choices. This poster has been made available in one county, and work with pupils in other schools suggests that they would welcome this sort of display. Discussion in the area's Governance group led to an intention to measure the impact of the Eatwell plate poster through discussion groups in the project schools.

In the same project school (A) the new menus and healthy food changes have been promoted to the Primary school children using fruit and vegetable based characters, which the children were involved in designing. These are all available as costumes for promotions and the characters also promote cooking in the classroom.

'The children seem to be eager to try new things when it's promoted positively and when they get their say, for example tasting sessions which have proved to be very popular as it gives the chance to speak to the children about food in a fun environment'.

Local A4L Co-ordinator

Schools have used sampling sessions for fruit and vegetables, taster sessions for new menu items such as soups (C, D, E), and some creative cookery sessions, such as the session at one school (A) using vegetables in cake making to provoke interest. A cake made from courgettes was particularly memorable and popular. The children's comments showed that they enjoyed the cake and were intrigued by it being made using a vegetable.

'I like the new cake. The courgette cake is very tasty'. Pupil Researcher.

¹⁰ The Eatwell plate is a tool for understanding different food groups. It was designed by the Food Standards Agency.

As a result some of the popular fruit and vegetables such as blueberries have been incorporated into the menu in one area, when in season.

Evidence from other studies

This empirical evidence from our research of the benefits of early experience is echoed in existing strategy for Wales. In the Welsh Assembly Government's Nutrition Strategy for Wales, *Food and Well Being*, there is a section on priority groups, which includes infants, children and young people. In providing the justification for inclusion as a priority group the strategy states that '*healthy eating habits established at an early age may be maintained in the long term*' (p9). Elsewhere in the strategy it is stated that delivery of the strategic actions will include further development of successful initiatives such as fruit tuck shops in schools (p7) and that some of the most effective interventions take place in schools (p30). The *Change4life* initiative started in England and has recently been adopted in Wales by the Assembly Government. It particularly targets families with children to improve their diet and increase activity levels. Amongst the campaign literature is an '*Early Years Guide for Local Supporters*' intended for professionals and volunteers working with toddlers and pre-school children aged 1-4 years to help them get the best start in life.' The approach is founded on the belief that children establish 'healthy habits' early on, and that 'unhealthy habits' are easy to pick up and hard to change. The influence of parents and carers upon children's habits in relation to food and drink is seen as fundamental to young people's choices later in life.

Initial reactions to the school meals were mixed. In one school (D) a grandparent reacted strongly, voicing her disappointment with the meal she had been served, describing the quality as poor. In another school (A) parents were often not aware what sort of food was being served and they were quite surprised about the variety on the menu that their children received. We found, in discussion with parents, that food that was eaten in school was often not a topic of conversation within the pupils' households. The Catering Services Manager commented on this fact and said that although a good deal of information was being sent out to Primary school parents about the school meals offered within the A4L Draft Guidelines, it was impossible to make them read it and she gave an example of a Primary parent exclaiming

'We didn't realise you make the burgers yourselves'.

For the Catering Services Manager and the local A4L Co-ordinator this lack of response demonstrated why face to face activities involving parents were so important.

A creative use of engagement processes, developing links to existing initiatives and utilising pupils' appreciation of novelty can go a long way to familiarising them with new tastes and building a sense of ownership of the changes.

In the Governance group in this area allied professionals saw the benefits of collaborating in promoting healthy messages as part of partnership work on food and nutrition. The local Designed to Smile¹¹ team suggested they could work with parents, trained teachers and deliver key dietary messages as part of their role. Researchers found that interagency working can create opportunities for shared campaigns and access to parents who might otherwise be hard to reach. In one area, Design to Smile school visits gave researchers the opportunity to promote new menus and healthy eating information and seek the views of the parents.

'If they did fun adverts like [chocolate bar] and [savoury pot snack] for 5 a day, people would eat them'. Pupil Researcher.

The quote illustrates the cultural environment within which attitudes towards school food take shape. The discussions in the first Governance group in one project area included representatives from a multi-national food company keen to brand school canteens, a proposal which on the surface seemed very attractive. Subsequently, reflection in the group about how the food quality would be monitored raised significant concerns.

More generally, a common theme running through the research has been the complaint that pupils simply weren't aware of changes to the canteen menu, or new dishes that might be on offer or tasting sessions, before they reach the canteen.

As mentioned above pupils in project school (H) organised an extremely successful trial day in the Summer Term of the first research year to road test changes they wanted to see. The Cook had made considerable efforts with the menu and the food was widely praised

¹¹ Designed to Smile is a national Oral Health Improvement Programme, funded by the Welsh Assembly Government and launched in 2009.

afterwards by pupils and staff. Importantly, and for the first time, posters were designed for the day and displayed all around the school. The Cook seemed very pleased that she had sold everything she had made, which was significantly more than usual.

Here is more reflection on the need for consistent marketing, from the same school (H):

'I think advertising is the key to why some of our things aren't working in the canteen – because the Cook has made soup before but it's just not sold because in my opinion no one knows it's there. There's no advertising to say there's soup on today, come and try it, it's brand new to the school. Because it's not advertised, it's right in a corner and it's not on a menu people don't know it's there and they go for the usual really'. Pupil Researcher.

'They've said there will be boards hanging down with food on them and prices which I think is a really good idea because when people come up the line they can see what's on offer with the price next to it, that will encourage people to see what's on offer instead of just going for their usual day to day, like they have a routine'. Pupil Researcher.

In another project school (B) an idea was mooted through the research to try the personal recommendation of a role model. According to the canteen, this seemed to work:

'The Head Girl encouraged 6th Form pupils to have Christmas dinner... and there was a much better than usual uptake of Christmas meals'. Acting Head Cook.

Research example – marketing on all fronts

The Headteacher of school (I) told his Governance group that he was in no doubt the new menu at the school had had an impact because of marketing, and not only around the school. He explained the school is working hard to keep parents on board, that the newsletter is a key vehicle for getting messages across to parents. He felt it had been important to work on multiple fronts.

The Healthy Schools officer explained to the same Governance group at its meeting in the Spring term of the second year of the research that introducing healthy eating messages through PSE lessons was Healthy School's priority this year (2010). Supporting this would be the Food Ambassadors initiative. So far Healthy Schools (WHNSS) have worked with the food technology teachers and there is now a Quality Circle for Food Technology teachers. Healthy Schools recognise they need to attend to the progression from Primary to Secondary.

4.1.5 RELATIONSHIPS

Learning Points:

1. Investing time in developing and sustaining relationships, and in communicating regularly has made a difference to the pace of change across project schools.
2. Engaging parents face to face has been important not only in sharing information, for example about healthy lunch boxes, but also to promote the quality of school food.
3. Responding creatively to the pressures of queuing has a positive impact on pushing, bullying, on the anxiety of canteen serving staff and reduces frustration of pupils.
4. Engaging canteen staff through the research has reduced anxiety about the changes.
5. The role of a senior staff member to act as a mediator between the pupils and the canteen was found to be helpful – to facilitate a new dialogue in the school but also to protect the Cook from becoming overwhelmed with requests for change.
6. Canteen staff appreciated even simple efforts on the part of pupils, for example that they were prepared to smile more in the lunch queue.
7. What is 'fair' in terms of pricing, queuing, or equal treatment is a significant preoccupation for pupils.
8. Where Dining Room Assistants have good relationships with children they can be very valuable in socialising children to their experience of lunchtime.

Here we include findings that shed some light on the importance of relationships between pupils in the canteen, between serving staff and pupils, between catering staff, Catering Services and the wider school community, as well as findings that address more generally the theme of ‘fairness’, an inevitable feature of rule-bound hierarchical environments. Our findings explore how all these factors impact both on choice and on the engagement that seems important in thinking and behaving differently around choice and, in the case of the canteen staff, providing new choice.

Making change is an iterative rather than a one-off process, and maintaining good and regular communication has been important in all schools. When this has been lacking because of workloads, staff changes or sickness, progress has slowed or stopped. Sustaining these levels of communication requires skill and confidence, and a commitment of time. In one school (D) the Cook retired suddenly. The incoming Cook brought a new attitude and different skills and was able to accelerate the planned changes and create a very different relationship with pupils and school staff. This has made the formation of a SNAG group possible. A comment from one Catering Service sums up the importance of their role in enabling this process:

‘The Catering service have seen their role to improve involvement of Cooks with the school, its School council and SNAG group and pupils generally. So that there is personal contact and relationships, and the Cook is not just a name’.

For example, when the new tables and chairs were ordered for one of our schools the ones delivered were totally unsuitable as the seats were fixed to the tables and would not stack in the limited storage space available in the multipurpose school hall. Because of the ‘shared domain’ status of school halls used as dining rooms, it is even more necessary for the school staff, Cook and Catering Services to have good communication flows, hopefully to avoid mistakes, and when the inevitable mishaps happen to ensure that they are rectified swiftly – as they were in this case.

The following example illustrates good work in developing face to face contact with parents. In one project school (A) a number of children brought in packed lunches from home and there were concerns about the overall nutritional content of these packed lunches – on one occasion a Primary school child was observed by the researchers to have only a packet of sweets in his lunchbox, not for the first time we were assured by the school. School A, with

the support of Catering Services and the local A4L co-ordinator created a display of unhealthy packed lunch items sold by retailers, with a display of alternative healthy additions to a lunch box. A food tasting evening event was held for parents and children focussing on healthy and nutritious foods for their lunch boxes and at the same time highlighting that the school served cold, as well as hot, nutritious food during the lunchtime. The Catering Manager explained:

‘We identified things that are advertised as suitable for packed lunches and let parents know what they were really made of’.

The local Appetite for Life Co-ordinator noticed:

‘Actually seeing the salt and sugar content of some packed lunch items was really eye-opening for parents’.

The next term 10 new pupils started at the school, of which 9 had school meals. The local Appetite for Life Co-ordinator noted:

‘You can send out information but it’s the face to face contact that does it’.

It is of course impossible to draw a single causal link for the increased uptake of meals, but the co-ordinators comment emphasises what she has learnt from the experience.

As has been described above, responding to a core issue such as queuing with creative responses like pre-ordering, staggering lunchtimes, opening new serving points, splitting queues, building covered walkways adjoined to the canteen has a positive impact on pushing, bullying, and on the anxiety of canteen serving staff as well as the frustration of pupils.

However building relationships with canteen staff through the research process in one school was able to facilitate the inclusion of kitchen and serving staff in the wider implications of menu changes at the school such that the Cook commented that *‘implementing the guidelines no longer felt like a mountain to be climbed’*.

Another project school (H) had a further reason to keep on good terms with the Cook. One of the first features of this school that researchers had noticed was the care and caution with which school staff handled the Cook's feelings. They understood only later that as a school with 'opted-out' status¹² without access to Local Authority catering services support, some senior school staff felt she was all but irreplaceable. Nevertheless when the research started, the Deputy Head was clear that she needed to play a coordinating role in order to protect the Cook from being overwhelmed. Her thoughts might sensibly apply to managing any key school employee:

'Before Appetite for Life when things started to come in about fair trade, local food and healthy eating the Cook started to become bombarded with staff and pupils asking her can this happen, can that happen. I was getting reports that people had been to see her and that change was going to be 'too difficult' and I thought that might be because it was too many things at once. I thought we might be asking too much, and quite often the children were approaching her during her busiest time when she was just in the middle of something. So I had a meeting with the Cook and did make it very clear that if anyone wanted to see her or ask if there could be changes that I would be the person who would say this group want to meet with you and she was quite happy with that'. Deputy Head.

Researchers found it took some time to gain the Cook's trust in the research process; after all she had been doing the job at this school for more than 30 years. Nevertheless, this managed engagement between school pupils and the Cook was a key factor in the school making progress in varying the menus and the canteen collaborating with the Local Authority. By the end of the research period work is still ongoing with the local A4L team to develop a two week menu cycle, which can be nutritionally analysed.

In another project school (F) where most children are bussed in and only the 6th form are allowed off site, at lunch at the beginning of the research project researchers noted a poor relationship between canteen staff and upper school pupils being reported:

'It doesn't help like when you've had a bad day at school and you go for your food and you're starving and you get: "hhnnn here's your chips".'

¹² Meaning opted out of Local Authority catering services.

Over several research cycles researchers continued to explore with upper school pupils the issue of their relationship with canteen staff. Some had experimented with smiling at canteen staff when ordering their food and had noticed this had led to a smile back. Canteen staff had been told about the growing appreciation of their food and concerns about the pressures they were under being expressed in research groups, and so were primed to receive the smiling as appreciation. But problems persisted and increasingly in this cycle researchers started to explore what role the language might be playing. School F is a Welsh medium school and the canteen is the only place in the school that English is spoken. There are language misunderstandings over payment when pupils need to switch into English at lunchtime. But at the end of the first year's research, the Local Authority Catering Services Manager commented that it was the effort by pupils to smile that was seen by serving staff as a major step forward.

Fairness, equity and adult role modelling

It is worth noting that our evidence points to a preoccupation with these themes, and suggests an impact on the wider theme of Pupil Engagement and the links between this engagement, and attitudes and behaviours around food and drink.

In one project area's Governance group, Catering Services officers related how in one school pupils told them they were shocked (though not entirely surprised) to be outside the staff room, and to see the door swing open to reveal chocolate biscuits on the table. Why, they wondered with some justification, are we not allowed chocolate, and you are?

In project school (I) during the second year of research pupils told researchers that the allowance for Free School Meals (FSM) was not being taken into account when new foods are put onto the menu. At a recent parents evening researchers were told by one concerned parent

'I don't think there is enough choice for free school meals. At the moment there seems to be very little they can afford for a proper meal without taking extra money'.

The new paninis were initially 10p more than the FSM allowance, so excluding these pupils from this choice, their peers felt this reduced their choice and discriminated against them. However the allowance has since been raised, and now makes up the difference. This pupil advocacy on behalf of others is another common aspect of fairness. In project school (G) five different types of chocolate bar were gradually withdrawn, several before the research period started. There was much early discussion about this in research groups with pupils acknowledging the arguments for eating less confectionary but also pointing out it was unfair to those who did expect to eat it every day to withdraw it *'so suddenly'*. These pupils might be obese or overweight they said, but there was concern in the group that they were being bombarded with healthy eating messages, which they warned might have exactly the opposite effect.

Starting in Autumn 2009 in school (G), in order to protect Year 7s from the lunchtime rush and to ensure that latecomers did not miss the start of lesson 5, Years 7, 10, 11 were allowed in to eat 20 minutes earlier than Years 8 and 9. Having this as a fixed arrangement caused frustration to Year 8 and 9 members of the research groups; they complained their favourite foods were often gone by the time they got to eat. Following discussion in the groups, two or three members raised this with the Head, suggesting that the arrangement be rotated each week. His response was this would be *'too confusing'* (see also following section 4.1.6 Leadership and School Culture)

'Once the Head has made up his mind it's the end of the story.' School Council Member.

It is interesting to note the difference between these two schools (school (I) and school (G)). In school (I), where issues of fairness have been discussed and addressed, after a slow start pupils became engaged with the new menus and with their passion for change. In school (G) where pupils were at least initially supported less and where their issues of fairness were not given the same level of attention by the school, their engagement gained momentum more slowly, was more fragile and their confidence to influence change was significantly lower throughout.

In project school (H) pupils often complained in research groups that not only 6th formers but also teachers were able to 'push in' to the lunch queue. Teachers also have water on their

tables and don't pay for their sauces. There were also complaints in the research groups that the sauces were costing them 10 or 15p for 'tiny' amounts and creating packaging waste. This led pupils to discuss with the canteen if the price of sauces could be reduced by having catering dispensers of sauce at the till. The WNHSS officer quickly explained that the Draft Guidelines were clear that condiments if provided must be dispensed in individual portions or sachets of no more than 10ml portions to keep within the recommended sugar allowances. It would be difficult to monitor this if sachets were phased out¹³.

At the start of the research in another project school (I) vending of food had already been withdrawn, although continues to be available in the adjoining community learning and leisure centre. This caused resentment from some pupils, who were particularly critical of adults being able to indulge in unhealthy food choices when these are not available within the school. If they couldn't have 'unhealthy' vending, couldn't they at least have 'healthy' vending?

'It's ok for adults in the evenings, but there's no machine in the school anymore. We could have healthy stuff in it, like drinks and stuff'. Pupil Researcher.

The role of Dining Room Assistants

We have observed the importance for Primary and special schools of good, well trained and attentive dining room assistants (DRAs), and the need for them to have good relationships with the school's teaching and support staff. DRAs can help pupils to socialise, and so make mealtimes less stressful, and can encourage slow and reluctant eaters to try different foods and to eat a proper sized portion. They also help keep order in the dining room, for example there are a number of different ethnic cultures in two of the sample schools, and on the whole they mix well at mealtimes, but there are some stresses, particularly the additional pressures on children of some migrant workers. At times these children need support in the dining room and their food preferences and experiences can be very different from some other pupils. DRAs in this school (D) work with these pupils to encourage integration into the peer groups, ensuring that the pupils are eating well and behaviour is acceptable. Offering a range of foods, some from other cultures has been beneficial, and the change of dining room furniture has also helped socialisation and integration. Tackling this type of issue is demanding on

¹³ Dispensers can be used for sauces, sachets are not the only option. A suggestion for analyzing portions served from dispensers is highlighted in the draft Guidelines (second draft), p28.

DRAAs and the teaching/support staff who are on duty each dinnertime. In one school Catering Services were able to advise on training available to DRAAs.

4.1.6 LEADERSHIP AND SCHOOL CULTURE

Learning Points:

1. The Headteacher has a direct influence on how much impact the healthy eating agenda has across the life of the school. For example:

In one school the Head decided on principle to exclude certain foods from the canteen on health grounds, and despite canteen takings falling initially they have then recovered.

Heads interpret health and safety concerns differently, such as popular innovations like fruit skewers being allowed in one school but not another.

2. While the support of the Headteacher is important for change to take place, those project schools who had a delegated role among the staff to look after the research groups and to encourage them to progress their actions made the most progress.
3. Pupils need to know that their voice counts and their participation is not tokenistic.
4. Transformative change in attitudes towards school food and drink are linked to a school culture that supports engagement as central to its educational ethos.
5. Pupil engagement leads to learning about, and a maturing in attitudes towards change and the pace of change, as well as to an increase in confidence.
6. Engagement need not begin with a direct focus on food and drink; in fact transformative change can emerge from initial engagement around the issues pupils identify as most important to them.
7. Where engagement has been constrained only to SNAG, rather than the wider school community, changes to food and drink may be poorly understood and resentments may persist.
8. Engagement is challenging in those schools where pupil confidence is low, though this seems to improve where staff support is sustained and regular.

