

Are pupils being served?

*A secondary review of the sector's evidence base
on school meal provision at lunchtime in Scotland*

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Abbreviations

Throughout the report, FSMs is used as shorthand for free school meals and UFSMs is used as shorthand for universal free school meals.

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Twenty Main Messages

Assist FM tasked us to review the evidence base to better understand the realities and trends pertaining to the uptake of free school meals (FSMs) in Scotland. We drew from Assist FM's research and evaluation work, undertook a rapid review of key literature, and completed observational field case studies of the out of school food environment for ten schools in west central Scotland. The report that follows provides a fuller account. Here, we summarise the key findings under four headings:

What did we know at the outset?

- ***Social policy and public health agenda.*** School meals are more than the means to provide everyday sustenance to children; since the Millennium, the Scottish Government has promoted school meals in Scotland as a public health intervention and, more recently, as an anti-poverty intervention.
- ***Changing nature of schools and society.*** The rationale for providing school meals in 21st Century Scotland is similar to that which underpinned the *School Meals Act* in Edwardian Scotland, but the service now operates in a markedly different and rapidly changing context; impacting on the contemporary service include, budgetary pressures on local authorities, less of the school day set aside for lunchtime; control of the school estate not always resting within the public sector/school management; greater awareness of public health and environmental issues; a concern with measuring performance; and a greater concern to view children as active agents with the right to express their views on matters that concern them.
- ***Scottish government evidence base.*** The annual school meals census has, since 2003, collected data on school meals (uptake), and free school meals (uptake, reach and registration) allowing stakeholders to better understand contemporary service reach and trends through time.
- ***An engaged sector.*** At all levels, stakeholders have shown a willingness to innovate and to engage in debates to improve the school meals service. Assist FM, as the leading body for specialists working in the sector, has been at the forefront of these debates and innovations.
- ***Policy can have positive impact.*** The introduction of universal entitlement to FSMs to all P1-3 pupils in January 2015 resulted in a step-change leading to an increase in the overall rate of school meals uptake in Scottish primary schools.

What do we now know better and what have we learned?

- ***Big numbers and big impact.*** On a typical school day, almost 350,000 school meals are served in Scotland; the majority of school pupils in Scotland present for a school meal every day (51%). More specifically, on a typical day, the majority of pupils registered for FSMs in primary, secondary and special schools typically present for this meal (76%, 60% and 77%, respectively). Not far short of 100,000 school meals per day are served to

pupils who are entitled to a free school meal on account of their family being eligible for social security.

- ***Universal provision does not have a universal reach.*** It was already widely known that uptake of FSMs was higher in primary than secondary schools, and that within each school age-stage, uptake was higher in smaller schools and schools serving areas that were more rural in character. As well as presenting the evidence base to confirm what was widely perceived/experienced, this report also (i) notes the complexity of the association between deprivation area status and uptake, with higher FSM uptake associated with primary schools with greater FSM registration, whereas higher FSM uptake is associated with secondary schools with *lower* FSM registration; (ii) the marked differences in uptake across local authorities; and (iii) the marked differences in contemporary uptake and trends across individual schools in Scotland.
- ***A plurality of alignments and priorities.*** It is clear that there is not alignment of priorities among key stakeholders. The aspirations of the school catering service to increase reach and uptake of school meals does not always align with school management; indeed, some school management reject some of the practical steps required to achieve this (e.g. preventing food purchased outside being consumed in school dining halls; introducing staggered lunch breaks to extend capacity, etc.). Furthermore, the rights of pupils (particularly senior pupils) to choose what and where to consume food at lunchtime – which is supported by many school managers and pupils alike – may not always be conducive to maximising uptake of school meals.
- ***Average experiences and trends are not universally experienced.*** Scotland's experience is not one that is universally shared across its schools. Although patterns and trends can be discerned, it is important to take into account the unique and particular context within which each school meals service operates.
- ***Lunchtime is a social time-space for young people.*** The observational, survey and focus group interview evidence with young people attest to the importance of factors other than food in shaping the lunchtime choices and experiences of secondary school pupils. Providing opportunities to be with friends and to be independent of the 'school environment' are key considerations for these pupils.

Critical reflections on the evidence base

- ***School meals census.*** The annual school meals census is an excellent resource that has helped to better understand the diverse experiences across Scotland. However, there are many significant limitations with these data, which imply that supplementary analysis is required if the reality of school meal uptake is to be better understood. Of particular note: (i) the encouraging introduction of local interventions to extend free school meal entitlement in recent years is compromising the utility of the census as a stable indicator of change through time; (ii) the lack of disaggregation, notably by year group and gender, limits our understanding of who presents for school meals and the reasons for so doing; (iii) the welcome flexibility that is exercised in allowing school meal entitlement to be used to purchase mid-morning snacks, introduces some uncertainty in the degree to which the data can be used to estimate consumption of lunchtime food in school; (iv) the approach is unable to account to ascertain whether there is a seasonal effect

(aggregation of weather effects), which makes this point-in-time estimate (January/February every year) problematic; and (v) consideration of issues pertaining to the fact that local authority grant funding is partly based on these data.

- ***Out of school food environment.*** Observational fieldwork and surveys/interviews with pupils, school management and catering professionals all attest to the importance of the out-of-school environment in ‘pulling’ secondary schools pupils away from schools at lunchtime. At present, this evidence is impressionistic and anecdotal; there is a need to understand more precisely the impact of the out of school environment on school meals.
- ***The impact of service delivery.*** The evidence base on the impact of service-led changes is anecdotal, impressionistic and superficial. If best practice is to be ascertained, shared and adopted across the sector, there is a need to invest in more robust evaluation.
- ***Canvassing the perspectives and experiences of key stakeholders.*** Assist FM has commissioned market research, which has engaged catering professionals, school management and school pupils. However, much of this work is now dated and the research design is insufficiently robust to inform decision-making. There is a need for high quality research with all stakeholders (which would also include parents and suppliers) to better understand the contemporary school meal experience in Scotland.
- ***School catering estate.*** There is growing anecdotal evidence that school redevelopment has reduced the capacity to deliver school meals at lunchtime. There is also anecdotal evidence of variable practice in using school space beyond a dedicated ‘lunch space’. As for service delivery, there is a need for most systematic appraisal of the capacity of the school estate and description of the way in which the spaces of schools are being used in conjunction with school meals provision.

What needs to happen now?

- ***Outlier analysis.*** Sector-led analysis of school outliers – both for Scotland as a whole, among school types, and within local authorities – should be prioritised in order that the sector can learn from schools with atypical experiences, both positive and negative.
- ***School and local authority reflection.*** The SPIRU analysis provides schools and local authorities with the means to better understand how their experience compares to others in Scotland. It would be prudent for those with responsibility for catering in schools to reflect on their standing, relative to others.
- ***More robust analysis of uptake.*** The claims to understanding made on the basis of the school meals census data alone, are compromised by the uncertainties over the impact of the ways in which these data are collected. Serious consideration needs to be given to layering the core data with complementary analysis.
- ***Clarification of purpose and re-alignment of action.*** There is a need to map the concerns and perspectives of stakeholders to reach a shared collective position on what actions should be taken to address common priorities.
- ***Robust evaluation and sharing of school-level practice.*** Notwithstanding the importance of school-level contexts, there is an urgent need to consider the way in which the lessons for robust evaluation of best practice can be shared effectively across all stakeholders in the sector.

1. Introduction: school meals for Scotland?

“ We make the commitment to deliver free school meals to all children from P1 to P7 by the end of this council term (2022).”

(Glasgow City Councillor Chris Cunningham, reported in Hunter, 2019)

1.1 – Does Scotland Deliver?

Almost 350,000 pupils in Scotland present for school meals on a typical school day, equivalent to slightly more than one half of the pupil population (calculated from Scottish Government, 2018a). Although not a stranger to critical comment (Obesity Action Scotland, 2017; Vidinova, 2018), a wide range of initiatives over many years has sought to improve the school dining experience and the wider contribution of school food to children’s wellbeing in Scotland. Given the disparate nature of the evidence base that exists, it is prudent to collate what is currently known to appraise the extent to which school meals ‘deliver’ for children in Scotland.

1.2 – Assist FM and SPIRU

Assist FM is a non-profit organisation, which aims to promote facilities management services across its member authorities in Scotland, a key aspect of which is the school meals service. In addition to promoting school meals in Scotland (through initiatives such as Scottish School Meals Week and via portals such as the Scottish School Meals website), Assist FM is keen to better understand the wider realities of school meals in Scotland by undertaking independent research and analysing published evidence.

Lindsay Graham, independent food advisor to the Scottish Government, suggested that Assist FM enlist the support of the Scottish Poverty and Inequality Research Unit, to appraise their evidence base. The project brief was agreed between Professor McKendrick (SPIRU), Jayne Jones and Keith Breasley (Assist FM) and Alan Cunningham (Totalize Media) on September 19th 2018.

Assist FM provided SPIRU with the following research outputs:

- Unpublished research with school pupils in six local authorities, i.e. Dumfries and Galloway (December 2012), Highland (2016) Inverclyde (February 2011), North Ayrshire (October 2010), Renfrewshire (2011) and Stirling (September 2015)
- Dataset from 2018 survey with key contacts in Scottish local authorities (23 responses covering 25 authorities, i.e. 78% of all local authorities in Scotland)
- Collation of local authority data from the annual School meals census for Scotland (2005-2017) into a single spreadsheet.

- Selected data from APSE's annual monitoring of its member organisations in Scotland; APSE supplemented and updated these data in the Spring of 2019

A team of ten SPIRU Student Researchers worked on this project under the guidance of Professor McKendrick from October 2018 – January 2019. Two SPIRU researchers undertook supplementary analysis, with the full report drafted in April 2019, and published in August 2019, following feedback of the interim report from Assist FM and APSE.

1.3 - The Purpose of This Report

The aim of this report is to deliver a 'state of the nation' summary of existing evidence on matters pertaining to FSMs in Scotland. In addition to making best use of existing evidence, it draws on relevant academic research and is supplemented by field visits to appraise the food retail environment surrounding a selection of secondary schools in west central Scotland.

The specific substantive objectives of this report are fourfold:

- Identify the extent to which trends and tendencies in the consumption of school meals in Scotland are universal across Scotland (exploring local authority and school-level variation).
- Evaluate the extent to which FSMs is delivering in-kind support to reduce household expenditure in Scotland
- Appraise the existing evidence base for school meals in Scotland.
- Specify priorities for future research on FSMs in Scotland.

1.4 – Understanding the Key Indicators

A critical review of the evidence base is provided in Section 9. By way of introduction, we specify the data pertaining to school meals that are available for individual schools (and which can thereafter can be aggregated for local authority and Scottish averages). We also explain the indicators that can be derived from these data and the particular value of each of these indicators.

In 2018, six counts were provided for each school in Scotland, based on data collected in the annual school meals census.

- School roll (on Healthy Living survey day)
- Pupils registered for FSMs
- Pupils in attendance (on Healthy Living survey day)
- Pupils who took a school meal (on Healthy Living survey day)
- Pupils present (on Healthy Living survey day) and registered for FSMs
- Pupils present (on Healthy Living survey day) who took a free school meal

Additionally, school type is defined (primary, secondary or special).

The school level dataset also provides one indicator of free school meal uptake for Primary 4-7 pupils in primary schools:

- % of pupils who are registered for a free school meal through targeted provision, where universal provision is available for some year groups (primary school only) – this percentage estimate is directly provided in the original dataset

A further five school meal indicators can be calculated from the original data.

- % of pupils who are registered for a free school meal (whether through targeted or universal provision)
- % of pupils who took a meal (on Healthy Living survey day)
- % of registered pupils in attendance who took a free school meal (on Healthy Living survey day)
- % of registered pupils who took a free school meal (on Healthy Living survey day)
- % of pupils who are not registered for a free school meal who took a school meal (on Healthy Living survey day)

Furthermore, the school meals data can be used to calculate two wider indicators that may be helpful in understanding school meals consumption:

- % of pupils registered for a free school meal who were in attendance (on Healthy Living survey day)
- % of pupils who are not registered for a free school meal who were in attendance (on Healthy Living survey day)

Although closely related, each indicator makes a specific contribution to our understanding of school meals in Scotland

- *Reach*. The extent to which pupils in Scotland are presenting for school meals, as estimated by data collected on Healthy Living survey day, i.e. % of pupils who took a meal (on Healthy Living survey day)
- *Reach of FSM eligible*. The extent to which pupils who are eligible for a free school meal, present for this free school meal, i.e. % of pupils who are registered for a free school meal who took a school meal (on Healthy Living survey day)
- *Reach beyond FSM eligibility*. The extent to which pupils who are not eligible for a free school meal, elect to present (pay) for a school meal, i.e. % of pupils who are not registered for a free school meal who took a school meal (on Healthy Living survey day)
- *In-school Uptake*. The extent to which, of those who are in attendance, pupils in Scotland are presenting for school meals, as estimated by data collected on Healthy Living survey day, i.e. % of pupils who took a meal (on Healthy Living survey day)
- *In-school Uptake of FSM eligible*. The extent to which FSMs are being utilised by eligible pupils when they are present in school, i.e. % of registered pupils in attendance who took a free school meal (on Healthy Living survey day)
- *In-school Uptake beyond FSM eligibility*. The extent to which, of those who are in attendance, school meals are being purchased by those pupils who are not eligible for a free school meal, i.e. % of non-FSM registered pupils in attendance who took a free school meal (on Healthy Living survey day)
- *Need*. Registration for FSMs can be used as a proxy for need, when eligibility is defined from the national criteria of being in receipt of specified forms of social security, i.e. % of Primary 4-7 pupils who are registered for a free school meal (primary school only) and % who are registered for a free school meal (secondary and special schools only)
- *Provision of FSM*. The extent to which FSMs are provided, regardless of the grounds for eligibility, i.e. % who are registered for a free school meal, whether on grounds of age or need (note that for secondary and special schools, *provision* and *need* are as one, as there is no universal provision on account of age)

- *Multiple Disadvantages.* The extent to which pupils who are eligible for FSMs are more/less/equally likely to be in attendance, compared to pupils who are not eligible for FSMs, expressed as a percentage point difference against those not eligible (attendance data based on returns for Healthy Living survey day)

1.5 - The Structure of This Report

After this introduction, this report is organised into ten further sections:

- Everybody's Business: School food as public policy (Chpt. 2)
- Social Justice and Beyond: What are the key issues pertaining to food in schools? (Chpt. 3)
- What Do We Know About Free School Meals? A rapid review of the key literature (Chpt. 4)
- What Do We Know About School Meals? Expert Scottish knowledge from APSE and ASSIST FM (Chpt. 5)
- National Trends in Scotland (Chpt. 6)
- Accounting for Variation in the Uptake of Free School Meals in Scotland (Chpt. 7)
- Regional Trends in Scotland (Chpt. 8)
- Local Focus: Outliers and Issues for Further Research (Chpt. 9)
- A Critical Review of the Evidence Base (Chpt. 10)
- What Next: Some Concluding Thoughts (Chpt. 11)

Furthermore, there are four Annexes at the end of the report:

- References (Annex 1)
- SPIRU 'On the Street' Case Studies (Annex 2)
- ASSIST FM 'In the School' Case Studies (Annex 3)
- Local Service Development Case Studies (Annex 4)

2. Everybody's Business: School food as public policy

"...Free school meals will help give every child the chance in life they deserve, building a stronger economy and a fairer society."

(Deputy Prime Minister, Nick Clegg in announcement of funding for FSM, 2013)

2.1 – Introduction

School food has been the focus for a wide range of public policy interventions in the 21st Century. As Table 1 shows, campaigners, interest groups and government have all contributed to debates and developments. The interventions have taken the form of exposes, demonstration projects, legislation, setting of standards, and policy provisions. The substantive focus of this work has covered nutrition, benefit entitlement, poverty proofing and service delivery. Within Scotland, some initiatives are local, while others are Scotland-wide. Developments beyond Scotland have also shaped thinking within, both from UK-wide debates on school meals, as well as local developments from other parts of the UK.

The purpose of this chapter is not to detail all of the interventions that have been listed in Table 1, as it is likely that most readers of this report will already be familiar with these. Rather, with the focus of this report on FSMs, the present objective is to demonstrate how a wide range of interventions - that vary in the degree to which free provision is the central focus – shape the provision of FSMs in Scotland. Four 'pathways to progress' are described; valuing FSMs by supporting something else (2.2.1); positioning FSMs as being part of something bigger (2.2.2); improving FSMs by driving up standards for all (2.2.3); and determining provision for FSMs (2.2.4). For each, reference is made to the range of recent interventions of that ilk, with one example used to demonstrate impact on how FSMs are provided in Scotland.

2.2 – Pathways to Progress

2.2.1 – Valuing free school meals by supporting something else

The concerns to tackle holiday hunger and to increase provision of breakfast clubs, have been fuelled by the evidence that children from the most impoverished and deprived backgrounds are unable to achieve their educational potential as a result of being under-nourished. Although the focus is the provision of food outwith the school day (beforehand or on non-school days), inadvertently this attests to the importance of school meals in providing the sustenance that is required during the school day. Thus, projects such as

Table 1: A timeline of developments in school meal provision in Scotland, 2000-2022

Year	Initiatives/ Key Developments
2000	Introduction of the <i>Education (Nutritional Standards for School Lunches) (England) Regulations 2000</i>
2001	
2002	Implementation of <i>The Education Act 2000</i> (England and Wales), which amended the free school lunch eligibility criteria, increasing the number of children eligible to receive free school meals.
2003	Introduction of <i>Hungry for Success</i> (February 19, 2003)
2004	Publication of <i>Healthy Living Blueprint for Schools</i> (Department for Education and Skills, 2004).
2005	Publication of <i>Eating Well at School: Nutritional and Practical Guidelines</i> (Crawley, 2005). Publication of <i>Turning the Tables: Transforming School Food. A Report on the Development and Implementation of Nutritional Standards for School Lunches</i> (School Meals Review Panel, 2005) <i>Jamie's School Dinners</i> , a four-part documentary series airs on Channel 4. UK Government establishes the School Food Trust, a non-departmental public body to assist schools to improve school meals Launch of Food in Schools Programme (Department of Health and the Department for Education and Skills, UK)
2006	
2007	Trial in five local authorities (East Ayrshire, Fife, Glasgow, Scottish Borders and West Dunbartonshire) in 2007/08 for the provision of free school meals to all pupils in P1-3. Introduction of <i>Schools (Health Promotion and Nutrition) (Scotland) Act 2007 – April 19th</i>
2008	Publication of the independent <i>Evaluation of the Free School Meals Trial for P1-3 pupils</i> (MacLardie et al., 2008) Introduction of <i>The Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2008 – June 26th</i> . Publication of <i>Healthy Eating in Schools. A guide to implementing the nutritional requirements for food and drink in schools (Scotland) regulations 2008</i> (Scottish Government, 2008).
2009	Extension of national entitlement criteria for free school meals to include pupils whose parents or carers are in receipt of both maximum Child Tax Credit and maximum Working Tax Credit and their income is under £6,420 (from August)
2010	Introduction of local schemes in a number of local authorities to extend provision of free school meals in the early years of primary school (P1-3).
2011	
2012	Introduction of the Scottish Government's Healthy Living Survey, which incorporated the old School Meals Survey.
2013	Extension of national entitlement criteria for free school meals to include pupils whose parents or carers receive Child Tax Credit, do not receive Working Tax Credit and had an annual income (as assessed by the Inland Revenue) of below £16,105 (from April) Publication of <i>The School Food Plan</i> (Dimpleby and Vincent, 2013) for the Department of Education, UK
2014	Introduction of <i>Better Eating Better Learning</i> Introduction of the <i>Cost of the School Day</i> project in the City of Glasgow Passing of the Children and Young People (Scotland) Act 2014, which became law on the 27 th March 2019 and which placed a statutory obligation on local authorities to provide free school meals to pupils in P1-P3.
2015	Introduction of universal provision of Free School Meals to all pupils in P1-3 (from January) Publication of <i>The Cost of the School Day</i> evaluation report (Spencer, 2015)
2016	
2017	Extension of national entitlement criteria for free school meals to include pupils whose parents or carers are in receipt of Universal Credit and their monthly earned income does not exceed £610 (from August) Scottish Government work with local authorities to explore the use of local initiatives to extend provision of free school meals (2017 and 2018)
2018	Introduction of Club 365 project in North Lanarkshire. Extension of free school meals to all Primary 4 pupils in Glasgow Commitment to extend the <i>Cost of the School Day</i> project as part of the Scottish Government's <i>Tackling Child Poverty Delivery Plan, 2018-2022</i> .
2019	Commitment to extend free school meal provision to all primary school pupils in Glasgow by 2022.

North Lanarkshire Council's *365 Project*, indirectly strengthen the case for provision of FSMs by providing food to children beyond the school day.

2.2.1a - 365 Project (North Lanarkshire Council)

In response to high levels of unemployment, health inequality and poverty, North Lanarkshire introduced the *365 Project*. It aims to provide all children eligible for a free school meal with a hot nutritious meal for every day that they are not in school. The need for out-of-school food provision became evident with a marked increase in the use of local food banks in holiday periods and awareness of a disparity in 'learning loss' between low-income pupils and middle-income pupils after a holiday, particularly evident after the summer holidays. It is understood that 'holiday hunger' contributes to this 'learning loss', as low-income pupils do not have access to a balanced nutritional diet throughout this lengthy period. Thus, the *365 Project* aims to contribute to narrowing the attainment gap. The project also promotes sitting down to a meal, thus providing social space for interaction in the summer holidays. The project is not only focused on food; living on a low income can also mean not having access to leisure pursuits, and a key focus for the project is the provision of food around a programme of games and activities. Interim in-house evaluation has been positive, with reports of increased attendance at school among those participating. Increased attendance at school also implies greater uptake of FSMs. Moreover, teachers have been reported to acknowledge an improvement in behaviour and concentration levels of participating pupils; once more, this attests to the value of providing food to support educational engagement.

2.2.2 - Positioning free school meals as being part of something bigger

In recent years, a number of key initiatives have been introduced in Scotland to address the wider issue of poverty and/in education. Of particular note is the EIS campaign, *Face Up to Child Poverty*, and the *Cost of the School Day* project, initially introduced in the City of Glasgow as a partnership project between CPAG Scotland, the Poverty Leadership Panel, Glasgow City Council, Glasgow Centre for Population Health and NHS Greater Glasgow and Clyde. Both projects have a broad anti-poverty focus, and both acknowledge the importance of FSMs as an integral part of a wider anti-poverty strategy or a poverty-proofed school. Significantly, both projects have been extended as part of the Scottish Government's first *Tackling Poverty Delivery Plan*, with pilot and best practice being adapted and adopted across Scotland.

2.2.2a – The Cost of the School Day (initially City of Glasgow, led by a local/national partnership, now being adopted in many local authorities)

The Cost of the School Day aims to identify and overcome the wide range of financial barriers that are faced by the children of low-income families in Scottish schools. It aims to ensure that all pupils have access to all of the opportunities that education presents and to ensure that pupils are not excluded from learning or participation on the grounds of cost. It raises awareness of the hidden cost of schooling and draws attention to the stigma that can result from awareness of a pupil's free access to school meals on the grounds of family benefit entitlement. This stigma can be a barrier to uptake and can adversely impact on a child's

mental and physical well-being. By aiming to sensitively reduce the pressures on low-income families, the *Cost of the School Day* project contributes to efforts to tackle one of the three drivers of child poverty recognised by the Scottish Government, i.e. reducing household costs (Scottish Government, 2018b). It has highlighted a range of hidden or heightened costs, incurred through school trips, uniforms, resources for learning, clubs and activities, fun events, transport and subject-specific supplements (e.g. geography fieldtrip contributions). By reducing the hidden cost of schooling, the child benefits directly by being more able to become fully involved in school life and the opportunities that present. Furthermore, the money not being spent on schooling can be used in the low-income family to meet the cost of essential outgoings. A 'Cost of the School Day Toolkit', facilitates 'poverty-proofing' the school. The effective provision of FSMs is a cornerstone of *The Cost of the School Day* intervention, with attention given not only to entitlement, but also to the manner in which the service is accessed. Although not without its problems, the intervention has encouraged the adoption of cashless systems to avoid the potentially stigmatising identification of those pupils who are entitled to FSMs.

2.2.3 – Improving free school meals by driving up standards for all

There has been no shortage of interest in the quality of school meals. A diverse range of stakeholders has contributed to debates and deliberations on how to improve the nutritional value of school food. At times, these debates have been highly visible, with celebrity-led campaigns through national media (e.g. Jamie Oliver in 2005), to local furore around the perceived poor quality of fare offered in particular schools (with high profile case studies in Argyll and Bute in 2012; and Dundee in 2018). Specialist interest groups have also been to the fore in specifying standards and priorities, both as critical friends working outwith the sector and those within and responsible for standards. Here, the end result is enhancement of FSMs, by focusing on improving standards for all. In Scotland, the critical moment in recent years was the introduction of *Hungry for Success* in 2003.