9. Sustaining engagement within the busy school day is difficult, and though older pupils may be instrumental in advocating for and driving change, younger pupils need continually to be brought into the engagement process.
10. Pupil engagement only goes so far towards effecting change at school. The involvement of the school leadership team is essential for more fundamental change to take hold – with respect to canteen pricing, canteen staff training (where the school is opted out) and capital expenditure.
11. Not all school cultures give the same status to food technology.
12. Parents see a logical link between life skills and food technology, though schools may have issues in timetabling the link between the two.
13. A pause before eating, such as was provided by grace said in a faith school, seemed to contribute towards a calmer start to lunch times when compared with the neighbouring school that shares the same canteen.

Giving Young People a Voice

'Schools need to tell pupils that they have and are affecting change and reassure them that this is not tokenistic participation'. Deputy Head

In project school (H), the evidence links change in the school clearly to the success the research achieved in engaging pupils. This approach is common to many schools. But our findings show that transformative change in schools is linked to those cases, for example project schools (H and I) where engagement is supported by an enabling school culture. In fact the A4L Draft Guidelines recommend 'giving children and young people a voice', and there are participation standards relating to work with children and young people¹⁴.

So in school (H) the root and branch review of canteen pricing and staff training was made possible because pupils were given space to vent frustrations, to analyse causes, but were also

¹⁴ The Welsh Assembly Government has seven core aims for children and young people summarising the UN Convention on the Rights of the Child (UNCRC) which form the basis for decisions on priorities and objectives nationally, and should also form the basis for decisions on strategy and service provision locally.

free to engage with the Cook as their understanding of change matured. Being given space by the school culture to mature in this way allowed them to see change not only as something that others did, but that they could help facilitate. In the case of the School Council they could see that their budget could have a role in change.

In another project school (F) researchers reflected that over the course of the research they had worked with the pupil groups to help ‘create and voice alternative perceptions’ around food and the canteen. Pupils at this school worked with researchers to practice how to advocate their concerns about school food differently, and across different groups they visualised more positively what they wanted to see (as opposed to just complaining about how things are). Researchers also rehearsed and discussed the issue of constructive feedback, responsibility and management with the Head, teachers and canteen staff. Over the period of the academic year 2008/2009 researchers noticed a marked difference in the attitudes of the pupils with whom they worked. The older pupils who were initially more negative became more forgiving, more understanding of what the school and canteen were trying to achieve and felt part of it. In the closing session at the end of the first year of research in July, when pupils were saying what actions they would take, one pupil commented:

‘I just think we should concentrate on what is getting changed. We are thinking about what we can change, but I think we are taking for granted a bit what has been changed. I’m not going to take it for granted like – if something’s changed then I will try....’

Many pupils nodded along to this and to the research team this seemed to signify a real shift in attitudes.

The successful introduction of a pre-ordering system in the canteen in project school (I) emerged in part because researchers followed a process of inquiry where pupils themselves made links between hygiene, school culture and food which then allowed them to focus their action. In this case pupils began with the very visible problem of litter.

This is not to say that changes were made successfully in project schools only where there was thorough engagement. In Year 1 of the research in project school (B) the SNAG noted that a slush -type drink had apparently appeared ‘overnight’ for sale in the canteen. The new

iced fruit-drink, made from fruit juice without any artificial additives or added sugar, was initially viewed positively:

‘Where did that blue [slush type drink] come from – it must be full of sugar and ‘e-numbers’?’

‘I am a diabetic and so I asked the canteen staff and they said that it had been introduced because it was free from additives and e-numbers and had only naturally occurring fruit sugar’.

Pupils, Research group.

Because information about the suitability of this product for diabetics had not been made available, the research groups talked about the importance of involving pupils and providing information about the content of food and drink available.

In some schools the SNAG has been quite active, yet issues of understanding and wider involvement still exist, as an example from school (B) illustrates. Two years after the SNAG had recommended that chocolate cookies should be withdrawn (as some pupils were seen to be buying several at a time) research group members were still remarking on their absence. The chocolate cookies had been made from a packet mix. This had been withdrawn and a more nutritious homemade cookie was now available at lunchtimes (but not break time). However, these cookies have not proven as popular as the chocolate cookies had been. *“The cookies were gorgeous?”* a senior school pupil said. They proposed a cookery session - perhaps a competition – to come up with a recipe for a chocolate flavoured cookie that might be acceptable under the A4L guidelines. Pupils were keen that researchers understood that they wanted formal opportunities to genuinely influence change (such as through the School Council or a SNAG), and to understand how what they had said had been acted upon.

The day before our research visit to project school (G) in October 2009, we were told it had been raining hard at lunchtime. Pupils on second lunch were huddled under the covered area some 5-10 metres from the canteen but the driving rain was soaking them through its open sides. The school has designated ‘wet weather areas’, but this covered eating area (which is not amongst them) is closer to the canteen.

Reflecting on this incident with teachers and catering staff they wondered could this sheltered area have been better designed with the assistance of pupils and catering staff?

'It's too far over there; it (the shelter) should have been attached to the canteen to manage the queues'. Canteen staff member.

But engagement is tough work at this school. Teachers say:

'You want the kids to nag you – [but] you [also] wouldn't believe how much nagging it takes for them to do something'.

It was easier at the start of the research for staff to make the changes being discussed in the groups themselves, like making menus available in the canteen, rather than waiting for pupils to drive the agenda. It was only in the middle of the second year when senior staff joined the pupil's research meetings that they saw the potential that engagement could offer, and began to encourage the pupils. The school recognises that even more support is needed for fuller participation, because they know that local children lack confidence.

Sustaining engagement became an important question in project school (H) where a small number of dynamic older or more vocal students across the groups were initially carrying the rest along with their enthusiasm and confidence. Pupils reflected in research meetings on whether this would help the school continue on its path of change. Older research group members identified next steps:

'[We need to] hand down some responsibility to the lower years so they can get it done – good skills for later life too, learning how to speak in a group'.

'We need to get more people involved; we need to tell people what we're doing'

But one of the challenges to wider engagement, particularly for older pupils is the busy curriculum:

'If you could engineer a few more hours in the day we'd all be delighted – it really is the school timetable. It's so tight, particularly for Year 11s, they're so focused,

they've got their exams. Perhaps we should try and engage with the younger pupils now. Maybe we need to look at bringing in some new members from Year 9. That might be a plan for the future'.

Teacher.

Despite these pressures, working with pupils through the research process has underlined that engagement enables pupils to feel valued, heard and increasingly confident that they can influence change.

'We would like to thank you for all of your support and help you have given us over the past two years – in making changes and also giving us the belief that we can change things as long as we pursue them'. Pupils' farewell message to researchers.

One project Primary school (D) invited the school inspectors to take part in a pupil presentation and discussion of the research findings, and the quality of participation and pupils' sense of agency was noted by the inspectors, in particular pupils' ability to advocate for their preferences *and* to accept that they may not be able to get everything they desired. At this presentation pupils were able to discuss their disappointments about losing items from their salad bar with maturity and good humour. The considerable rate of progress in the three project Primary schools appeared to relate to the level of commitment of the Head or a similarly influential individual, as well as to their partners in Catering Services and Public Health.

Headteacher's influence

Much of the schools' overall direction on food in the curriculum came from the Headteachers, with examples of Heads pulling together strands of food related issues in and around the school e.g. Fairtrade, and awareness of the contrasting living conditions in other countries (E), cookery classes (B, G, I); school gardens (A, D, E, G); building a greenhouse out of plastic bottles (D); and, in one case (A) keeping chickens and planting an orchard.

Two of the Headteachers made a particular effort to ensure that they, or their deputy, were in the dining room each day, in this way modelling the social behaviours they felt beneficial to a good quality eating experience.

Research example – delegating a lead role

The Head of project school (I) acknowledged to the area's Governance group that his school's engagement with the A4L research project had stuttered to start with. But he believed the significant progress the school has now made has been through 'making the links in the school and having a number of staff with A4L related responsibilities as part of their role'.

In project Secondary school (H), driven by concern for his pupils' health, the Head took a decision before the research period began that beef burgers and sausages should be removed from the menu and that chips should not be available every day. He explained to researchers that canteen takings fell initially, though they did eventually recover. He wasn't persuaded to reverse his policy by the short term financial consequences. This same Head, as noted earlier, after hearing about pupils' concerns about the canteen's prices, and the significant differential between the price of certain dishes in his school compared with another research school, asked the Cook to run a thorough price comparison with other local school canteens and has set up a review of pricing in the canteen by the Senior Management Team.

He also read in the Learning History the links researchers were making between his school's canteen status (opted-out) and therefore not being able to access the same pool of temporary short term cover available to LEA maintained schools, and how this was influencing a culture in which it was felt canteen staff cannot be released for training. He commented that canteen staff should be accessing training (important if food standards are to be raised), and that he will be discussing this with the Bursar who line manages the Cook. This was being progressed at the point at which the research in the school finished.

In contrast in project school (G) the Head on a number of occasions during the research period ruled out innovations proposed by pupils on grounds of health and safety, though he was prepared to join research groups to explain this directly to pupil researchers.. Even a tried

and tested innovation such as fruit skewers, was banned as too dangerous. Researchers noted at this school that the confidence among pupils to engage with school food and drink changed little over the research period, and that the School Council, one of the research groups, was not being convened regularly.

At the same school researchers joined the Parent Teachers Association (PTA) to introduce the research and begin a discussion about school food and the new Draft Guidelines. Following this meeting this is the email the PTA sent to the Head:

'After much discussion we actually decided as a group that one of the most important points raised was to do with cookery lessons in school.'

'We felt that the children were given recipes that did not relate to normal or classic cooking but designed to be quick and fit into the lesson. We understand that the time given to lessons and the number of pupils per class makes it very difficult to plan and cook what we would call 'a proper dish'. Some parents felt that what they had shown/taught their children at home to cook bore little resemblance to the school cookery lesson. The group agreed that cookery lessons should form part of life skills to show children how to cook simple meals that could then be cooked at home or even set them in good stead for leaving home/University. I assume that our comments will form part of a wider review of the healthy eating programme in the School'.

The school responded that there were major timetabling issues around bringing basic cookery skills as part of broader life skills into the curriculum. But at the same time the Head acknowledged to researchers *'healthy eating will never work unless it gets support at home'*. Later in the research, SNAG pupils at this school joined an after school cookery club for 6 weeks. The Community Focused Schools coordinator, who was hosting this Cymru Cooks initiative together with the Home Economics Teacher, commented to researchers: *'Their cooking skills were non-existent'*.

A subsequent SNAG research meeting discussed the PTA's feedback to the school. The group understood from the feedback that they were being asked to spend more time cooking. The status of cooking skills within their school was illustrated starkly by this reaction:

'You don't want to throw away your education.' SNAG pupil researcher.

Shared values

One Primary school in the sample is a Catholic school (E) and we noticed the difference in lunchtime atmosphere, as compared to the neighbouring school (D). This was particularly noticeable at the beginning of dinnertime, when a grace is said in school (E). At this point all the children have to be quiet and this seems to contribute to an atmosphere of calm at the beginning of the meal. We observed that this school, separated only by a kitchen from another project Primary school (D), had calmer lunchtimes, with some pupils lingering over lunch, rather than racing to get out of the dining room. Lunch became a different social experience, which may also have been influenced by other aspects of the school culture.

Delegated leadership

Leadership does not reside only in the Head. The following example from another project school (F) illustrates the influence of senior managers aside from the Head Teacher. We note that the school ethos in this case clearly supports the healthy eating agenda. The Head told researchers he thought: *'Healthy eating for young people is essential if we're to prevent future health problems and more future pressure on the NHS'*.

In this school the researchers heard that the canteen manager had raised with the Bursar an incident when a pupil had been rude to her. He had been up a few times, and wanted just rice. The serving staff were saying *'No, it's part of the meal, you have to have whatever it was that went with the rice'*. Asked if this was a problem, the boy had responded *'I'm fed up with having baked potatoes'* and *'don't worry I'll just starve'* and walked off. The canteen manager came to find the Bursar to find out who this pupil was. Together they identified the pupil. The Bursar's concern was that since the pupil was on free school meals this meant *'he had the ticket and he had to have the worth of his food, and just having rice meant that he wasn't having adequate nutrition'*.

A few days later the pupil came to say said that he was a vegan. The Bursar realised there was no record of this, that schools held allergy information but nothing relating to other specialised diets. The Bursar suggested to the pupil if he discussed it with the canteen they would be sure to provide him with something suitable. Following discussion with the

research team the Bursar came to the conclusion that not all pupils are aware of who to be in touch with if there were dietary issues, and she took action to make her role more visible in the school so that pupils with special diets would know to whom to speak.

In another project school (H) pupils have been encouraged from the start to progress their actions decided at research group meetings. The Deputy Head personally sponsored pupil engagement, coordinated the attendance of pupils at research groups, organised teacher support for the groups and facilitated communications with the canteen, but never sought to control all contact. During the first year of the project when pupils decided they would organise their first themed day to trial new drinks, a new menu, a new canteen layout and music, the critical meeting about pricing meals was for example entrusted to the pupils. However, though great progress was made in the end, at the start of the second year of research pupils were baffled why it was that following these successful themed days in the summer term, the changes were not regular features in the canteen. Pupils assumed that someone other than them (Deputy Head, or the researchers) would take responsibility for keeping the momentum for change going. Researchers noted no evidence that the Deputy Head was inclined to step in and ‘rescue’ pupils from their confusion, and take action on their behalf.

The evidence has already illustrated the challenges of maintaining a truly whole school approach, drawing the links with healthier food and drink choices through the whole curriculum and beyond it in a way that builds capacity for healthier living, not only imparting helpful information. In project school (B) for example, turkey burgers were removed and the reasons for this were explained to pupils. They were then replaced with a more healthy option yet children still didn’t want them that often (having taken on board the reasons for dropping them in the first place). *‘It’s a lot about what the children are used to’* say the Catering Services Team. We return to this theme in 4.1.8 Engaging Family and Home Culture.

4.1.7 CANTEEN BUSINESS CULTURE

Learning Points:

1. If canteens focus too narrowly on balancing individual meals, they may find, as one school did that they become rigid in their approaches and create more waste.

2. Canteens are ‘situated’ in their local cultures, and this can lead to resistance to phasing out certain popular though non-compliant foods.
3. The language of risk can be helpful to both staff and pupils to understand better why it is that certain foods stay on the menu longer than others.
4. Canteen attitude towards business risk, as well as pricing, and the impact of these on customer satisfaction can be challenged if they are made an agenda item for the school’s leadership team.
5. There are different levels of skill and experience between schools in the project sample in procurement (where the canteen is opted out), customer service and staff management.
6. A background in customer service seems to dispose the canteen manager well towards engagement with pupils.
7. There are different attitudes across the sample based on local culture to the importance of using local suppliers.

The canteen culture is yet another key element in making things happen. We have witnessed the anxieties provoked in canteen staff as they try to balance providing sufficient food, enough choice, and reducing waste and staying within budget. On an individual level, canteen staff have made efforts to be flexible in relation to portion size, so as to avoid overwhelming the small eater, and to ensure the larger, more active pupils do not go hungry. In one Primary school (E), when this flexibility was missing we heard a volley of complaints from pupils who were treated to a well meaning but misguided Cook’s one (portion) size-fits-all approach.

When one Catering Service wrote

‘Cook is very accommodating and very versatile to changes as long as the changes asked of her can fall within budget restraints, nutritional guidelines and practicality of working time.’

they seemed to sum up the difficult and competing demands that Cooks need to balance.

Business Risk

'On [having a wider variety of fillings in] the sandwiches, the Cook said she needs ideas off people, but she needs guarantees that they will be sold because she can't afford to take that many risks'. Pupil researcher.

In one project school (H) with an opted out canteen the issue of business risk emerged as pupils explored what might be the reasons that changes to menus were not being sustained (like soup), or why it was certain dishes could not be sold at a lower price (like Spaghetti Bolognese which was sold as a loss leader on the Italian themed day in Term 3 of the research). The Cook at the school wanted to make clear to researchers just how limited her staff's time is in the kitchen. Making soup takes up a lot of time, she said, time that can be used to make other foods she knows will sell more reliably. *'If you have to throw it [the soup] away one day you very rarely try that thing again'*. When researchers raised with the Deputy Head this link between attitude to risk and how long new items or lower prices stay on the menu, she made more sense of the resistance the pupils had been experiencing. As this issue of risk began to enter the language of change through the research, the School Council decided to respond:

'We're planning to give some of our School budget money to X [Head Cook] so she can take more risks, maybe lower the prices for a few days, or lower a particular meal to see if it sells and we're going to do a meal deal next week or some time maybe'. Pupil Researcher.

The Cook explained to researchers that managing business risk was between her and the Bursar to whom she reports. The Head then became involved through reading the Learning History which contained the quotes above, and the research ended as already described with price and risk finding their way onto the Senior Management Team agenda.

In another project school (G), the canteen manager has worked for a large private sector school catering provider and is consistently able to make a mark up across the menu of 40%. The biggest differential we found in the research was Pasta [Brand], being sold at this school for £1.25, and at another project school in which the Cook had had no formal procurement training, for £1.75. What is more, at school (G) good management also enabled the Canteen

Manager to leave the canteen to attend research meetings, to take days off for training and to visit other project schools.

There are notable differences in attitude across project school canteens towards customer service. In the project school above whose canteen manager has a private sector background, researchers suggested, aware that the research was not gaining the same momentum as in other project schools, that she and the Business Manager join the research group meetings to add their support. The Canteen Manager was very willing and encouraged the groups to voice their ideas or feelings about the canteen:

'If I don't know about it I can't change anything!'

There followed the liveliest discussions of the research in the school so far. One outcome was that the School Council in their research meeting won support from the Canteen Manager for a pre-ordering system for meal deals using a raffle ticket issued in the morning, so as to save time in queues and stop people throwing out those parts of the sandwich filling they don't like. They also agreed that if the canteen was to invest in a sandwich bar they needed to work up a business case by surveying packed lunch people to see who might switch to the canteen if this new bar is introduced.

For their part the School Council explained to the Catering Manager that they want better signage in the canteen and that they would talk to the Head about better queue management. Another research group was keen to have toasted sandwiches at break. Following the meetings the Canteen Manager introduced toasties straight away. She ordered new signage for the Pasta [Brand] area so that pupils could see the choices and prices more clearly, and she sourced suppliers and quotes for a sandwich bar, and set a date for the first Theme Day 1st March, St David's Day. In May 2010 researchers were told the pre-ordering system was about to be launched.

Evidence also links attitudes in the canteen towards change with food preferences in local food culture. In one urban school in a more deprived area (I) where sausage rolls at break time were finally phased out, there was resistance to this. The school Cook in charge pointed out that still she gets regular requests for sausage rolls and litter shows that pupils are purchasing them elsewhere and bringing them into school to eat.

Another project school (F) illustrates the tension between giving customers what they want and providing a ‘balanced’ meal – and the waste that can result. Because of the rigid policy in the canteen around meal deals, despite pupils complaining of going hungry, good food was still being thrown away. Staff were incredulous.

‘On Friday when there are Fish and Chips. Sometimes I’m late because of running club. And I arrived there the other day and they (serving staff) said “everything’s gone, everything’s gone”. But the tragedy is that all the fish seems to be thrown away and children only eat the chips’.

Teacher.

Canteen food output has been increasing, so the Bursar and Canteen Manager are tracking more closely take-up and procurement now, so as to minimize waste.

Two project Primary schools (D, E) took the opportunity of introducing new menus working towards compliance with the Draft Guidelines and in an effort to reduce wasted food through reducing the number of choices available to pupils. However it was discovered that the number of choices were not the only thing that affected waste i.e. overcooked and unattractive food, and ‘compulsory items’ and sizes of portion were also creators of waste. Pupils were less concerned about the number of meal choices than they were with being able to refuse food if they didn’t like it (and to be assured that they would be offered an alternative e.g. a slice of ham, chicken or cheese).

Despite some initial concerns from pupils and parents, because of the time invested by the school, the Cook and Catering services to involve pupils and, to a lesser degree parents in ‘tuning’ the new menus, the menus have been well received, with numbers eating school meals rising and pupil feedback positive.

Local Suppliers

There are constraints around the cost of some foods and differences between authorities in how they balance cost with a commitment to using local suppliers. For one authority local sourcing is a priority, and they have developed relationships with local suppliers to enable them to do this within budget:

'Yoghurt [Brand] are doing special 5 litre yoghurt pots for [Local Authority] now and they are cheaper than the previous option'. Catering Services Manager.

Another smaller authority in our sample have chosen to contract with a major supplier as it is more important for them, in their words, to ensure a '*predictable supply*' of compliant food stuffs (contributing to an analysed menu cycle).

Resourcing the changes

A dynamic and responsive Cook who is excited by positive reactions from pupils is a strong driving force for positive change, as we see in the example of D and E, where the Cook changed during the research period.

Regular communication between the school, the kitchen and Catering Service is essential for joint working towards a healthier menu. At times of stress (staff illness, work pressures) this can slip down the list of priorities, but is essential for making effective change.

Research Example - catering services good practice

In one area in which we researched it is customary for all the Primary school Cooks in the region to meet up prior to each menu change. At the last such meeting in October 2009, the importance of the Cook's role in executing the A4L Draft Guidelines was stressed and a prize was offered for the Cook who succeeded in engaging their school's pupils most successfully (as evidenced by an increased uptake of the improved school meals). Such is the enthusiasm for this scheme based on staff recognition and reward that it has been hugely successful in spreading the A4L message and increasing the involvement of Cooks and catering staff.

4.1.8 ENGAGING FAMILY AND HOME CULTURE

Learning Points:

1. Parents, carers and other family members can play a role in lifting pupils expectations – and canteen standards.

2. Primary school children can be inspired by the opportunity to cook for their parents.
3. Parental engagement is particularly effective in Primary school in countering their preconceptions about the quality of school meals, and to prepare them for restrictions in school diet such as snacks and confectionery.
4. Cooks wonder whether parents are considerably less motivated to monitor their children's school diet once they move up to Secondary school.
5. Efforts to engage Secondary school parents around school food can pay off if a school communicates regularly and creatively across a range of media.
6. Eating habits at home vary from one area to another. Sitting down and eating at lunchtime of itself does not necessarily mean pupils are consuming a better diet.
7. Home culture is a factor that can feel difficult or impossible for schools and the Catering Service to influence.
8. There are different levels of tolerance among parents (and pupils) across the project sample to the rate at which snack products and confectionery have been reduced or phased out.

Involving parents, carers and other family members

The research teams noticed ways in which each of the project Primary schools set out to create different types of links with parents. These links helped to involve parents, grandparents, and carers in supporting the schools to increase the consumption of healthy and nutritious food and drink on the school premises, and hopefully at home too, through raising awareness of the contents of the Draft Guidelines¹⁵. Initiatives included;

- Folders were provided for year 6 pupils with sample menus for the Secondary school and information on A4L Draft Guidelines (A).
- Parents, grandparents, and carers were invited to eat lunch with pupils (D, A).

¹⁵ The existence of the draft Guidelines was often referred to by research teams, but pupils and families were more interested in what constitutes a healthy diet, and how this can be managed with limited resources of time and money.

- Parents were encouraged by their children to be involved in what they were cooking at school, and the food cooked was taken home to parents, with recipes (A).
- School cook book produced¹⁶ (A).
- Involvement in the school garden (D).
- Integration into sports days and other events (D,E).
- One school (D) ran workshops with parents on expectations regarding pupil behaviour, including behaviour at lunchtimes.

One Primary school (A) used these types of interactions as an opportunity to relay information about new menus, and to show posters of the school council and their work selecting the school meal for parents and governors.

One initiative involved year groups of children preparing and then serving their parents at special ‘cook-in’ events held at the end of the school day (A). The choice of menu was made by the school council members, who learnt how to produce healthy meals, which included dishes that were already on the school menu. The recipes were printed out in Welsh and English and made available for parents to take home. At these evening meals for parents, researchers noticed a really positive response from the children. They loved the idea of cooking for their parents and serving them food.

‘My parents really liked the muffins’. Year 6 pupil.

‘I’ve made cakes twice now with my two little brothers – they love it!’ Year 6 pupil.

In preparing the food pupils got used to using various kitchen utensils including sharp knives (under supervision), and to seeing a variety of foods being put together. They were also able to make bread.

¹⁶ This was a PTA fundraiser and was not specifically linked to Appetite for Life. However it is included here because it proved a good method of engaging family members.

We noted across our research sample how much more difficult it was for schools to engage parents at Secondary schools. When successful engagement took place, schools were delighted. The Head of project Secondary school (I) told his Governance group *‘researchers have been really pro active in getting parents involved’*. He was referring to a social event with the PTA and [Pasta Brand] who had asked Year 9’s at the school to be involved in designing their new sauce. The Head was clear that he felt this had increased engagement with parents around the A4L agenda, and he stressed the value of this participation. Researchers found most parents here were interested in the food and drink available in school, and most wanted to have the menus available at home so that they could plan when their children would have school dinners and when they would take in packed lunch. It was this same school that made coordinated efforts to keep parents informed with newsletter articles, sending letters home and by publishing updated menus on the website.

In Primary school (D) the grandparent of one of the pupils regularly joined a research group over the life of the project. Her own children had been pupils at the school and she was a very active supporter of school initiatives, having more time to be engaged than her daughter. On one occasion researchers were eating lunch in the dining room with the children and invited the grandparent to join them. Roast pork was on the menu, with all the trimmings, and she ordered it. When the meal came it looked very dull, all the vegetables were an overcooked beige colour and fell apart when touched. The stuffing ball was bullet hard and the meat pretty tasteless. The grandparent was obviously unimpressed with the quality of the meal.

Part way through the meal we were joined at the table by a member of the Catering service team. He asked her what she thought of the meal, and got a blunt reply.

‘What upsets me most is that my granddaughter thinks this food is alright. It’s not, it’s crap frankly’.

Researchers later heard that this Cook regularly steamed vegetables for up to an hour, including green vegetables, and began to better understand previous comments from some pupils about ‘funny tasting’ potatoes.

Parents' own experience of school meals

A further issue was that many parents still recalled the sort of food they used to get in school themselves with a degree of displeasure

'Because school meals have had such a bad reputation, we need to get parents more involved to see for themselves'. Catering Services Manager.

In addition to their own experiences parents bring their values in relation to food. Parents surveyed about the menu changes in two schools (D, E) were concerned about portion sizes and the nutritional content of meals, and often quoted 'fresh' and 'not processed' as values. The Catering Service invited parents into the school for tasting sessions to test the new menus, and sent copies of the new menus home to parents, along with a brightly illustrated pack introducing the changes.

The research generally found that the children were increasingly knowledgeable about food and drink and that this was something that was being positively reflected back to their parents, which, in turn, encouraged some of them to support the eating of nutritional and balanced meals at school.

Lunch boxes

While recognising that the primary focus of Appetite for Life is the food provided in the school, we observed the importance of joint working with WNHSS and others in their efforts to inform and educate parents and pupils about healthier contents in lunch boxes. We note that research recently carried out by the University of Leeds (Evans, Greenwood, Thomas and Cade, 2010) suggested that only 1% of all food sampled in lunch boxes met basic nutritional standards that are commensurate with 'Appetite for Life' or similar food related schemes in English or Scottish schools¹⁷.

Project school (A), with the support of Catering Services and the A4L co-ordinator worked to engage parents with comparisons between locally retailed items, and healthy lunch box

¹⁷ A Cross Sectional Survey of Children's Packed Lunches in the UK: food and nutrient based results by CEL Evans, DC Greenwood, JD Thomas and JE Cade, Journal of Epidemiology and Community Health. (2010) Research commissioned by the FSA and undertaken by Leeds University – found that 82% of children's lunchboxes contained foods high in saturated fat, salt and sugar – items such as crisps, sweets and biscuits. Only one in five packed lunches contained any veg or salad, only half included fruit. Only one per cent of lunch boxes were found to meet the nutritional standards set for school meals.

alternatives. Researchers noted that the numbers of new pupils taking school dinners in (A) had increased from 1 in 12 to 9 out of 10. Overall the school meal take up in this county had risen from 65% to 74% in 2009.

In one school researchers noted that, *‘the targeting of contents of lunch boxes is not high on the Catering Service’s agenda, understandably in the light of their business culture and targets’*, and asked *‘if they are not able to drive this agenda then who will?’* We received a pragmatic and realistic response from them:

‘The contents of the packed lunch boxes unfortunately are not the Catering Services responsibility, advice is given from Healthy Schools scheme and the school itself as the Catering Service cannot influence changes for parents to put healthier items in children’s packed lunch boxes’.

Catering Service Manager.

Research example – parental resistance

One project Primary school was represented by the Headteacher on the area’s Governance group. She related that when she first opened a fruit tuck shop (before the research period) and asked parents to replace chocolate bars in lunch boxes with chocolate biscuits, there was huge resistance from parents. Children were being fed chocolate through the school fence, and being told – ‘go eat it in the toilets where she can’t see you’. The situation has since improved through good, ongoing engagement with parents.

Local Food Cultures

‘I don’t know what you do about sitting down and eating. They are used to ‘walk around’ food; they don’t always eat at tables at home, they eat on trays’. Canteen Manager.

There are distinct differences in local food cultures across our project school sample. Research teams were told in one of the more rural project areas that it was a regular tradition for families to sit down and eat a roast dinner together once a week. In fact roast dinner in this region is one of the more popular (and heavily subsidised) school meals. This is in direct

contrast to what researchers were told by school staff in some more deprived urban and semi urban areas where sitting at the table to eat is much less common (G, I). In project school (G) for example, researchers observed only a handful of children eating sitting down with a plate and knife and fork over the two year research period, as compared to ‘perching’ to eat walk-around food.

The Cook in another project Secondary school (I), in a more deprived area, to which a large number of pupils walk to school underlined the challenge she saw of persuading her customers to sit down for a plated lunch:

‘There is plenty of selection of both hot and cold food and there is always a Daily Special meal available, with a vegetarian option. This has never gone well at this school and that has not changed’. Cook.

More nuance is added by the Cook’s reflection in a rural Secondary school (H). Pupils had organised a varied and well publicised awareness raising evening for parents, including music, presentations and the Cook had cooked a range of taster dishes and a number of different cakes. Hopes were high, but the event was poorly attended. The Cook told researchers she was doubtful as to whether many parents really had time to monitor the healthy eating habits of their children at school, and wondered how motivated they really were: *‘Some children still bring pop and crisps into school’*. She was particularly disappointed with the poor uptake of the taster food she prepared for the evening. While at this school it is the norm to eat from a plate, from researchers’ observations over two years it would seem much work is yet to be done to change the food pupils choose to put on the plate.

In a Welsh medium Secondary school (F) to which almost all pupils are bussed from across the region (away from their local food context), the young people (aside from 6th formers who are allowed off site at lunch) are a captive audience. In this school culture with a tiny canteen, the Head and the staff noted the importance to pupils of eating not from disposable plates and tubs as at present, but from proper plates with proper cutlery. Pupils created a poster in research groups visualising their needs regarding school nutrition and this they linked closely to the way the food was served. *‘No plastic!’* was a forceful comment on one group’s poster. The need for lunch to be an occasion as marked by using ‘proper’ plates seemed at this school to transcend the influence of any one local food culture.

Not only did it seem more difficult at Secondary level than in Primary schools to attract parent's interest in children's diet (unless direct and consistent effort was made to engage them) researchers also noted that there was confusion as to what constitutes a healthy diet. Research questionnaires completed by parents across our research sample showed awareness of a 'healthy eating agenda' but these quotes show how unclear some parents, and consequently pupils are about what healthy eating means. First a researcher reflection:

'We were given food for thought by a conversation with one mother who reported that she and her daughter ate a very healthy diet, with no junk food. It then emerged in conversation that they ate 30 packets of crisps between them in an average week, and that she used salt both in cooking and on the table, and was very against the school not allowing salt in the canteen. She felt that, as neither she nor her daughter were overweight then their diet was clearly healthy. In a similar vein teaching staff have talked of a "missing generation" of adults who had not learnt to cook at home and had not had cookery lessons at school'.

Here are two pupil voices from project school G expressing similar misunderstandings:

'The healthy food we get is tomatoes, lettuce and cucumber it doesn't fill you up, it's rabbit food, and mostly it doesn't look very nice'.

'They want you to eat healthy but you can't just eat healthy food; you need to eat unhealthy food too otherwise you'd be really thin'. Pupils, Research group.

In this school, teachers suspect that a lot of confectionery is brought into class from home. Pupils have an emotional reaction to the restriction around confectionery, even though they understand it rationally:

'It's good they're stopping it [confectionery] to stop people eating all this junk but they should let us have one day a month to have something unhealthy. You deserve a treat once in a while because you've got to keep learning' Pupil, Research group

Research example – different strategies towards phasing out confectionery

At the Governance group meeting in one area it was pointed out that a couple of schools still have chocolate in their vending machines. The A4L dietician told the group that she believed this to be a more successful strategy for reducing intake of confectionery because the children can see it is still available, albeit less so. In another area, the deputy Head pointed out in her Governance group that it had taken 6 months to phase out chocolates and crisps.

In fact eating confectionery is a strong enough part of the culture here for a senior manager to speak out, illustrating the challenge of following the Draft Guidelines in the absence of a wider engagement around change:

'I like the idea of chocolate once a week. What will we put in place of Trade bars? [local A4L Coordinator] has shown us how much sugar is in a cereal bar. We might just as well give them chocolate. WAG have suggestions for drink but not snack alternatives. In this area kids won't touch seeds'.¹⁸

Business Manager.

4.2 Transition

Learning Points:

1. Incoming Year 7s are often pleasantly surprised at the freedoms that greet them in the school canteen.
2. Engaging transition pupils in the SNAG seems to have raised the interest in school meals, and even caused some of these pupils to switch from packed lunches.
3. The disenchantment with queuing sets in during the first year; it can be convenient and be an expression of independence to use alternatives to the canteen.
4. The message from Primary school that 'you should eat your vegetables' begins to lose its power as transition pupils are no longer made to eat them.
5. Younger pupils' generally more positive attitude to engaging with issues around food and drink can contrast with more jaded views higher up the school, in particular if especially popular choices have been removed during a pupil's time at school.

¹⁸ Clarification: A4L Draft Guidelines recommend that cereal bars are removed/not allowed, and guidance on vending machines in schools *Think healthy vending* (WAG, 2005) recommends using vending as an additional service point not for snacks, but as service point for more substantial meals

'When I started in Year 7 I couldn't believe it - when I came up from the junior school you had to have a full meal and then two pieces of veg and you'd have a pudding like a yoghurt or fruit salad or something like that but when I came here I couldn't believe it that children were just allowed to have a bowl of chips!'

Year 7 Pupil Researcher

Two schools in the sample were specifically chosen because the Primary (A) in a semi rural area was a direct feed to the Secondary (B), with a large proportion of the Year 6 pupils moving to the project Secondary school. This gave us the opportunity to follow some research pupils from one school to the next over the period of the research, and to work with them to assess whether their attitudes towards food and food choice began to change. This section will draw out some themes of transition in this particular pairing; it will also draw on transition themes that emerged across the sample.

The pupil comment above is echoed in similar ways by Year 7 members of research groups at a number of other project schools. There is surprise at the freedom not only of what to eat, but also where to sit, to be able to control the balance between eating and relaxation time, and to be able to choose to do homework at lunchtime if necessary.

Two of the pupils in the research group in project school (A) made the transition from Primary to Secondary school (B) during the course of the A4L research. In year 6 they had been members of their Primary school's council, one of the research groups in that school. Others became involved with them in the research during their first term at senior school.

Early impressions

The research project was interested to see how the whole transition group would react over time to the different operating environment of the larger, and in some ways less formal Secondary school catering facilities and what impact this might have on their attitudes and choices around food over time. This interest was shared by the Headteachers of both schools.

As practiced in many schools, the 'transition' pupils were invited to visit the Secondary school in the months leading up to their move on a number of 'bridging day' visits in order to

help them make a smooth transition when the time came. A key part of this integration work involved trips to the canteen.

Researchers met with the transition group of ten pupils early in their first term. The group had already noticed a good deal about the differences between their experience of food in the Primary and senior school environments.

'It's a lot better; you get more on your plate'.

'You get more of a choice for what's on your plate'. Pupils, Research Group.

Members of the group were asked about their choice of food provision to determine whether there were any differences in uptake of school meals between the two schools. In Primary school 7 out of 10 of the research group had opted for school lunch with 3 bringing packed lunch, and with 2 also saying it depended on what was on the menu. At senior school 9 out of the 10 were now taking school lunch, with 1 bringing packed lunch.

They recalled their Primary school lunchtimes, their comments focusing principally on the shortcomings of the dining facility arrangements:

'It was very packed in the hall – too many tables were close to the wall and there was lots of pushing and shoving and the little kids would get hurt'.

'We wouldn't be allowed to sit by friends – we were put where we were put'.

By comparison they noticed the comparative freedom of both choice and association offered in their new facilities:

'....you order what you like and pay and sit with friends, by the door or the window or wherever you want'.

'The foods are a lot different. At Primary school it was a couple of things swapped around. Here there's a wide variety'.

'Here we can leave when we have finished – in little school we had to put our hand up and sit for 10 minutes to queue up again for pudding....'

New freedoms

The wider range of food offered at the Secondary school meant that the children were at liberty to choose any combinations of food and they were asked how they dealt with this freedom.