2.2.3a - Hungry For Success: A Whole School Approach to School Meals in Scotland

The Scottish Executive's Expert Panel on School Meals published 'Hungry For Success' in 2003. *H4S* was viewed as the beginning of a holistic approach to food in every school in Scotland. It suggested that all pupils should be given access to suitable food selections within a health-promoting environment. Its main priorities were: to remove stigma in regard to the uptake and consumption of FSMs; to have better presentation of the meals; and to set higher standards of nutrition for school meals. However, 'Hungry For Success' implored schools not to view meals in isolation. The wider health problems that were evident across Scotland, and their related stressors – unhealthy lifestyles, poverty, poor housing and unemployment – were also to be acknowledged and addressed. Recognition was also given to the practical challenges in delivering school meals, such as the rush at lunchtime and inadequate size of dining rooms. These – and other – factors were acknowledged as contributing to pupils preferring to venture outwith the school grounds at meal times. 'Hungry For Success' encouraged schools to be inclusive in their attempts to drive up standards; most significantly, by engaging the catering professionals, e.g. by encouraging catering and dining room staff to undergo appropriate training to enable them to effectively manage the dining environment to create an enjoyable experience for pupils.

2.2.4 – Determining provision for free school meals

There has also been direct action to extend the reach of FSMs in Scotland. Most notably, following a successful trial in five local authorities (East Ayrshire, Fife, Glasgow, Scottish Borders and West Dunbartonshire) in 2007/08, the Children and Young People (Scotland) Act 2014 placed a statutory obligation on local authorities in Scotland to provide FSMs to pupils in P1-P3. This provision was implemented from January 2015. Perhaps encouraged by the national lead, some local authorities in Scotland have extended eligibility criteria to particular groups of pupils. However, perhaps most notable of all is the recent commitment of Glasgow City Council to incrementally extend universal provision such that all pupils in primary schools will receive a free school meal by 2022.

2.2.4a - Extension of Free School Meals to all Pupils in Primary School (Glasgow City Council)

In 2018, Scotland's largest council extended eligibility to FSMs to all Primary 4 pupils and committed to extend universal provision incrementally so that all pupils in all of its primary schools were entitled to a free school meal by 2022. Currently entitlement to FSMs in the upper stages of primary school and secondary school is only available to those families claiming either universal credit, income support, income-based jobseeker's allowance, income-based employment and support allowance, child tax credit with income less than £16,105, child tax credit AND maximum working tax credit where income is less than £6,420, or there is support under part VI of the immigration and asylum act 1999. However, there has been wider debate around the efficacy of universal free provision for Primary 1-3 pupils. Indeed, extending universal provision is of wider significance than school meals alone, universal basic income is also being proposed (Painter et al., 2019) and is under consideration in some pilot authorities (MacEwan, 2018).

2.3 – Conclusion

It has been shown that, in the last decade, and in response to wider social concerns, school food and poverty has emerged as a field of interest in Scottish public policy. Different types of interventions and approaches have been used, actively engaging a wide range of stakeholders. FSMs has been the direct focus for policy, an inadvertent beneficiary of wider concerns over school meals, an integral part of wider strategies to tackle poverty and is implicitly valued when attempts to extend free food provision outwith the school day are promoted.

Before moving on to provide a rapid review of the key literature pertaining to FSMs in Scotland (chapter 4), we first turn to describe the ways in which school food has been presented as a question of social justice in Scotland and to acknowledge the wider agendas that are also pertinent to school food (chapter 3).

3. Social Justice and Beyond: What are the key issues pertaining to food in schools?

“... Free school meals make sure that young children get a healthy and nutritious meal every day, improving their concentration in the classroom and helping them to achieve better results. This has been a huge relief for many... saving families £380 a year for each child”
(SNP, 2016)

3.1 – Introduction

This report is concerned with FSMs. The previous section explained the mechanisms, which shape *FSMs* provision in Scotland. The primary purpose of this section of the report is to specify the range of ways in which FSMs is pertinent to wider social justice agendas. Consideration is given to issues, which focus specifically on FSMs (3.2) and those that are focused more generally on the wider school food agenda, but which are pertinent to understanding FSMs as an issue of social justice (3.3).

3.2 – Issues Surrounding Free School Meals

There are several drivers to improve the effectiveness of school meals in Scotland. Key among these are the desire to tackle food security (3.2.1), remove classroom hunger (3.2.2), tackle income poverty (3.2.3) and tackle wider problems associated with poverty (3.2.4). Debates also focus on whether there is adequate infrastructure to deliver FSMs (3.2.5), the merits of universal versus targeted provision (3.2.6), stigma-free administration (3.2.7) and the affordability of school meals (3.2.8).

3.2.1 – Food Security

Food security implies having reliable access to a sufficient amount of safe, nutritious and affordable food (World Food Summit, 1996). It is understood to be a pre-requisite for an active and healthy life (Deeds, 2015). Research indicates that there are adverse mental and physical consequences for food insecure young people (Jyoti et. al, 2005). FSMs contribute toward food security for eligible children through the provision of one healthy and nutritious meal at lunchtime during each school day. It should be acknowledged that although making a contribution toward food security, lunchtime school meals cannot alone provide total food security.

3.2.2 – Tackling Income Poverty

FSMs are also valued for the contribution they make to tackle child/family poverty. The provision of FSMs helps to relieve income pressure on low-income families, who as a result can make a considerable saving, particularly when there are several children in the family (The Children's Society, 2012). The SNP (2016) estimates that FSMs saves families £380 each year per child. The Children's Society estimated 140,000 children had already escaped food poverty as a result of FSMs and an estimated 100,000 children would further be assisted if plans to expand provision were extended at that time. Anti-poverty interventions of the ilk – those with aim to reduce household expenditure – are a central focus in the Scottish Government's approach to tackling child poverty in Scotland, as expounded in the "Tackling child poverty delivery plan" (Scottish Government, 2018b).

3.2.3 - Classroom Hunger

It is estimated that 8,370 children arrive at school hungry every day in the UK (Kelloggs, 2013) and that children who arrive to school hungry lose one hour of learning time each day. The evidence that morning hunger contributes to learning loss is also applicable to afternoon hunger; like breakfast clubs, lunchtime meals also make a positive contribution to supporting learning in school. Jyoti et al. (2015) have established that under-nourished children are more likely to fall behind in class or drop out before completing high school. Therefore, by addressing classroom hunger, FSMs can also help to overcome one of the barriers to academic achievement for children living in poverty.

3.2.4 – Tackling The Problems Associated With Income Poverty – Case Study Obesity

Providing school meals are not only valued as a means of tackling poverty directly (3.2.2); they are also valued as a means to tackle second-order problems that are strongly associated with poverty, or created by it. Obesity is one such problem that is linked with poverty. Healthy meals are often more costly than unhealthy meals (CPAG, 2019). Parents from low income backgrounds can find it more manageable to purchase processed foods at local shops, rather than pay higher travel costs of visiting more distant stores that offer a greater range of fresh and healthy food (CPAG, 2019). This may, at least in part, explain why children from poorer backgrounds are more likely to suffer from childhood obesity. As there are strict nutritional guidelines for school meals, they could potentially be healthier than other lunchtime options and could have positive impact on the health of a child and the prevention of obesity, particularly if consumed five days a week (Homer, 2010). However, once more, it is important to remember that school meals provide only a fraction of a child's diet and so the ability to tackle obesity solely through the provision of FSMs is limited (Jones, 2018). Of course, healthy school meals can only help to tackle childhood obesity if children actually eat the meals provided (Ofsted, 2018). More positively, experiencing a healthy nutritious meal in school may contribute toward child-led 'demand' for similar quality food beyond the school.

3.2.5 – Do Schools Have the Infrastructure to Deliver?

A major issue for schools is encouraging children to present for school meals against the competition of the packed lunch, or the allure of out of school competition with their 'lunchtime specials'. Lorna Aitken (2018), Development Officer for *Food for Thought* has argued that it is possible for public (school meal) and private (out of school) services to work together to encourage young people to eat more healthily. Such public-private collaboration or partnership may be desirable as not all schools have adequate facilities to accommodate all pupils in their cafeteria at lunchtime. Indeed, as is evidence in Annex 3, excessive waiting times caused by long queues in the lunchroom/school canteen are reported to be a major disincentive for pupils. It is not at all clear that schools have the infrastructure to deliver what is aspired for school meals in Scotland.

3.2.6 – Universal Versus Targeted Service Provision

Following a successful pilot in five local authorities in 2010, the Scottish Government committed to provide all children in P1-3 with a free school meal from January 2015 (see 2.2.4). More recently, the City of Glasgow has committed to provide all primary school children with a free school lunchtime meal by 2022. This raises the issue of whether FSMs should be universal or targeted to populations in need. This is a wider debate in social provision, which has also been debated following the universal provision of free prescriptions, free university tuition, free personal care for the elderly, and free bus travel for people of pensionable age. Proponents of universal provision of school meals have argued that it could eradicate the stigma that can be felt through targeted provision, increase the uptake of school meals (with the consequent benefits for health and educational attainment) and help to address inequality (CPAG, 2019). Universal provision is also valued as it provides for children from low-income families who would otherwise not be eligible for FSMs. However, universal provision leads to accusations of wasteful spend. It can be argued that providing pupils from higher income backgrounds with FSMs is a waste of resources as the children are unlikely to require such support, and scarce funding would be better spent elsewhere (Horton, 2017). Targeted service provision is not without its challenges and must overcome the problems that can arise from setting and administering eligibility criteria.

3.2.7 – Local Intelligence and Action

The Education (Scotland) Act 2016 gave local authorities the ability to grant discretionary free school meals. In practice, Head teachers may be responsible for exercising this discretion. The advice given to local authorities is that this discretion should be used particularly when there are cases of hardship due to exceptional circumstances, such as when a family has no income due to their immigration status. However, there is considerable scope for local authorities/head teachers to set their own standards, given that it applies "to pupils who satisfy such conditions as the authority thinks fit." At present, there is no understanding of: (i) the extent to which this discretion is being applied; (ii) the conditions under which this discretion is being applied; (iii) which pupils are receiving discretionary provision; (iv) how this discretionary provision is being funded; (v) the extent

to which head teachers are aware of this discretion; (vi) the extent to which local authorities are promoting/encouraging use of these discretionary powers.

3.2.8 - Stigma and school meals

Schools have produced a variety of 'solutions' to help reduce the stigma felt by pupils, including operating cashless systems (James, 2012), whereby young people use a card to pay for their meal, which is automatically loaded with cash for those who receive FSMs, making it less obvious who is having their lunch provided for them. However, this does not always work, particularly at secondary school level, as many children choose to eat lunch outwith the school lunch hall. This could be an isolating and embarrassing experience for young people who receive FSMs as they are likely to feel excluded if all of their friends are going to the shops for lunch and they have to stay in school for their free school meal (CPAG and BYC, 2019).

3.2.9 – Can we afford it?

Finally, it is important to consider whether funds are available to supply FSMs to all young people, and whether the benefits outweigh the costs that would be incurred. Even though the Scottish Government spent a total of £53,918,000 in 2017/18 in order to support local councils in the provision of FSMs to P1-3 pupils, local authorities argued that this was insufficient to cover costs and that, as budgets were already financially strained, it is likely that local services will be cut and/or residents will see an increase to council tax charges in order to cover costs (BBC News, 2015). These cuts and costs must be set against the benefits that would be gained by children from low-income working families. It is therefore complicated to take account of both the short term and far reaching benefits of FSMs, in order to assess whether it is a sensible investment.

3.3 – Other Issues Surrounding Food in Schools

Some of the wider issues that pertain to food and schools concern food provision beyond lunchtime, i.e. at breakfast (3.2.1) and during school holidays (3.3.2). More generally, there are concerns about the wider environmental (3.3.3) and public health (3.3.4) impact of school food.

3.3.1 – Breakfast Provision

Without breakfast, concentration levels are impaired and the quality of school work suffers (3.2.3). This can have a huge impact on short and long-term outcomes (The Scottish Government, 2006). Breakfast clubs, free fruit, free milk and FSMs all have a part to play in reducing the effects throughout the school day of poverty-induced learning loss.

3.3.2 – Holiday Provision

Holiday hunger has emerged as a concern in recent years. Evidence is emerging of parents not being able to adequately feed their own children throughout the holidays, even if they

are in work (Children & Young People Commissioner Scotland, 2017). Throughout the UK there has been a rise in the use of food banks over the summer holidays, which attests to the problem of parents not being able to afford food. In response, many local schemes such as 'Feeding Britain' an initiative providing 79 clubs with 27,000 meals to children over the holidays (Foster, 2018) are emerging to meet the demand for holiday food. This provision is not universal across Scotland and not all local authorities are committed to holiday provision.

3.3.3 – Food Miles

Sourcing local, fresh produce may be more desirable than purchasing food that has been stored for extended periods or transported over long distances, which can affect food quality. Transportation of food by air or land over long distances also increases greenhouse gasses with CO₂ being a known contaminant of crops (McKie, 2008). If food were mainly locally sourced, there would be potential financial and environmental benefits.

3.3.4 – Healthy Lifestyles

Obesity, coronary heart disease, cancer, diabetes and strokes are all health issues related to poor nutritional health in the UK. Obesity alone affects 13% of children in Scotland. In response to this health 'crisis', national and local governments have focused on initiatives to promote healthier lifestyles and healthier food choices. For example, *Eating Well at School* encouraged making nutritionally valuable choices, whilst 2006 brought about the implementation of Nutritional Guidelines for Early Years. Continuing this agenda, the focus of managing levels of sugar and fats was refocused in 2008 with introduction of *The Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations*. In addition, initiatives such as 'Food for Thought' use food as a context for learning, promoting a food education that sustains continued healthy choices for children in and out of the school setting. Also significant is the work of the Soil Association and its *Food for Life School Award*, in which school food is an integral part of a whole school approach to improving pupils health and wellbeing. Thus, school lunchtime meals are viewed as an integral part of wider initiatives to improve the health and wellbeing of children in Scotland.

3.4 – Conclusion

FSMs can have a positive impact on pupils' academic engagement and performance, and have longer-term positive health outcomes. However, socio-cultural pressures shape children's food choices and young people may not choose school meals over more familiar or attractive alternatives. Although the introduction of FSMs could be viewed as a success, it alone is insufficient to tackle issues of food insecurity and family poverty in Scotland.

4. What Do We Know About Free School Meals? Key findings from a rapid review of the key literature

“The evaluation of our pilot project says that free school meals had a positive impact on all aspects of a child's schooling”

(Nicola Sturgeon, First Minister of Scotland, in BBC News, 2015)

4.1 - Introduction

The primary purpose of this report is to utilise the unpublished evidence base generated from qualitative and quantitative research, by or with the sector. However, it should be acknowledged that much school meals research has already been published and that this evidence base also has contemporary value to those who promote school meals in Scotland.

In this chapter, we summarise the most pertinent findings from published research. What is presented is not a fully fledged literature review; rather, it is a collation of key findings and expert opinion on four key issues – the value of school meals (4.2), patterns of uptake (4.3), strategies that can be deployed to increase uptake (4.4) and the evidence base (4.).

The primary goal is to draw lessons from school meals research in Scotland; however, reference is also made to learning beyond of Scotland, where it is considered relevant. Similarly, where appropriate, lessons for school meals are also drawn from studies that are have a broader focus but which contains some key points that are pertinent to FSMs provision.

4.2 – Why School Meals Matter

Tackling poverty: the need for school meals

- Stewart (1999) recounts the history of the introduction of school meals in the 20th Century, showing that it was highly politicised, with support for school meals not always following predictable lines by 21st century standards.
- Morelli and Seaman (2010, p.142) argue that – given the growth in child poverty in the UK – delivering school meals is an anti-poverty strategy that would reduce household costs.
- Morelli and Seaman (2010, p.156) calculate that UFSM would lead to a reduction in inequality in Scotland and that that reduction would be greater in Scotland than other parts of the UK.
- Craig et al. (2014, p.9) argue that FSM policy has been shaped by the complex political challenges that present.
- Ford et al. (2015, p.22) report that some parents whose children were previously ineligible for FSM, made reference to the financial benefits of universal free provision in P1-P3.
- Holford (2015, p.976) is among the many authors who note that a significant proportion of eligible children do not present for FSM, limiting its potential as an anti-poverty intervention.

Improving health: the need for healthy school meals

- Seaman and Moss (2006, p.305) refer to evidence that estimates that one in five children in the UK are overweight, with obesity rates rising for the past two decades. They argue that providing healthy

school meals has the potential to contribute to efforts to tackle obesity through healthy eating; conversely providing school meals that are high in sugar and fat will exacerbate the problem.

- High levels of obesity are noted by Morelli and Seaman (200, pp.142-143)
- High levels of obesity are also noted by MacDiarmid et al. (2009, p.1297)
- Seaman and Moss (2006, p.305) further found that there is confusion among 11 and 12 year old children as to what constitutes healthy food – educating in conjunction with the provision of healthy school meals has the potential to increase awareness of healthy eating.
- Craig et al. (2014, p.9) argue that FSM policy has been shaped by the complex health challenges that present.
- Walling et al. (2016, p.1) argue that school meals provide a unique opportunity to improve public health.
- Eadie et al. (2016, p.2) position the introduction of UFSM against the policy focus on reducing health inequalities in Scotland.

Providing nourishment for all

- Lucas et al. (2007, p.7) refer to guidance that lunch should constitute about 30% of daily energy needs.
- Biltoft-Jensen and Holm (2016, p.1) note that 40%-45% of the daily energy intake of children aged between 6 and 14 years old is consumed during school and after-school activities.
- On the other hand, Wills et al. (2015, p.23) report that one quarter of young people reported not eating anything at lunchtime (24.3%) and one fifth reported not drinking anything at lunchtime (19.1%) on the day of their study.
- Norris et al. (2016, p.836) argue that school meals contribute significantly to children's food intake.

Providing nourishment to those who need it

- Chambers et al. (2016, p.1) contextualise their study by noting that school meal provision in the UK was originally introduced to meet the needs of poor children.
- Chambers et al. (2016, p.2) also refer to a study that demonstrates that those receiving FSM receive a higher proportion, than those not receiving FSM, of their energy and nutritional needs through lunchtime food. They conclude that the FSM may be the main meal of the day for these children.
- Chambers et al. (2016) found that the free school lunch was often a child's main meal of the day.
- Rona and Chin (1989, p.69) in their study of school meals, school milk and pupil height, found that the lowest rate of growth was to be found among children receiving FSMs, suggesting that school food alone was insufficient to counter wider nutritional deficits. Of course, this evidence could be used to strengthen the case for FSM provision and even extending food provision in schools, i.e. to provide nourishment for children with the lowest levels of growth..
- Stewart (1999, p.11) recounts that the goal of improving health was a major factor behind the introduction of schools meals in Scotland.

Ensuring healthier nutrition

- Chambers et al. (2016, p.2) refer to studies that suggest that school lunches are more nutritious than both packed lunches (which are more likely to contain high energy foods and drinks) and food consumed outside of school (which is associated with a higher percentage of food energy through sugar consumption).
- Norris et al. (2016, pp.836-839) found that school meals were healthier than packed lunches and street lunches, although not all lunches consumed were meeting the Scottish Nutrient Standards for School Lunches.
- Ford et al. (2015, p.14) report that parents perceive that school meals are healthier than the alternatives., although parents also report being reassured if providing packed lunches (p.16).
- Ford et al. (2015, p.18) report that some parents suggest that school meals had led to children eating more healthily outside of school.

Widening food horizons

- Ford et al. (2015, 18) report that some parents suggest that school meals offered children the opportunity to eat foods that were not available at home.

Improving educational attainment

- Walling et al. (2016, p.9) makes reference to a study in England, which demonstrated that the provision of school meals could have a significant impact on the cognitive ability of pupils. For example, Key stage 2 tests results were shown to improve during the implementation of celebrity Chef Jamie Oliver's effort to make school meals in England healthier.

- Stewart (1999, p.5) refers to historic arguments that assert that it is counter-productive to attempt to educate ill-nourished children.

Improving outcomes in school

- Craig et al. (2014, p.10) refer to previous research, which suggests that school-based behaviour, classroom productivity, attendance and pupil perception of their schoolwork were also positively associated with school meals consumption.
- Walling et al. (2016, p.9), through reference to the same study noted above, makes reference to evidence that the provision of school meals can have a significant impact on reducing absenteeism in schools.

Meeting statutory responsibilities

- Chambers et al. (2016, p.1) note that UK local authorities have a statutory responsibility to provide meals at lunchtime in schools. In addition, children whose families are in receipt of certain benefits/tax credits are entitled to a free school meal.

Achieving long term economic gains

- Chambers et al. (2016, p.2) refer to studies that argue that school meals have the potential to generate long-term economic gains via improved health and productivity, which in turn, could be achieved by offering food in schools that is nutritionally dense.

Delivering immediate economic gains

- Craig et al. (2014, p.9) argue that FSM could generate local economic benefits if their ingredients were sourced from local suppliers.

Releasing time pressure for parents

- Ford (2015, p.31) argues that the implementation of the USFM policy has also had a number of unintended and positive consequences such as, an increase in available time for parents who would normally have had to make a packed lunch.

4.3 – Understanding Uptake

Mixed-mode

- Norris et al. (2016, p.836) found almost two fifths of pupils did not have the same mode of lunchtime meal every day (38.6% switched between school meals, packed lunches and street meals), while one third habitually had school meals (32.8%).

4.3.1 – Population-based variation

Lone parent families

- Rona and Chin (1989, p.68) in a cross-national study in the 1980s in Scotland and England, found that children of lone parents had the highest uptake of school meals among family types.

Social class

- Rona and Chin (1989, p.68) also found that uptake of school meals was higher among children whose fathers were either semi-skilled manual workers or unskilled manual workers.
- Craig et al. (2014) make reference to the work of Bartfield and Kim (2010), which suggests that economic vulnerability is a factor that increases the uptake of FSM.

Ethnicity

- Rona and Chin (1989, p.68) found that Asian ethnic groups had a consistently lower uptake of school meals, whereas 'Caucasians' and Afro-Caribbeans had the highest uptake.
- Sahota et al. (2013, p.1274) identify language issues (inability to complete the FSM entitlement form) as being a possible reason for non-uptake of FSMs in England (in relation to a pilot for universal entitlement).

Religion

- Montemaggi et al. (2016) premise their study in England on evidence that Catholics are over-represented among children entitled to receive FSMs.

- Montemaggi et al. (2016, p.7) report that Catholic schools in England have a lower uptake of FSMs than the national average. They attribute this to cultural resistance to receiving FSMs amongst parents from ethnic minorities (p.8).

Low Literacy rates among parents

- Montemaggi et al. (2016, p.14) argue that low literacy rates among parents (particularly when English is a second language) is a barrier to these parents applying for their child's FSM entitlement.

General socio-economic environment

- Chambers et al. (2016, p.1) refer to the work of McDermid et al. (2015) who note that children from deprived areas are more likely to buy their lunch outside of school, compared to children from non-deprived areas.

Higher uptake in schools with higher levels of FSM entitlement

- Chambers et al. (2016, p.8) evidence that uptake of FSM is greater in schools where there is a higher proportion of pupils who are entitled to FSM and who were in attendance on the school meals census day. They note, however, that this increase is not proportional.
- Chambers et al. (2016, p.3) refer to the work of Sahota et al. (2014) who argue that where FSM registration is high, take-up is normalised, and therefore not being singled out is not a factor that might lead to low uptake.

Higher uptake of FSM when there is higher uptake of school meals among pupils not entitled to FSM

- Chambers et al. (2016, p.8) evidence that uptake of FSM is greater in schools where there is higher uptake of school meals among those pupils who are not entitled to FSMs.
- Sahota et al. (2013, p.1278) conclude that the best way to increase FSM uptake is to increase uptake for all pupils.
- Holford (2014, p.980) evidence that FSM uptake is most likely to increase when non-FSM uptake increases.
- The limitations of the UFSM policy for P1-P3 can be shown with the transition from P3 to P4, where presentation for school meals drops, both among those entitled to FSMs and those who are not (Ford, 2015, pp.32-33).

4.3.2 – Societal factors

Stigma

- Chambers et al. (2016, p.2) refer to historical evidence that suggests that many children did not present for their FSM as their parents were fearful of being labelled 'paupers'.
- Chambers et al. (2016, p.2) observe that many local authorities in Scotland have been concerned with reducing stigma associated with FSM, e.g. through the introduction of cashless systems to ensure anonymity.
- Chambers et al. (2016, p.2) refer to the work of Moffit (1983) who argued that stigma explains non take-up of FSMs.
- On the other hand, Chambers et al. (2016, p.2) refer to the work of Sahota et al. (2014) who argued that stigma is not a significant factor in accounting for non-uptake of FSM in both primary and secondary schools.
- Chambers et al. (2016, p.9) conclude that stigma may be an issue that accounts for non-uptake of FSM – they reach this conclusion given the evidence that uptake is higher in schools where more pupils are registered for FSMs.
- Sahota et al. (2013, p.1274) identify stigma as being one of the main reasons for the non-uptake of FSMs in England when a pilot for universal entitlement was implemented. However, they also note that head teachers tended to dismiss the problem of stigma, given that they were operating cashless systems (p.1276).
- Holford (2014, p.978) notes that separating those eating school meals from those eating packed lunches drives school meals stigma. More generally, Holford (2014, p.977) refers to Moffit (1983) in noting that stigma can influence uptake of welfare benefits.

- Ford et al. (2015, p.19) report that some parents considered that stigma was an issue hampering uptake of FSM among older children. Some parents themselves reported being stigmatised when presenting for FSM as children.