'If it's not on the menu you can make it up with the food they have... can ask for beans and a jacket potato and put it together and make mix and match/pick and choose'.

'On a hot day I have baguette and salad, on a cold day a hot meal'.

'You are allowed in at break and can have pizza or toast, in Primary we were only allowed fruit or a milkshake'.

The canteen staff also noticed how these younger children enjoyed their vegetables.

Whilst the pupils had all experienced queuing in both schools at mealtimes, in Primary school they had to *'queue for ages'*. In Secondary school they perceived the queuing was faster, that there was more than one queue, and that they could *'queue for what I want'*.

The group made a number of suggestions as to how they might give ongoing feedback to the canteen staff about the food and dining experience. These included notice boards, comments boxes and also more sophisticated systems where they would receive direct feedback on their ideas, for example, through the class registration system. The ideas generated by the Transition group were noted by the Head of Food Technology, who had supported the group throughout, with a view to taking one or more forward to the newly established SNAG. The ideas were also shared with and supported by the Head Cook, the LA Catering manager, the local A4L coordinator and the Headteacher. The research ended before this was progressed.

Joining SNAG

The transition group's enthusiasm about participating in the action research and openness in sharing their views led school staff to invite the whole group to join the reinvigorated School Nutrition Action Group (SNAG) during their first term. Here they could continue to be instrumental in observing and helping to influence the canteen regime, and the wider experience of food and drink in the school.

The Deputy Head and Food Technology teacher commented *'The school ethos has been lifted due to this [A4L research] project. People who would otherwise have no interest in school meals now understand that it's big on the agenda'*.

The research team met with the transition group again later in their first term and the group discussed their developing experiences and perceptions. By this point the only child in the group who brought a packed lunch to school was now also occasionally having school meals.

Settling in

The group explained their food choices were being influenced in particular as a result of queuing conditions. While their attitudes to queuing at the beginning of the year had been more positive, they were now absorbing some of the general disenchantment with queuing.

Although the group didn't mind some queuing, as they felt this was understandable, they didn't like it when older pupils pushed in. Also, it didn't seem fair that 6th formers were 'privileged' to go to the front of the queue. By the Spring term, most of the transition group had attended their first SNAG meeting, which had also been attended by the Head Cook and the Catering Manager.

Overall the group felt that being part of the SNAG group was a positive thing

'It is good, because how else are you going to tell the staff what you think?'

Changing choices

By the following term (Spring Term) the practicalities of school life as well as peer pressure were beginning to impact on choices. Whether or not transition group members used the canteen could be dependent on where pupils' classes were located. A common difficulty was

finishing late for sport and arriving to the canteen too late. Or if the pre lunch lesson was further away from the canteen, queues would be too long by the time they arrived. The attitude taking shape became:

'We'll just go to the leisure centre it's quicker there'.

'You can get like genuine things we can buy in the shop'.

However the pupils didn't apparently want to choose chocolate:

'Yeah chocolate's bad for you - chocolate gives you heart disease.... I buy [Brand crisps] every day for a snack'.

And the food itself wasn't always the draw:

'If all your mates go over to the leisure centre you don't want to sit like "Billy no mates" in the canteen and have someone you don't know come and sit with you and you be like ugh...'

'It does say on the [vending] machine that no school children are allowed but no-one takes any notice'.

Pupil researchers.

The pupils recognised that using the vending machines was the more expensive option but this did not put them off and further they all indicated that as soon as they had the 'privilege' they would go to town where they would be content to pay extra money for the same food.

It was interesting to note that by May 2010 pupils' attitudes to vegetables were beginning to change. When asked if they still liked vegetables they gave responses like:

'When the food settings change, tastes change' and

'Now I don't have to, so I don't as much'.

Growing older

The group were then asked to consider what they thought would change as they got older and moved through the school. The majority talked of changes to their own behaviour and choices:

'We won't want the healthy options'.

'I'll probably want fattier foods but I'll try not to'.

'Taste buds will change so the food that they serve in the canteen may be a bit too 'simple' and we'll start going down town instead of going in the canteen'.

The final research meeting revealed more challenges that the pupils foresaw, such as the effects of different calorie demands between adolescent female and male pupils.

'Girls by that age will be going on diets so will want healthier options – boys will choose fattier options'.

Generally, transition group members' candid and enthusiastic attitude about food both before and after their move to the Secondary school impressed teachers and staff of both schools.

'We've spread the word. We're on a roll now and need to tap the enthusiasm of this transition group – there's lots of energy to drive it as they go up the ladder'.

Food technology teacher and Deputy Head.

The transition group's generally positive attitude contrasted with the senior pupil group who tended to be more cautious, challenging and questioning, less certain and a little less trustful.

Age and attitude

This contrast in attitudes between younger and older pupils was noted in another project school (F). Further up in this school attitudes regarding the school's canteen are more firmly established, and can be negative. In the third term of research in (F), though improvements like the installation of new equipment that produced very much more edible jacket potatoes

had been noticed by older pupils, most positive comments were accompanied with a degree of humour, disbelief or irony.

'It [the food] is better now, "more healthy" like but I don't like it [laughter]'.

'I like Lasagne but they have started putting lentils [in it]'. Pupil Researchers.

Pupils also explained that they had had experiences of poor quality food at the school and these negative encounters with food seem to leave a trace. In school (B) older pupils continued to lament the withdrawal of chocolate cookies two years after the decision was taken to remove them.

4.3 Special Schools

Learning Points:

1. Special school pupils may require foods prepared differently, liquidized or special diets, which can have implications for equipping kitchens and providing training for kitchen staff.
2. The needs of individual pupils need to be considered. Some pupils are very particular about the food they eat; colour and texture can matter greatly to individual pupils, as can portion size.
3. The need for routine is paramount.
4. Any changes need to be introduced slowly, allowing sufficient time for pupils to adapt.
5. School meals services can learn from hospital based nutritionists when devising appropriately balanced meals within the special requirements of disabled children.
6. Pupils value choice and being involved in making changes, but may need to be enabled in the process of making and voicing choices.
7. SNAGs can be a good way to enable ongoing involvement, given sufficient resources of staff time.
8. There is a need for good communication and partnership working between the special school, the catering team and the Local Authority catering service, particularly when making changes. The time taken to develop working relationships between all parties should not be underestimated.

While conscious that the action research project worked with only one Special School, we think that there is some transferable learning from this site.

There are a number of requirements of the kitchen in a Special School, which may not apply to other schools. Some meals need to be liquidised for pupils who have feeding and swallowing problems, some pupils are very particular about foods they will eat, and there may be special nutrition diets.

The need for routine is paramount, as is the need to take sufficient time to bring in any changes. Changes to portion size and menu should not be undertaken without careful consideration of the potential impact on the children. Yet, at the same time the pupils at the school have a wide variety of special needs, and their needs can vary from day to day according to how they are feeling,

'No two days are the same.' Teacher.

4.3.1 Food

We noted that the support staff looking after children with complex needs understood the children's needs, particularly where children could not communicate verbally. Close working with them to develop specific diets is essential. Generally the new menus have been received positively by pupils and staff, and there has been a need to make special efforts to accommodate specific needs of some groups of disabled children (e.g. regarding texture and colour of foods).

Presentation and the need for flexibility

One class teacher felt that the dietary needs of the most profoundly disabled children could be better met. Needs for these pupils include liquidized and finely minced food, and feeding by tube. Some items on the regular menu could not be prepared in this way and on these days, known as 'pizza days' it appeared that there was no planned alternative, and the children were routinely given certain stand-by foods, which were not part of the official menu. Dry foods e.g. with pastry or pizza base or food with bones such as a chicken leg do not lend themselves to this and school staff recommend that fresh cooked food is the most appropriate

way of providing easily digestible food for these pupils. One teacher questioned why they couldn't have more fresh food, or even pureed fruit? This was brought to the attention of the Catering Service team through the research project.

'No meetings had been arranged before the [research project] to discuss the dietary needs of these children, but since [the research project] has started new pureed menus have been introduced and are deemed a success'. Catering Management Team.

While initially staff who support children who have pureed food commented that there was little variety, all the food was pureed together and looked unappealing (*'one grey mush'* was the description), initiatives have been taken to change this. The school has now ensured that each of the meal ingredients is now pureed separately and new pureed menus are being developed. The Catering department has sought information and advice from different sources, including the Food Standards Agency and Dieticians, to enable them to start producing a separate pureed menu. Pureed meals were then sourced as a 'regeneration' product for ease of use for school Cook. In the meantime school staff met with the Catering team and support staff listed all the foods that the children will eat and these are clear on the dinner register so the Cook can cater for them.

4.3.2 Choice and awareness

Challenges around choice

Issues about offering and enabling choice are both similar and different from mainstream schools. The values of offering choice, and the desire of many (if not all) pupils to exercise choice are much the same as any other school, but the methods, timescale and skills to enable choices to be understood and made may be very specific to the group or the individual concerned. These need to be considered in relation to the new Draft Guidelines being successfully framed and implemented.

From our early conversations with teachers at the school we became aware of the importance that the school attaches to giving the children 'pupil voice'. This aim permeates all aspects of school life, and decision making is a key life-skill that is taught across all areas of the curriculum. Alongside this aim, however, is the reality that for some children their level of

understanding makes it hard for them to fully comprehend the implications of making a choice and then following that through with action.

Some of the children don't have the ability to remember what they have just eaten, and many have a tendency to just copy what other children in the group are saying or what they think adults want to hear. It becomes difficult to know whether they are expressing their own opinions or not, representing an ongoing challenge to staff wanting to make changes towards the Guidelines.

Change and routine

Many pupils with a range of autistic special needs like to have the same routine and have difficulty with sudden changes. In addition, pupils may find it difficult to communicate preferences, as opposed to single choice likes or dislikes. Staff and carers at the school are sensitive to the children's needs and usually give pupils ample warning of any changes, introducing new ideas clearly and visually in assembly and individually supporting them when the changes happen. Support staff know their pupils and what is likely to upset them, particularly in the crowded dining room, and they can be prepared. (See also the example of making changes to food 4.3.4 below).

It can be very difficult to give some pupils the same choices open to other pupils.

'We discussed with school staff whether pictures of food might be a way to describe the daily menu choices. One staff member described how it is hard to know whether some of the more profoundly disabled children actually like the food they are given or not, because they have limited communication abilities... Another teacher described how the only real way you know is whether they spit it out or not, but that some children may not even be capable of doing this'.

Research team.

A teacher from the Junior School uses photographs of the food to help her children understand exactly what they are choosing in the morning, and she then sticks their names on Velcro alongside their choice, so this helps them to remember it by the time it is lunchtime.

Pupils' Special Needs

An example of how individual these special needs can be was provided by one adolescent boy with autism who only likes certain foods, which have to be a particular colour. He will often eat big rolls filled with butter and red sauce and often eats lots of potatoes, chips or roast. If worked with one-to-one he will try new things. Flexibility appears to be the only practical response to this situation, and the local Catering Management team reflected:

'It is a difficult call but we would provide what is needed for such a child' and

'The new menu implementation will take a considerable time longer in this school due to the needs of the children'.

There was agreement across the school staff that the portion size at meals is too small for some of the older children at the top end of the Junior School, who may be older than average junior school pupils (in this school the classes are arranged mostly by ability range, rather than by chronological age). Not giving an autistic child enough food can cause them to get angry and upset, when they are hungry in the afternoon. This makes it difficult for the teachers to manage them after lunch. Although the Catering team were providing the correct portion size in line with Local Authority guidelines, the Cook was also well aware of this issue and sensitive to it.

4.3.3 Physical environment

When the action research team first visited the school, it became clear that almost everyone disliked the grey plastic 'flight trays', which were aesthetically unappealing. Although a few pupils liked the flight trays as they were 'easy to manage'. Subsequently new trays, bowls and plates were introduced to replace the flight trays in Welsh colours of red, white and green. However the new trays proved to be slippery, so that the bowls and plates slid around on them making it difficult for many of the pupils to manage and carry.

The sudden introduction of the different trays in the dining hall proved very challenging on the day with many complaints about the changes, as some pupils found it difficult to cope with both the practicality of managing the trays and the unfamiliarity of the trays, bowls and

plates, even with support from staff. However a responsive Catering service can make a huge difference:

‘As soon as Catering became aware of the situation all the trays were removed and new colourful flight trays were put in; the colours were selected by the school.’
Catering Management Team.

More involvement

Early involvement with pupils and staff made the introduction of new tables and chairs more successful for pupils and catering staff. In September 2009 the old foldaway tables with separate chairs were replaced by new tables with integrated stools. These stools no longer had backs to them, so a small number of the old tables and chairs were retained for those children who may find it difficult to sit on the new stools. The kitchen staff liked the new tables with the fixed seats because they fold up all in one. Generally the children liked the tables and stools too, although the School Council demonstrated an interest in practicalities:

‘The seats are wobbly’, and ‘there is no edge to the table’, [so plates might slide off].

Once again, it highlights the need for clear communication and close partnership working between the school and the catering team, to ensure that the needs of the various stakeholders (teachers, kitchen staff and pupils) are being met equally.

The decision to redecorate the wall area around the serving hatch was initiated by the Catering Management Team, who had recently carried out a serving hatch ‘makeover’ at another school in the same Local Authority area, and showed photos of this at one of the SNAG group meetings. The school responded enthusiastically and it was agreed that a design project should be set in motion. The Catering Team used the appointed local designer to produce a range of design ideas, which they then presented to the school. The Catering Management team took a clear lead on this process, but then worked in close partnership with the school to develop the final designs. There was time allowed for the children to fully participate and voice their opinions. This seemed to illustrate what can be achieved when

there is clear leadership, close collaborative working and good communication between the teaching staff and the Catering Management team.

4.3.4 Relationships

Communication

Communication between school staff, the Cooks and Catering Services is particularly important in the context of the Special school, particularly when making changes. In our project school changes were made both to the food itself and to the containers in which it was served, which required discussing these sufficiently with staff and students.

Although the School Council pupils had had the opportunity to taste the new hot meals, soups and baguettes before they were introduced and this had been a success, the process for introducing the soups to the whole school was done differently. The logistics of arranging for pupils to sample soup as well as have their usual meal meant that pupils had to come up several times for their food, the serving hatch was too small and was arranged differently and this was stressful for both staff and pupils. Pupils were also asked which of two soups they preferred and some of them found it difficult to make a choice. Usually the teacher would suggest trying one new thing at a time so that pupils could give a clear yes or no answer.

‘... this is the way taster sessions had been held in the schools previously and [it] was thought the same format would work’.

Catering Management Team.

Later in the week the soups were tried one at a time and this worked better.

‘The catering staff were not aware of the severity and implications of any changes that are made at the school without close workings with key members of teaching staff – from here on in the school will direct the catering and we will implement’. Catering Management Team.

The Catering Team put in place a phased introduction of the new menu, starting in September 2009 and going right through until Easter 2010. One new dish was introduced at a time, and trialled every day for a week, with pupils being offered a small sample plate alongside their

main meal. The intention was to allow them to experiment with their choice of food, without the risk of having no food at all if they then decided they didn't like it. One pupil suggested:

'Why don't they give the samples to the kids having packed lunches as well then they might want to have dinners instead!'

Alongside the development of this new menu the Catering Team have also been working in the background to improve nutritional standards by changing ingredients and cooking methods.

4.3.5 School leadership and culture

Work with the School Council has shown pupils value being involved in the changes. At the end of the Summer term 2009, the School Council tasted five new dishes, and a selection of filled baguettes, and seemed to thoroughly enjoy both the food and the experience. One pupil told us *"it was nice to be asked."* The Catering Team then repeated the exercise with parents in the evening and again had a generally positive response to the new meals. One issue for Special schools is that children are bussed in to school from a wide catchment area. This poses a problem for the school and the Catering team in trying to generate awareness and support for the changing choices that the children will be faced with, once the school menu begins to change. Partly in response to this communication challenge, a colourful and informative 'parents pack' was sent out to all parents in April 2010 by the Catering Management team.

The development of the SNAG group

At the end of the first year (June 2009) it was recognised that it would be useful for all those involved in the provision of meals in the school to meet together on a regular basis to facilitate and agree changes. This followed on from early difficulties in communication and understanding about the needs of the children that emerged as changes were made without sufficient consultation.

The SNAG group was set up initially with clear leadership, but only as an interim post. A smaller group of school staff, the Catering Team and the researchers continued to meet to keep up to date with the changes and informal contact continued on an ad hoc basis when

needed. However, this ‘unofficial’ ad hoc arrangement has not always been able to anticipate the effects that changes could have on the school and a SNAG group with a clearly designated and resourced leader is desirable as an ongoing channel for communication.

4.3.6 Catering service culture

The Local Authority Catering Service serves all the schools in this Local Authority area. Initially the Service took an approach to the Special school that was very similar to that taken in other Primary and Secondary schools. However, the example of the introduction of soup serves to demonstrate that Catering Services need a good link to Special schools to enable them to be guided by the school’s experience of working with its client group. In this particular school an initial ‘one size fits all’ approach to the menu was not practicable as it did not allow for certain pupils (such as those on the higher end of the autistic spectrum) to continue eating the foods that they were willing/able to eat. A customer focused approach and the provision of sufficient time for Catering Service staff to make good connections with the school were essential to improving the situation. This also highlights the need for the provision of time for teaching , support and kitchen staff to be involved in the process at the appropriate stages.

Our overall reflection, from working with this Special School over a two-year period, is that a lot of effort has gone in to piloting the A4L Draft Guidelines, by both the Catering Team, the teaching staff and the Cook, and some real progress has been made. A flexible approach has been developed towards food provision, which has accommodated the needs of individual pupils and of the essential routines of the school, themselves developed to keep the atmosphere as calm as possible. This partnership working has been essential to weathering initial misunderstandings and finding shared solutions to problems. The amount of time and effort committed by all parties to developing this working relationship should not be underestimated.

5. Discussion

In this study the action research has had multiple products, which include the relationships built through the inquiry process at the levels of school, Local Authority and multi agency partnerships; learning produced through the inquiry process, and existing knowledge captured by the research; and the actions taken which have led to new developments for the sites involved. This section of the report explores in more detail some of these aspects through considering partnerships that have been developed, the educational aspect of the research process, the learning about the research process itself, evidence we may not have got by working in other ways, and ends by situating the Draft Guidelines in the wider picture of learning about introducing change (change management).

5.1 Partnership working

Partnerships have been developed through inquiry groups at several levels of the study. We have seen pupils developing partnerships across cohorts, Eco Committee and SNAG groups; with teaching and support staff; and with Cooks and kitchen staff and LA Catering service staff. In some study schools pupils also made links to other schools in their area, which may be of enduring value, for example deepening the pre-existing transition-related connections between schools (A) and (B), and school (I) and its feeder schools. For example the secretary, Headteacher and head of food technology in school (B) commented to researchers that the research had highlighted for them the value of including the canteen in bridging visits, not simply as an opportunity for pupils to see where they can eat, but to orientate them to the schools philosophy and practice around food, drink and nutrition.

Governance groups in the study have expressed the value and usefulness of a broad and inquiring partnership to think together, and to support each other to experiment (e.g. utilising the opportunities offered by oral health service visits to schools to work with parents in one Local Authority). It has enabled partners to champion and encourage changes in their own services and those of others. Beyond the Local Authority areas in the study the stakeholder events have brought together interested professionals across Wales to be updated on the progress of A4L, to hear from the study schools and LA areas, and to add their own experience and examples of good practice.

Involvement in inquiry groups exposes and troubles the relationships and communication between the participants. It may prove impossible to keep within agency boundaries and responsibilities as the real-life interconnectedness of issues emerges (see also Learning, below), and yet it is this connecting up that can lead to inquiring partnerships achieving breakthroughs that other groups cannot, for example the willingness of playground leadership and sports development workers to deliver support to address behaviour management issues in the playground, and so enable schools to make more informed choices about the impact of shortening breaks because of concerns regarding behaviour in the playground.

The Governance groups and school-based research groups have often brought together those who might not otherwise meet, both professionals and pupils. However, we have observed that it has taken a willingness to listen to each other as well as an ‘inquiring approach’ (inviting and supporting people to reflect undefensively on their own practice, and utilising participants’ shared commitment to better outcomes) to enable some of these connecting-up conversations. If this is to continue then there will need to be both opportunities to meet, and for meetings to be facilitated to be inquiring spaces.

We have also been able to identify barriers to the effectiveness of these ‘inquiring partnerships’, at both the school and at an inter-agency level. These are unsurprising, but as they persist we feel it is worth mentioning them here, they are:

- fluctuating membership,
- absence of key players with sufficient authority,
- lack of time to commit to meeting and taking action,
- the lack of a sense of integration of A4L into other agendas within education and beyond and,
- an unfamiliarity with what we have described (above) as inquiring behaviours.

In order that inquiring partnerships can flourish there is the need to commit resources, including the commitment of senior staff time and sponsorship. The Governance group in one Local Authority provided an example of the importance of engaging those with sufficient authority and overview. Both an Elected Member and a strategic Director were able to attend the group for some of its meetings, and this enabled a strategic level understanding of the work being undertaken by other organisations, which was otherwise invisible at this level. This also led to the Elected Member spending half a day with the inquiry groups at one of the

schools involved in the research, which was an empowering and educational experience for all involved as the Elected Member was able to share with them her role and the ways they could continue to influence and inform her.

An aspect of this inquiring partnership approach is the deepening of a sense of collegiality through the appreciation that the issue in question was a shared one, and understanding more about others' thinking and felt responses to the issue. One outstanding example in the study was that of one Governance group in which cookery lessons were under discussion. The group moved on from discussing pupils' learning to influencing cooking in the home, and the lack of cooking skills in some of the current generation of parents was identified as critical. The idea of extending cooking skills classes to parents was mooted, initially with the response that that was 'not in my brief', but through another cycle of exploration this was transformed into 'maybe we could', and further into cross-boundary collaboration to address the need. In another Governance group, community development projects, including a Healthy Living Centre and other agencies, worked to dovetail their existing services in order to reach parents *and* pupils and so to influence and inform parents and pupils to make healthy choices.

Taking appropriate leadership regarding A4L and developing a sense of collegiality can also be significant within a school, as when the role of facilitating A4L in the school was delegated, with sufficient time and authority to a member of staff in school I. This teacher was then able to involve other members of staff, and to start to develop a SNAG group, so enabling the research to become better integrated into the school, and the lessons learnt about participation and involvement (of pupils and catering staff) to inform structural changes (the establishment of a SNAG), which can continue to influence and inform healthy eating provision and consumption.

5.2 The educational and liberational process of action research

Pupils have recorded feeling more confident in advocating for the changes they wish to see, and perhaps more importantly, more able to gather evidence and analyse data to inform themselves. As well as these practical research skills (survey design, data management, analysis and presentation) they have learnt communication skills, including listening, and have been more empathetic and inquiring than they were before being involved in the

research groups. In some cases we have seen changes in relationships between, for example, pupils and catering staff, and Catering Services staff and teachers, that demonstrate this increased understanding and empathy. Feedback on a sense of empowerment has sometimes been explicit, as when one member of the School Council in school (G) was heard to say (although tentatively) '*power to the people*' as he left a meeting with the school Cook and Bursar. In another (Primary) school the Headteacher was clear that her pupils were transferring their learning from the inquiry group into wider participation in the school (D), and a visiting Estyn inspector remarked on pupils' abilities to go beyond simple advocacy to work constructively with the experience of not being able to achieve some of the changes that they desired.

In addition to these benefits of a sense of empowerment and the capacity building of skills to support inquiry, the action research approach, involving as it does the process of sharing perspectives and the encouragement to share feelings as well as thoughts in the inquiry groups, leads to a more direct experience of the issues and a deeper understanding of both issues and potential solutions, the latter tested through action. The successful implementation of A4L requires cross boundary working, and the research study has built capacity to sustain dialogue across a range of different groups.

What have we learned about doing action research in this context

Using action research as a methodology has enabled us to engage with the issues raised by the introduction of A4L in a way that differs from other qualitative research approaches to understanding change processes. Since action research starts from the interests and concerns of the participants and focuses on the practical everyday detail it would not have been appropriate to start from a focus *only* on the Draft Guidelines; we both introduced the Draft Guidelines into the research groups *and* chose to listen to and work with the interests in each research group, balancing the emergent nature of the research questions raised with our over-arching question of 'what are we learning from the process of introducing the A4L Draft Guidelines into schools in Wales?'

'For us it [tracking and learning from change] was stats before, then make the change, then stats afterwards – it's taken some getting used to doing things this way'. Healthy Schools Officer.

This aspect of action research as not outcomes-driven can make it a challenging approach to commission, and we have been grateful for the understanding and forbearance of the commissioners of this study in their commitment to and championing of the participant-led nature of the process. We believe that this has enabled us to understand causal connections to barriers, which we might otherwise have missed. For example who would have thought that a school's concern with general litter would have had a major impact on the introduction of changes (school I)¹⁹. Yet not only did examining the nature and source of the litter enable the school to feel more prepared in relation to developing its outside eating area and allowing food to be taken outside the canteen, but it also helped the Cook to track whether the litter originated from food sold in the canteen. In addition it informed the research groups and the Catering Services Manager that, despite removing certain items such as sausage rolls from the canteen menu, the consumption of sausage rolls continued to be an issue as pupils brought them to school in their lunch boxes. Research participants were then able to identify the next-steps of surveying parents on what went into lunch boxes, all of which can lead to targeting parents with information about healthy eating.

One of the advantages of action research's participant-led approach is that it is flexible and sensitive to its participants, wherever they are positioned, and so able to work well with diversity. This has enabled us to work in inquiring ways in a variety of settings as part of this project. These include work with pupils, parents, school governors, teaching, support and catering staff in school settings; and also with Local Authority, private sector and NHS staff in the Governance groups. Taking an educative rather than a more managerial approach has helped us to work with this diversity, resulting in not going into meetings with a predetermined agenda, but instead being open to what comes up, and working to maximise the learning from the research meeting, whilst keeping our research question in mind. Initially some research participants were disconcerted by a lack of an agenda and more formal structure, and for the Governance groups we have fallen-in with members' preference for at least a loose agenda, and have used this as a starting point for inquiries. We have also

¹⁹ We learned after the conclusion of the research that concern with litter was one factor that catalysed the setting up of the first fruit tuck shop in the Healthy Schools work in Wales, 1995.

circulated amongst group members action notes of research group meetings, as a record of learning and a reminder of actions to be taken, rather than more formal minutes (although we noticed that for some Governance groups it was more comfortable to turn these into minutes).

One aspect of our approach that has enhanced the participation of pupils and many adults, has been to take a narrative approach to gathering information in and about the inquiries, and to present our learning in a simplified and contemporaneous Learning History format. This approach was chosen in order to make the material as accessible as possible, for narratives are great carriers of learning. For most participants this has been a useful approach, easy to engage with, however it did not work so well with the wider stakeholder group at a large event. Consideration needs to be given to ensuring that the presentation of information gathered is appropriate for the audience and the format of the meeting with that audience.

What kind of evidence did we get that we could not have got in other ways

Action research is likely to produce a focus on practical change, and the Results and Methodology sections give some detail of the very practical experiments undertaken as part of the research, as do the Learning Histories²⁰. Other evidence has been enabled by the nature of the open relationships facilitated by action research approaches. The action research approach, which has encouraged participants to speak honestly with each other about challenges and failures as well as successes, has enabled a lot of plain speaking in the research groups. This in turn has reduced the temptation for people to take refuge behind the ‘official line’ and has increased empathy and helped joint working. We believe that this has enabled the inquiry groups to experiment with ideas that they might otherwise not have done.

Action research’s grounding in the ‘world as lived’ has also enabled the groups to work with paradoxes and contradictions facing participants: For example the paradox of ‘choice’ being presented as a (consumerist and educational) ‘good’ to pupils, yet a healthy eating approach seeking to limit the choice of pupils at a time when they are being encouraged (by the wider society) to be consumers. There are also the contradictions of cultures; the business driven

²⁰ The Learning Histories, along with other research reports, research notes and minutes from Governance group meetings were the source materials for this report. As such, the Learning histories have not been translated. For those interested in seeing the detail of the data informing this report, the Learning Histories can be requested from appetiteforlife@wales.gsi.gov.uk. Please note, as these were used as data capture mechanisms, these are available in English only.

model for some school canteens (school G) versus the Healthy Schools approach, and yet again the lack of a healthy eating focus in some schools' food technology curriculum.

Familiarity with the complexity of real-world decision-making builds capacity in participants to make more nuanced and thoughtful choices, and to become increasingly aware of the impact that exercising their choice has on others. For example in school (H) the pupils formed a group to meet with the Cook, and through the meetings developed an understanding of the commercial risks involved in making potentially unpopular changes in the menu. This led to the group exploring the possibility of transferring £1000 from another fund to enable new and healthier menu choices to be made available for a longer period to allow pupils to become accustomed to the change, so buffering the commercial risk to the canteen.

The Learning History approach gathered and worked with multiple perspectives and understandings of any issue explored in the research groups. This enabled us to work with complex issues in understandable ways, while working to maximise understanding of each other's positions for the research participants. This has been a valuable tool at the scale of the individual school and Local Authority.

5.3 Multiple levels of learning

Although the research team interpreted the original invitation to undertake the action research project as primarily an opportunity to use this research to learn at multiple levels about making change to food and drink in schools in Wales, it became rapidly apparent that for the sponsors and steering group the research was chiefly expected to experiment with and draw conclusions about testing and developing the Draft Guidelines so that they could be adjusted and rolled out across Wales. The chosen methodology of action research is relevant here, as there are often such tensions as action research has multiple 'clients', which include the participants as well as the sponsors of the research.

The research team were grateful to the original sponsors of the research, who might have foreseen this tension when they wrote into the objectives for the research:

‘To use action research methods to explore the *issues raised* in moving towards the standards proposed in the Action Plan in Primary schools, Secondary schools and at Local Authority level’.

In practice the adjustment of menus required to comply with the Draft Guidelines, and the discussions about the conflicting economic demands (including costs of new foods, wasted food and staffing) took place largely outside the school-based inquiry groups, and even the Governance groups were seldom seen as an appropriate place for the detailed discussions necessary to reconcile these pressures on LA catering services and school kitchens. Much as the research team sought to ensure that the Draft Guidelines were at the heart of the action research we have been unable to capture some of these debates, but we are confident that the learning produced from the project goes well beyond the more focused inquiry question of testing and developing the Draft Guidelines.

Here we offer the framework of single, double and triple loop learning (Agyris and Schon, 1996; Senge, 1990) to illustrate the complexity we encountered, and which we believe this A4L change process needs to work with.

We distinguish between "changing our actions" (single-loop), "reframing or changing our thinking and strategies" (double-loop learning), and "transforming or learning about learning" (triple-loop). These distinctions are important when making significant changes in a complex situation, referred to here as transformational change.

We suggest that testing the implementation of the A4L Draft Guidelines can be seen as 'single loop' learning—learning which enables us to discover whether the actions we have taken have resulted in the outcomes that were intended. Single loop learning is important, but testing and adjusting Draft Guidelines can be seen in service to the wider aims of the A4L project - the consumption of a healthier diet in schools, so tackling the rising levels of obesity and reducing health inequalities.

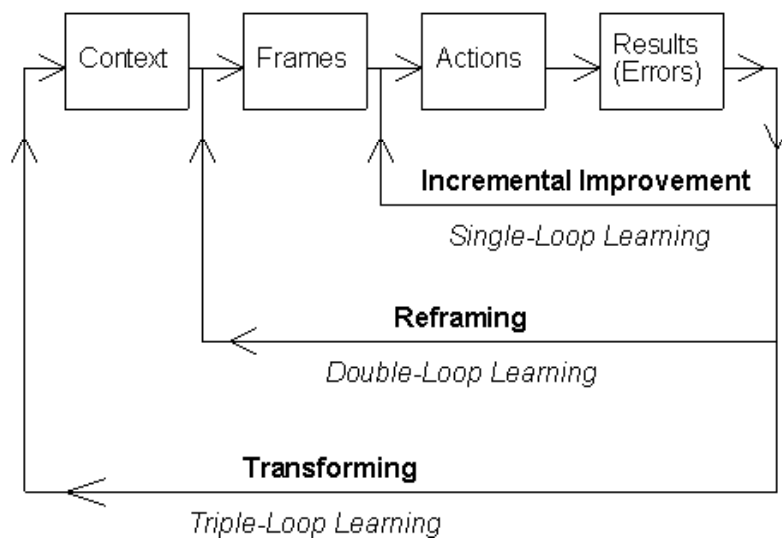


Fig 2. Triple Loop Learning.

Action research is better suited to exploring these wider issues. As we have evidenced food is an enormously complex issue and the A4L project, as we have shown, places contradictory demands on all who are involved in its implementation. We argue that this leads to the requirement for double- and even triple-loop learning to understand and manage the contradictions and tensions embedded in changing both provision and what is chosen in the school canteen.

Double-loop learning asks not only whether we are getting the outcomes we planned, but also whether our theories of practice and our strategies of influence are appropriate. This leads us not only to attend to the A4L Draft Guidelines themselves, but the theories of change that underlie the Guidelines. It leads us to consider whether the paradoxes and contradictions that appear to arise in the implementation of the Draft Guidelines are not simply issues to be overcome through managerial effort, but are inherent in the way the programme has been designed. We ask not only ‘are the Draft Guidelines correct’ but also ‘how can we better understand the challenges that implementing Draft Guidelines brings to different stakeholders’.

The evidence we developed through the action research process might suggest, for example, that the Draft Guidelines should be contextualised much more within the educational process. This would lead us toward what might be called triple-loop learning, in which it is recognized

that the process of learning, exploration, and transformation are at the heart of an education system, and are always more important than the achievement of specific objects.

5.4 Benefits and challenges of using action research

Action research differs from other forms of research in a number of ways. First it is based on participative principles, the research is ‘with participants’ rather than ‘on research subjects’. Mutual value for the participant as well as the research agenda is important. It is assumed that some of the research outcomes and learning remains with the participants, so this is not ‘extractive’ research for the benefit of ‘others’ but in this case has two purposes; to improve things in the research sites (schools, Local Authority areas) and provide learning for others across Wales. Theory is treated accordingly not as an end in itself, but in terms of its usefulness to the project at hand. Researchers use and develop models and theories to help further the practical work they are doing, rather than for their own sake.

Benefits

Participation in action research has benefits for the individuals involved, for the group, and for the quality of information gathered. Individuals and groups gain confidence and a sense of their own ability to influence, as well as skills to advocate and to be able to accept that not everything is open to influence, and to cope with disappointment when they cannot influence a decision. They have more capacity to address this and other issues as a result of the experience, including generally greater capacity of dialogue across the different groups involved e.g. enduring communication between catering staff and pupil groups.

All involved in the research are left with a more direct experience of the issues and a deeper understanding of the topic. The solutions and practices developed are grounded and tested in action, rather than being purely theoretical.

Challenges

Using an action research approach means that inquiry groups will necessarily start from their own points of interest. However, research facilitators have a role in enabling participants to understand opportunities to influence, and in the study this has involved making links to the Draft Guidance.

As mentioned above, the progress of the research cycles is dependent on a number of resources being available, the most important being the motivation of participants, availability of time and materials, and participant's sense of their own agency.

The opportunity to work in schools over six terms has enabled the research team to develop a culture of inquiry in research groups, where information is shared, experiments planned and carried out, and results brought back and shared with the group – even when things have not gone as hoped. This has been more difficult to develop and sustain in the Governance groups, where membership has fluctuated and where there were only four meetings.

It was to be expected that Governance group membership would start out high and settle to a more sustainable number of engaged participants, and in three out of the four Governance groups this was true. However in one Local Authority it was much harder to recruit to the group, and to sustain membership. In our work with this at times ailing group, we found that it was of benefit for the local 'champion' of the group to ensure that a personal invitation went to potential group members, with a clear explanation of the purpose of the group, also that notes from meetings were circulated promptly, and members were reminded of forthcoming meetings in good time. This would have been less critical had the group met more frequently, or if it had been 'attached' to or followed straight after another meeting with a similar membership, as it was in the three more successful groups.

The two stakeholder events have not proved to be forums for any substantial inquiry as such, although they have provided opportunities to disseminate information and to seek views.

We used a variety of strategies to recruit parents to the research, but found that parents were harder to engage than other research group participants. A small number of parents, often already engaged with the school were usually willing to meet with the researchers, often in a series of research group meetings, but it frequently proved impossible to engage a 'representative' group of parents, and the schools themselves reported struggling to engage them too. Where we felt we needed a wider group of parent 'voices' we used surveys and one-off opportunities for conversations with parents, for example at sports days and parent evenings.

5.5 Limitations of the study, difficulties encountered

Action research is a very flexible approach to learning, in that it can accommodate and work in a variety of settings and cultures, both formal (e.g. structures of governance within and between organisations), and informal (e.g. the cultures and relationships existing in and between the stakeholder organisations). We discuss here how the wider context in which the research took place has, despite the best efforts of all concerned, limited or caused difficulties for the study.

Working at a system level

Scaling up the inquiry across boundaries into the wider system has required real sensitivity, as the organisations we have worked with (schools, local authorities) are closely scrutinised, and food is such a complex and emotive issue. In addition the organisations inquiring with us are not ‘on a level playing field’ themselves, with schools being managed in many aspects by local authorities, WAG and central government; and local authorities subject to policy and financial drivers from local and central government, as well as the influence of locally elected council members and the general public.