Preference for non-healthy food

- Chambers et al. (2016, p.4) refer to the wider literature, and note that children's preference for non-healthy options is one of the factors that account for non-uptake of FSM.
- Wills et al. (2015, p.29) report that some young people explicitly mentioned the attraction of purchasing unhealthy food beyond the school gate, while others criticised the lack of salt and sugar in school food.
- Eadie et al. (2016, p.51) note that catering managers and head cooks report that less healthy options remain the most popular menu items, even following the introduction of UFSM.

Influence of peers

- Biloft-Jensen and Holm (2016, p.1) refer to research that has shown that peers are important shapers of children's eating habits in school.
- Ford et al. (2015, p.26) report that parents acknowledged the role of peers in shaping their children's school meal consumption behaviour.

Importance of the opportunity to spend time with friends

- Chambers et al. (2016, p.4) refer to the findings of MacDiarmid et al. (2015) who found that the opportunity to spend time with friends is the main reason cited by secondary school children for purchasing food outside of school at lunchtime. They refer to studies that note that when eating in dining halls, pupils are less likely to be able to sit with their friends.
- Sahota et al. (2013, p.1277) note that limited opportunities for socialising with friends was a barrier to taking a school meal.
- Craig et al. (2014) make reference to a number of studies, which suggest that not being able to eat with friends is a factor that decreases the uptake of FSM.
- Wills et al. (2015, p.ix) report that being with friends is important in terms of determining where pupils buy food and drink at lunchtime.

Attraction of leaving school at lunchtime

- Craig et al. (2014) make reference to a number of studies, which suggest that having the freedom to leave the school at lunchtime (often determined by age) is a factor that decreases the uptake of FSM.
- Wills et al. (2015, p.ix) report that young people from schools serving deprived areas wanted to 'escape the school environment' at lunchtime.

4.3.3 – School-family interactions

Information deficit

- Holford (2014, p.977) contextualises his study by noting that a lack of information about welfare and its benefits can hamper FSM uptake.

FSM Registration Process

- Sahota et al. (2013, p.1274) identify problems with the claiming process as being one of the main reasons for the non-uptake of FSMs in England when a pilot for universal entitlement was implemented.
- Ford et al. (2015, p.26) report that some parents criticised some pre-ordering procedures, which had led to their children not being served the FSM to which they were entitled, on account of parents not returning the pre-order forms on the set date.
- Montemaggi et al. (2016, p.13) report that parents consider forms for FSM entitlement to be overly complex and intrusive.

4.3.4 – In-school factors

Supportive school culture

- Craig et al. (2014) make reference to two studies, which suggest that school culture is a factor that increases the uptake of FSM.

Limited choice of food

- Chambers et al. (2016, p.4) refer to the findings of MacDiarmid et al. (2015) who found that the greater variety of food that can be found from outlets around schools is one of the reasons that secondary school children purchased food outside of school at lunchtime.
- Chambers et al. (2016, p.4) argue that day-to-day take-up is menu dependent, with children more likely to present for school meals when popular items are on the menu.
- Sahota et al. (2013, p.1274, p.1276) identify limited food choice as being one of the main reasons for the non-uptake of FSMs in England when a pilot for universal entitlement was implemented. Specifically, pupils had mentioned (i) limited halal options; and (ii) limited 'snack' type options.
- Craig et al. (2014) make reference to a number of studies, which suggest that improved school food choice is a factor that increases the uptake of FSM.
- Ford et al. (2015, p.26) report that parents acknowledged menu choices shaped their children's school meal consumption behaviour.

Inadequate portion size

- Chambers et al. (2016, p.4) refer to the wider literature, and note that secondary pupils have identified inadequate portion sizes as one of the factors that lead them not to present for school meals.
- Sahota et al. (2013, p. 1276) notes that pupils – especially boys – were critical of option sizes that were too small.

Restrictions placed on FSM allowance

- Chambers et al. (2016, p.4) refer to the wider literature, and note that secondary pupils have identified limitations of the FSM allowance (not being able to purchase additional food and drinks) as one of the factors that lead them not to present for FSMs.
- Sahota et al. (2013, p.1277) report pupils in England criticising the level of FSM as being insufficient to cover the cost of food they wanted to purchase.

Quality of food

- Sahota et al. (2013, p.1274) identify quality of food as being one of the main reasons cited for the non-uptake of FSMs in England when a pilot for universal entitlement was implemented.
- Craig et al. (2014) make reference to a number of studies, which suggest that improved school food (nutritional content) is a factor that increases the uptake of FSM.
- Wills et al. (2015, p.26) found that taste was the most important factor cited by young people purchasing food beyond the school gate at lunchtime (97.5%).
- Eadie et al. (2016, p.51) report that school provision of 'packed lunch' options has proven popular where available.

General dining environment in schools

- Chambers et al. (2016, p.4) refer to the findings of MacDiarmid et al. (2015) who found that better value for money (relative to school meals) when purchasing from outlets around schools is one of the reasons cited by secondary school children for purchasing food outside of school at lunchtime.
- Chambers et al. (2016, p.9) evidence that take-up of FSM was higher among those secondary school pupils who were attending schools whose school buildings were rated as being suitable (rating independent to those of the pupils).
- Sahota et al. (2013, p.1274) identify the general dining experience (pupils were critical of noise, lighting and 'institutional feel') / organisation of space as being one of the main reasons for the non-uptake of FSMs in England when a pilot for universal entitlement was implemented.
- Craig et al. (2014) make reference to a number of studies, which suggest that an improved school dining environment is a factor that increases the uptake of FSM.
- Wills et al. (2015, p.ix) report that young people from schools serving deprived areas noted that they did not feel welcome in the school cafeteria.
- Interestingly Wills et al. (2015, p.18) evidence that the majority of young people did not consider that atmosphere of out of school stores to be important in shaping purchasing behaviour (58.2%).
- Ford et al. (2015, p.23) report that parents were critical of the dining environment in schools.
- Eadie et al. (2016, p.36) report particular concern with increased noise levels in the dining environments of larger schools following the introduction of UFSM.

Inadequate capacity within schools

- Chambers et al. (2016, p.3) argue that it is often impossible for pupils to be seated in school at one sitting.
- Holford (2014, p.986) evidence that capacity constraints associated with a growing intake are associated with lower rates of school meals uptake among non-FSM registered pupils.

Limited time available to eat food in schools at lunchtime

- Chambers et al. (2016, p.3) argue that there is limited time available to eat food in schools at lunchtime.
- Craig et al. (2014) make reference to a number of studies, which suggest that time constraints is a factor that decreases the uptake of FSM.

Queuing

- Sahota et al. (2013, p.1277) note that the length of time spent queuing was the most unpopular part of the dining experience in both primary and secondary schools. It was reported that this directly led to pupils seeking alternative places in which to eat.
- Craig et al. (2014) make reference to a number of studies, which suggest that a long queue is a factor that decreases the uptake of FSM.
- Wills et al. (2015, p.20) report that the *lack* of a queue was also noted as a reason to stay in school and present for a school meal at lunchtime, particularly for senior pupils around examination time.
- Wills et al. (2015, p.31) report strong dissatisfaction that young people had to queue twice – once to load their payment card and then again to purchase their food.
- Ford et al. (2015, pp.23-24) report that parents were critical of the long time spent queuing, which meant either (i) a reduction in play time for children, or (ii) children rushing their food consumption to access playtime.
- Eadie et al. (2016, p.26) note widespread reports of increased queuing time following the introduction of UFSM.

Lack of consultation with pupils

- Wills et al. (2015, p.28) report that many young people in their study complained that they had not been asked what food or drink they wanted to be served in the cafeteria.

Less fun

- Sahota et al. (2013, p.1277) report that primary school pupils in England were inclined to perceive that packed lunches were more fun than school meals.

Cost

- In what might seem to be counter-intuitive, Chambers et al. (2016, p.8) evidence that uptake of FSM is higher when the cost of a school meal is higher.
- Sahota et al. (2013, p.1277) identify significant school-level variation in the cost of school meals in England, with for example, the cost of a jacket potato, beans, salad and yoghurt varying from £1.15 to £2.45.
- Holford (2014, p.982) note that uptake of school meals among non-FSM pupils is negatively impacted by higher prices.
- Holford (2014, p.982) argues that in areas with a greater prevalence of poor households who are not eligible for FSM, there will be a greater sensitivity to price rises (or income shocks within the household).
- Craig et al. (2014) make reference to a number of studies, which suggest that universal provision (without cost) is a factor that increases the uptake of FSM. Most generally, they also refer to studies, which indicate that cost is also a factor than can impact on uptake.
- Wills et al. (2015, p.31) report that young people from schools serving deprived areas were more sensitive about cost.

4.3.5 – Food environment beyond the school

Competition beyond the school gate

- Chambers et al. (2016, p.4) refer to a Glasgow study that estimates that there are an average of 35 food retailers within an 800m radius of secondary schools in Glasgow.
- Wills et al. (2015, p.12) enormous variation in terms of the number of food businesses within 800m of the school.
- Wills et al. (2015, p.ix) report that proximity to school is important in terms of determining where pupils buy food and drink at lunchtime, although many will go further to avoid queues, spend time with friends, or purchase food that they particularly want.
- Wills et al. (2015, p.ix) report that more than three quarters (77%) of young people reported buying food and drink beyond the school gates at least twice per week (rising to over 90% in some of the most deprived schools).
- Wills et al. (2015, p.1) found that 63% of secondary school pupils report buying something to eat or drink beyond the school gate at lunchtime.
- Wills et al. (2015, p.ix) report that the most popular outlets beyond the school gate for lunchtime purchase were fast food outlets (25.8%), newsagents (25.1%), supermarkets (23%) and grocery/corner shops (20.1%).

Better value for money outside school

- Chambers et al. (2016, p.4) refer to *Hungry for Success* and *Better Eating, Better Learning* and note that both initiatives encourage paying attention to the school environment to encourage higher uptake of school meals.

Service provided

- Wills et al. (2015, p.19) found that three-quarters of young people noted that the service provided by out of school retailers was important in shaping out of school purchases at lunchtime (73.8%).

Value for money

- Chambers, et al. (2016) note that value for money was identified as one of the main reasons why children eat outside of school.

4.4 – Strategies to Improve Uptake of School Meals

4.4.1 – School catering service

Canteen ambience

- Seaman and Moss (2006, p.309) noted that *Hungry for Success* acknowledged that a good atmosphere in canteens is essential to support children's attendance.
- Sahota et al. (2013, p.1278) report that both primary and secondary school pupils favour creating a more 'restaurant-like' design with (i) better decoration (ii) music (iii) noise-abatement measures, (iv) tablecloths and (v) better signage designed by pupils.
- Wills et al. (2015, p.41) conclude that schools, which create a more pleasant environment, are more successful at keeping pupils in school at lunchtime.
- Wills et al. (2015, p.x) conclude that action targeted at improving school dining experience is more likely to be successful than attempts to control the external food environment.

Making dining halls a pupil friendly environment

- Chambers et al. (2016, p.10) conclude that schools and local authorities should do more to ensure that the school dining environment is managed in a pupil-friendly manner.
- Sahota et al. (2013, p.1278) also conclude that there is a need for a pupil-centred approach.
- Wills et al. (2015, p.43) conclude the importance for schools to address young people's need to socialise with friends during and after lunch.

Desegregate dining halls

- Holford (2014) concludes that promoting inclusive eating spaces within primary schools (where those taking a packed lunch can sit alongside those taking school meals) should be encouraged as a means to tackle stigmatisation.

Canteen staff and attitudes towards pupils

- Seaman and Moss (2006, p.309) provide evidence from a case study school, which demonstrated that a change in staff and staff attitudes created a change in ambience, which in turn led to increased school meal uptake.
- Eadie et al. (2016, p.5) note the importance of experience and trained catering staff to ensure the system continued to work well when time was pressured due to increased uptake of FSM.

Food offered

- Seaman and Moss (2006, p.310) provide evidence from a case study school, which demonstrated that – although some children always preferred unhealthy options – children’s preferences were often defined by food type, e.g. a liking of sausages – they suggest that focusing on providing healthier versions of popular foods has the potential to increase pupil uptake,

Providing popular food

- Wills et al. (2015, p.43) conclude the importance of schools providing sufficient amounts of popular foods.

4.4.1 – School education management

Senior manager support

- Eadie et al. (2016, p.7) suggest that senior management attitude was one of the key factors that was associated with uptake of UFSM.

Targeting parents

- Seaman and Moss (2006, p.313) noted that parents are important in determining / shaping the food that children consume in school – they argue that it is important to educate parents on key issues pertaining to school meals.
- Montemaggi et al. (2016, p.15) recommend providing parents with clear and concise information on FSM throughout the school year.
- Eadie et al. (2016, p.5) note the positive value of school meals taster sessions.

Home-school relationships

- Sahota et al. (2013, p.1276) identify developing home-school relationships as being crucial in promoting FSM uptake.
- Ford et al. (2015, 33) conclude the importance of improved communication with parents to facilitate understanding of FSMs among parents. This could extend to providing tasting sessions.

Involving Pupils

- Chambers et al. (2016, p.11) conclude that young people should be involved in (i) menu creation and (ii) design and layout of dining space.
- Wills et al. (2015, p.43) advocate undertaking regular consultations with young people with regards to food, drink and the social environment within schools.

Local intelligence

- Wills et al. (2015, p.x) conclude the need for local intervention that is aware of local circumstance in order to improve nutritional intake among young people.

Managing the wider school environment for dining

- Sahota et al. (2013, p.1278) conclude that there is a need to consider the possibility of using locations outside the school dining hall (both inside and outside) for the consumption of school food.

Managing time available for dining

- Sahota et al. (2013, p.1278) conclude that there is a need to appraise the temporal organisation of lunchtimes in order to improve the social aspects of the dining experience (to reduce pressure on facilities at the same time).

Whole-school focus on healthy eating

- Lucas et al. (2007, p.13) argue that there is a need for a broader focus on school meals if the aim is to improve healthy eating.

Increased awareness among staff

- Sahota et al. (2013, p.1278) conclude that there is a need for a better understanding of the factors that lead to non-uptake of FSM among staff.

4.4.1 – Infrastructure

Cashless systems

- Montemaggi et al. (2016, p.12) evidence that cashless systems lead to an increase in FSM uptake.

Infrastructure

- Eadie et al. (2016, p.4) argue that infrastructure improvements are necessary if UFSM are to be implemented effectively. Issues to be addressed include limited capacity, food storage capacity and accommodating greater numbers presenting for hot meals.

4.4.4 – Senior and strategic intervention

Increasing FSM entitlement among low income households

- Morelli and Seaman (2010, p.151) demonstrate that extending the range of benefits that trigger FSM would lead to increased entitlement among some low income households, but not among households with the very lowest incomes who are already entitled to FSMs.

Increasing FSM use through universal provision

- Morelli and Seaman (2010, p.155) demonstrate through analysis of longitudinal datasets that universal provision is more effective than improving targeting of FSM.
- On the other hand, Sahota et al. (2013, p.1274) note significant levels of non-uptake in areas where universal provision of FSM was piloted in England. However, they do conclude (p.1278) that normalising FSM entitlement should be encouraged as an effective intervention against stigma.
- Similarly, Milne and Gibb (2016, p.11) opine that the gain in terms of percentage point increase in FSM uptake does not represent value for money given the scale of investment for UFSM.
- Milne and Gibb (2016, p.11) believe that there are grounds for attributing an increased uptake of FSM among P7-P7 pupils to the introduction of UFSM for P1-P3 pupils.
- Holford (2014, p.980) estimates (in advance of the introduction) the positive impact of universal provision in P1-P3 on rates of uptake among FSM-registered pupils.
- Holford (2014, p.989) concludes that universal provision is an effective intervention to improve FSM uptake.

Catering staff complement

- Eadie et al. (2016, p.12) report that catering staff express concerns over inadequate staffing levels, which were thought to hamper their ability to serve the increased number of children presenting for school meals following the introduction of UFSM.

Experience of catering staff

- Eadie et al. (2016, p.13) report concerns over a lack of training and experienced catering staff, rendering it more difficult to meet the challenges associated with the increased number of children presenting for school meals following the introduction of UFSM (e.g. more meals to prepare, more P1 pupils who might need assistance, more pupils who are slower at moving through the dining hall, more cleaning up to manage).

Early intervention

- Holford (2014, p.989) argues that focusing investment on the early years is prudent as it may establish 'social and household norms' that would lead to higher rates of FSM and non-FSM entitlement beyond the years of universal provision.

Anonymised payment systems

- Holford (2014) concludes that anonymised payment systems should be extended in order to reduce stigma among FSM registered pupils.

4.5 – The Evidence Base

Focus on children eligible but not presenting for school meals

- Gorard (2012, p.1014) argues that this is a distinct group. English data is analysed and it is suggested that there is some evidence to suggest that this group may be the most deprived of all pupils (more deprived than both (i) those eligible and who present for FSM and (ii) those not eligible for FSM)

Eligibility for free school meals

- Morelli and Seaman (2010, p.146) note that eligibility for the benefits that determine entitlement to FSMs has changed through time.
- Morelli and Seaman (2010, pp.146-47) note that eligibility for FSMs in Scotland was in continual decline between 1998 and 2004.
- Morelli and Seaman (2010, p.149) note that eligibility for FSMs in Scotland among households with the lowest incomes fell dramatically between 1991 and 2003.

Evaluating cash versus cashless systems

- Chambers et al. (2016, p.10) argue that there is a need to evaluate the impact of these different systems of paying for meals in order to understand the impact on FSM uptake.
- Chambers et al. (2016, p.9) recommend that information on whether the school operates a cashless system should be included in the annual school meals census.

School ethos

- Chambers et al. (2016, p.10) note that there is a lack of information on 'school ethos surrounding meals', which limits interpretation of school meals census data.

Out of school food environment

- Chambers et al. (2016, p.10) note that there is a lack of information on 'local retailers', which limits interpretation of school meals census data.

How schools manage their estate and space

- Chambers et al. (2016, p.9) note that there is an absence of data on how schools manage the space they have in order to facilitate school meals uptake.

Lack of direct engagement with primary school children

- Sahota et al. (2013, p.1278) note that they canvassed parents to convey the opinions of primary school children. They acknowledge that there is a need to engage directly with primary school pupils.
- Walling et al. (2016, p.9) conclude that it is vital to know more about children's own experiences and understanding of school meals, which has been little studied.
- Ford et al. (2015, p.34) recommend more direct engagement with children to understand their perceptions of the dining environment.

Limited cohort studies

- Sahota et al.'s work (2013, p.1278) focuses on schools with high levels of FSM entitlement. This leads them to conclude that there is a need to explore issues in schools with low levels of FSM entitlement.
- Lucas et al. (2007, p.12) argue that there is a need to monitor uptake of meals and nutritional intake of consumed meals by social groups, in order to assess whether provided school food is successful as a public health intervention.

Focus on peer influence

- Biloft-Jensen and Holm (2016) argue that more research is needed to understand peer influences on school eating habits.

Lack of individual level data

- Holford (2014, p.981) notes that analysis of school meals data would be stronger if it were available at the level of the individual (rather than aggregated for school cohorts).

Lack of longitudinal evidence

- Lucas (2007, p.14) observe that there are few high quality longitudinal studies or randomised control trials to evaluate the impact of school meals policies on nutrition, behaviour, diet quality and health.
- Eadie et al. (2016) also identify longer-term monitoring of UFSM as a priority.

Insufficient, but with value

- Craig et al. (2014, p.2) recommend that additional data collection is required in order to evaluate the implementation of FSM policies. However, they also recommend that best use be made of existing resources (such as Growing Up in Scotland and the school meals census in the Healthy Living Survey).

Data discrepancy and credibility

- Eadie et al. (2016, p.7) identified differences between routinely collected data by schools and local authorities and the data presented in the annual school meals census as part of the Healthy Living Survey.

4.6 - Conclusion

The provision of FSMs has been evidenced to positively impact on educational attainment, social inclusion and nutrition. In addition, providing FSMs universally can have a number of unintended and positive consequences, such as creating more time for parents and removing stigmas attached to the previously means tested FSMs. Providing a safe, pleasant dining experience for pupils also appears to influence whether or not they choose to remain in school to eat. However, the primary factor shaping pupil dining choices is the pull of the external environment.

5. What Do We Know About Free School Meals? Expert Scottish knowledge from APSE and ASSIST FM

“... we have also identified practical mechanisms ... so that schools can begin, or in many cases continue, the journey towards providing attractive, nutritionally balanced meals to all children who wish to take them, without fear of stigma, in an environment that is welcoming, comfortable and fun.”

(Michael O'Neill, Chairman of Expert Panel on School Meals, Foreword in Hungry for Success, 2002, 5)

5.1 – Introduction

Here, we provide an overview of key findings from work undertaken by the two main interest groups responsible for school meal services in Scotland, APSE and Assist FM. The chapter draws upon both administrative data and expert experience, starting with an analysis of APSE's local authority performance data (5.2), before moving on to reflect on findings from the ASSIST FM 2018 Survey of Local Experts in Education catering (5.3).

5.2 – APSE'S Performance Indicators for Education Catering in Scotland

APSE's annual report brings together performance data, presenting evidence in an accessible format. The UK-wide report comprises trend analysis, key service profile data and performance indicators. For the purpose of this report, we focus on Scotland, drawing some comparisons between Scotland and England, and exploring the key differences among Scottish local authorities. Table 1 compares Scottish performance to that of England for four aspects of catering in school education.

5.2.1 – Environment

Not only does sourcing food locally help local businesses; it is also environmentally friendly. Much more food is sourced locally in England (49.5%), compared to Scotland (18.2%), although there is also much variation in local sourcing across Scottish local authorities, ranging from less than 1% to 58%. A more positive portrayal of the environmental credentials of Scottish local authorities is conveyed with regards to crockery and cutlery use. In recent years there has been a push to reduce our plastic footprint as often plastic is unrecyclable and can be harmful to our environment. In particular, disposable crockery and cutlery can contribute to this build-up of waste. The use of disposable crockery and cutlery is low in both Scottish and English local authorities. 97.3% of schools in England do not use disposable crockery/cutlery, compared to an average of 85.5% in Scotland (with a range within local authorities from 75% of schools to all schools).

Table 2: Selected APSE performance indicators, Scottish/English local authorities, 2016-17

	England	Scotland
Environment		
% food sourced locally	49.5% *	18.20%
% schools not using any disposable crockery / cutlery	97.30%	85.40%
Nutrition and healthy eating		
% front line staff trained in food nutrition and health	69.10%	58.50%
% schools offering breakfast service	11.00%	20.10%
Productivity		
Staff absence (front line staff)	4.30%	4.60%
Lunch meals served per staff hour (primary)	10.7	8.8
Lunch meals served per staff hour (special)	8.0 *	5.7 *
Price performance		
Average spend per paying pupil (secondary)	£1.05	£0.77
Subsidy per lunchtime meal	£1.55	£1.76
Food only cost per lunchtime meal (primary and special)	£0.78	£0.78
Total cost per lunchtime meal (primary)	£2.47	£2.77
Total cost per lunchtime meal (secondary)	£2.55	£2.98

5.2.2 – Nutrition/Healthy Eating

Table 2 also offers an insight into nutrition and healthy eating. Although the majority of frontline staff in Scotland are trained in food nutrition and health (58.5%), this is lower than the proportion of staff in England (69.1%). On the other hand, breakfast services are almost twice as likely to be offered in Scottish schools compared to English schools (20.1% and 11%, respectively).

Once more, these aggregate Scottish level data disguise wide disparities across local authorities. For example, there are some authorities where all frontline staff are reported to be fully trained in food nutrition and health, whereas there is one local authority in which less than one in ten staff are reported to be fully trained in the same (8.9%). Similarly, some local authorities offer no breakfast service while one local authority reports that two thirds of its schools offer this service (66.4%).

5.2.3 – Productivity

In general, increasing productivity is considered to be the key driver to the future success and health of the UK economy (Kierzenkowski et al., 2018). With regards to educational catering, APSE present data on staff absence and the number of pupils served per staff member during an average lunch break. Levels of frontline staff absence are similar in England and Scotland (4.3% and 4.6% respectively), with absence rates reported to range from zero to 7.1% across Scottish local authorities. Productivity is reported to be higher in England, despite the fact that an extension of universal provision in P1-3 has increased productivity in Scotland in recent years. It also prudent to note that the higher proportion of smaller/rural schools in Scotland will impact on these indicators of productivity.

5.2.4 – Price Performance

The final data in Table 2 refer to price performance. School meals are supposed to be affordable for pupils and their families, although fees must be set at a level that ensures the viability of the service. At the same time, in Scotland, schools must adhere to stringent food standards to ensure the provision of a healthy offering. In Table 2, data are provided on the average spend per paying secondary school pupil, the subsidy per lunchtime meal, food only cost per lunchtime meal (for both primary and special schools) and total cost per lunchtime meal (at both the primary and secondary school level). In summary, the average pupil spend is lower in Scotland (77p, compared to £1.05 for England), while the subsidy and total cost of the meal are all higher (for example, a subsidy of £1.55 per meal in England, compared to £1.76 in Scotland). Once more, these aggregate figures for Scotland disguise variation across local authorities, with some reporting a subsidy per meal of as much as £2.52 and total cost of a primary school meal as high as £4.09.

5.3 – ASSIST FM 2018 Survey of Local Experts in Education Catering in Scotland

The ASSIST FM 2018 survey of local experts in Education Catering in Scotland had two primary objectives. The first was to examine the marketing and promotional campaigns linked to school meals in Scotland over the past decade, and the second was to explore the challenges facing school catering in Scotland.