In order to understand what issues are raised when changes are made in such a complex and interconnected system as food in schools, we identified the need for the research to be able to work at/address the system level. The original design for the research included stakeholder workshops. It was the research team’s intention not only to disseminate what we had discovered, but also to add to this knowledge by working with stakeholders in these workshops to add to the information gained from the study areas. This has proved difficult for reasons outlined above.

The symbolic role of the Draft Guidelines

Our struggles to ensure that inquiry groups had sufficient focus on the Draft Guidelines are described above. However, the Draft Guidelines assumed a symbolic as well as a practical role in the research, mirroring the tensions between WAG developed policy and Local Authority autonomy. ‘Ownership’ for the Draft Guidelines was something the project might have inquired into, but was unable to within its brief. With the benefit of hindsight, this would have been beneficial as it would have added to our understanding of how to build shared and ‘local level’ ownership for central government led changes in standards.

The initial draft of the Guidelines was still under development as the action research project commenced in Autumn 2008, and these were made available to the schools and the research team towards the end of the autumn term that year, so that the team started working with them in the schools in the spring term 2009. Regional workshops had been held with representatives from each of the 22 Local Authorities to identify the issues that stakeholders wish to see included in the Draft Guidelines. Our experience was that we seldom heard a sense of shared ownership of the Draft Guidelines from LA, public health or other staffs. They too easily slipped into being viewed as a tool of direction 'from above' (WAG), or were felt to be not explicit enough by others, who 'sought more direction'. One of the aspects of this was the confusion as to what 'draft' meant in relation to the Guidelines, and at least one participating Local Authority continued to wait for a final or revised set of Guidelines well into the second year of the project.

Effectively making changes affecting a wider system, as the A4L changes do, requires that system to be prepared to be part of an inquiry about how and what to change, in other words to 'own' both the change agenda and the change process. Not all stakeholders were on board with either the changes proposed (in the draft Guidance) or the research process itself at the start of our study. Later additional efforts were made to inform and engage the wider stakeholder group e.g. by explaining the differences between the study and a quantitative evaluation.

Issues relating to the resourcing of the study

Here we consider the resources needed to support a participative, inquiry based approach to learning:

Champions for change – the importance of a champion for change (in a school or Local Authority), at a senior enough level and with enough time and knowledge of the system to guide the process of researching into things, and target and support the process of presenting the findings from the research groups to those groups/individuals they wish to influence and inform. This also includes being able to launch the research project from a platform of authority within schools e.g. school assemblies. In one school this was not possible and we believe could have impaired pupil's sense of engagement.

Time -- Time is needed for the LA, school and kitchen/catering staffs, school governors, pupils, and parents to become involved in the process of making change. To allow this degree of participation may well require a provision in the A4L budget to provide extra time and cover for the teaching staff to get more actively involved.

Contracting - With the benefit of hindsight we consider it may have been helpful for the research project to arrange to have more contact with the steering group for the project. However, we are also aware of the additional demand this would have put on steering group members, given the emergent nature of action research the process of contracting is slow and on-going.

Specifics for special schools

It became apparent to us that a Special school was likely to need more time and resources for supporting the children and staff within the school to make the sort of changes associated with the introduction of the A4L Draft Guidelines, and researchers sought expert advice and developed close working with support staff at the research school in order to ensure they maximised opportunities for participation by pupils. As anticipated there have been challenges for the research team at the level of ability of some pupils to participate in the process of the research study, and the researchers have been dependent on and grateful for, the generous participation of teaching and support staff in the inquiry groups. This does, however, pose practical problems for researchers who may be more used to unmediated access to participants' views, and requires careful contracting with the school and individual staff facilitating discussions to ensure that the authentic pupil voice is heard and understood by the researchers. The idea of using food diaries was considered as a way for the pupils to record and report back on their actual eating behaviour, but it was felt this would be too demanding for some of the pupils who had challenges around reading and writing skills.

Using action research, which is grounded in everyday, practical experience helped to make the research relevant and accessible to pupils, as it focused on their experiences rather than requiring them to deal with more abstract concepts. To enable this some of the research sessions took place in the food technology classroom, often school staff had preparatory sessions with pupils to start to explore the questions arising for them, the art teacher coordinated a project of collages on fruits and healthy eating displayed at a parents evening

session and later in the school corridors. Pupils involved in the research participated in discussions of preferences regarding foods for the new menus and a wider pupil group and parents took part in subsequent food tastings. This ‘multi-sensory’ approach to discussing and evaluating food choices seemed to work very well with the children; the School Council chose the designs for the redecorated dining room.

The ethos of the school is that the students should be enabled to speak out about their likes, dislikes and opinions; the 'Pupil Voice'. This dovetailed well with action research and with the way that we recorded the authentic voices of all stakeholders in the Learning Histories. One of the values of the action research was for the pupils to see what implementing ideas in practice might look like, and how difficult this could be. In this the benefits to participants were similar to those noted in the Primary school sites worked with.

For resources which may be of benefit to other researchers working in special schools, see the section under References.

Specific limitations of this study

It should be noted that this action research study was limited to a sample of 9 schools, and its findings are based on work with few pupils relative to the size of each school, though the intention in the action cycles was always to embrace the whole school community. Nevertheless action research is not best suited to questions based on statistical analyses, or where comparison is required. It is better suited to inquiring into issues based on the unpredictability of human factors and is dependent on dialogue between people for its success. Critics suggest that any research design based so heavily on human factors ‘will founder in the vagaries of human error’. Supporters however judge this dependency a strength, seeing the need for understanding between persons as an ‘ideologically appropriate way to approach human enquiries’ (McNiff, 2002).

6. CONCLUSIONS

We conclude here with the major themes that have emerged from this study that we believe require closest consideration if the journey towards implementing the Draft Guidelines is to be successful. These conclusions are followed by recommendations.

6.1 Complex interconnections

On recognising the scale of the challenge involved in changing provision and consumption of food and drink in schools, members in several of the Governance group meetings were struck by how many connections this issue makes across policies, initiatives, partnerships, departments, local priorities and how all this effort sits together with an urgent need to engage both pupils and parents in thinking and acting differently around food.

Our findings point to a web of connections between food and its context: between physical environment and the exercise of choice; between attitudes to risk and the pace of change; between leadership of the A4L agenda at school level and the capacity of the school to address changes around provision and consumption of food and drink; and between pupil confidence and their ability to exercise ‘agency’ – that is to take action for change around issues that concern or inspire them. But this work has also gone deeper.

The level at which our research participants in this study have been able to engage with the provision of food and drink over a two year period has revealed what is at the heart of any complex issue: paradox, contradiction, and tension. Here is one simple example to illustrate the point.

In one Secondary school, pupils raised the issue of being able to buy only small sachets of sauce at the till, rather than being able to help themselves from a large sauce bottle. These sauce sachets cost 10p. Why was this? And why were teachers allowed to have their sauces for free? At the heart of these questions lie fundamental contradictions between control and freedom, human health and packaging waste, equity and privilege. The explanation that came to the school from WNHSS officer was that dispensing sauce in sachets controls sugar and salt intake to within acceptable daily levels.

6.2 *A business or not a business?*

Enclosed within the example about the sauce sachets is a less explored assumption that goes to the heart of this research. We experienced in particular in Secondary schools among pupils, teachers, even catering staff that at some level the school canteen is an extension into the school of the High Street. Why shouldn't they as 'customers' ask for what they want – access to bigger portions of sauces for example? Pupils (and occasionally teachers) compared their canteens with restaurants or fast food outlets with which they were familiar, in décor, signage, food presentation, food quality and especially price and queuing. Catering staff were often conflicted around decisions to gradually restrict or remove choices according to the guidelines, for example where popular foods like bacon or sausage rolls, or even confectionary were concerned. To them this didn't make commercial sense – it wouldn't be a decision an ordinary commercial operation would make. Yet at the same time they recognised these new guidelines would seem to be important for young people's health.

There are clear benefits to framing school food provision as a business. The discipline of running a commercial operation means that employment can be maintained, and the school may generate revenue. In fact our findings show there were reported lifts in uptake when themed days were well marketed, from which we might conclude that canteens could do even better commercially if marketing and customer service skills (and in the case of some opted out canteens, procurement skills too) were more highly developed.

But the analogy with the high street soon breaks down. School canteens do not manage their budgets on a commercial basis; they are not free to invest in the business to respond to changes in the 'marketplace'. When compared to what is on offer on the high street, they are always at risk of being seen by pupil customers as a less favourable option, coupled with the fact that most pupils cannot exercise their 'customer choice' elsewhere. Yet the illusion that they are commercial enterprises means that canteens are continually managing the tension between what makes commercial sense: offering their customers what sells, with what they are being told they can no longer sell or should be phasing out, or limiting. Regulation by Government of this 'niche' of High Street food retailing therefore passes down a significant tension to school canteens, which are then caught between needing to make money to support jobs (and in some cases produce a surplus for the school) and the demands of 'customers'

who are often left wanting change for example to reduce time spent queuing or to increase choice.

6.3 School food as education

From the pupils' point of view we notice they too are navigating in a complex environment. Pupils (in particular in Secondary schools) are caught in a paradox around choice. On the one hand they have the freedom to choose what they eat, or to eat nothing. But their choice is situated within the mix of messages through the media, advertising, from the curriculum and from the High Street, while the clamour of 'healthy eating' messages grows ever louder. This can represent a form of double bind dilemma to pupils. On the one hand they are 'customers' who expect choice; on another the healthy eating messages in the curriculum exhort them to be responsible in exercising their choice; but then because their choices are set about by limitations they are tacitly informed they are neither customers, nor sufficiently responsible to make these choices.

Unlike the usual no-win situation, in the double bind the 'victim' has difficulty defining the exact nature of the paradoxical situation he or she finds herself in, and even if they can, is not powerful enough to speak out about it. This research project has only begun to scratch the surface of engaging pupils around this paradox. We believe there is a significant opportunity to make these contradictory messages apparent, and at the same time for policy to bring some clarity to the confusion of identities between the pupil as a recipient of education in the classroom, and a 'customer' in the canteen - so that the nature of choice in the canteen context is better understood by pupils, by their parents and indeed all stakeholders.

In fact a fundamental shift in how school food is framed in policy would, we believe, be helpful. Our work leads us to conclude that the complexity of the issues surrounding food, and in particular the interwoven factors that impact on meal 'choice' at the counter, point towards the liberating role education can play in order to describe and engage around the factors that bear down on choice.

This study would suggest the outcome of such engagement is increasingly sophisticated thinking by all stakeholders as contradictions and double binds are named, and underlying drivers like peer pressure, the habit of making conservative meal choices, and negative

reactions to queuing are discussed. Looking again at the case of the sauce sachets example above, we might ask is it better to engage pupils around the tensions in controlling this choice, and about the sugar and salt contribution to their diet, about packaging waste and questions of equity; rather than to justify limiting sauces simply by referring to regulation? We argue that policy should allow room both to set a boundary: only small portions/sachets will be sold; as well as opening the space for deeper understanding and change. If such space gains legitimacy in a school, perhaps the school community may decide together that teachers too will pay for their sachets in future; and /or a more sophisticated dispenser might be bought that dispenses limited portions to all, so reducing packaging.

Or to take another example from the research; when the length or timing of the lunch break clashes with the curriculum, this could be an excellent opening to engage pupils and parents around discussing the importance of lunch as a relaxed social space, and how the school might hold onto some of the essence of this at lunchtime. Or if there is resistance to phasing out confectionary in a particular local area, this could be turned into an opportunity to bring into everyone's awareness just how much confectionary is actually eaten, to situate this within local health statistics, and to engage parents, elected Members and pupils to debate the issue.

We conclude therefore, that rather than the high street extending into the school with all the difficulties this presents a school, the canteen needs to be seen as an extension of the classroom. While we believe education is the key towards answering how a transition towards healthier eating and drinking can be facilitated, this approach needs to be complemented with the ability to set and enforce boundaries. The body of evidence linking dietary factors to the development of chronic diseases is growing ever stronger. The lesson of healthier eating therefore, and the tensions and contradictions within this need to be digested in school, so to speak. Schools are often very aware of the low quality of food choices offsite. Yet teacher's contracts give them free time over the lunch hour so it cannot be assumed they will be available for school duties, leaving many Secondary schools with a lunchtime exodus which is difficult to police. Policy can play a more supportive role in guiding schools to set more directive off site arrangements.

We conclude then that the Draft Guidelines need to be rebalanced. While it will have a focus on the food and drink provision, this guidance needs to be situated more clearly within an

educational framework that goes beyond the detail of standards and compliance and the ‘whole school approach’. This framework needs to reconceive the nature of school food as an extension of a lesson in how to eat and drink well, with clear standards and boundaries, but also a clear place for engagement to surface tensions and contradictions and to act on new understandings. It needs to reconceptualise the canteen as a fun experience that is co-produced with children and young people as compared to a service that is ‘delivered’. Policy needs to give guidance and support so that this reframing can be successful, to enable the transition and to help schools in setting clear boundaries which restrict choice such that a bag of crisps and a drink, or a bowl of plain pasta is no longer an acceptable lunch time meal.

6.4 Leadership

The importance we give to education within these conclusions - in changing both what is provided and what is consumed in school - suggests schools need to give nutrition a more central role within school life. What a school believes about education and its potential to build rich and fulfilling lives needs to extend into the subject of how nutritional choices are made and the environment in which they are made. Schools need to ask themselves how important is it for our pupils to leave us with useful social skills, and what role do we have as a teaching community in helping develop these skills? These are not niche concerns only for SNAG for example, but for the whole school. How children and young people are supported to think about their choices, and how they are supported to act on new understandings, on their concerns, curiosities and ideas requires a dedicated person or persons taking a leadership role. As our findings show, engagement with parents is essential too, through newsletters, letters, school website and at every opportunity face to face as well as through tasting and joint cooking sessions with their children. A key aspect of the leadership role is mediating between the changes that might be desired by the school community, the innovations that the cookery classes might produce, and the canteen, as well as overseeing regular communication between the school, the kitchen and Catering Service. This would seem to be essential for joint working towards a healthier menu.

The canteen also needs support. We observed that making changes can be stressful for kitchen staff, and needs to be backed up by training and resourced with more time. Where canteens are opted out and source their own meals, the school needs to be sure that procurement skills and waste management are optimised since these will have a direct impact

on pricing and the flexibility around pricing. The values, workload and influence of the Cook are all important factors to take into account. A dynamic and responsive Cook who is excited by positive reactions from pupils is a strong driving force for positive change, as we see in the example of schools D and E, where the Cook changed during the research period.

Our findings also suggest that how the canteen manages business risk has an important influence on school menus and how long the canteen will try new foods. The influence of local and home cultures, as well as a general conservatism governing food choice, means that pupils often need time and repeated exposure to get used to new choices. We suggest the issue of business risk is too important to be left only to the canteen, managed between the Cook and the Bursar for example. The leadership role we describe requires that the fruits and issues emerging from engagement with the school community need to be represented alongside the issue of risk as a regular item for consideration by the school's senior management team.

Pace of change

While there should be no doubt in the mind of the school's collective leadership of the direction of change and the ethos underlying it, there is nevertheless a need to respect the local context. For example there does not seem to be a shared understanding or acceptance (across our sample) in regard to 'treat' foods, and whether they should still be available occasionally. There are a range of possible strategies for withdrawing non compliant snack foods e.g. crisps and confectionary. These include: sudden and complete withdrawal; phased withdrawal; and limiting availability (e.g. restricting availability to vending machines only). Local professionals will need to select a strategy most likely to be successful in their local context.²¹

Different social and ethnic groups have varying approaches to mealtimes, and this needs to be taken into consideration. Not all families sit down together to meals; it depends upon what is customary in their families. Home culture is a factor that can feel difficult or impossible for schools and the Catering Service to influence, and this would suggest that in areas with community development initiatives there is a potential benefit in a joint and strategic approach. In order to support a school's vision for mealtimes.

²¹ Whilst limiting availability may be a strategy for moving towards complying with the guidelines, it is not a long term strategy as limited availability would not be compliant.

There are tensions in supporting lunchtime as space for developing social skills at the same time as wanting to make canteen food both more healthy and popular. The dilemma for school food providers is asking themselves '*do we go with pupils' preferences*' –e.g. for walk around food, or do we try to counter this, hoping that if we offer more space, better price points and attractive meal deals, and teachers volunteering their lunch hour to sit and eat with pupils (supporting them to make new food choices where appropriate), that culture can be changed and pupils will sit down together to eat so making the mealtime a social occasion. So far in the absence of an enabling framework to think about these issues together in the school community in the way we conclude is necessary, the result is often a lowest common denominator outcome as evidenced by the high number of schools opting for 'walk-about food'. It should be acknowledged that change of this nature takes time, alongside clarity of vision.

Innovation

Where we followed pupils from Primary to Secondary school our findings tell us that their disaffection with queuing developed within the first year of this transition. At the same time the school noted the desire of these transition pupils to contribute their ideas about school food in general. The need to engage these youngest pupils in the school community was given additional weight by findings in the same school and elsewhere across the sample that attitudes towards the canteen can harden as pupils get older if they have had problematic encounters with school food which have been left unresolved. While younger pupils may be keen to innovate, they need their older peers to guide them in how the school system works, to model good communication with school staff and to help manage their expectations.

It is important in our view that schools consider how they will support a sincere and long term commitment to engagement. In those schools where pupil confidence is generally lower it will take more time for pupils to feel confident to innovate; that is not only having ideas, but being able to carry them through. But innovation is surely there, as the activity generated through the research demonstrates. Our study may have focused in large part on the pupils; this is not to say that innovation cannot also come from staff and parents. What is key is that the way decisions are made about which ideas or what change is adopted must be clear to all. Where engagement is more at the level of consultation, pupils, staff, and parents need to be kept informed about what has changed as a result of the consultation, and if not why not. The

terms of the consultation need to be made clear up front and all parties that are likely to be affected by that consultation, need to understand its terms.

7. Recommendations

	Recommendation	Who?
1	<p>Appetite for Life Draft Implementation Guidelines should be strengthened to:</p> <ul style="list-style-type: none"> • Reflect that the canteen is an extension of the classroom and therefore integral to education. • Encourage engagement of pupils, teachers and catering staff around changes to the school meal service and to explore and capitalize on potential linkages with the curriculum. • Encourage schools to ask themselves how this ‘re-framing’ of school food provision matches our vision and mission. 	Welsh Assembly Government.
2	In undertaking self evaluation, in the context of the wellbeing quality indicator of Estyn’s Common Inspection Framework, schools should take every opportunity to draw on and make linkages with work undertaken in relation to Appetite for Life.	Schools.
3	<p>A senior lead officer should be identified at Local Authority level to ‘champion’ and embed the importance of healthy school meals by working with and supporting partners, particularly Heads to understand and appreciate:</p> <ul style="list-style-type: none"> • The potential tensions around provision and consumption of ‘healthy’ and ‘local’ school food. • The latest evidence linking nutrition and educational performance. • The mounting evidence of costs to the public sector of ill health related to unhealthy diet. 	Local authorities.
4	Inter agency working should be maximized in order to cross communicate messages about healthy eating, and to ensure consistency of agency aims and policy, and the integration of practice.	Local authorities and schools working with key partners e.g. Healthy School coordinators, Public Health Wales, NHS.
5	School meal services should move from a ‘business’ (customer/provider) model towards a ‘citizen centred services’ model with a focus on engagement and collaboration with customers to	School Meal Providers and local authorities.

	deliver Appetite for Life.	
6	Responsibility for maintaining an overview of communication within individual schools should be held at a sufficiently senior level within that school.	Schools.
7	At least one lead from within the school staff, reporting to the Headteacher, should be identified to coordinate widespread engagement around school food within the parameters of the guidelines, incorporating a whole-school approach and pupil participation and bringing a learning dimension to this engagement. This learning dimension needs to include building capacity for: <ul style="list-style-type: none"> • Pupil choice and decision making. • Participation skills. • Cookery and budgeting skills. 	Schools.
8	Attention should be paid to the need for regular and good quality communication between the school Cook, the school staff and school meal providers.	Schools, School Meal Providers and local authorities
9	Support should be provided for opted out schools to work towards Appetite for Life standards.	Local authorities and schools.
10	The school canteen's change strategy and its approach to business risk should be included as a regular agenda item for the schools senior management team meetings.	Schools.
11	Clear communication routes should be established between the school meal services and the school management teams.	School Meal Providers and School Management Teams.
12	Within the context of Appetite for Life, pupils should be engaged in decisions that will affect them about the school meals service for example: managing queues, introducing pre-ordering, where to site outside eating areas.	Schools and School Meal Providers.
13	As part of a whole school approach schools should consider: <ul style="list-style-type: none"> • Restricting all access to offsite eating; and, • Establishing (where possible within the school grounds) alternative selling points for pupils for whom eating off site is an anticipated privilege eg mobile concessions operating on the same principles as the canteen. • Whether the lunchtime arrangements allow sufficient time for eating and other activities. • Seating children (particularly Primary) together in friendship groups regardless of whether they are eating school meals or their own packed lunch. • Experimenting with different approaches to 	Schools working with School Meal Providers and local authorities.

	managing queues.	
14	Opportunities to engage pupils and parents in tasting sessions when developing/changing menus should continue to be utilized.	School Meal Providers working with schools.
15	Tasting sessions and trial periods for new menu should be planned and the information gathered used to 'tune' new menus and grow pupil (and staff and parent) ownership of the changes.	School Meal Providers working with schools e.g. SNAGs.
16	Signage and displays in the canteen should be updated regularly to reflect any changes in provision and to maintain interest.	School Meal Providers working with schools
17	Pupils should be engaged in: <ul style="list-style-type: none"> Informing and contributing to the design of the new food and drink on offer within the parameters of the standards proposed in Appetite for Life. Developing creative ways of marketing menus and new foods around the school. 	School Meal Providers working with schools e.g. SNAGs.
18	Pupils and parents should receive clear and timely communication about the: <ul style="list-style-type: none"> Rationale for canteen pricing and changes made to food provision. Content and quality of food that is available in school, and where food is homemade and/or made from local or school garden produce. 	School Meal Providers working with schools.
19	Appropriate methods of communication (eg face to face, newsletters) to provide parents with information on healthy eating should be fully utilized; making linkages with food and drink provided and consumed throughout the school day. (This may require extra efforts where pupils are bussed in from a wide area).	Schools.
20	As part of a whole school approach, advice on healthy packed lunches should be provided to parents and pupils through periodic campaigns.	Schools working with key partners e.g. Healthy School coordinators.
21	Opportunities should be explored for discussions across groups like the School Council, SNAG and Eco Committee, to hold an on-going dialogue with the canteen, and to be a conduit of information and understanding to the wider school community.	Schools.
22	Skills required by school Cooks (particularly those in opted out schools) to balance workload, demands of new menus, equipment should be recognized and these requirements reflected in regular training and ongoing support.	School Meal Providers.
23	School canteen staff should be provided with information and support to enable them to understand the context for making the changes to	School Meal Providers.

	the food and drink provision.	
24	Dining room assistants and canteen staff should be equipped with the necessary skills and knowledge to communicate appropriately with all pupils, including those with complex learning needs, about healthy eating in the context of Appetite for Life.	School Meal Providers and schools.
25	Support should continue to be provided to school meal providers to facilitate the application of nutritional analysis software for the lunchtime menu cycle for all schools.	National Food in Schools Coordinator
26	Within the Draft Appetite for Life Implementation Guidelines, explore and utilize flexibility to phase in the implementation of the proposed food and drink standards for all pupils including those with different dietary requirements.	School Meal Providers.
27	Information regarding specialist dietary needs, including the provision of pureed food, should be shared across school meal providers in Wales with the assistance of the National Food in Schools Coordinator. (This will not suit the needs of all children but can contribute suggestions and ideas for other schools).	School Meal Providers working with the National Food in Schools Coordinator.
28	Where pureed diets are required, sufficient time should be built in to plan and organize a variety of foods as alternatives to the main menu on days when main menu foods cannot be pureed.	School Meal Providers working with the school, parents, pupils and dieticians.

Because this report makes links between education and health in particular, as well as touching on the issue of local economies, these recommendations need to be considered within the commitment of the Welsh Assembly Government to make sustainable development its central organising principle (Welsh Assembly Government, One Wales: One Planet, a new Sustainable Development Scheme for Wales, 22 May 2009)

Note: School Meal Providers includes all providers eg. Local Authority school catering services; school run catering services and privately run school catering services.

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Appendix 1. Pen Pictures of schools

School	Basic information ²²	Dining environment and lunch break arrangements	Opted in or out	Free school meal entitlement ²³	Welsh Network of Healthy Schools Schemes ²⁴
A	<p>Size: 185 pupils</p> <p>School A is a maintained community primary school. The local town and the largely rural area surrounding are neither prosperous nor economically disadvantaged. The school caters for both Welsh and English speaking children, for whom a prior knowledge of the second language is not essential.</p> <p>The school has close co-operation with the local Comprehensive, School B. Pupils in the final year have many opportunities to visit the senior school, to meet staff and to familiarise themselves with the campus, which includes having lunch in the school canteen.</p>	<p>Dining environment: The school hall also serves as the dining room, with dining furniture put out for lunch and put away afterwards. Meals are served from a kitchen hatch and there is a separate salad bar.</p> <p>Lunch time arrangements: the school's meal capacity is 104, which is managed in two sittings each of 30 minutes.</p>	School meals are provided by the local authority run Catering Service.	Free School Meal Entitlement: 3.2%.	Welsh Network of Healthy School Schemes: Phase 3.
B	<p>Size: 687 pupils, including 120+ in the sixth form.</p> <p>School B is a maintained 11-18 mixed comprehensive school. The school is bilingual, with about half the pupils speaking Welsh as their first language (or to an equivalent standard).</p> <p>The school serves a largely rural area which is neither prosperous nor economically disadvantaged.</p>	<p>Dining environment: The school has an attractive and spacious dining room which was redesigned, redecorated and extended in 2009.</p> <p>Lunch time arrangements: lunch is served from 1.20pm until c.2pm (lessons resume at 2.10pm).</p> <p>Years 11 and 12 are allowed off site at lunch time.</p>	Not opted out.	Free School Meal Entitlement: 10.5%.	Welsh Network of Healthy School Schemes: Phase 1.
C	<p>Size: 147 pupils</p> <p>School C is a combined primary and senior school, catering exclusively for pupils with special needs, aged between 3 – 19. The pupils come from right across the Local Authority, some traveling considerable distances to attend the school.</p> <p>The pupils in this special school have a range of disabilities. There are 3 autistic levels; some pupils have high functioning autism, which can be very challenging. Pupils come from a wide area and are nearly all bussed in.</p>	<p>Dining environment: There are 2 sites on the school (Junior School and Senior School) and they are both served by one kitchen located in the Senior school. Most of the Senior School and many of the Junior School children eat in the dining room, but a number of the Junior School children eat in their classrooms, and have their meals transported up to them (especially the nursery classes and for the high level functioning autistic children.)</p> <p>Lunch time arrangements: There are a number of requirements of the kitchen, which may not apply to other</p>	School meals are provided by the local authority run Catering Service.	Free School Meal Entitlement: 48.3%.	Welsh Network of Healthy School Schemes: Phase 2.

²² Source for pupil numbers: School census 2010

²³ Source: School census 2010

²⁴ Source: WNHSS, WAG 2010

		schools. For instance a number of meals have to be liquidized, some of the pupils have feeding and swallowing problems and some pupils can only communicate by touching switches. Some pupils are very particular about foods they will eat, though there are no special medical dietary needs. 74 staff provide the high level of care needed.			
D	<p>Size: 214 pupils, aged 3 to 11</p> <p>Primary School D and Primary School E are sited side by side in the town, both drawing pupils from areas that include parts with high levels of unemployment and financial and social exclusion.</p> <p>School D draws pupils from a number of different ethnic groups (rising to 8% who have English as a second language). It has a large number 24% (EST YN, 2004) of special needs pupils (learning disabilities and physical impairments), some with substantial disabilities.</p>	<p>Dining environment: The school hall serves as a dining room, but is heavily used for teaching at other times. Storage of tables, chairs and catering equipment is an issue in the dining area.</p> <p>Particular issues are raised as this school and school E share a kitchen and the same catering staff, making the timing of serving meals and bringing in changes an added pressure on kitchen staff and resources.</p> <p>Lunch time arrangements: The school has a one hour lunch break, with two sittings.</p> <p>Fewer 'meals of the day' type hot meals are sold in school D than its neighbouring school E.</p>	School meals are provided by the local authority, as are the Catering staff. The school employs the dining room assistants.	Free School Meal Entitlement: 27.6%.	Welsh Network of Healthy School Schemes: Phase 3.
E	<p>Size: 200 pupils</p> <p>School E is a Catholic school. It draws pupils from a wide geographical area and from a number of ethnic groups. It has considerable English language support, the number of children requiring EFL support has risen from 29% to 31% in the last year. In addition the school has a history of being attended by traveller children who currently make up 4% of children, with the expectation that this number will shortly increase.</p> <p>School E is based in the centre of the town, although draws from a wide geographic catchment area. A large number of pupils are bussed into school; 41% are entitled to free transport, 30% travel on a daily basis.</p>	<p>Dining environment: The school hall serves as a dining room, but is heavily used for teaching at other times. Storage of tables, chairs and catering equipment is an issue in the dining area. The hall is set up by the catering staff for school meal pupils and the pupils who bring their own sandwiches.</p> <p>Lunch time arrangements: The school has a one hour lunch break.</p> <p>The school shares a kitchen with the neighbouring school (D). The service is split into two sittings: The infants' first sitting is finished by 12.30pm followed by juniors.</p>	School meals are provided by the local authority, who also employ the catering staff. The school employs the dining room assistants.	Free School Meal Entitlement: 21%.	Welsh Network of Healthy School Schemes: Phase 3.
F	<p>Size: 915 pupils, including 120+ in the sixth form</p> <p>School F is a maintained 11-18 mixed comprehensive school. The school delivers its lessons almost entirely in Welsh and is the Welsh medium education provision for the region. The school draws from all primary schools across Gwent.</p> <p>The school is in a small village and serves a wide geographical catchment area, so that very few pupils are local.</p>	<p>Dining environment: The school has a very small canteen facility which has only 70 or so seats available during the lunch time. However plans are in place, as part of the re-development of the site, to have a much larger canteen (in 2012).</p> <p>Lunch time arrangements: lunch is served from 12.30pm until 1.30 pm although food is available to the pupils from 11.30 at morning break.</p> <p>Off site policy is that only the sixth form are allowed off site.</p>	School meals are provided in house and canteen staff are employed by the school.	Free School Meal Entitlement: 11.7%.	Welsh Network of Healthy School Schemes: Phase 1.
G	<p>Size: 932 pupils</p> <p>School G is a mixed English medium 11 to 16</p>	<p>Dining environment: The canteen has space for 250. The canteen was completely redesigned and refurbished in 2008. The serving area is divided into sections selling different types</p>	Opted out of Local Authority provision, the canteen is run on an "in house" basis and makes	Free School Meal Entitlement: 21.7%.	Welsh Network of Healthy School Schemes: Phase

	<p>Comprehensive maintained by the Local Authority.</p> <p>The school has 7 feeder primary schools. Part of its catchment is a Communities First funding area and a high proportion of students come from socially and financially disadvantaged backgrounds.</p>	<p>of meals e.g. one area for Pasta, one for main meals, one for sandwiches.</p> <p>Lunch time arrangements: Two staggered sittings over a 50 minute break were introduced in September 2009. Years 7,10,11 eat first, followed by Years 8 and 9. Only Year 11s and those living within easy walking distance are allowed out at lunchtime. In practice however a number of students in the lower years leave the school site since not all exits are monitored. Teachers rarely eat in the canteen. The canteen operates a "healthy points" scheme with prizes. The Eco Committee has instigated a kitchen garden, which sells vegetables to the canteen.</p>	<p>a profit year on year, which is reinvested in the school. It supports 10 jobs including 2 midday supervisors.</p>		4.
H	<p>Size: 761 pupils, including a sixth form</p> <p>School H is an 11-18 mixed English medium comprehensive school with foundation status. It serves a wide rural catchment in a farming community and students can travel as far as 15 miles. 95% of students are bussed to school.</p>	<p>Dining environment: The canteen has dining space for 200. Most of the kitchen equipment and the counter were in need of an upgrade. A refurbishment of the kitchen counter was started in the summer term 2010 funded by the A4L grant.</p> <p>Lunch time arrangements: Lunchtime runs from 12.30 to 1.25pm, with two sittings. Sixth formers have priority. Students with packed lunches are allocated a separate table and teachers eat in the canteen. Only Years 12 and 13 are allowed off site.</p>	<p>The school has opted out of the LA catering service.</p>	<p>Free School Meal Entitlement: 7.5%.</p>	<p>Welsh Network of Healthy School Schemes: Phase 2.</p>
I	<p>Size: 1,100 pupils, no sixth form.</p> <p>School I is a mixed, English-medium, 11-16 community comprehensive school and serves seven feeder primary schools.</p> <p>The school has pupils, drawn from a variety of socio-economic backgrounds. However, a significant number of pupils are drawn from distinct sections of social disadvantage involving a Communities First Area. The majority of pupils, with a small number of exceptions, walk to school.</p>	<p>Dining environment: It is a large school with a small canteen area. The school worked with <i>The Groundwork Trust</i> on an initiative to provide a covered outside eating area (2009 - 2010).</p> <p>Lunch time arrangements: The lunch break is 45 minutes, and the canteen has one sitting (both the length of morning break and lunch time will be reduced from September 2010). Staff are on duty in the canteen, but do not eat with the pupils. Only year 11 are allowed off site.</p>	<p>School meals are provided by the local authority, who also employ the catering staff.</p>	<p>Free School Meal Entitlement: 24.1%.</p>	<p>Welsh Network of Healthy School Schemes: Phase 4.</p>

Appendix 2. Research visits to project schools

Key:

AFL = Appetite for Life

BCS = Borough/LA Catering Service

HSC = Healthy schools coordinator

LA = Local Authority

LH = Learning History

SC= School Council

EcoC = Eco Committee

SNAG = School Nutrition Action Group

RG = Raising Attainment and Individual Standards in Education in Wales Group (programme targeted at disadvantaged pupils)

Rep = Representative Group (more disadvantaged and disaffected pupils)

School	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
A	<p>i. Meeting with Catering Manager and AFL Co-ordinator to plan the launch</p> <p>ii. a) Group with School Council</p> <p>b) AFL Research Launch (including pupils, teachers, governors, parents, local politicians, Director of Education, local press and TV)</p> <p>c) Meeting with Catering Manager and AFL Coordinator.</p> <p>d) Joint engagement evening meeting held for parents and others interested from both schools</p>	<p>i. a) School Cooks x 2; Grandparents x 2; Catering Manager; pupils x 4</p> <p>b) Catering staff x 2; Parents x 2; AFL Co-ordinator; Pupils x 6; head teacher.</p> <p>ii. a) Fruit tasting activity b) Group with School Council pupils x9 c) Meeting with School Cooks d) Meeting with Head Teacher e) Meeting with Catering Manager and AFL Co-ordinator</p>	<p>i. a) School Council pupils x 9 b) Discussion with School Cooks c) Meeting with Head Teacher d) Meeting with Catering Manager and AFL Co-ordinator</p> <p>ii. Meeting with Catering Manager and AFL Co-ordinator (with WAG officer)</p> <p>iii. a) Meeting with Catering Manager and AFL Co-ordinator b) Meeting with Head Teacher (Learning History validation) c) Meal prepared and cooked by pupils on the School Council – opportunity to meet with pupils and parents, governors and teachers</p>	<p>i. a) Meeting with Head Teacher b) Meeting with Catering Manager and AFL Co-ordinator</p> <p>ii. a) Meeting with Catering Manager and AFL Co-ordinator b) Meeting with School Cooks x 2 c) Meeting with new School Council Pupils x 8 and Head Teacher d) Cold bar and lunch box event with parents and 'friends of the school' cookery book launch - opportunity to meet with pupils, parents & teachers</p>	<p>i. a) Meeting with AFL Co-ordinator b) Meeting with School Cooks x 2 c) Meeting with School Council Pupils x 8 d) Meeting with Head Teacher</p> <p>ii. a) Meeting with School Council Pupils x 9 and Head Teacher b) Meeting with School Cooks x 2 c) Meeting with Catering Manager and AFL Co-ordinator d) Fairtrade cooking event (part of International Week)- opportunity to meet with pupils, parents & teachers</p>	<p>Final celebration day</p> <p>a) discussions with school cooks and head teacher (learning history validation)</p> <p>b) Joint celebration lunch (including pupils, teachers, governors, local politicians, WAG Officers, LA Catering Manager and AFL Co-ordinator, representatives from secondary school including school governors, Transition Group of pupils and Head of Food Technology).</p>