5.3.1 – Marketing of school meals in Scotland

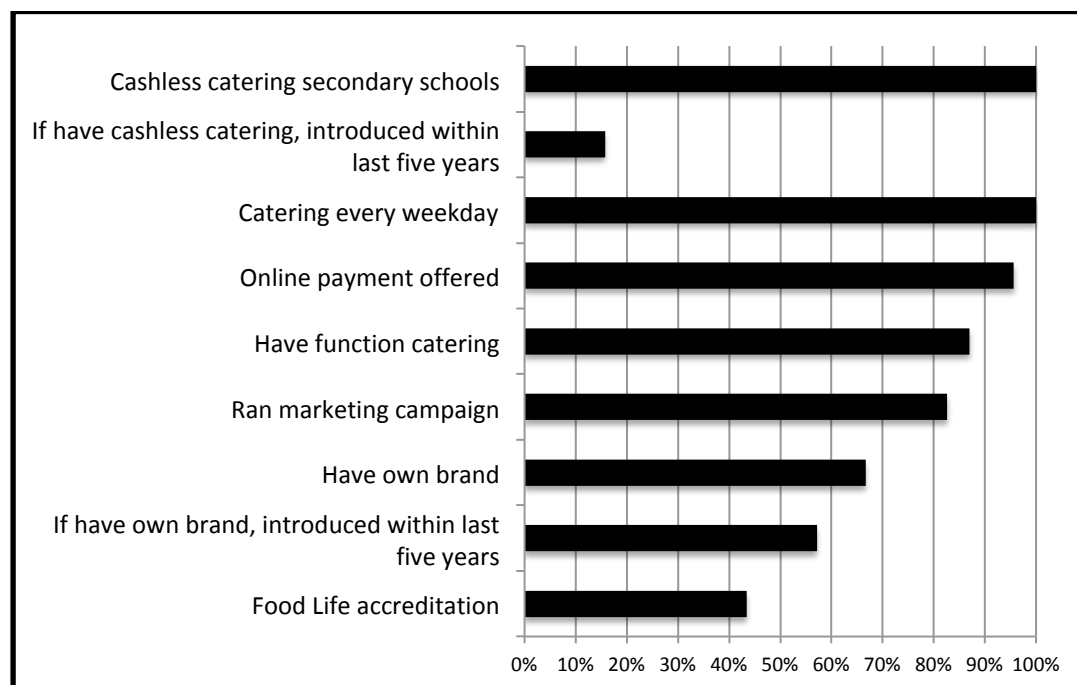
Figure 1 displays key findings pertaining to the marketing of school meals in Scotland, summarising the proportion of local authorities in Scotland that deliver on each indicator.

There appear to be some universal characteristics of educational catering in Scotland; all report cashless catering in secondary schools and all provide catering every weekday. A cashless catering system is thought to reduce the stigma encountered by those who receive FSMs and it may also improve the efficiency of lunchtime service. Each pupil is provided with a swipe card which they can top up with money, either in the school premises or online. Pupils can top their card up in advance, for example, on a monthly basis, and parents are also provided with access to their child's account where they can view their purchases and spending. Food allergens can also be registered on these cards and there are systems in place, which will flag up at the register when a pupil is purchasing food that is not suitable for them.

The majority of Scottish local authorities also have their own food brand, marketing campaigns, and themed food days. Local authorities are creating their own brands in order to appeal to more pupils and to encourage them to eat healthier, nutritious foods within the school gates. In 2018, two thirds of local authorities had their own brand (67%), with many of these brands being well established; the majority of these were introduced more than five

years ago (57%). The majority of local authorities in Scotland report that they have organised a marketing campaign in schools (83%).

Figure 1: Marketing of school meals, Scottish local authorities, 2018



The majority of schools within the local authorities surveyed were reported not to have a Food For Life Accreditation (only 43% were accredited). This is an opt-in programme which is designed to involve, engage and motivate pupils to make informed decisions about their eating habits and to engender a healthy food culture within schools. Not only are the pupils provided with healthy food options, but they also have the opportunity to learn about food in the classroom and how to grow it outdoors. When a school is accredited they are ranked based on their commitment to these values and can be given bronze, silver or gold accreditations. It might be argued that young people's keen interest in environmental issues could be an untapped source of potential for marketers seeking to promote school meals.

5.3.2 – Promotional campaigns over the last decade

As identified above, the majority of Scottish local authorities have run a school meals marketing campaign (83%). These campaigns can include the promotion of themed days, which are used to create a fun atmosphere at lunchtimes and to highlight the range of lunchtime food options within the school gates. Many schools use multiple marketing campaigns throughout the year that reflect seasonal and themed occasions. For examples, Robert Burns Day, Red Nose Day, Halloween, World Food Week, Easter, St Andrews Day, Christmas, and Bonfire Night. In addition, some schools promote school meals at parents' evenings and promote loyalty cards to pupils during lunch times.

Some local authorities have led marketing campaigns to promote the uptake of FSMs. Targeting parents, this work has involved radio advertisement, video production and sponsored feeds on Facebook and Twitter.

5.3.3 Challenges for School Catering in Scotland

The ASSIST FM survey afforded key informants the opportunity to provide further comment and share their insider experiences of school catering provision in Scotland.

It was opined that local authorities face a number of challenges in relation to school catering in Scotland. Many authorities were judged to struggle with the introduction of FSMs for all P1-P3 pupils, with some identifying a lack of proper equipment and space within their kitchens in order to meet the heightened demand. Furthermore, cashless operating systems also present problems. Staff training is necessary to ensure these systems are operated efficiently; however, due to strict budgets and cost cutting, it has proven difficult to fully train every staff member to the required standard. A lack of staff and staff absences, are reported to have created further difficulties in some local authorities, as has a reduction in management capacity due to wider cost cutting measures.

5.4 – Conclusion

This chapter provides insights into school meal and catering provision based on the findings of the APSE'S Performance Indicators for Education Catering in Scotland and the ASSIST FM 2018 Survey of Local Experts in Education Catering in Scotland. The APSE performance review's figures on the local sourcing of school meals highlights how only a small percentage of Scottish school meals are locally sourced. Maximizing local food might not only benefit local providers; it may also appeal to the wider environmental sensitivities of school pupils. The ASSIST FM survey provided an insight into key aspects of educational catering in Scotland at the present time, for example, the universal adoption of cashless systems. Although the benefits are widely acknowledged, key informant insights suggest that these benefits are not yet been fully realized in practice.

Although the insights raised in the reports of these key interest groups extend beyond the sharp focus of this report on FSMs, they are not without relevance. In general, there may be potential in better utilizing these resources in future to focus more directly on issues pertaining to FSMs. For now, the wider challenges faced in the sector relating to the operation of cashless catering are significant given that this is heralded as a key means through which free school meal stigma is avoided. Furthermore, the relatively higher costs of providing school meals in Scotland may become an issue if steps are to be taken to extend free school meal provision, or even maintain existing levels of provision in times of constraint for local authority budgets (The Accounts Commission, 2019).

6. National Trends in Scotland

*“... what good will it do us to provide the healthiest food in Scotland if nobody comes?”
(Michael O’Neill, Chairman of Expert Panel on School Meals, Foreword, in Hungry for Success, 2002, 5)*

6.1 – Introduction

The importance of understanding national trends cannot be understated. If it is considered that children must be properly nourished if they are to thrive in education, then the evidence of school meal uptake makes an important contribution to our understanding of whether Scotland is providing an environment in which school children can achieve their academic potential. The national data that follow explore three issues: uptake of school meals (6.2), registration for FSMs (6.3) and uptake of FSMs (6.4). Time series and contemporary data are analysed.

6.2 – Uptake of school meals, 2006 - 2018

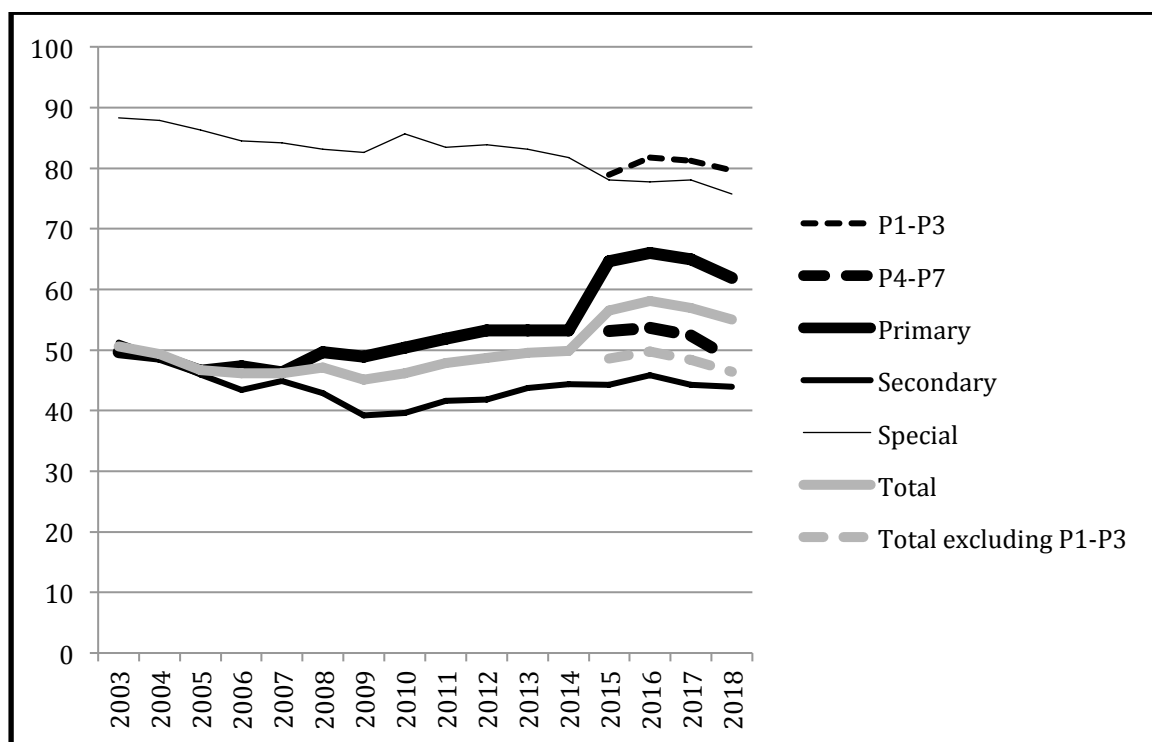
Figure 2 reports trends in the uptake of school meals in Scotland, by sector, from 2003 to 2018. As noted above, the data is provided in a time series graph. Full time-series data are presented for secondary, primary and special schools, in addition to Scotland as a whole. However, for reasons outlined in Chapter Three, since 2015 it is more useful to set apart those year groups in primary school for which school meals are now provided universally (P1-3) from those for which provision is targeted (P4-7).

On the whole, there was little variation in the proportion of pupils in Scotland who presented for a school meal between 2003 and 2014, with every other child consuming a school meal. The introduction of universal provision in P1-3 led to an immediate and marked increase between 2014 and 2015 (from 49.8% to 56.5%), although in recent years some of that increase has been lost (falling from 58.1% of pupils in 2016, through 56.9% in 2017 to 55% in 2018). Nevertheless, since the introduction of universal provision in 2015, the majority of pupils in Scotland have been presenting for school meals.

These aggregate data disguise significant variations across school type. Indeed, each of the three school types can report a different trajectory in recent years. Not only have the number of special schools and pupils in attendance at special schools reduced in Scotland in recent times; the proportion of pupils in special schools who present for school meals has also steadily fallen through time. On the other hand, uptake of school meals remains significantly higher in special schools, in contrast to mainstream schools.

Back in 2003, one half of pupils in both primary schools and secondary schools presented for school meals. Indeed, uptake was marginally higher in secondary schools (51.2% in secondary schools, compared to 49.6% in primary schools). For much of the decade thereafter, trends began to diverge; secondary school uptake fell steadily through to 2009, with some of that loss then recovered until 2016. In contrast, uptake in primary schools held fairly constant through until 2009, resulting in divergence between primary and secondary schools (48.9% in primary schools, compared to 39.2% in secondary schools in 2009). From 2009 through 2014, small and steady increases in uptake were evident in both primary and secondary schools and small decreases have been reported for both since 2016; the only difference since 2009 being the spike in uptake for primary school meals in 2015 with the introduction of universal provision for P1-P3.

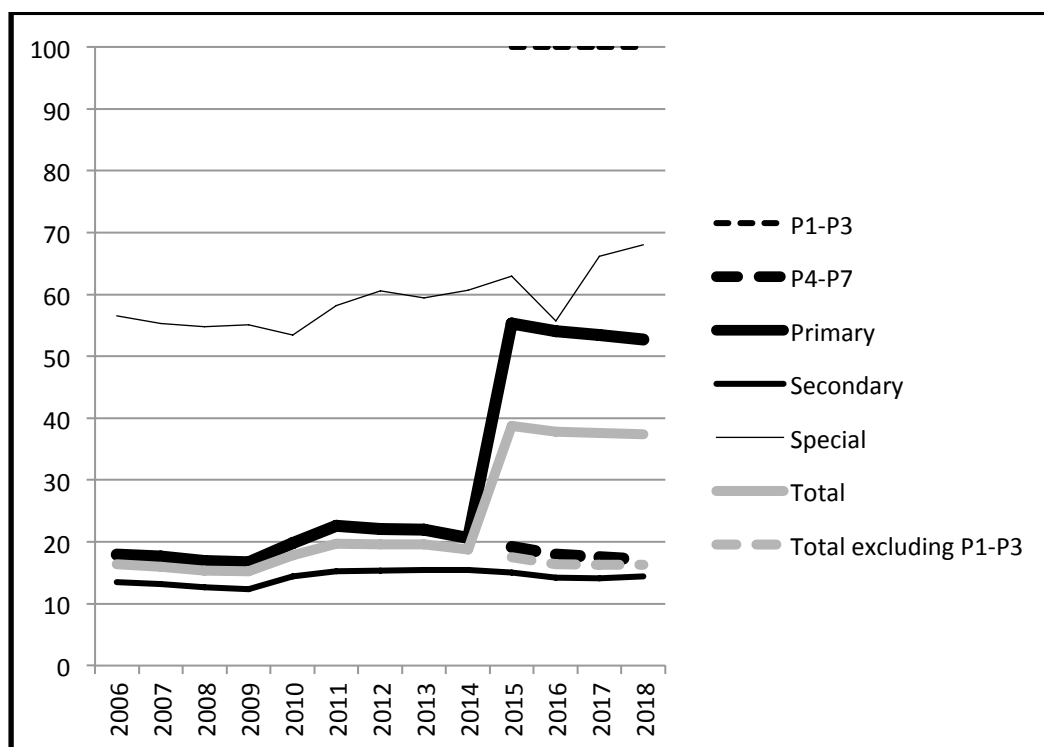
Figure 2: Uptake of school meals in Scotland on census day, by sector, 2003-18



6.3 – Registration for free school meals, 2006 - 2018

‘Registration for FSMs’ refers to those who are eligible for FSMs and have registered to receive them. Prior to 2015 eligibility was largely based on the receipt of benefits and largely remains so today, with the exception of P1-3 pupils who are now universally eligible, i.e. they can register to receive FSMs regardless of their parent’s or guardian’s socio-economic circumstances. Figure 3 reports trends in registration for FSMs for a range of school types since 2006; as for Figure 2, data are presented separately for P1-3 and P4-7 since 2015.

Figure 3: Registration for free school meals in Scotland, by sector, 2003-18



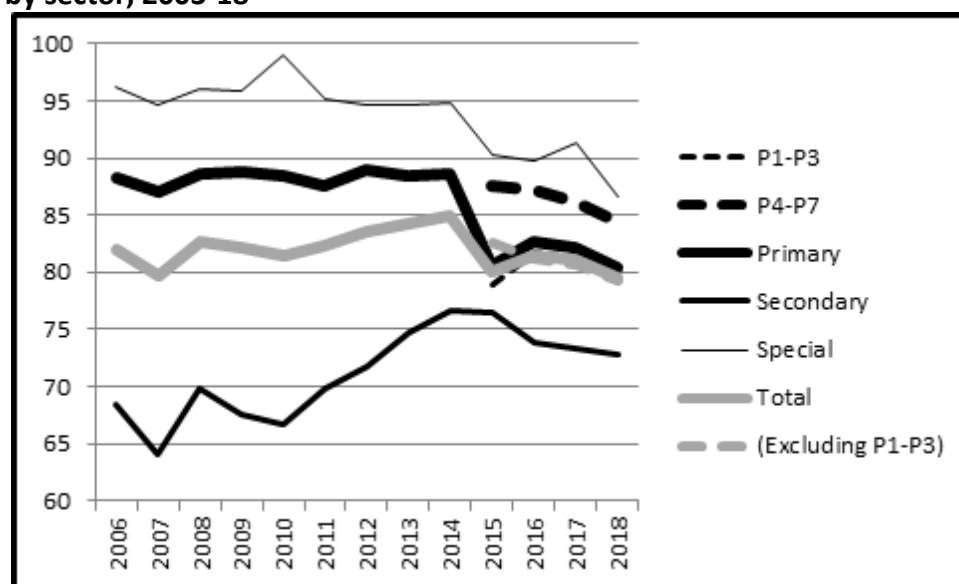
In 2018, more than one third of pupils in Scottish schools registered for a free school meal. The proportion of pupils registered for FSMs across Scottish schools (including primary, secondary and special schools) has increased by 21 percentage points over the last decade, from 16.5% in 2006 to 37.4% in 2018, with the bulk of this increase reflecting the introduction of universal provision for P1-P3 in 2015.

Other points of note are the consistently high (and relatively higher) rates of free school meal registration in special schools, compared to mainstream schools and the slightly higher rates of registration in primary schools, relative to secondary schools (even prior to the policy change in 2015). Primary school pupils are now almost four times as likely to be registered for FSMs than secondary school pupils. Registration has remained constant in secondary schools in recent years. However, registration has fallen slightly for pupils in the upper stages of primary school in recent years (19.2% of P4-P7 were registered for FSMs in 2015, compared to 17.1% of P4-P7 in 2018).

6.4 – Uptake of free school meals, 2006 - 2018

Figure 4 reports the uptake of FSMs since 2006 for different types of school in Scotland. This refers to the proportion of eligible pupils who were present and received a free school meal on school census day. From 2006-2018, a total of 1,552,552 FSMs were served to registered pupils from primary, secondary and special schools on the school census day in Scotland. In 2018, over five times as many FSMs were served in primary schools (160,582) compared to secondary schools (24,019). A very small proportion of total FSMs are served to pupils attending special schools (3,551).

Figure 4: Uptake of free school meals among registered pupils in attendance, in Scotland, by sector, 2003-18



On the whole, uptake of FSMs among pupils in attendance is high, ranging from 72.8% in secondary schools to 86.6% in special schools in 2018. For Scotland as a whole, a high point of 85% uptake was registered in 2014; a sharp fall the following year (to 80.1% in 2015) has never been recovered, and the rate in 2018 was 79.5%.

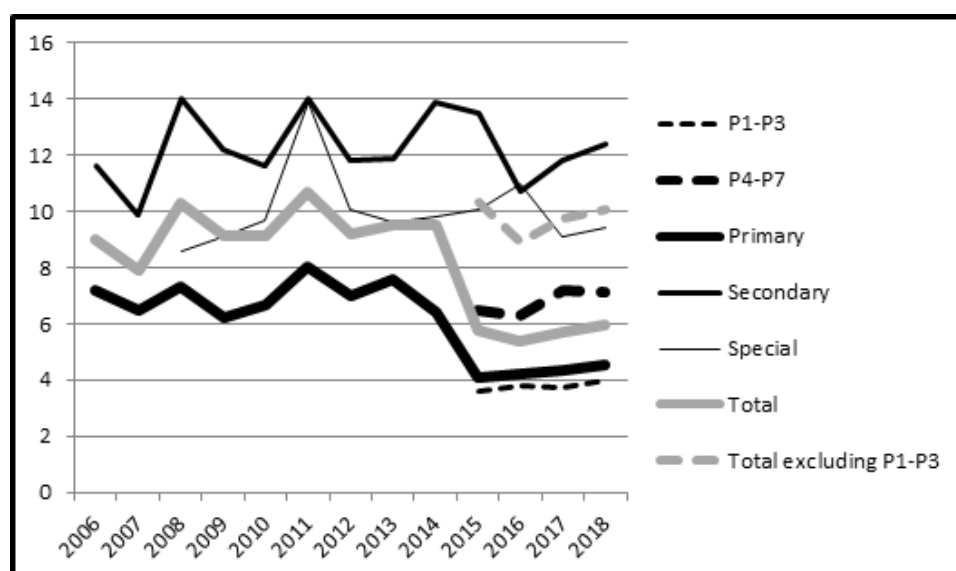
However, these summary statistics disguise sector divergence; since 2010, uptake in special schools has fallen markedly; steady increases in uptake between 2010 and 2015 for secondary schools (66.7% to 76.4%), have been reversed in recent years (now 72.8% in 2018), although current levels of uptake are still much higher than they were a decade ago (e.g. 64% in 2007); and the slight recovery in primary school uptake that followed the marked drop in uptake that accompanied the introduction of universal provision of FSMs for P1-P3 in 2015 (88.7% in 2014, 80.5% in 2015 and 82.7% in 2016), has been followed by reductions in uptake among pupils in the upper end of primary school (87.3% uptake in 2016, compared to 84.4% uptake in 2018).

These are 'best case' statistics. Uptake of FSMs of those in attendance, by definition, does not account for those pupils who are entitled to FSMs, but are not in attendance (and who cannot therefore cannot receive a free school meal). Taking this more comprehensive indicator of the reach of FSMs, leads to a slightly less positive portrayal of uptake. Adding

the non-attending to the non-presenting of those in attendance, the typical daily reach of FSMs to those registered for them is 75.6% for P1-P3, 77.3% for P4-P7, 77.1% for special schools and 'only' 60.4% for secondary schools.

Figure 5 summarises the difference between the two indicators of free school meal uptake, i.e. it reports the percentage point difference between the two indicators for each school type. Although there is volatility across time, it is clear that the more comprehensive indicator (accounting for non-attending pupils) makes a significant difference to descriptions of FSMs uptake for all but P1-P3.

Figure 5: Impact of absence on consumption of free school meals in Scotland, by sector, 2006-18 (percentage point difference between pupils 'registered for FSM' and pupils 'registered for FSM and in attendance')



6.5 - Conclusion

In conclusion, the majority of pupils in Scotland now present for school meals, following the introduction of universal provision for P1-3. However, a substantial proportion of pupils do not take school meals and trend evidence highlights some negative direction of travel. Among the issues raised that are of worthy of further attention are the following:

- What factors underpin the recent reduction in the number of pupils presenting for school meals – and, in particular, FSMs?
- What lessons can be learned from the increase in free school meal uptake in Scottish secondary schools between 2010 and 2014?
- Should greater use be made of the 'reach' indicator, rather than the 'uptake' indicator?
- Should consideration be given to providing the equivalent of a school meal to pupils in need who are not attending school?

7. Accounting for Variation in the Uptake School Meals in Scotland

“Both schools and local authorities reported that UFSM had led to increased uptake of free school meals among P1–3 children. However, levels of UFSM uptake varied between schools and also varied during the school week and between school terms.”

(McAdam, 2016, p.7)

7.1 – Introduction

It is widely acknowledged that school meal consumption is not uniform across Scotland, with the previous chapter demonstrating how uptake has varied over time, and continues to vary across school age stage (lower uptake in secondary schools, compared to primary schools). This chapter extends this analysis by drawing upon published data from the annual Scottish school meals census to explore the impact of three factors that could also account for variation in school meal uptake in Scotland, i.e. school population size (6.2), geographical setting (6.3) and deprivation area status (6.4). Although time series data are available to track changes for each through time, only a contemporary analysis is presented using data from the latest school meals census (published in June 2018).

7.2 – School Roll

Figure 6 allows us to appraise whether school size is associated with the likelihood of pupils presenting for school meals in Scottish primary schools, while Figure 7 does likewise for Scottish secondary schools. In this context, school roll is an appropriate proxy for school size. Figure 6 also distinguishes between uptake for those year groups for which provision of a free school meal is universal (P1-P3) and those for which eligibility is determined by passported benefits (P4-P7).

Uptake of school meals is higher in smaller schools at both primary and secondary levels, and in primary schools where eligibility is universal and targeted. Where provision is targeted the differences at the extremes appear substantial with 56% of those from the smallest secondary schools presenting for school meals, compared to 36% of those from the largest. Similarly, for P4-P7 in primary schools, 40% of those in the largest schools present for school meals, compared to 61% of those in the smallest schools. Significantly, the differences in uptake are much less marked when school meals are free to all; for P1-P3 in primary schools uptake ranges from 72% in the largest schools to 83% in the smallest schools. Interestingly, there is an anomaly for secondary schools in that the very largest secondary schools (1,200 pupils or more) have slightly higher levels of uptake, compared to the next largest band of schools (roll between 1,100 and 1,199 pupils),

Although uptake is consistently associated with size, it is important to acknowledge that the differences are more a matter of degree, rather than ilk; for example, the majority of pupils in all but the very smallest secondary schools do not present for school meals, while typically three-quarters of primary school pupils in P1-P3 present for school meals (with rates of uptake slightly higher in smaller primary schools, and slightly lower in larger primary schools).

Figure 6: Uptake of school meals in primary schools in Scotland, by age stage and school roll, 2018

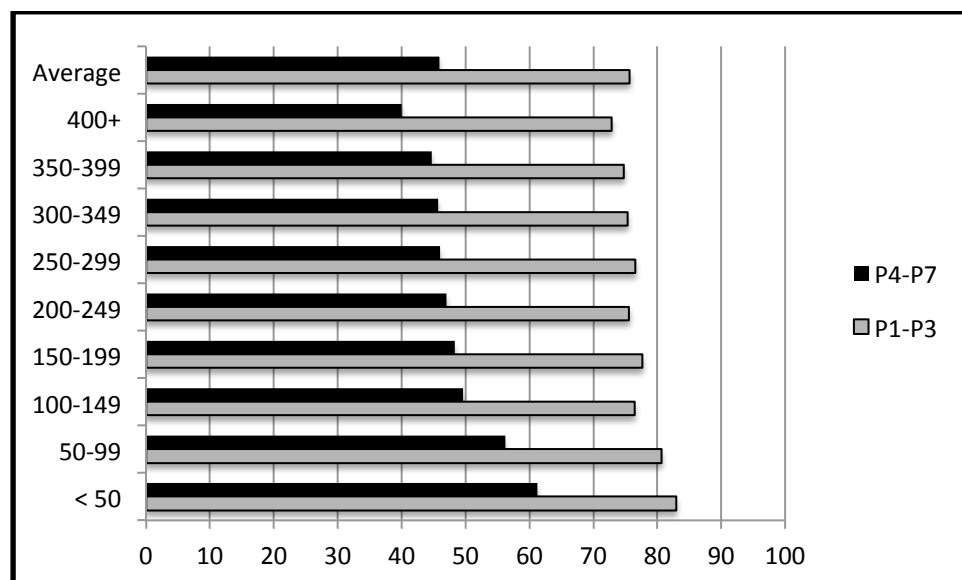
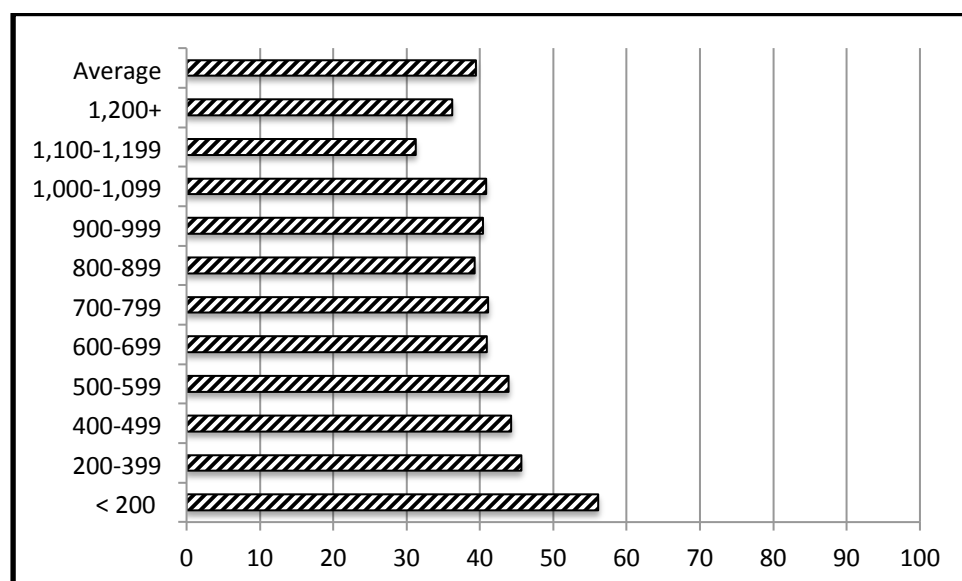


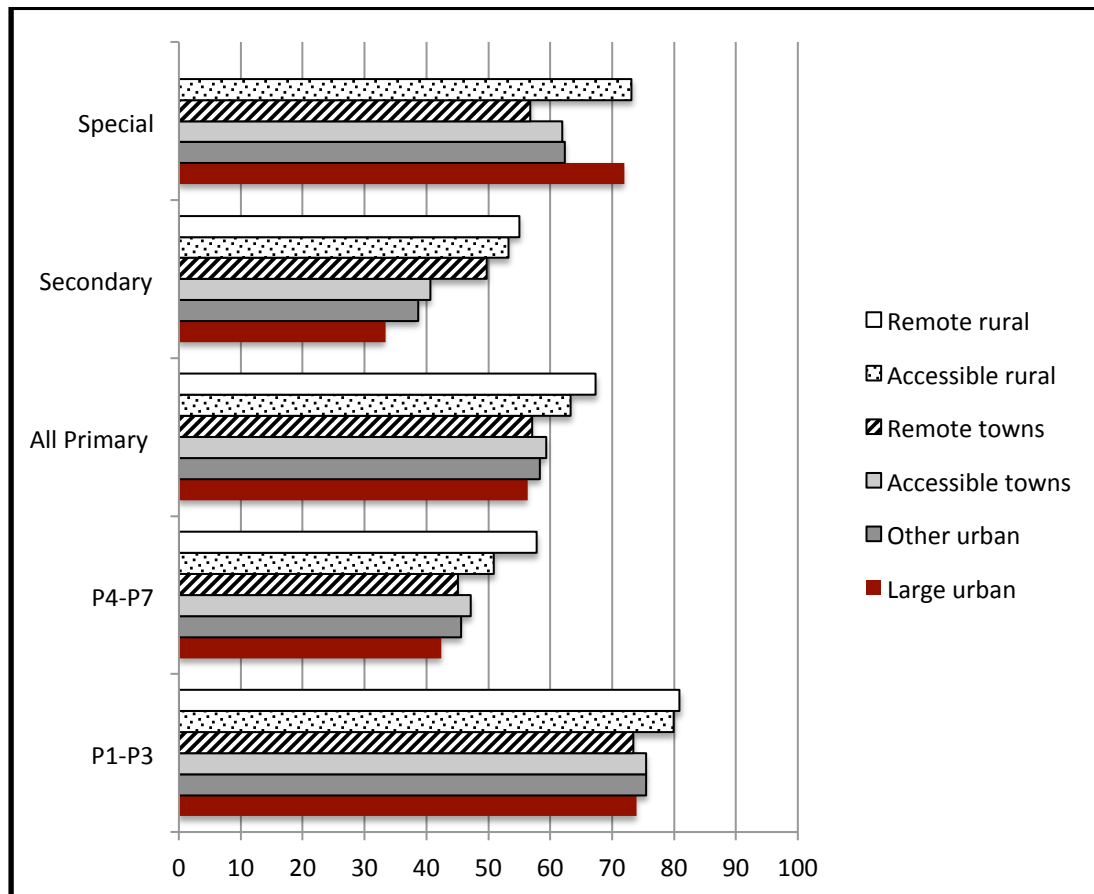
Figure 7: Uptake of school meals in secondary schools in Scotland, by school roll, 2018



7.3 – Geographical Setting

Figure 5 summarises how geographical setting is related to school meal uptake. Data are presented for five school types (special, secondary, all primary, P4-P7 and P1-3) for each of the six geographical area types that are typically used to describe geographical setting in Scotland (Scottish Government, 2019). For each area type, for each school type, data are presented on the percentage of pupils who present for school meals. The missing bar for special schools reflects that there are no special schools in remote rural areas.

Figure 8: Uptake of school meals in Scotland, by urban/rural status and school type, 2018



On the whole, uptake is higher in rural, compared to urban areas. However, and as for school roll, differences are less marked when school meals are provided as a universal service, e.g. for P1-P3 pupils, average uptake of free school meals in remote rural schools is 80%, compared to 73% in large urban schools. More marked differences are evident for secondary schools (54% for remote rural, compared to 32% in large urban areas) and upper levels of primary schools (58% for remote rural schools, compared to 42% for large urban areas).

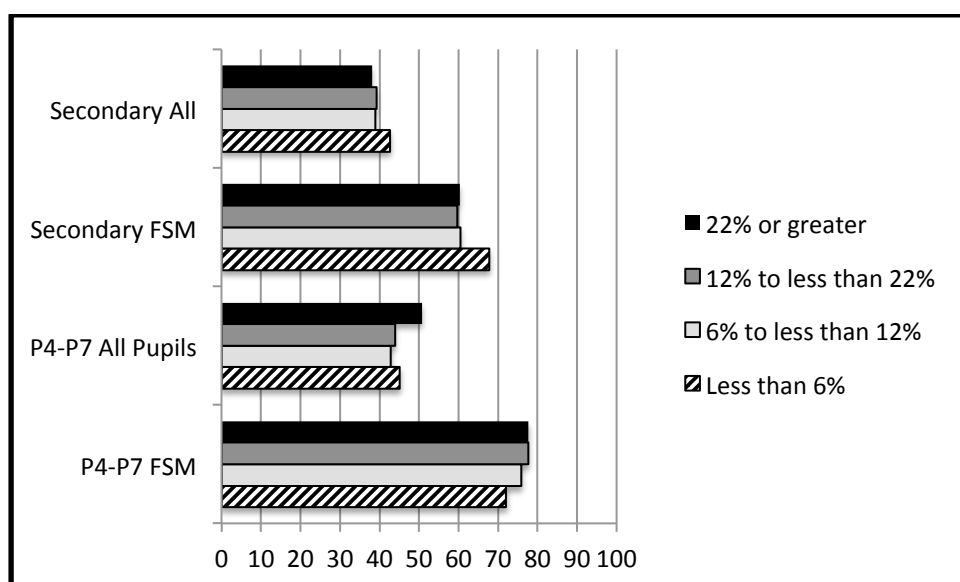
Urban-rural differences are less evident for special schools with, for example, the highest levels of uptake found in both accessible rural areas and large urban areas.

7.4 – Prevalence of Deprivation

Entitlement to school meals has been used as a proxy for area poverty/deprivation. It is therefore also useful to consider whether school meal uptake is related to the overall proportion of the school population that is eligible for a free school meal. No data are presented for Primary 1-3, given 100% of these pupils are eligible for free school meals.

In Figure 9, school meal uptake is described for four pupil populations. First, data are presented for all pupils (whether eligible for free school meals or not) and then for all pupils eligible for free school meals. These data are stratified for secondary schools and the upper end of primary school (Primary 4-7). The concentration of pupils who are eligible for free school meals is described across four bands; from highest (22% or more of all pupils in school) through to lowest (less than 6% of all pupils in school).

Figure 9: Uptake of school meals in Scotland, by percentage of pupils registered for Free School Meals and school type/FSM status, 2018



Variations are smaller and less consistent than those that were evident for school size and geographical setting. However, although differences are slight, there would appear to be a difference between secondary and primary schools, i.e. in secondary schools, higher rates of uptake are evident in schools with fewer pupils registered for FSM, whereas in contrast, in primary schools, higher rates of uptake are evident in schools with more pupils registered for FSM. On the whole, however, differences are slight, and it would appear that the prevalence of FSM entitlement has little bearing on school meals uptake.

7.5 – Conclusion

School roll and geographical setting appear to be associated with the likelihood of pupils presenting for FSMs. In contrast, the prevalence of those entitled to FSM among the school population is less significant.

8. Regional Trends in Scotland

“...A berry day was organized by the local authority education department and school meal providers in the county of Angus in the east of Scotland. ... Attendance for school meals on berry day increased 35.5% on the previous week and increased by 47.5% compared with the same day in the previous year”

(Beattie, 2004, p.157)

8.1 – Introduction

We now explore regional variation in school meal uptake across local authorities in Scotland in 2018. This ‘local authority’ level of analysis is important as it is the scale at which service delivery decision-making is made in Scotland. Furthermore, added to the previous chapter, and taking cognisance of the variable character of local authorities in Scotland, this analysis also provides key insight into the possible reasons for pupils taking or not taking school meals. Thus, ‘regional’ time-series data is presented for three issues for 2006-2018: uptake of school meals (8.2), registration for FSMs (8.3), and uptake of FSMs (8.4). Comment will focus on trends and contemporary status. In section 8.2, the uptake of school meals for 2006-2018, will be explored.

8.2 – Uptake of school meals, 2006 - 2018

The national trends regarding uptake of school meals in Scotland was presented and discussed in Chapter Six. Table 3 summarises key aspects of school meal uptake in 2018 for Scottish local authorities at four stages: primary, secondary, P1-P3 and P4-P7. As previously noted, due to Scottish policy changes with regards to UFSMs for P1-P3, data has been provided for two primary age ranges in order that the universal provision of FSMs at P1-P3 does not misrepresent overall levels of school meal uptake for primary schools. For each stage of schooling the table identifies the three local authorities with the highest uptake and those three with the lowest uptake, as well as noting the Scottish average.

Table 3: Uptake of school meals among pupils in attendance on census day in Scotland, selected local authorities, by school type, 2018

	P1-P3	P4-P7	Primary	Secondary
Highest	Shetland Isles (94.5%)	Inverclyde (77.4%)	Shetland Isles (80.4%)	Eileanan Siar (70.4%)
2nd	Dum./Gall. (88.4%)	Orkney Isles (74.4%)	Orkney Isles (79.7%)	Orkney Isles (69.4%)
3rd	Orkney Isles (87.7%)	Eileanan Siar (73%)	Eileanan Siar (78%)	E/Renfrew. (63.1%)
Scottish Average	79.6%	48.5%	61.9%	43.9%
3rd	East Ayrshire (72.3%)	Renfrewshire (35.3%)	East Lothian (52.9%)	Renfrewshire (33.8%)
2nd	Clackmannan. (71.9%)	East Lothian (34.6%)	Renfrewshire (52.6%)	N/Lanarkshire (25.8%)
Lowest	W/Dunbarton (69.6%)	Edinburgh (33.1%)	Edinburgh (52%)	Edinburgh (21.7%)

At the primary school level, Shetland Isles has the highest uptake at 80.4% - four out of every five primary school pupils in the Shetland Isles presents for a school meal. Interestingly, all three of the local authorities with the highest levels of uptake in primary schools are Island Councils, with Orkney Isles and Eileann Siar having uptake levels that are comparable to the Shetland Isles (79.7% and 78% respectively). Uptake for these three island councils is significantly higher than the Scottish average of 61.9% for the primary school level. In contrast, East Lothian, Renfrewshire and Edinburgh all record much lower levels of uptake with just over one half of their primary school pupils taking a school meal on school census day.

The island authorities are still well represented in those local authorities that have the highest level of school meal uptake for both P1-P3 (with universal provision) and P4-P7 (with targeted provision). Inverclyde has the highest overall levels of school meal uptake in the upper stages of primary school. Dumfries and Galloway seems to 'perform' relatively well in terms of delivering school meals when it is freely available to all in the early stages of primary school.

At the other end of the scale, it is notable that even when provided as a universal free service, almost one third of P1-P3 pupils in West Dunbartonshire do not present for school meals. Equally notable is that the levels of school meal uptake in the upper stages of primary school in Renfrewshire are as low as that which is evident in Renfrewshire's secondary schools (35.3% and 33.8%, respectively). However, on the whole, there is no geo-patterning to those authorities with the lowest level of school meal uptake in primary schools with both city and rural, and large and small authorities ranked toward the lower end of the table.

Moving to secondary schools, once more relatively higher levels of uptake are evident for island authorities, with both Eileann Siar and Orkney having more than two thirds of their secondary school pupils presenting for a school meal on school census day (70.4% and 69.4%, respectively), while East Renfrewshire has the third highest with 63.1%. As with primary school data, Edinburgh has the lowest uptake (21.7%), with North Lanarkshire (25.8%) and Renfrewshire (33.8%) also having low uptake.

At each age-stage there is significant divergence among local authorities. The percentage point range between the authorities with the highest and lowest levels of uptake is 28.4 percentage points for primary schools and 48.7 percentage points for secondary schools.

Figure 10 extends this analysis by providing trend data on the uptake of school meals among primary school pupils in selected local authorities in Scotland from 2015 to 2018. The six authorities represented include the three with the highest percentage point increase in primary school meal uptake (Inverclyde, Perth and Kinross, and East Renfrewshire) and the greatest percentage point decrease in primary school meal uptake (City of Edinburgh, West Dunbartonshire and Falkirk). Notwithstanding what may be an anomalous estimate for Inverclyde in 2017 (given that it otherwise would suggest a sharp rise from 2016-17 and a sharp fall from 2017-2018), it is clear that different trajectories are evident across Scottish local authorities in recent years.

Figure 10: Uptake of school meals among primary school pupils in attendance on census day in Scotland, selected local authorities, 2015-2018

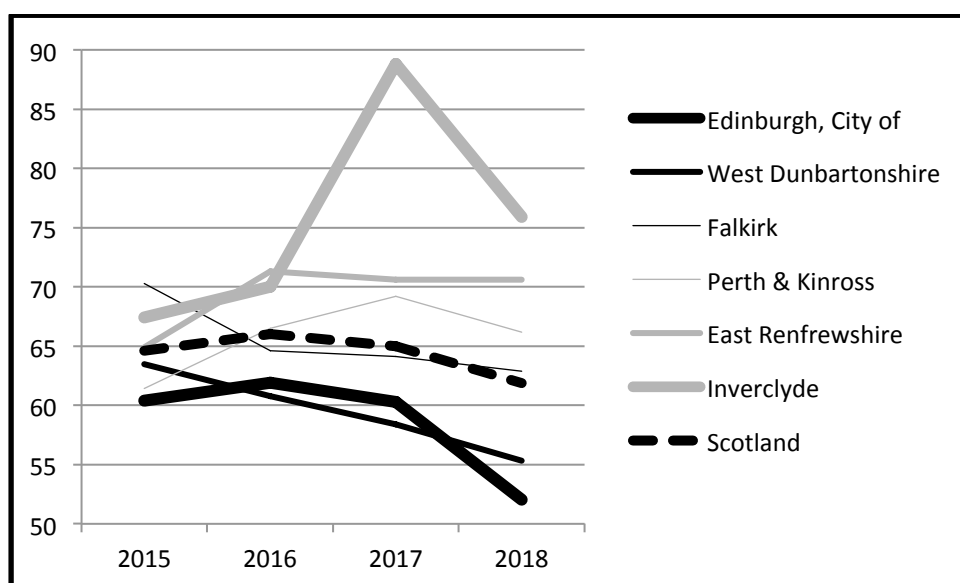


Figure 11 replicates the time series analysis of Figure 10 for secondary schools and, given that there is no significant change in entitlement rules, provides data for a longer period, from 2003 to 2018. Once more, data are provided for the three local authorities with the highest percentage point increase in secondary school meal uptake (East Lothian, Clackmannanshire and Na h-Eileanan Siar) and the greatest percentage point decrease in secondary school meal uptake (Shetland Isles, North Lanarkshire and Renfrewshire).

Figure 11: Uptake of school meals among secondary school pupils in attendance on census day in Scotland, selected local authorities, 2003-2018

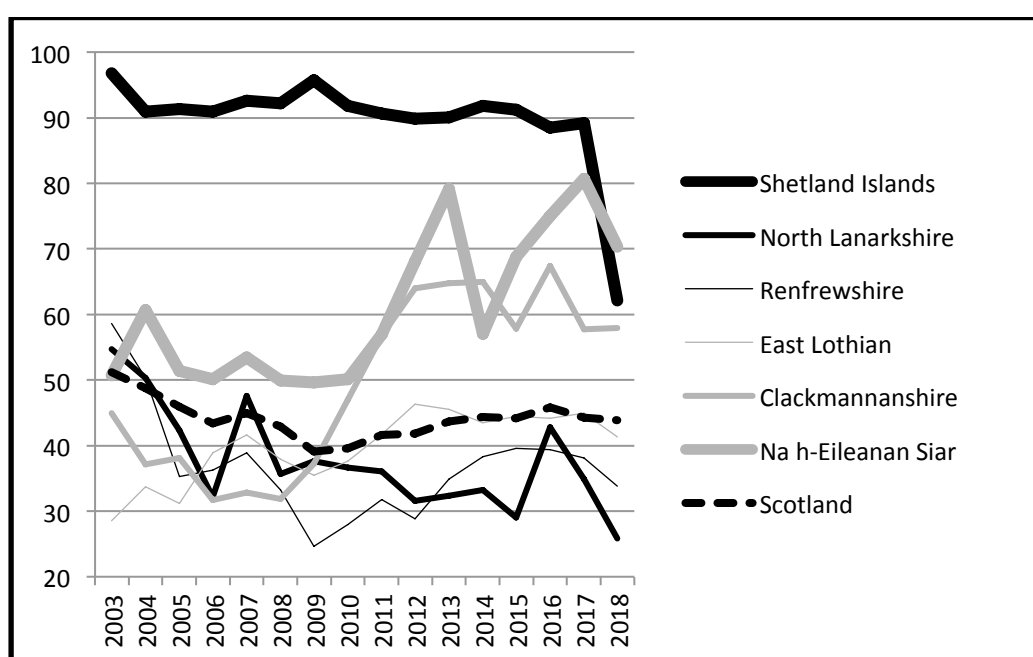


Figure 11 has an erratic nature with sharp increases and steep declines, particularly for the two island authorities represented. Volatility seems characteristic of Na h-Eileanan Siar, while the stable high uptake reported for the Shetland Isles seems to have collapsed between 2017 and 2018. These trend data highlight the value of sub-national analysis, as the Scottish trend often bears little resemblance to that of individual authorities. For example, while the proportion of pupils taking school meals in North Lanarkshire has almost halved over the period (54.7% in 2003 to 25.8% in 2018), East Lothian has increased dramatically (28.5% in 2003 to 41.3% in 2018).

8.3 – Registration for free school meals, 2006 - 2018

We now replicate the analysis of the previous section for the registration of pupils for FSMs. This data complements the national data for the same issue, which were reviewed in 6.3. Figures 12 and 13 present data for primary and secondary schools respectively, with trends reported for both the three authorities with the highest levels of free school meal registration in 2018, and the three authorities with the lowest levels of free school meal registration in 2018.

Figure 12: Registration for free school meals among primary school pupils on census day in Scotland, selected local authorities, 2006-2018

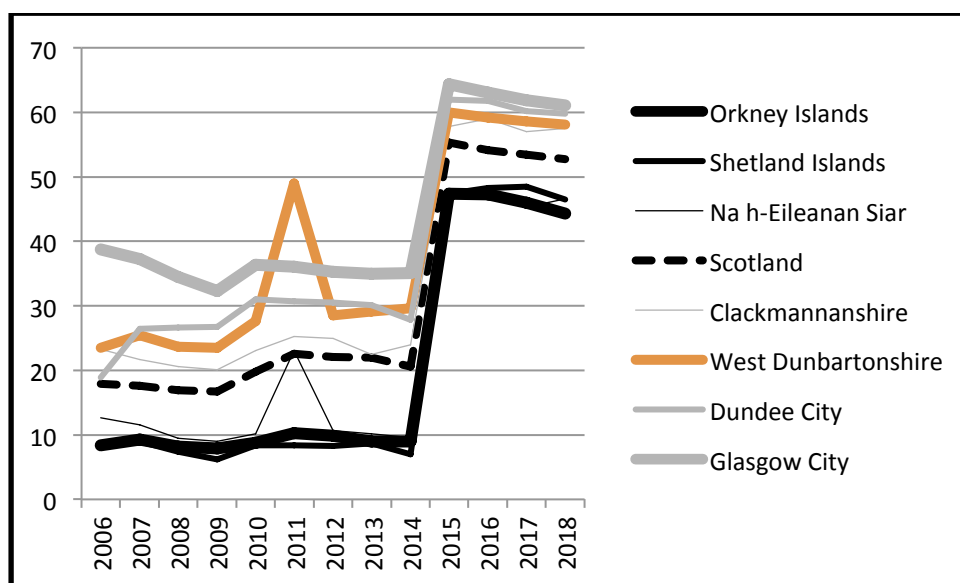
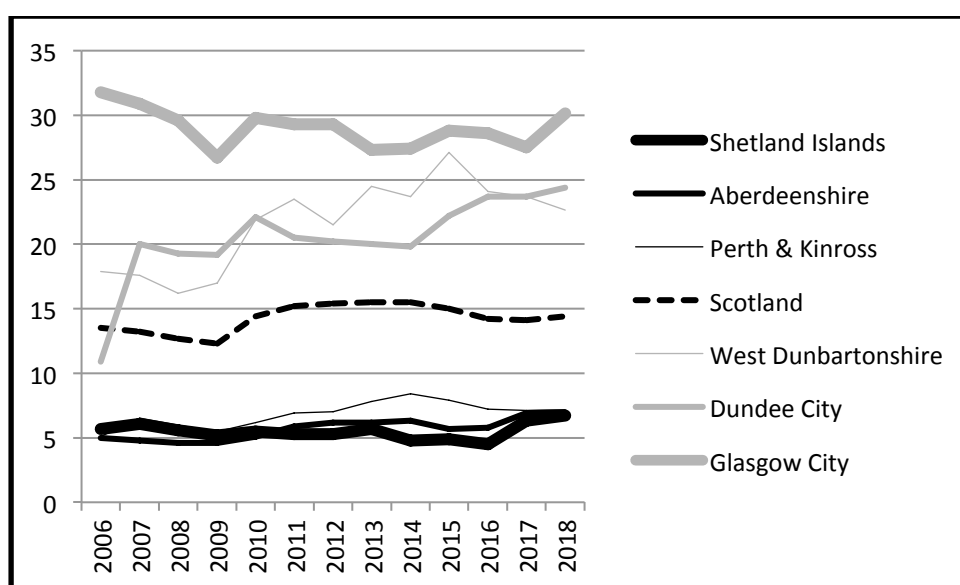


Figure 12 illustrates the impact of social policy on free school meal registration, with the introduction of universal provision in P1-P3 in 2015 leading to a dramatic increase in registrations across all local authorities in Scotland. Otherwise, and as would be predicted, there is a marked difference between the affluent and less affluent local authorities in terms of low/high registration for FSMs. For example, three fifths of primary school pupils in the City of Glasgow City are registered for FSMs (61.1% in 2018), compared to much lower rates of registration in the Orkney Islands, Shetland Islands and Eileanan Siar (44.3%, 46.5% and 46.6%, respectively).