B	<p>i. Initial meeting with Catering Manager and AFL Co-ordinator (including planning the launch)</p> <p>ii.</p> <p>a) Meeting with Head Teacher School Assembly – introduced research to all pupils and staff in attendance</p> <p>b) Launch (included introductions to School Council pupil reps; governors, local politicians, Director of Education)</p> <p>c) Group with Catering Staff x 2 Teachers x 2 Chair of Governors</p> <p>d) Meeting with Catering Manager and AFL Co-ordinator. (Joint engagement meeting with parents from both schools)</p>	<p>i.</p> <p>a) Group with 5 Senior Pupils; Teacher x 1; Catering Staff x 3</p> <p>b) Meeting with Head of Food Technology</p> <p>c) Meeting with Catering Manager and AFL Co-ordinator</p> <p>ii.</p> <p>a) Group – Pupils x 7 + teacher</p> <p>b) Meetings x 2 with catering staff x 3</p> <p>c) Meeting with Head Teacher and Head of Food Technology</p> <p>d) Meeting with Catering Manager and AFL Co-ordinator</p>	<p>i.</p> <p>a) Group – Pupils x 7; Teacher x 1</p> <p>b) Group – Governors x 3</p> <p>ii. Meeting with Catering Manager and AFL Co-ordinator (with WAG officer)</p> <p>iii.</p> <p>a) Group – pupils x 8; Teacher x 1</p> <p>b) Meeting with Head and 2 Deputy Head Teachers</p> <p>c) Group – Catering Staff x 10 (in three groups each with one researcher)</p>	<p>i.</p> <p>a) Group - Catering Staff x 10</p> <p>b) Transition Group pupils x 10</p> <p>c) Meeting with Catering Manager and AFL Co-ordinator</p> <p>d) Meeting with Head, Deputy Head and Head of Food Technology</p> <p>ii.</p> <p>a) Group with Transition Group Pupils x 10</p> <p>b) Meeting with Catering Manager and AFL Co-ordinator</p> <p>c) Group with Senior Pupils x 2</p> <p>d) Meeting with Head Cook and Assistant</p>	<p>i.</p> <p>a) Group with Catering Staff x 7 (in three groups each with one researcher)</p> <p>b) Meeting with AFL Co-ordinator</p> <p>c) Transition Group Pupils x 10</p> <p>ii.</p> <p>a) Group – Senior Pupils x 6</p> <p>b) Transition Group Pupils x 10</p> <p>c) Governors Group x 3</p> <p>d) Meeting with Catering Manager and AFL Co-ordinator</p> <p>d) Brief discussion with Head Teacher</p>	<p>Final celebration day</p> <p>a) discussions with Head and Deputy Cooks (learning history validation)</p> <p>b) Discussion with Head Teacher and Head of Food Technology (learning history validation) (with WAG Officers)</p> <p>c) Joint celebration lunch (including primary school pupils, teachers, governors, local politicians, WAG Officers, LA Catering Manager and AFL Co-ordinator, representatives from secondary school including school governors, Transition Group of pupils and Head of Food Technology).</p>
C	<p>i. Pre-launch mtg,</p> <p>a) Head</p> <p>b) Head of Catering Services</p> <p>c) AFL school rep (2nd Dec 2008)</p>	<p>i.</p> <p>a) AFL school rep,</p> <p>b) School Council c)</p> <p>Post 16's (S1)</p> <p>d) Post 16's (S2)</p> <p>ii.</p> <p>a) AFL school rep,</p> <p>b) School Cook</p> <p>b) Head Junior school</p> <p>c) Junior School staff</p> <p>d) Junior School classes</p>	<p>i.</p> <p>a) AFL school rep</p> <p>b) Snag group</p> <p>c) School Cook</p> <p>d) Head junior school</p> <p>ii.</p> <p>a) AFL school rep</p> <p>b) Head</p> <p>c) Parents</p> <p>d) School Council</p> <p>iii.</p> <p>a) AFL school rep</p> <p>b) Snag group</p>	<p>i.</p> <p>a) AFL school rep</p> <p>b) Snag group</p> <p>c) School Cook</p> <p>d) School council e) Junior Head</p> <p>f) Junior school (infants)</p> <p>ii.</p> <p>a) AFL school rep</p> <p>b) Snag group</p> <p>c) School council</p> <p>d) School Cook</p>	<p>i</p> <p>a) AFL school rep</p> <p>b) Snag group</p> <p>c) School Council</p> <p>d) Post 16's (S2)</p> <p>e) Junior Head</p> <p>f) Junior school (infants)</p> <p>g) Junior school (seniors)</p> <p>ii</p> <p>a) AFL school rep</p> <p>b) Snag group</p> <p>c) School Cook</p> <p>d) School Council</p>	<p>i. Finishing Celebration day</p> <p>Full school assembly - all pupils and all staff, the Head, Junior School Head, the School Council and Food Technology Teacher.</p> <p>Present for the assembly and for lunch afterwards was: WAG x2 The Chair of Governors LA Catering Team, and the School Cook Chief Education Officer for LA.</p>
D	<p>i. Pre-launch mtg, head & BCS</p> <p>ii Launch group consisting of SC & EcoC (12), Head, Chair of Governors, 2 teaching staff (1 also a parent, 1 the HS Coordinator) School Nurse, Grand parent, cook & 2</p>	<p>i.</p> <p>a) SNAG, included BCS & both heads</p> <p>b) Parent group (6)</p> <p>ii.</p> <p>SC + EcoC + school ambassadors (20 pupils)</p>	<p>i. Sports days x 2: to meet with parents</p> <p>ii. Meeting with head x 1</p> <p>iii.</p> <p>a) Catering x 1,</p> <p>b) Snag group included BCS & both heads +</p>	<p>i.</p> <p>a) SC + Head;</p> <p>b) BCS, new cook & head</p> <p>ii. Both SCs, BCS, HSC teacher, cook x 1</p>	<p>i.</p> <p>a) SC + HSC</p> <p>b) school head</p> <p>ii.</p> <p>a) SC + HSC</p> <p>b) School Inspector's Visit (Pupils did a presentation for</p>	<p>i.</p> <p>a) Head x 1,</p> <p>b) Head + Chair of Govs, HSC.</p> <p>ii.</p> <p>a) Finishing celebration: SC, Eco ctte plus other pupils</p> <p>b) Finishing session: Head &</p>

	members BCS	+ 2 teachers Cook & BCS	HSC, parent, SC + EcoC		the inspectors about their involvement in AfL) c) School head	MCT
E	i. Pre-launch mtg, head & BCS ii. Launch group: BCS (2), Head, SGov, School nurse x2, HS Coord, parents (5)	i. a) SNAG, included BCS & both heads b) Parents (6) ii. SC + EcoC Cook & BCS	i. Sports days x 2: to meet with parents ii. Meeting with head x 1 iii. a) Catering x 1, b) Snag group included BCS & both heads + HSC, SC + EcoC	i. a) SC + Eco C b) Head ii. Both SCs, BCS, HSC teacher, cook x 1	i. a) SC + EcoC b) School head ii. Head & BCS	i. Finishing celebration: SC + EcoC, BCS (2) Head, HS Coord
F	Nil	i. AFL Launch: Pow er-point presentation to w hole school assembly a) 10 pupils from the Upper School b) 10 pupils from the Lower School c) Met w ith Head, LA co-ordinator, Head of Catering, Food tech teacher, Chair of Governors and Parent representative (7 groups total) ii. a) 7 Low er school pupils b) 5 Upper school pupils c) Bursar and Head teacher d) Head of Catering e) School Co-ordinator f) Teachers x 2	i. a) 9 Low er school pupils b) Bursar and Head Teacher c) Head of Catering d) LA School Co-ordinator ii. a) 11 pupils from across school b) Bursar c) LA Co-ordinator d) Head of Catering Accompanied by WAG officers	i. a) Bursar b) Cross School Council x 12 c) Yr7 Transition Group x 9 ii. a) Yr 7 Transition pupils x 12 b) Cross School Council x 15 c) Teachers x 3 d) Headteacher e) Bursar f) Head of Catering	i. a) Attended w hole school assembly b) Attended w hole school 'cook-in' c) Meeting with Bursar and Head d) Meeting with Governor ii. a) Meeting with Head, Bursar & LA co-ordinator to validate Learning History b) Meeting with Governors	Final celebration day Celebration slideshow and future visioning closing sessions with a) Catering Staff x 4 b) Yr 7 transition pupils x 6 c) Cross School Council pupils x 6 d) Bursar (Head teacher absent due to illness) Accompanied by WAG officers.
G	i. Set up meeting with Head, Business Manager, Canteen Manager, LA Catering Manager coordinator to introduce the research	i. Launch Pow erPoint presentation to w hole School Assembly followed by first research group meetings: Canteen Manager	i. Raise group 6 students, SC Council 6 students, SNAG 13 students (including local AfL coordinator),, Canteen Manager, Allotment Manager, Community	i. LH validation meeting Head, Canteen and Business Managers ii. Raise group 6 students, SC Council 10 students, SNAG 12 students, Head	i. Raise 8 students, SC 9 students, SNAG 9 (including local AfL coordinator), Meetings with Canteen and Business Managers, and Head ii Follow up food survey at Year	Final celebration day: Full Assembly w ith AfL coordinator, renaming of canteen, distributing brochures on Gimme 5, Taster Sessions w ith Chef, Quiz by PTA, validation meeting with Head,

		<p>ii. Raise 6 students, SC 8 students, SNAG 12 students</p> <p>iii. Evening meeting with 5 members of the PTA (Friends of Abersychan)</p>	<p>Focused Schools Coordinator</p> <p>ii.. Second evening meeting with PTA</p> <p>iii Last minute cancellation of research groups</p> <p>iv School food survey conducted with parents at introductory evening for incoming Year 7's</p>	<p>of Pastoral Care, Teacher in charge of SC, Canteen Manager. Principal Research Officer WAG and AfL Policy Lead from WAG also present</p> <p>ii Raise 6 students, SC 9 students, SNAG 10 students (including local AfL coordinator), LA AfL Dietician,</p> <p>Also meetings with Head of Pastoral Care, Community Focused Schools Coordinator and Canteen Manager</p>	<p>7's Parents Evening</p> <p>iii Raise group 8 students, School Council 7 students, SNAG 8 students (including local AfL coordinator), Canteen Manager and Canteen Staff, Business Manager</p>	<p>Business Manager, Canteen Manager, LA Catering Services Manager, featuring a bike which produces smoothies outside canteen during the day, introducing Hearty Lives (British Heart Foundation) with 8 classes in the Main Hall, Masterchef sessions with 4 classes and SNAG</p>
H	<p>i. Set up meeting Senior Env Health Officer, LA Catering Manager, then Introductory visit to school meeting Head and Deputy.</p> <p>ii. Launch day. Presentation to three Assembly Groups; LA Council Chief Officer also speaks. Present: AfL Support Officers, Healthy Schools Officer. Meetings with Rep, 12 students SNAG 8 students School Council 6 students plus Deputy Head, 5 teachers in Staff group, 8 Canteen staff</p>	<p>i. Rep 5 students +1 support teacher, School Council 11 students, SNAG 5 students, Deputy Head</p> <p>ii. Rep group 5 students+1 support teacher School Council 11 students, SNAG 12 students. Head plus 6 Canteen staff</p>	<p>i. Rep 6 students, School Council 8 students, SNAG 6 students +Deputy Head, Healthy Schools teacher</p> <p>ii. Rep group 5 students + 1 support teacher, School Council 6 students, SNAG 5 Students, 6 Canteen Staff, Deputy Head, Healthy Schools teacher</p>	<p>i. Rep Group 7 students, School Council 9 students, SNAG 5 students +Deputy Head + AfL Coordinator</p> <p>ii. Rep group 9 students plus 1 support teacher, School Council 8 students, SNAG 7 students plus meeting with Canteen Manager, Healthy Schools teacher</p>	<p>i. Parents Information Evening: Presentation and survey. Also presenting: AfL Support Officers</p> <p>ii. Rep group 7 students, School Council 8 students, SNAG 10 students + meeting with Canteen Manager, Healthy Schools teacher</p> <p>iii. Rep group 10 students, School Council 4 students, SNAG 10 students. Plus meetings with Bursar, Canteen Manager, Healthy Schools teacher, Head. (Principal Research Officer WAG present at this visit)</p>	<p>i. Celebration Day. Meetings with Rep group 10 students, School Council 10 students, SNAG 9 students. Presentation with all group members 30 students, Head, Deputy, Support teacher, Healthy Schools teacher, 8 Catering staff, AfL Support Officer, Principal Research Officer WAG and Food in Schools Coordinator WLGA attending.</p> <p>Met Deputy Head for LH validation.</p>
I	<p>Set up meeting with Head, Business Manager, HS Manager for Borough, 2x newly appointed AFL co-ordinators, Catering Manager and Environmental Health manager.</p>	<p>i. AFL Launch: Power-point presentation to individual groups:</p> <p>a) 18 pupils from Eco committee + 2 teachers+ 1 AFL Assistant</p> <p>b) 18 pupils from School Council + 1</p>	<p>i. a) 9 Lower school pupils b) Bursar and Head Teacher c) Head of Catering d) LA School Co-ordinator</p> <p>ii. a) 5 pupils from Eco committee + 1 AFL</p>	<p>i. Attended yr 5 & 6 parents evening - surveyed 30 parents</p> <p>ii. a) 1 AFL school liaison + 1 AFL coordinator +2 WAG officers b) 4 pupils from Eco committee (lower) + 1</p>	<p>) 5 pupils from Eco committee + 1 AfL Coordinator + 1 AfL school liaison b) 2 pupils from School Council (upper) + 1 AfL school liaison c) 6 pupils from School Council (lower)+ 1 AfL school liaison + 1 AfL coordinator d) Attended Yr 9 Options</p>	<p>Finishing celebration: Cross section of pupils from research groups (7) + LA Catering manager + School liaison + parents + Head + WAG officer + school orchestra + cook + 2 governors + AfL co-ordinator + Healthy Schools officer</p>

	<p>teacher + 1 head c) 7 teachers + 1 support w orker d) 12 Canteen staff + 1 manager e) 1 Head of Behaviour</p> <p>ii. a) 6 Pupils from Eco committee b) 7 Pupils from School Council c) 5 Pupils from School Council + 1 support w orker d) 1 Head teacher + AFL liaison teacher e) 1 community development w orker</p>	<p>Coordinator + 1 AFL school liaison b) 2 pupils from SC(upper school) + 1 AFL school liaison c) 6 pupils from SC(lower) + 1 AFL school liaison + 1 AFL coordinator d) 3 parents + 1 child + 1 AFL coordinator + 1 community development project w orker</p>	<p>school liaison + 1 AFL coordinator + 2 WAG officers c) 5 Pupils from Environment group + 1 School liaison + 1 AFL coordinator + 1 AFL supervisor + 2 WAG officers d) 6 Pupils from litter and poster group e) 1 chief cook + 1 AFL coordinator + 2 WAG officers</p> <p>iii. a) 8 Pupils from Eco committee + 1 Councillor + 1 Catering manager + 1 School liaison b) 9 Pupils from Food Ambassadors and Environment group + 1 Councillor + 1 school liaison c) 2 Teachers + 1 head d) 1 chief cook + 1 Councillor + 1 school liaison e) 4 governors + 1 school liaison f) 3 pupils from eco committee + 1 councillor + 1 catering manager + 1 school liaison</p>	<p>evening and surveyed 57 parents</p> <p>ii. a) 5 pupils from Eco committee + 1 Afl Coordinator + 1 Afl school liaison b) 2 pupils from School Council (upper) + 1 Afl school liaison c) 4 pupils from School Council (lower) + 1 Afl school liaison + 1 Afl coordinator</p>
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Appendix 3. Governance Group Visits to Project Areas

Key:

AFL = Appetite for Life

HSC = Healthy schools coordinator

LA = Local Authority

PESS = PE and School Sport

	Term 2	Term 3	Term 4	Term 5
Merthyr	HSC (Chair), Ward Manager- Paediatrics PCH, Local Authority Catering Team (x2), PESS Co-ordinator, Cymru Kids Club, Oral Health Manager, Voluntary Action Merthyr Tydfil, Unilever Food solutions (x4) Local Authority – Sports development Food in Schools Co-ordinator - WLGA Merthyr YIP/YOT Environmental Public Health Deputy Head local Primary School, Gellideg Healthy Living Centre	HSC Co-ordinator (Chair), Project Manager Community Nutrition Project, Local Authority Catering Services representatives, Cymru Kids Club, Oral Health Manager, Community Focused Schools, Head Teacher Project Primary School, Teacher Project School, Voluntary Action Merthyr Tydfil	Meeting cancelled at short notice	Health Practitioner, Local Public Health Team Representative, Local Authority Catering Services representatives, Cymru Kids Club, Oral Health Manager, Head Teacher Project Primary School, Teacher Project School, Voluntary Action Merthyr Tydfil
Wrexham	LA Health and Wellbeing Manager, Appetite for Life Support Officer, Healthy Schools Officer, Lead Member for Health and Social Care, Head Teacher Project School, Community Dietician, Deputy Head Project School, LA Catering Services Manager, , Senior Health Promotion Specialist	Healthy Schools Officer, Chief Officer Learning and Achievement; Lead Member for Health and Social Care, Head Teacher Project School, Senior Environmental Health Officer, Community Dietician, Deputy Head Project School, Governor Project School	LA Health and Wellbeing Manager, Healthy Schools Officer, Chief Officer Learning and Achievement; Lead Member for Health and Social Care, Head Teacher Project School, Appetite for Life Support Officer, LA Catering Service Manager	LA Health and Wellbeing Manager, Healthy Schools Officer, Chief Officer Learning and Achievement; Lead Member for Health and Social Care, Head Teacher Project School, Appetite for Life Support Officer, Deputy Head Project School, LA Catering Service Manager
Ceredigion	Health and Well Being Strategy Manager (Chair), Catering Services Team, Healthy Schools Coordinator, Recreation Manager Leisure Services, Senior Governor Support Officer, local food suppliers	Health and Well Being Strategy Manager (Chair), Catering Services Team, Healthy Schools Coordinator, Community Dietician, local food supplier, Principal Research Officer WAG & Food in Schools Coordinator, WLGA attending	Health and Well Being Strategy Manager (Chair), Catering Services Team, Catering Manager Urdd Activity Centre, Healthy Schools Coordinator, Community Dietician	Health and Well Being Strategy Manager (Chair), Catering Services Team, Catering Manager Urdd Activity Centre, Community Dietician, local food supplier (Meeting held at Urdd Centre)
Torfaen	LA Catering Services Manager, Head Teacher Project school, Joint Procurement Unit SE Wales, Senior Public Health Team member, Business Manager and Canteen Manager Project School	LA Catering Services Manager, Business Manager and Canteen Manager Project School (Meeting held at Project school)	LA Catering Services Manager, Head of Children's Dietetics, Manager Joint Procurement Unit SE Wales, Senior Public Health Team member, A4L Dietician, Health Improvement Manager	LA Catering Services Manager, Senior Public Health Team member, Manager Joint Procurement Unit SE Wales, AfL Dietician

Note: Governance groups were convened in Term 1. No Governance groups were held in Term 6.