Figure 13 replicates the analysis of Figure 12 for secondary schools in Scotland. On the whole, there is little overall change in registrations for Scotland as a whole and for those authorities with low overall rates of registration in 2018 (Aberdeenshire, Shetland Isles and Perth & Kinross). On the other hand, a few of the local authorities with high rates of registration in 2018 have experienced quite significant increases in the proportion of secondary school pupils who are registered for FSMs. For example, whereas in 2006 free school meal registrations for secondary school pupils was below the Scottish average in the City of Dundee (10.9%, compared to 13.5% for Scotland as a whole), by 2018 registrations for FSMs in Dundee was far in excess of the Scottish average (24.4%, compared to 14.4%). Once more, the importance of layering understanding through a ‘regional’ lens is clear.

Figure 13: Registration for free school meals among secondary school pupils on census day in Scotland, selected local authorities, 2006-2018



8.4 – Uptake of free school meals, 2006 - 2018

The final analysis in this review of ‘regional’ trends focuses on the uptake of FSMs, which was first reviewed for Scotland as a whole in 6.4. Table 4 is similar to Table 3 and summarises key aspects of *free* school meal uptake in 2018 for Scottish local authorities at four stages: primary, secondary, P1-P3 and P4-P7. For each stage of schooling the table identifies the three local authorities with the highest uptake and those three with the lowest uptake, as well as noting the Scottish average.

Across local authorities in Scotland, there is wide divergence in the rate of FSM uptake, in particular for the secondary school stage (Table 4). Uptake is highest in some mainland rural and relatively affluent authorities, with uptake in the Scottish Borders almost double that reported in South Lanarkshire. Indeed, in South Lanarkshire in 2018 – interestingly also a part-rural and relatively affluent authority – there are more pupils who do not receive the

free school meal to which they are entitled than those who do. Less than two thirds of secondary school pupils registered for FSMs receive this meal in both Fife and Renfrewshire.

Table 4: Uptake of free school meals among pupils in attendance on census day in Scotland, selected local authorities, by school type, 2018

	P1-P3	P4-P7	Primary	Secondary
Highest	Shetland Isles (94.5%)	Eileanan Siar (96.7%)	Shetland Isles (94.5%)	Scot. Borders (94.9%)
2nd	Dum./Gall. (88.4%)	Shetland Isles (95.2%)	Dum./Gall. (87.8%)	Angus (93.9%)
3rd	Orkney Isles (87.7%)	Aberdeen City (90.6%)	Orkney Isles (87.7%)	E/Dunbarton. (93.9%)
Scottish Average	79.6%	84.4%	80.5%	72.8%
3rd	East Ayrshire (72.3%)	East/Renfrew. (77.8%)	WDun. & Edin (74.7%)	Renfrewshire (60.6%)
2nd	Clackmannan. (71.9%)	Highland (76.8%)	East Ayrshire (74.6%)	Fife (54.7%)
Lowest	W/Dunbarton (69.6%)	Renfrewshire (76.3%)	Renfrewshire (73.9%)	S/Lanarkshire (48.8%)

Although differences are less dramatic at primary school level, they are still substantial across local authorities. For example, whereas the universal provision at P1-P3 is reaching virtually all pupils in the Shetland Isles (94.5% in 2018), it ‘only’ reaches just over two-thirds of younger primary school pupils in West Dunbartonshire (69.6% in 2018). Interestingly, reach is slightly higher at both ends of the scale for P4-P7, compared to P1-P3, i.e. when FSMs are targeted, rather than universally provided. For example, the authority with the lowest uptake of FSMs in Scotland has 69.6% of pupils presenting in P1-P3 (West Dunbartonshire, as noted above), compared to 76.3% for P4-P7 (Renfrewshire). There is a tendency for authorities with the highest levels of free school meal uptake to be island/rural/affluent in character, whereas there is greater diversity among those with lowest levels of free school meal uptake.

Figures 14 and 15 present time series data for uptake of FSMs in primary schools and secondary schools, respectively. As for school meals (Figure 10), the time series data for primary schools is shorter, i.e. after the change to universal provision for P1-P3 in 2014/15. Longer-term trend data is presented for secondary schools in Figure 15 (2003-2018). For each, data are presented for the Scottish average, the three authorities with the highest percentage point increase over the period, and the three authorities with the greatest percentage point decrease over the period.

Once more, the importance of a ‘regional’ lens is confirmed. Figure 14 highlights divergent experiences among Scottish local authorities in recent years, with Na h-Eileanan Siar and Perth & Kinross bucking the general trend by avoiding a fall in uptake of FSMs. Also diverging from the slight falls in the rate of free school meal uptake in recent years are the Orkney Isles and City of Edinburgh; however, their falls are significantly larger than that recorded for Scotland as a whole.

Figure 14: Uptake of free school meals among primary school pupils in attendance on census day in Scotland, selected local authorities, 2015-2018

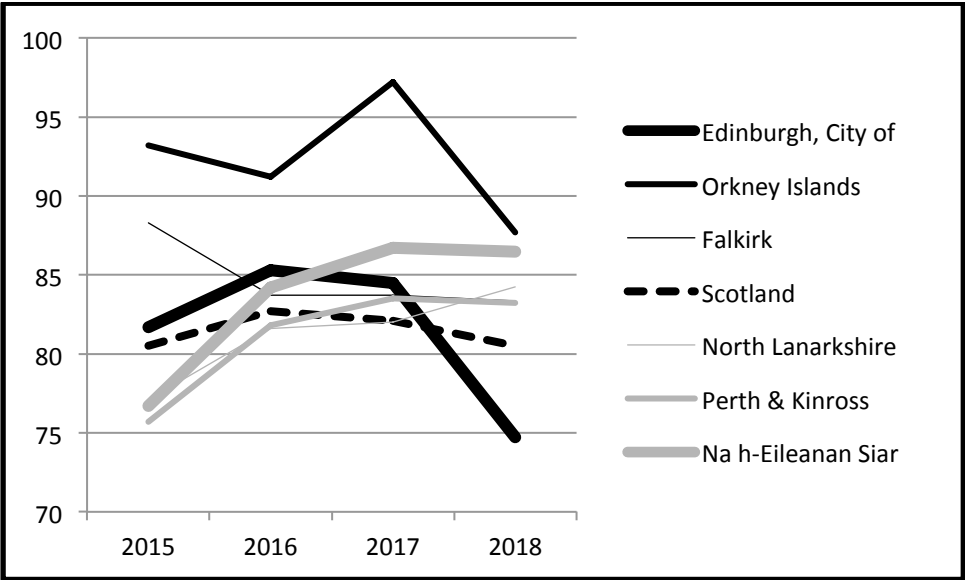
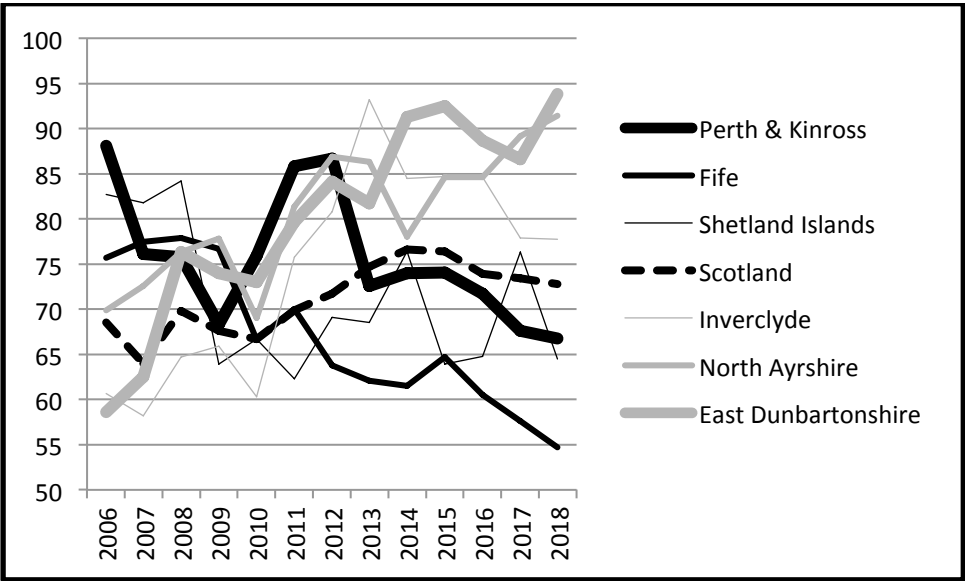


Figure 15 demonstrates that trends in free school meal uptake between 2003 and 2018 are much more complex for secondary schools. The Scottish average disguises the marked variations across the country in FSM uptake. In particular, with only a few corrections, there has been a steady decrease in FSM uptake in Fife secondary schools since 2009. In contrast, the opposite trend is evident in East Dunbartonshire, with steady increases over the period only occasionally checked. Indeed, of the six authorities represented in Figure 15, FSM uptake was lowest in East Dunbartonshire in 2006, but highest by 2018.

Figure 15: Uptake of free school meals among secondary school pupils in attendance on census day in Scotland, selected local authorities, 2003-2018



8.5 – Conclusion

From the data presented in this chapter, it is clear that there is a need for a ‘regional’ lens of analysis if we are to understand the reality of free/school meal uptake in Scotland. More particularly, these data raise challenging questions, which would be of interest to all who are concerned with free/school meal uptake in Scotland. For example:

- What can be learned from the Shetland Isles (primary) and Scottish Borders (secondary) with their very high rates of uptake of FSMs in 2018 (Table 4)?
- Why are fewer than three quarters of P1-P3 pupils in East Ayrshire, Clackmannanshire and West Dunbartonshire presenting for their free school meal in 2018 (Table 4)?
- Why are rates of free school meal uptake so low in South Lanarkshire secondary schools in 2018 (Table 4)?
- What accounts for the trend-bucking increase in free school meal uptake for Na h-Eileanan Siar primary schools since the introduction of universal provision for P1-P3 in 2015 (Figure 14)?
- What accounts for the substantial fall in free school meal uptake for Fife secondary schools since 2006 (Figure 15)?
- What accounts for the rise, then fall in free school meal uptake for both Inverclyde and Perth & Kinross secondary schools since 2009/10 (Figure 15)?
- What accounts for the significant increase in free school meal uptake for East Renfrewshire secondary schools since 2006 (Figure 15)?

9. Local Focus: Outliers and issues for further research

You know I asked a class recently, “Who all had a breakfast?” and there was only about two of them out of twenty

(Classroom teacher, quoted in Spencer, 2015, p.30)

9.1 – Introduction

The primary purpose of this report has been to interpret the existing evidence base that has been generated by the school meals sector or is readily available to it. This chapter uses data from the Scottish Government’s annual school meals census to demonstrate the value of school-level analysis. Although substantive points of note are identified, the purpose is to be illustrative and to encourage those responsible for services within their school and those responsible for schools within a local authority to make better use of existing data, as a means to draw attention to schools whose experiences are worthy of further analysis.

Three issues pertaining to the uptake of FSMs are considered. First, attention is drawn to the schools with the highest and lowest uptake of FSMs in both primary and secondary schools for each local authority in Scotland (9.2). Following this, long-term trends (2004-2018) through time are explored for secondary schools, identifying the schools in each local authority in Scotland, which are reported to have the largest and smallest percentage point increase in uptake (9.3). Finally, this analysis is repeated for contemporary trends (2014-2018), to identify the five schools with the highest increase and greatest decrease in uptake of FSMs (9.4).

9.2 – Local Variation in Uptake of Free School Meals, 2018

The specific focus of this section is uptake of FSMs among pupils who have both registered for FSMs and who were in attendance on the census day. As was alluded to in the Introduction to this report, this can lead to overestimation of uptake, i.e. not counting (i) those pupils who are eligible, but whose families do not register them, and (ii) those pupils who were not in attendance on the census day.

The analysis aims to demonstrate the range of schools experience within local authorities in Scotland. Analysis is presented for both primary schools (9.2.1) and secondary schools (9.2.2). In addition to identifying the school with the highest uptake of FSMs (column B) and lowest uptake of FSMs (column C), data are also presented on the proportion of schools within each local authority, which had (i) less than 75% of its eligible pupils in attendance presenting for their free school meal, and (ii) less than 50% of its eligible pupils in attendance presenting for their free school meal.

9.2.1 – Primary Schools

Every pupil in attendance who was entitled to a FSM also presented for this meal in 173 primary schools in Scotland on the school meals census day in 2018 (column 2 of Table 5). In almost every Scottish local authority, there is at least one primary school in which at least 90% of eligible pupils in attendance present for this meal (column 2 in Table 5). If we consider universal uptake to be a success and assume that good practice in schools facilitate this success, then it should be recognised that there is local expertise upon which others can draw in each local authority in Scotland. Similarly, the majority of eligible pupils in attendance in all primary schools in 26 local authorities presented for their free school meal on the survey day (column 5 in Table 5).

Table 5: Uptake of Free School Meals Among Registered Pupils in Attendance at Primary Schools, Scottish Local Authorities, 2018

Local Authority	School with Highest Uptake FSM	School With Lowest Uptake FSM	% Schools with FSM Uptake	
			Below 75%	Below 50%
Midlothian	2 schools (100%)	Tynewater Primary School (75.82%)	0.0%	0.0%
Shetland Islands	17 schools (100%)	Sandwick Junior School (74.07%)	4.2%	0.0%
Dumfries & Galloway	18 schools (100%)	Creetown School (50%)	4.3%	0.0%
Angus	11 schools (100%)	Langland Primary School (70.83%)	7.7%	0.0%
Falkirk	5 schools (100%)	Laurieston Primary School (26.67%)	8.0%	1.9%
Aberdeenshire	25 schools (100%)	Kininmonth School (53.85%)	8.2%	0.0%
Scottish Borders	5 schools (100%)	Philippaugh Comm. Sch. (55.26%)	8.3%	0.0%
East Renfrewshire	Eaglesham Primary School (98.38%)	St Mark's Primary School (68.89%)	8.7%	0.0%
Na h-Eileanan Siar	3 schools (100%)	Breascelete Primary School (71.43%)	10.0%	0.0%
Perth & Kinross	6 schools (100%)	Blair Atholl Primary School (63.16%)	10.4%	0.0%
Argyll & Bute	16 schools (100%)	St Columba's Primary School (57.69%)	11.8%	0.0%
Orkney Islands	8 schools (100%)	Stromness Primary School (73.13%)	12.5%	0.0%
North Lanarkshire	2 schools (100%)	St Mary's PS (Cleland) (46.55%)	19.4%	0.9%
Moray	Glenlivet Primary School (100%)	Milne's Primary School (60.27%)	20.9%	0.0%
Glasgow City	8 schools (100%)	Carntyne Primary School (42.96%)	21.7%	1.4%
South Lanarkshire	14 schools (100%)	St Blane's Primary School (60.5%)	21.8%	0.0%
East Dunbartonshire	Holy Trinity Primary School (100%)	Meadowburn Gaelic Unit (55.26%)	23.5%	0.0%
South Ayrshire	Cairn Primary School (100%)	St Ninian's Primary School (58.62%)	26.3%	0.0%
West Lothian	Addiewell Primary School (94.55%)	Our Lady's Primary School (57.78%)	28.4%	0.0%
East Lothian	5 schools (100%)	Stoneyhill Primary School (62.35%)	29.4%	0.0%
Fife	4 schools (100%)	Cairneyhill Prim and Comm Sch (55%)	32.6%	0.0%
Highland	10 schools (100%)	Carbost Primary School (50%)	34.3%	0.0%
Inverclyde	St Michael's Primary School (98.18%)	Lady Alice Primary School (61.9%)	35.0%	0.0%
North Ayrshire	2 schools (100%)	Shiskine Primary School (63.64%)	36.2%	0.0%
Aberdeen City	Manor Park School (98.1%)	Sunnybank School (48.1%)	36.2%	6.4%
Stirling	2 schools (100%)	Cowie Primary School (63.64%)	36.8%	0.0%
Dundee City	St Fergus's RC PS (93.83%)	Downfield Primary School (66.38%)	44.1%	0.0%
West Dunbartonshire	St Martin's Primary School (100%)	Knoxland Primary School (44.05%)	46.9%	3.1%
Edinburgh, City of	6 schools (100%)	South Morningside PS (42.55%)	48.9%	2.3%
East Ayrshire	St Sophia's Primary School (89.29%)	Crosshouse Primary School (54.22%)	52.4%	0.0%
Renfrewshire	West Primary School (95.93%)	St Anne's Primary School (50.68%)	55.1%	0.0%
Clackmannanshire	Muckhart Primary School (96.15%)	Fishcross Primary School (54.76%)	55.6%	0.0%

Note: Excludes schools for which data were suppressed to preserve anonymity (between 1 and 4 of either (i) pupils eligible and registered for FSM, or (ii) pupils presenting for FSM)

On the other hand, the contrast between the schools with the highest uptake of FSM (column 2 of Table 5) and lowest uptake of FSM (column 3 of Table 5) demonstrates that there is much intra-local authority variation across schools. At its most extreme, while there are five primary schools in Falkirk in which all eligible pupils in attendance presented for their FSM, three quarters of eligible pupils in attendance in Laurieston Primary School did not.

A listing in column C is not necessarily evidence of a problem or a failing. However, those concerned to improve uptake of FSM in primary schools within local authorities should be making best use of this readily available data to ask questions and, on reflection, learn from best practice and local outliers.

9.2.2 – Secondary Schools

Table 6 replicates Table 5, this time focusing on secondary schools in Scotland.

Table 6: Uptake of Free School Meals Among Registered Pupils in Attendance at Secondary Schools, Scottish Local Authorities, 2018

Local Authority	School with Highest Uptake FSM	School With Lowest Uptake FSM	% Schools with FSM Uptake	
			Below 75%	Below 50%
Angus	3 schools (100%)	Arbroath High School (77.66%)	0.0%	0.0%
Clackmannanshire	Alva Academy (97.33%)	Alloa Academy (80.17%)	0.0%	0.0%
Na h-Eileanan Siar	Sgoil Lionacleit (100%)	The Nicolson Institute (90.91%)	0.0%	0.0%
Scottish Borders	5 schools (100%)	Galashiels Academy (83.18%)	0.0%	0.0%
West Dunbartonshire	3 schools (100%)	Dumbarton Academy (72%)	12.5%	0.0%
Argyll & Bute	2 schools (100%)	Hermitage Academy (58.51%)	14.3%	0.0%
East Dunbartonshire	3 schools (100%)	Turnbull High School (70.27%)	14.3%	0.0%
North Ayrshire	2 schools (100%)	Largs Academy (50.62%)	22.2%	0.0%
Dundee City	Craigie High School (100%)	Baldragon Academy (64.37%)	25.0%	0.0%
Falkirk	3 schools (100%)	Larbert High School (64.29%)	25.0%	0.0%
Inverclyde	Inverclyde Academy (98.4%)	St Columba's High School (63.75%)	25.0%	0.0%
West Lothian	The James Young HS (97.03%)	Bathgate Academy (42.24%)	27.3%	9.1%
East Renfrewshire	3 schools (100%)	Mearns Castle High School (70.97%)	28.6%	0.0%
Orkney Islands	Sanday Community School (100%)	Stromness Academy (69.23%)	33.3%	0.0%
Edinburgh, City of	5 schools (100%)	Boroughmuir High School (45%)	34.8%	10.5%
Highland	4 schools (100%)	Fortrose Academy (54.29%)	36.0%	0.0%
Aberdeenshire	2 schools (100%)	Turriff Academy (49.15%)	37.5%	6.3%
Stirling	Dunblane High School (100%)	Stirling High School (57.14%)	42.9%	0.0%
Midlothian	Dalkeith High School (100%)	Lasswade High School (59.69%)	50.0%	0.0%
Shetland Islands	2 schools (100%)	Anderson High School (39.47%)	50.0%	25.0%
East Ayrshire	Grange Academy (88.14%)	Stewarton Academy (24%)	55.6%	22.2%
Glasgow City	2 schools (100%)	Bellahouston Academy (41.97%)	60.7%	7.1%
Aberdeen City	Cults Academy (96.3%)	Torry Academy (47.27%)	61.5%	15.4%
Moray	Elgin Academy (100%)	Keith Grammar School (43.75%)	62.5%	12.5%
Renfrewshire	Gryffe High School (82.05%)	St Andrew's Academy (36.87%)	63.6%	18.2%
Dumfries & Galloway	2 schools (100%)	St Joseph's College (51.02%)	66.7%	0.0%
East Lothian	Musselburgh Grammar Sch (89.13%)	North Berwick High School (61.29%)	66.7%	0.0%
North Lanarkshire	Calderhead High School (100%)	Dalziel High School (46.91%)	72.7%	4.5%
South Ayrshire	Marr College (87.27%)	Prestwick Academy (56.3%)	75.0%	0.0%
Perth & Kinross	Crieff High School (92.31%)	Perth Grammar School (47.62%)	75.0%	12.5%
South Lanarkshire	Calderglen High School (77/78%)	Holy Cross High School (29.91%)	94.1%	70.6%
Fife	Lochgelly High School (67.59%)	Madras College (27.06%)	100.0	33.3%

Every pupil in attendance who was entitled to a FSM also presented for this meal in 48 secondary schools in Scotland on the school meals census day in 2018 (column 2 of Table 6). Once more, in the vast majority of Scottish local authorities, there is at least one secondary school in which at least 90% of eligible pupils in attendance present for this meal (column 2 in Table 5). As for primary schools, it should be recognised that there is local expertise upon which others can draw in terms of facilitating FSM among secondary school pupils in each local authority in Scotland.

On the other hand, there is more evidence of more schools with low rates of uptake of FSM among eligible pupils in Scottish secondary schools. At its most extreme, fewer than one in four such pupils in Stewarton Academy (East Ayrshire) presented for their FSM on the school meals census day in 2018. Similarly, it is reported that the majority of eligible pupils did not present for their FSM in the majority of secondary schools in South Lanarkshire, while in Fife, the very highest uptake of FSM in a secondary school was in Lochgelly High School, where 'only' 68% of pupils presented for their meal.

Once more, it should be stressed that these data alone are not indicative of a problem or a failing. However, they raise questions that should be asked. The wide variation in rates of FSM uptake across secondary schools in Scotland is worthy of more systematic analysis, at both the local and the national level.

9.3 – Local Variation in Uptake of Free School Meals by Registered Pupils in Attendance in Secondary Schools, 2004-2018

in this section, the point-in-time analysis of the previous section (9.2) is extended for secondary schools to consider long-term changes in the proportion of eligible pupils who presented for FSM on the school meals census survey day. Data are presented for each local authority in Scotland and for schools that have been open from 2004 through 2018, inclusive. For each, there is a positive highlight (column 2 identifies the secondary school that had the greatest percentage point increase in eligible pupils presenting for their FSM), a lowlight (column 3 identifies the secondary school which has the greatest reduction in the percentage of eligible pupils in attendance who presented for FSMs) and a summary statistic (column 4 reports the percentage of secondary schools which report a fall in the proportion of eligible pupils presenting for their FSM).

Table 7 powerfully demonstrates the diversity of experience both across local authorities and within them, with regards to eligible secondary school pupils presenting for their FSM. At one extreme, there is Clackmannanshire in which no secondary school has recorded a reduction in the percentage of eligible pupils presented for FSM between 2004 and 2018. Indeed, its 'poorest' performance was a 21% percentage point increase in eligible pupils presenting for FSMs in Lornhill Academy. The positive change in Lornhill Academy through time was higher than the very best change reported in nine other local authorities in Scotland. At the other extreme, all secondary schools in Perth & Kinross, Fife and Orkney Isles have recorded a percentage point decrease in the eligible secondary school pupils presenting for FSMs between 2004 and 2018.

Table 7: Change in Uptake of Free School Meals Among Registered Pupils in Attendance at Secondary Schools, Scottish Local Authorities, 2014-2018

Local Authority	School with Highest Increase in Uptake of FSMs	School With Lowest Increase / Greatest Decrease in Uptake of FSMs	Percentage of Schools Recording a Percentage Point Fall
Clackmannanshire	Alva Academy (+40.19%)	Lornhill Academy (+20.77%)	0.0%
Midlothian	Dalkeith High School (+42.86%)	Lasswade High School (+2.28%)	0.0%
East Renfrewshire	Williamwood High School (+33.33%)	Barrhead High School (-9.88%)	14.3%
East Dunbartonshire	St Ninian's High School (+59.93%)	Turnbull High School (-29.73%)	14.3%
Argyll & Bute	Oban High (+36.36%)	Rothsay Academy (-4.35%)	16.7%
Dundee City	Morgan Academy (+38.56%)	Baldragon Academy (-6.0%)	16.7%
Scottish Borders	Peebles High School (+44.44%)	Galashiels Academy (-6.82%)	22.2%
North Ayrshire	Kilwinning Academy (+35.0%)	Largs Academy (-34.72%)	28.6%
Inverclyde	Port Glasgow (+42.82%)	St Columba's High School (-19.56%)	33.3%
Angus	Webster's High School (+21.93%)	Arbroath High School (-22.34%)	33.3%
West Lothian	The James Young HS (+30.0%)	Bathgate Academy (-28.21%)	45.5%
Na h-Eileanan Siar	Sgoil Lionacleit (No change)	The Nicolson Institute (-9.09%)	50.0%
West Dunbartonshire	Our Lady and St Patrick's HS (16.06%)	Dumbarton Academy (-23.06%)	50.0%
Highland	Gairloch High School (+47.37%)	Plockton Academy (-26.44%)	54.2%
Stirling	Dunblane High School (+33.33%)	Wallace High School (-18.41%)	57.1%
Glasgow City	Lochend Community HS (+61.12%)	Lourdes Secondary School (-53.23%)	59.3%
Falkirk	Braes High School (+26.72%)	Larbert High School (-33.9%)	62.5%
Moray	Elgin Academy (+22.72%)	Speyside High School (-34.03%)	62.5%
Edinburgh, City of	Balerno Community HS (+35.23%)	Royal High School (-27.88%)	63.9%
South Lanarkshire	Cathkin High School (+21.18%)	Holy Cross High School (-47.66%)	64.3%
East Lothian	Musselburgh Grammar Sch (+15.08%)	Knox Academy (-17.95%)	66.7%
Shetland Islands	Sandwick Junior HS (No change)	Anderson High School (-40.53%)	66.7%
Renfrewshire	Gryffe High School (+37.93%)	St Andrew's Academy (-36.95%)	70.0%
North Lanarkshire	Bellshill Academy (+31.37%)	Dalziel High School (-51.42%)	75.0%
Aberdeenshire	Portlethen Academy (+22.58%)	Westhill Academy (-50.0%)	80.0%
Dumfries & Galloway	Lockerbie Academy (+6.25%)	Wallace Hall (-38.30%)	84.6%
South Ayrshire	Marr College (+34.26%)	Belmont Academy (-32.55%)	87.5%
East Ayrshire	Loudoun Academy (+16.19%)	Stewarton Academy (-76.0%)	88.9%
Aberdeen City	Cults Academy (+46.3%)	Harlaw Academy (-47.94%)	90.0%
Perth & Kinross	Blairgowrie High School (-0.68%)	Perth Grammar School (-48.61%)	100.0%
Fife	Glenrothes High School (-6.79%)	Waid Academy (-54.55%)	100.0%
Orkney Islands	Kirkwall Grammar School (-18.84%)	Stromness Academy (-30.77%)	100.0%

Note: Excludes schools for which data were suppressed to preserve anonymity (between 1 and 4 of either (i) pupils eligible and registered for FSM, or (ii) pupils presenting for FSM. Only considers schools that were open between 2004 and 2018.

As striking as the differences among local authorities, there are dramatic differences among secondary schools within individual local authorities. For example, while there was a 31 percentage point increase in Bellshill Academy, within the same authority (North Lanarkshire), there was a 51% decrease in Dalziel High School. Other local authorities with particularly marked long-term trend differences among its secondary schools include Aberdeen City, South Ayrshire, Aberdeenshire, Renfrewshire, North Ayrshire, Clackmannanshire, East Dunbartonshire, Highland, Glasgow, Falkirk, Moray, Edinburgh and West Lothian.

Once more, the key point is that these data raise questions that should be answered. The wide variation in long-term trends rates of FSM uptake across secondary schools in Scotland is worthy of more systematic analysis, at both the local and the national level.

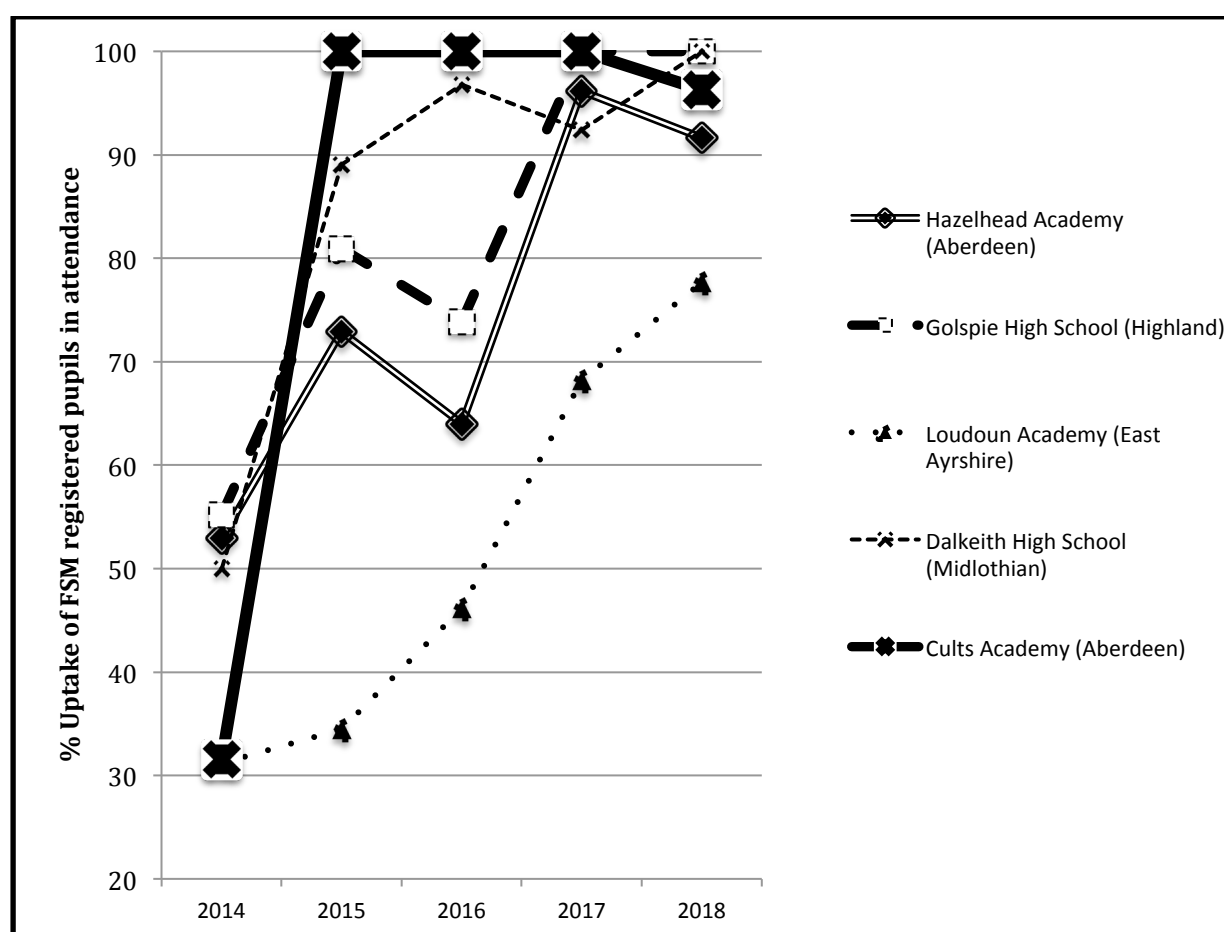
9.4 – Recent Change in Uptake of Free School Meals by Registered Pupils in Attendance in Secondary Schools, 2014-2018 – Focus on Outliers

Long term trends – such as those discussed in the previous section (9.3) – emphasise the possibility of transformative change and alternative pasts/futures. Equally useful is a focus on short-term trends, not least because those with responsibility for school leadership and school meals services are highly likely to relate to these data. In this section, we summarise the outliers among secondary schools in Scotland – Figure 16 reports trends for those secondary schools with the greatest percentage point increases between 2014 and 2018 in the percentage of eligible pupils in attendance who present for FSMs (9.2.1), while Figure 17 reports the same for schools with the greatest percentage point decreases.

9.4.1 – Most Improved Uptake

The five schools with the greatest percentage point increases between 2014 and 2018 in eligible secondary school pupils presenting for FSMs are spread across four Scottish local authorities. However, from the data alone, it would appear that there are different experiences to share among these schools.

Figure 16: Secondary Schools With the Greatest Percentage Point Increase in the Uptake of Free School Meals Among Registered Pupils in Attendance, Scottish Local Authorities, 2014-2018



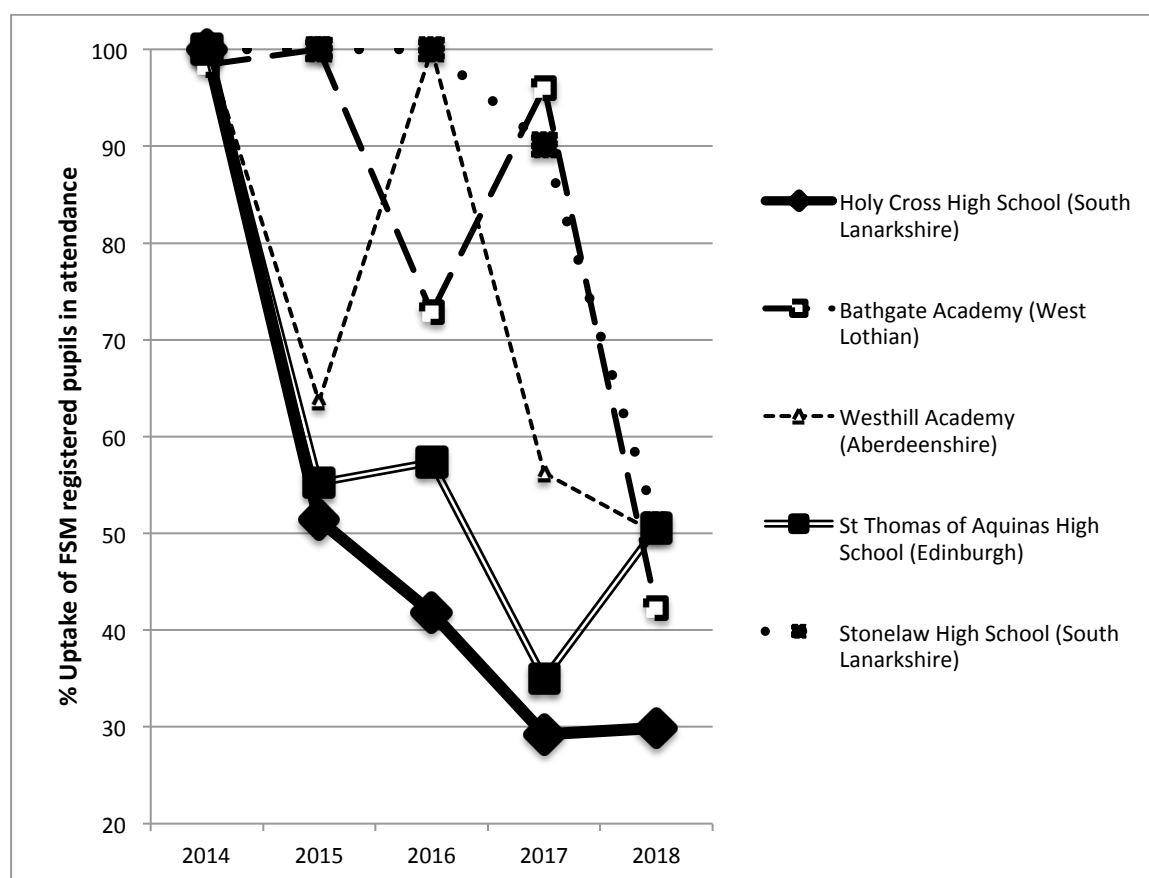
Unlike the other schools in Figure 16, Loudoun Academy still has a significant proportion of its eligible pupils who are not presenting for FSM (22% in 2018); however, there has been a remarkable transformation in uptake in recent years, with year-on-year increases in the proportion of eligible pupils in attendance presenting. In a short space of time, uptake has been reversed from a clear majority of eligible pupils in attendance not presenting for FSM in 2014 (69%) to the majority presenting for FSM in 2018 (78%).

In contrast, Cults Academy has sustained almost universal uptake since a transformative shift between 2014 and 2015; rates of uptake at both Golspie High School and Hazelhead Academy have increased significantly over the period, although there is some year-on-year volatility; while a steadier pace of change in Dalkeith High School culminated in universal uptake in 2018. Clearly, there are particular school-level experiences that are worthy of further analysis.

9.4.2 – Highest Rates of Decline

Figure 17 complements Figure 16, this time focusing on those schools with the greatest percentage point decreases in FSM presentation among eligible pupils in attendance.

Figure 17: Secondary Schools With the Greatest Percentage Point Decrease in the Uptake of Free School Meals Among Registered Pupils in Attendance, Scottish Local Authorities, 2014-2018



Notwithstanding some volatility in St Thomas of Aquinas High School and, in particular, Westhill Academy and Bathgate Academy, the dominant characteristic among those schools reporting the greatest fall in the percentage of eligible pupils in attendance presenting for FSM is evidence of a single year in which uptake fell dramatically – most notable, between 2014 and 2015 for Holy Cross High School and St Thomas of Aquinas High School, between 2017 and 2018 for both Bathgate Academy and Stonelaw High School, and exceptionally between 2014 and 2015 and then again between 2016 and 2017 for Westhill Academy.

In the case of schools reporting negative trends, it would appear to be worthwhile to examine possible trigger events that lead to dramatic and transformative shifts in rates of FSM uptake.

9.5 – Conclusion

The objective of this section was to demonstrate the utility of school-level analysis, particularly within local authorities. It is unhelpful and too crude to draw firm conclusions from point-in-time data alone and trend data alone from the annual school meals census in Scotland. However, it is clear that divergent experiences and trends among schools raise questions that should be answered and draw attention to issues that would be worthy of investigation. The analysis in this chapter has been indicative; there remains scope to extend the trend analysis to primary schools, to extend the analysis to pupils who are not eligible for FSMs and, of course, to complement the appraisal of published with school-level examination of the underlying processes that are generating these outcomes.

10. A Critical Review of the Evidence Base

“Integral to this agenda must be an understanding of how education and school structures, policies and practices affect children and young people from low income households and where difficulties and financial barriers to participation exist throughout the school day. Understanding more about this from children’s perspectives can support schools to poverty-proof their policies and practices so that conditions are right for all children and young people to learn and to achieve”

(Spencer, 2015, p.5)

10.1 – Introduction

The purpose of this chapter is twofold: it aims (i) to evaluate the information sources that were used within this report, and (ii) to consider the wider utility of the evidence base. The four main information sources used in this report are each considered in turn, starting with a review of the annual school meals census in Scottish schools (10.2), before moving on to performance indicators that are routinely collected by APSE (10.3), ad-hoc survey and service provision research that has been administered by Assist FM (10.4) and field observations by GCU students (10.5).

10.2 – Annual School Meals Census in Scotland

Since 2003, a school meals census has been conducted in each state-funded primary, secondary and special school in Scotland. In 2012, the focus of the census was broadened and the census on school meals became part of a healthy living census, which also collected information on physical education in Scotland. Notwithstanding some recent additions to the information collected - to ensure that the utility of the census is optimised following the extension of provision of FSMs to all children in P1-P3 in Scotland - it has provided a stable estimate of school meal consumption in Scottish schools since its inception. As was outlined in 1.4, the information can be used to provide a range of estimates pertaining to school meals in Scotland. Data are published for individual schools, which permits aggregation by school age-stage, school community profile, geography and administrative area. The Scottish Government publishes an annual report that summarises registration and consumption, tracks changes through time, and explores variation across schools. Chapters 6, 7 and 8 of this report have drawn from these data, while chapter 9 has gleaned new insight from school-level analysis.

Data collection procedures and data processing is robust, being undertaken to the standard required in the National Statistics Code of Practice. The reports are public documents that are free from political bias. This and the stable nature of data collection permit a national understanding to be gained of both the contemporary situation and trends pertaining to free school meal registration, school meal consumption and free school meal consumption across Scotland. However, there are limitations to these data that should be acknowledged.

The collection of information on a single school day (the school census day is typically in January/February), could introduce systematic bias to the results. First, schools know in advance when data collection is scheduled, which leaves open the possibility of promotions being used or encouragement being made to heighten uptake of school meals (free or paid) on the census day. Second, it is unknown whether there is a 'day of the week' effect, i.e. whether the likelihood of pupils presenting for school meals varies across particular days of the week. The possibility that the census day may be an atypical day of the week cannot be ascertained as data on census day are not published. Similarly, although the stability of conducting the school meals census at the same time of the year heightens reliability across years, it implies that the school meals census is not well placed to account for seasonality, e.g. the possibility that pupils may be more motivated to partake of a school lunch beyond the school gate as summer / end of the school year approaches.

Second, although school-level information can be used to layer the analysis, and although information on registration and consumption is available according to whether the pupil is eligible for a free school meal, other key information about the pupil population is not collected and therefore cannot be factored into the analysis. Thus, it is unclear whether boys and girls are equally likely to present for school meals, or whether uptake is consistent across year groups; the field observations in Annex 2 would suggest not.

Third, following the introduction of universal free provision for all P1-P3 pupils in 2015, the utility of using entitlement to FSMs as a proxy measure for school concentration of socio-economic deprivation or poverty has been compromised. The attraction of using free school meal eligibility in this way reflects that entitlement is determined on the basis of defined benefits (refer to 2.2.4a). Although statistics on entitlement for pupils in the P4-P7 stage was published in the 2018 census, local enhancement such as Glasgow extending entitlement to all P4 pupils for school year 2018/9, will reduce the utility of these data in the future for Scotland as a whole. Similarly, it is worth noting that one half of all local authorities reported that they provide FSMs to all pupils in some of their special schools; other local initiatives have also extended FSMs to some secondary school pupils who do not meet the national criteria. These limit the usability of some of the data as an effective proxy measure for socio-economic deprivation.

On the other hand, if limitations are acknowledged and taken into account in analysis, these data on FSMs can provide useful insights. The census provides a snapshot of FSM uptake and registration, which in addition to being of interest in its own right, can be linked to other datasets in order to explore relationships with wider issues of interest, such as academic performance and health outcomes.

10.3 – APSE'S Performance Indicators for Education Catering in Scotland

APSE collates data from member organisations across the UK and then aggregates these for national regions (Wales, Northern Ireland and Scotland) and three English regions (Central, Northern and Southern). All 32 local authorities in Scotland are members of an APSE performance network. Catering is one of the fifteen service areas that APSE reviews.

The process administered by APSE for collecting catering data is robust, which fulfils Audit Commission criteria, has been used by government bodies such as Audit Scotland, and has been independently validated by the University of Birmingham. This involves (i) a working group of practitioners reviewing and, as necessary, revising data to be collected that year; (ii) APSE distributing standardised spreadsheets to members with in-built validation to ensure consistent data collection; and (iii) data checking by APSE on receipt of members' spreadsheets. APSE produces a range of reports, which enable local authority members to benchmark and understand their performance in context. These include performance indicator standings tables, direction of travel reports and best practice case studies. Member authorities can, on request, access data in other formats.

APSE also publishes a summary report for specific service areas, each of which provides key data, key findings and some detailed analysis. The summary catering report for 2016/17 comprised data from 20 Scottish local authorities, as not all local authorities provide data for every service area. The particular indicator of most interest for *Are Pupil Being Served?* is uptake of school meals; in the APSE summary report, this is presented as an average, with highest and lowest figures for the current year. In some cases, the average is given for across several years, with the data not broken down in further detail.

On the whole, the summary APSE report for catering is a credible source of information regarding school meals across the UK. More generally, the APSE data has the potential to be the definitive source of robust information for the sector in Scotland. However, the main limitation lies beyond APSE's control. As noted above and for example, only 20 of the 32 local authorities in Scotland provided catering data in 2016/17. Although member authorities can access the data from participating authorities in order to make meaningful comparison (for example, in order to make informed comment on the representativeness of the APSE Scottish sample), it would be a richer source of insight for school meals / catering in Scotland as a whole if more of the non-participating local authorities presented their data to APSE. On balance, as it stands, it is without question a useful starting point for analysis and comparison, particularly so for individual member authorities who provide catering data.

10.4 - Ad-hoc Research by ASSIST FM

10.4.1 – ASSIST FM 2018 Survey of Local Experts in Education Catering in Scotland

In 2018, Assist FM conducted a survey amongst key contacts from selected local authorities in Scotland. The questionnaire asked respondents about school meals marketing within each local authority and comprised both closed and open-ended questions. Results were presented in the form of a user-friendly spreadsheet.

The data gathered by ASSIST FM is useful in that it provides insight into local authority practices, which complements other types of data that are already available. For example, most of the authorities surveyed provided a year in which they began their branded lunch programmes. The data is also valuable in that it canvasses key informants on what each

respective council found to be the most challenging aspect of providing school meals. Areas for improvement are clearly identified. Furthermore, the local authorities that took part in this survey are broadly representative of Scotland as a whole.

Overall, the data contained in the ASSIST FM report is valuable, especially if used in conjunction with other statistics relating to school meals in Scotland. The data adds insight into local authorities school meal programmes, as well as identifying issues that should be addressed. It provides a basis for improving the systems and initiatives, which shape the provision of children's school meals in Scotland.

10.4.2 – ASSIST FM Marketing Surveys in Selected Scottish Local Authorities

From 2011 to 2016, ASSIST FM commissioned Taylor McKenzie to administer marketing surveys in secondary schools in six local authorities in Scotland. This questionnaire focused on the pupil experience and asked the pupils about the implementation of the Hungry 4 success programmes in their school. Results were presented in an essay style report, with supplementary commentary. The key findings from this work are re-presented in Annex 4 of this report.

First and foremost, these data are valuable as they canvass the opinions of children, the service users. Most significantly, the surveys collected data that enabled a better understanding of the problems that present and reasons that underlie children's decision-making. The collection of these data across schools and across local authorities adds an extra layer to the analysis. The scale of survey returns instils a degree of confidence in the results.

However, caution is urged in placing too much store in these survey findings. No information is provided on how the surveys were administered, which is a key factor in determining the manner in which pupils engaged. Likewise, no indication is given on response rates or the respondent profile, which makes it difficult to determine whether the results are representative of the pupil population as a whole. The level of analysis is descriptive, with no opportunity taken to explore whether there are key differences among the pupil population. It also now several years since some of these surveys were administered and the contemporary value of these data may be open to question.

In conclusion the ASSIST FM Marketing surveys, address important issues and directly canvass the pupil voice. Although potentially a rich data source, considerable caution must be urged in using these data to inform future decision-making.

10.5 – Field Observations by GCU Students

Annex 2 reports ten case studies of the out of school lunchtime food environment. These are based on fieldwork observations made by GCU students in the autumn of 2018, with each themed on the dominant issue that emerged from the fieldwork. They complement the data on school meals provided in the main body of the report by exploring the competing attractions that lie beyond the school gate.

Degree-level BA Social Sciences students on work placement at the Scottish Poverty and Inequality Research Unit conducted the fieldwork independently. Prior to the fieldwork, students were trained and became familiar with the key issues pertaining to school meals in Scotland. A fieldwork plan was submitted by each student/researcher in advance and revised following feedback from Professor McKendrick. The reports included in this report are the fourth iteration; the initial draft was revised following feedback from Professor McKendrick. SPIRU Researchers (Jill Marchbank and Tracey Hughes) edited these redrafts, before being finalised for this report by Professor McKendrick.

These case studies are impressions, drawn by students typically on the school that they themselves attended as a pupil. They shed insight into the attractions of the out of school food environment and the problems that it presents for those concerned to promote school meals in Scotland. However, they are based on a single day's fieldwork observation, with all the limitations that this entails.

11. What Next? Some Concluding Thoughts

“As a society we expect – and demand -that schools provide every student with the resources necessary for learning-books, a desk, a qualified teacher, a safe learning environment. Of course, the most basic and fundamental resource that every child needs in order to learn is nourishment for the brain and body-an adequate and healthy diet that supports learning and keeps the child healthy.”

(Levin and Hewins, 2014, p.390)

11.1 – Overview

Assist FM tasked us to review the evidence base to better understand the realities and trends pertaining to the uptake of FSMs in Scotland. We drew from Assist FM’s research and evaluation work, undertook a rapid review of key literature and completed observational field case studies of the out of school food environment for ten schools in west central Scotland. Here, we summarise the key findings under three headings:

11.2 - What did we know at the outset?

Although both applied and academic research-based knowledge on free schools meals in Scotland is under-developed, the knowledge base has accumulated through time.

Social policy and public health agenda. School meals are more than the means to provide everyday sustenance to children; since the Millennium, the Scottish Government has promoted school meals in Scotland as a public health intervention and, more recently, as an anti-poverty intervention.

Changing nature of schools and society. The rationale for providing school meals in 21st Century Scotland is similar to that which underpinned the *School Meals Act* in Edwardian Scotland, but the service now operates in a markedly different and rapidly changing context; impacting on the contemporary service include, budgetary pressures on local authorities, less of the school day set aside for lunchtime; control of the school estate not always resting within the public sector/school management; greater awareness of public health and environmental issues; a concern with measuring performance; and a greater concern to view children as active agents with the right to express their views on matters that concern them.

Scottish government evidence base. The annual school meals census has, since 2003, collected data on school meals (uptake), and FSMs (uptake, reach and registration) allowing stakeholders to better understand contemporary service reach and trends through time.

An engaged sector. At all levels, stakeholders have shown a willingness to innovate and to engage in debates to improve the school meals service. Assist FM, as the leading body for specialists working in the sector, has been at the forefront of these debates and innovations.

Policy can have positive impact. The introduction of universal entitlement to FSMs to all P1-3 pupils in January 2015 resulted in a step-change leading to an increase in the overall rate of school meals uptake in Scottish primary schools.

11.3 - What do we now know better?

This research has added new insight into key issues pertaining to school meals in Scotland. However, the primary contribution of this report has been to re-analyse and reflect on a disparate collection of sector-generated knowledge on free schools that has not been disseminated to a wider audience. Here, we consider what we now know better in terms of substantive knowledge (11.3.1) and the research base that underpins this (11.3.2).

11.3.1 - What do we now know better and what have we learned?

Big numbers and big impact. On a typical school day, almost 350,000 school meals are served in Scotland; the majority of school pupils in Scotland present for a school meal every day (51%). More specifically, on a typical day, the majority of pupils registered for FSMs in primary, secondary and special schools typically present for this meal (76%, 60% and 77%, respectively). Not far short of 100,000 school meals per day are served to pupils who are entitled to a free school meal on account of their family being eligible for social security.

Universal provision does not have a universal reach. It was already widely known that uptake of FSMs was higher in primary than secondary schools, and that within each school age-stage, uptake was higher in smaller schools and schools serving areas that were more rural in character. As well as presenting the evidence base to confirm what was widely perceived/experienced, this report also (i) notes the complexity of the association between deprivation area status and uptake, with higher FSM uptake associated with primary schools with greater FSM registration, whereas higher FSM uptake is associated with secondary schools with lower FSM registration; (ii) the marked differences in uptake across local authorities; and (iii) the marked differences in contemporary uptake and trends across individual schools in Scotland.

A plurality of alignments and priorities. It is clear that there is not alignment of priorities among key stakeholders. The aspirations of the school catering service to increase reach and uptake of school meals does not always align with school management; indeed, some school management reject some of the practical steps required to achieve this (e.g. preventing food purchased outside being consumed in school dining halls; introducing staggered lunch breaks to extend capacity, etc.). Furthermore, the rights of pupils (particularly senior pupils) to choose what and where to consume food at lunchtime – which is supported by many school managers and pupils alike – may not always be conducive to maximising uptake of school meals.

Average experiences and trends are not universally experienced. Scotland's experience is not one that is universally shared across its schools. Although patterns and trends can be discerned, it is important to take into account the unique and particular context within which each school meals service operates.

Lunchtime is a social time-space for young people. The observational, survey and focus group interview evidence with young people attest to the importance of factors other than food in shaping the lunchtime choices and experiences of secondary school pupils. Providing opportunities to be with friends and to be independent of the 'school environment' are key considerations for these pupils.

11.3.2 - Critical reflections on the evidence base

School meals census. The annual school meals census is an excellent resource that has helped to better understand the diverse experiences across Scotland. However, there are many significant limitations with these data, which imply that supplementary analysis is required if the reality of school meal uptake is to be better understood. Of particular note: (i) the encouraging introduction of local interventions to extend free school meal entitlement in recent years is compromising the utility of the census as a stable indicator of change through time; (ii) the lack of disaggregation, notably by year group and gender, limits our understanding of who presents for school meals and the reasons for so doing; (iii) the welcome flexibility that is exercised in allowing school meal entitlement to be used to purchase mid-morning snacks, introduces some uncertainty in the degree to which the data can be used to estimate consumption of lunchtime food in school; (iv) the approach is unable to account to ascertain whether there is a seasonal effect (aggregation of weather effects), which makes this point-in-time estimate (January/February every year) problematic; and (v) consideration of issues pertaining to the fact that local authority grant funding is partly based on these data.

Out of school food environment. Observational fieldwork and surveys/interviews with pupils, school management and catering professionals all attest to the importance of the out-of-school environment in 'pulling' secondary schools pupils away from schools at lunchtime. At present, this evidence is impressionistic and anecdotal; there is a need to understand more precisely the impact of the out of school environment on school meals.

The impact of service delivery. The evidence base on the impact of service-led changes is anecdotal, impressionistic and superficial. If best practice is to be ascertained, shared and adopted across the sector, there is a need to invest in more robust evaluation.

Canvassing the perspectives and experiences of key stakeholders. Assist FM has commissioned market research, which has engaged catering professionals, school management and school pupils. However, much of this work is now dated and the research design is insufficiently robust to inform decision-making. There is a need for high quality research with all stakeholders (which would also include parents and suppliers) to better understand the contemporary school meal experience in Scotland.

School catering estate. There is growing anecdotal evidence that school redevelopment has reduced the capacity to deliver school meals at lunchtime. There is also anecdotal evidence of variable practice in using school space beyond a dedicated 'lunch space'. As for service delivery, there is a need for most systematic appraisal of the capacity of the school estate and description of the way in which the spaces of schools are being used in conjunction with school meals provision.

11.4 - What needs to happen now?

Much effort is being invested within the sector in exploring issues pertaining to school meals. Although it could be argued that there is scope to increase the amount of effort being invested into better understanding the school meals service, the key priority is improving the quality of what is being generated in order to be fit-for-purpose to inform the future development of policy and practice.

Outlier analysis. Sector-led analysis of school outliers – both for Scotland as a whole, among school types, and within local authorities – should be prioritised in order that the sector can learn from schools with atypical experiences, both positive and negative.

School and local authority reflection. The SPIRU analysis provides schools and local authorities with the means to better understand how their experience compares to others in Scotland. It would be prudent for those with responsibility for catering in schools to reflect on their standing, relative to others.

More robust analysis of uptake. The claims to understanding made on the basis of the school meals census data alone, are compromised by the uncertainties over the impact of the ways in which these data are collected. Serious consideration needs to be given to layering the core data with complementary analysis.

Clarification of purpose and re-alignment of action. There is a need to map the concerns and perspectives of stakeholders to reach a shared collective position on what actions should be taken to address common priorities.

Robust evaluation and sharing of school-level practice. Notwithstanding the importance of school-level contexts, there is an urgent need to consider the way in which the lessons for robust evaluation of best practice can be shared effectively across all stakeholders in the sector.

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Annex 2 – *On the Street* Case Studies

Introduction

What follows are ten case studies of key issues that pertain to the out-of-school food environment for ten secondary schools in west-central Scotland.

Case Study 1: A wet weather lunchtime in Williamwood

Local Authority: East Renfrewshire Council

Williamwood High School is situated in the village of Waterfoot in East Renfrewshire. Private housing and some farmland surround the school. The majority of residential properties in East Renfrewshire are privately owned with small pockets of council and social housing. Williamwood ranked in the 'top five' of Scottish public schools in the Sunday Times School Guide 2019.

The school handbook has clear instructions regarding FSMs. S1 pupils are not allowed to go out of the school grounds at lunchtime and so must take packed lunches or present for school meals. The cafeteria operates with a swipe card system and is available to all pupils. The school website informs that pupils bringing packed lunches to school can use the canteen or *The Street* (an inside communal area) to eat their lunch. However, it is unclear if pupils returning to the school with food bought outside of it at lunchtime can eat this food inside the school. The website encourages pupils to remain in the school and to try school lunches, stressing that the school provides a safe dining environment.

The external competition is within a 15 minute walk from the school gates. In one direction there is a bakery and a convenience store, and in the opposite direction another bakery, Co-op and fish and chip shop. Notably the fish and chip shop ordinarily offers a lunchtime deal for pupils, but was closed on the day of observation so it was not possible to ascertain how widely this is used by pupils.

On the day of observation the weather was poor and this may have deterred some pupils from leaving the school at lunchtime. The small groups who did venture out visited the bakery first, with many then choosing the Co-op to buy snacks such as crisps and chocolate. Only two pupils used the Co-op to purchase sandwiches and pasta pots, which seemed to be the healthiest food purchased out of school. All pupils, except two girls, were in 5th or 6th year, which was identifiable by the style of their blazers. It was noted that all pupils were well behaved.

Case Study 2: How do local retailers respond to the demands of pupils from All Saints RC Secondary School at lunchtime?

Local Authority: Glasgow City Council

All Saints is a secondary school in Barmulloch in the north east of Glasgow. The school has a 'Fuel Zone', which offers a range of healthy lunch options, as well as vegetarian and halal food. Not far from the school, about a five minute walk away, are a row of shops, comprising a sandwich shop, Post Office (which offers a range of confectionary and instant noodles), and a Spar. An ice-cream van also parks close to the school and a snack van is located a 10-minute walk away. At the opposite end of the school, there is a community centre with a small café, which is also a 10-minute walk away.

Many of the pupils who left the school at lunchtime visited the row of shops. The most popular foods purchased by pupils in the sandwich shop were breakfast rolls, other filled rolls and chips, or chips with curry sauce/gravy. A few girls purchased salad rolls. However, the most popular choice was chips. The sandwich shop was so busy it was virtually inaccessible within fifteen minutes of the lunchtime bell. This could explain why groups of pupils left with nothing more than a packet of crisps and a bottle of fizzy juice from the shop next door. Pupils only have 40 minutes for lunch and may not want to spend a significant amount of time waiting in a queue for food. To manage the number of pupils, the sandwich shop has a 'traffic management' system in place; orders are taken at one side of the shop, with pupils being given a coloured ticket to redeem at the other side once their food is ready. However, these tickets are not numbered (in order of purchase) which means that pupils do not necessarily receive their food in order of purchase. This system appears to encourage boisterous behaviour, as those who are more forthright are more likely to receive their food first.

The Post Office and Spar also have systems in place to respond effectively to lunchtime demands. Both shops have tubs of noodles sitting out with the lids already peeled open; all the pupils have to do is fill up the tub with hot water from the nearby urn and then pay. However, the shops charge pupils for use of these facilities, as well as for additional extras, such as a sturdier plastic fork than the one given with the noodles.

A smaller number of pupils, mostly senior boys, preferred to walk to the snack van for burgers and breakfast rolls. The ice-cream van was popular among pupils from the lower school who waited to purchase confectionary, mainly gums and crisps. Only a few pupils frequented the community centre café, perhaps because it sold very similar food to the sandwich shop, but was further away.

This fieldwork was carried out on 29th October 2018 at lunchtime (between 1300-1345). It was carried out by an ex pupil of All Saints who also lives nearby the shops that the school pupils attend. Pupils were observed from a car parked nearby. The local vendors were also approached after the fieldwork for additional information.

Case Study 3: Lunchtime specials and fast food prove too tempting for pupils of St Ninian's High School

Local Authority: East Dunbartonshire Council

St Ninian's High School is located in the heart of Kirkintilloch, East Dunbartonshire, approximately 200 yards from the town's Main Street. The school accommodates 800 pupils and, due to the school catchment area, pupils come from a diverse range of socio-economic backgrounds. In line with the Scottish Government's 'Hungry for Success' initiative, St Ninian's school meals aim to provide balanced and healthy options, low on sugar and salt with menus rotating on a three-week cycle. Confectionary products have been removed from the menu and the volume of fizzy/carbonated drinks available for pupils to purchase has been substantially reduced. A price list of various lunch options can be found online via the school handbook. The food on offer includes baguettes, Paninis, salads, and baked potatoes. However, there are many food outlets located a short distance from the school, which are much frequented by pupils. The most visited providers – all of which are situated on the lower Main Street – are Greggs, Subway, San Marco (chip shop), Dominos, Majella's (café) and Tesco.

In particular, San Marco and Greggs were often frequented. San Marco offers lunchtime specials specifically for school children, e.g. £1.00 for chips and cheese or small sausage suppers. An overwhelming majority of customers were boys who were mainly buying chips. At Greggs, the ratio of boys to girls was more evenly split; pies, sausage rolls and pastries were more popular among the boys, whereas the girls were more likely to purchase sandwiches. The duty manager confirmed this observation by commenting that girls, disproportionately to boys, tended to purchase packaged fruit and salad bowls from the store. The café, Majella's, was the third busiest outlet. They offered a range of options such as noodles, sausage rolls, soup, hot dogs and pies with the manager remarking that all food is oven cooked and that nothing was fried. Once again, where what is considered to be healthier food is offered, the number of girls far exceeds the number of boys.

Despite offering a two-topping pizza for £1.99 – a lunchtime special for school pupils – Dominos was not busy. Similarly, Subway did not attract a great deal of custom; the few who did go there were mainly girls (where they could buy a cold sandwich and cookie for £2.00).

Proximity and variety appear to play a part in attracting pupils to food providers on the Main Street. More specifically, the value for money offered through lunchtime specials and meal deals appeared to be very tempting for the pupils of St Ninian's High School. The most notable and interesting dynamic was the difference in consumption between boys and girls, with girls favouring the healthier options.

Observations were made on Kirkintilloch Main Street on Friday 2nd November 2018 between 12:25 and 13:10. As a local resident the area was familiar and easily accessible

Case Study 4: Patrolling out of school behaviour – but not food consumption – on the streets around Cleveden Secondary School

Local Authority: Glasgow City Council

Cleveden Secondary School is situated on Cleveden Road in Kelvindale, in the west end of Glasgow. Less than 400 yards from the school, a number of shops are open at lunchtimes and available for the school pupils. These shops include Spar, Subway, Chicken Palace, Cleveden Deli, Golden Buck and Londis. There is a Tesco supermarket just over one mile away. However, as the pupils only receive 40 minutes for lunch, the Tescos does not seem to be used as a lunch destination.

First year pupils are not permitted to leave the school during lunchtime. The year groups that left the school tended to be between second and fourth years, with only a few fifth and sixth year pupils observed. Additionally, boys were more likely than girls to leave the school at lunchtime. The most frequently visited shops by pupils were Spar/Subway (with the Subway located inside the Spar) and the Chicken Palace - with its queues stretching out into the street for the majority of the lunch period. The most popular purchases were donner meat and chips, meatball subway sandwiches, and burgers, with crisps and bottles of fizzy juice also commonly purchased. The options chosen by students at these outlets are generally understood to be less healthy than those served in the school.

The Golden Buck offers a cheap lunchtime menu to entice the pupils to eat there. For example, salt and chill chicken with rice, chips and sauce is priced at £3.70 during the school lunch break, whereas salt and chilli chicken alone usually costs £5.20. The Golden Buck appeared to be the third most frequently visited food outlet during lunch period. Behaviour was less orderly in this establishment, with pupils observed writing risqué comment on the lunchtime menu in this outlet, in order to make their peers laugh and 'show off' to their friends.

The food purchases by pupils did not appear to vary by year group. However, food choices varied by gender. Females tended to pick 'healthier' options, such as a chicken salad, sandwiches and water, although they were also not averse to buying less healthy options. Interestingly, the street where these shops are located is patrolled by a police officer during the lunch period. The officer was observed telling pupils off for littering – and promoting the use of bins. At the end of lunch, the police officer was also seen to visit each shop to ensure that no bad behaviour had occurred.

It was interesting to observe that instead of ensuring pupils stay within the school grounds for lunch, the school and local community (evident through the presence of the police officer) focused on controlling behaviour outside of school during the lunch period, presumably in order to minimise anti-social behaviour for the benefit of local residents and shop owners.

Case Study 5: Does the dash for fast food leave learning lagging behind for the pupils of Holyrood?

Local Authority: Glasgow City Council

Holyrood Secondary School, on the south side of Glasgow, is the largest school in Scotland and one of the largest in Europe with over 2000 pupils. Although a Catholic faith school, Holyrood lies at the heart of a multicultural area and is culturally inclusive as it welcomes pupils from all denominations. Pupils have ready access to a wide range of lunchtime providers out of school, although pupils only have one hour's lunch break. By focussing on the time it takes pupils to buy their lunch, eat it and get back to school, this case study speculates on potential learning impact, as a result of their lunchtime travels.

Around one-fifth of the pupils are first years, who must remain within the school grounds during the lunch hour. Many options are available to pupils via *Fuel Zone*, including, fresh baguettes, baked potatoes, burgers, curries, pasta and traditional hot meals. Furthermore, Holyrood has a School Nutrition Action Group (SNAG), which consists of student and staff representatives who work together to promote health and well-being across the school. For example, SNAG introduced an award system encouraging pupils to choose healthy options and foods from a variety of cultures.

Despite these efforts to improve school lunches, the vast majority of pupils beyond S1 tend to head for a preferred off-campus destination during the lunch period. Pupils tend to head in one of two directions: towards Aitkenhead Road or Cathcart Road. On the Aitkenhead Road side, the quickest and easiest destination for the pupils to access appears to be the Asda in Toryglen (a five minute walk). The takeaway shops at Kings Park are a little further away (a ten minute walk). Accessing these outlets mean that the pupils can comfortably purchase their lunch, eat it and get back to school in time for the next lesson.

It is not so quick to access the preferred eateries on Cathcart Road. Although at its closest point to the school exit, there are eateries that the pupils can access just as quickly as the those on Aitkenhead Road, many attempt much longer journeys. Some pupils head straight for Crosshill station in order to catch a train to nearby stations where they can they buy their lunch at Dominos (in Mount Florida) or McDonalds and KFC (near Queens Park station). On one survey day, forty-eight pupils were observed making this journey. Twenty-three pupils returned by train with twenty minutes to spare, eleven with ten minutes to spare, and eight pupils came back around ten minutes late after lunch. However, there were six pupils unaccounted for.

Although it may only apply to a minority of pupils, the time it takes for some to travel and buy their lunch, eat it and make it back in time for their next lesson may present problems, i.e. digestive issues, behavioural problems and class disruption, which may result from pupils returning late back from lunch.

The author's children were pupils at Holyrood, which meant he was already familiar with the layout of the school and the surrounding areas. Observations were made on the 5th November 2018 during the school lunch hour (1.10pm-2pm).

Case Study 6: Congregating on the street at Hyndland

Local Authority: Glasgow City Council

Hyndland Secondary School, founded in 1912, is located in the west end of Glasgow in the constituency of Glasgow North. It operates a 'Fuel Zone' where payment for school food is by swipe card that can be topped up by parents online; children eligible for FSMs have their card credited daily to the value of £1.70 and may add to this amount themselves with cash. Hyndland is a conservation area characterized by red sandstone tenements and a range of retail outlets. Several of these sell take-away food, collectively offering a wide range of options.

It was clear that those pupils who leave the school at lunchtime tend to separate into groups of boys or groups of girls. In terms of food, the preference of the majority of pupils appeared to be Pablo's Fish and Chip Shop or the pizzeria beside it. Large queues formed whilst around 80 pupils remain on the street in the immediate vicinity of these outlets. Public seating is at a premium so many pupils chose to stand nearby. It is unclear if the pupils are merely socializing or if they are waiting for the queues to subside so they can then make purchases. A majority of girls, seemingly undeterred by the cold weather, remain outside eating filled rolls. From observation, the meal of choice is chips or a roll and chips with a minority ordering another item such as fish with chips or pizza.

Case Study 7: Is temptation too much for pupils of Cardinal Newman High School?

Local Authority: North Lanarkshire Council

Cardinal Newman High School is located a short walking distance away from the Main Street of Bellshill in North Lanarkshire. The school roll is just in excess of 1000 pupils. According to the school website, hot and cold school meal deals are available for £2.05 as part of a choice of three menus that rotate throughout the week. Although there is a common approach across the whole authority, once per month each school can present its own themed food day.

Although the school offers a range of nutritionally attractive options at affordable prices, a large proportion of pupils still choose to eat elsewhere. I observed that the close proximity of the fast food outlets to the school appears to be a major pull factor for students and that the majority of pupils out with the school at lunchtime were boys.

The Main Street of Bellshill, which is easily accessible from the school, comprises a row of fast food outlets including Greggs, Subway, a chip shop, a convenience store and a deli. Each individual shop had a queue of pupils stretching beyond each entrance, although the deli was the least busy with school pupils. The girls mainly went to Subway, with only one boy being observed there. Subway offers students a cold sandwich meal deal for £1.99 or a hot one for £2.99. The most popular destination seemed to be Greggs, which offers pupils a free cake or sausage roll with a £3 sandwich meal deal; even so, most of the pupils were buying sausage rolls or steak bakes.

Less accessible is the local McDonalds, which is located at the other side of dual carriageway, requiring the pupils to negotiate a very busy roundabout from which traffic connects to the carriageway below. The majority of pupils purchasing from McDonalds were boys who were reckless crossing the road en route.

The majority of pupils who were observed smoking were girls. This could possibly be one of their reasons for them leaving the school premises in the first place (as smoking is prohibited on school grounds).

Case Study 8: The gender divide at Saint Peters

Local Authority: West Dunbartonshire Council

Saint Peter the Apostle High School is located in the busy neighbourhood of Drumry, to the north of Clydebank (West Dunbartonshire). Despite the school's relatively isolated location and poor road connections to the central shopping area in the town, it is surrounded by many shops and fast-food restaurants, which the pupils can readily access when they leave the school grounds. Most pupils come from surrounding neighbourhoods, giving the school a mixed social profile. The school website does not provide details of the lunch options that are on offer. In the school handbook, there is a brief mention of Free School Meal Entitlement and how more information on this could be found on the Local Authority website.

This case study makes reference to five areas (consisting of eight food outlets) that pupils tended to frequent in large numbers. The first area of focus is located 25m from the school's gate and consists of two food outlets, an ice-cream van and a fish and chip van. These were by far the busiest lunchtime locations with perhaps as many as 150-200 pupils visiting in total. Although pupils of all ages were observed, there appeared to be a gender divide. For example, at the fish and chip van there were two separate queues – one for each gender. Similarly, at the start of lunch break, the ice-cream van had one queue, primarily consisting of boys, and as this queue cleared, girls would begin to form a queue. By the end of the lunch period, roughly equal numbers of females and males had visited each van.

Another three areas had six food outlets in close proximity to one another. These were the delicatessen and Spar, the Kilbowie café and another Spar, the Chip shop and Co-op. These lunch spots were between 100-150m away from the school grounds and each of these locations had approximately 75-100 pupils visit during the lunch period. This group consisted primarily of younger males (around 80%).

The final area that was visited was further away at Clydebank shopping centre (approximately 1.2km away), with the key attractions being Greggs and Subway. Despite this distance, around 50 pupils visited this location for lunch. Whilst some pupils walked to the centre, the clear majority of pupils were observed disembarking the bus that runs past the school. Even fewer pupils were observed walking back to school, with most pupils getting the same bus back. However, three groups of four or five senior, male pupils shared a taxi that they hired from a nearby rank.

It is interesting to note the differences in gender at the various food outlets, most notably at the ice-cream van and fish and chip van. The area consisting of Greggs and Subway also suggests the lengths pupils are willing to go to, particularly male pupils, to acquire unhealthy food, despite (healthy and) cheaper alternatives being available within the school.

The author was a former pupil of the school. Observations were carried out between the 22nd and the 26th of October 2018, during the hours of 12.35 and 1.20 (the pupil's lunch period). I paid particular attention to pupil numbers, as well as age and the gender

Case Study 9: Lunchtime in the park at Trinity

Local Authority: Edinburgh City Council

Trinity Academy is situated in the north of Edinburgh. The school is at the heart of a quiet, middle class suburban neighbourhood and enjoys the benefit of Victoria Park located opposite. The catchment also includes parts of the more traditionally working class area of Leith.

Although the school website promotes the quality of school meals at Trinity, it does not mention FSMs or how to claim them. Payment is by the online Parent Pay facility or by a weekly, monthly or termly cheque, which usefully allows parents to top up their child's swipe card. Parents also have the option of checking the items that their child is purchasing. There is no mention of whether the children can top the card up themselves or if the card can be topped up daily, which may be useful to those families whose finances are insecure. The school handbook appears only to be available by downloading a dedicated school app; this may contain more information about school meals at Trinity.

Several food and drink outlets are adjacent to the school and the park. Close to the main entrance on Craighall Road is a small but busy Sainsburys store from which a queue of pupils extends into the street at lunchtime. There is also a newsagent and a bakery nearby at Newhaven Harbour. Further on is a 24hr Asda offering meal deals, as well as the extensive range of products that is characteristic of a superstore. On Newhaven Road there are also two delis, Ollie's Café and The Mulberry Bush, both of which target pupils with special lunchtime prices.

The delis were selling boxes of chips for £1 and cans of juice for 50p as special offers to school pupils. Similarly, the local bakery sells pies and pastries for £1 and Asda offers whole boxes of donuts and baked goods for prices that start at less than £1. It also sells pre-cooked chicken wings for £1.50, with the Asda café selling pizza slices at £1.50 and jacket potatoes from £1.

Apart from the potential savings to be made by purchasing food outwith school, the pupils also use the opportunity to socialise with their peers away from the scrutiny of school staff. Indeed, many pupils were observed eating homemade packed lunches outside the bakery or in the park. More again were in the park eating only crisps and drinking juice, and some were playing football on the Astroturf and were not observed to consume any food or drink. Of those seen to be eating, the choices were more akin to a snack than a mid day meal. A number of pupils were observed smoking, which would not be permitted on school grounds.

It is possible that on the observation day the good weather encouraged more pupils to eat outdoors than at other times.

Case Study 10: Option to heat up their own lunches

Local Authority: South Ayrshire Council

Prestwick Academy is in Prestwick, a coastal town that borders with the larger town of Ayr in South Ayrshire.

Prestwick Academy's website informs that a freshly prepared set lunch costs £2.25. Further links reveal menus, one of which includes snacks and drinks at lower prices. Information on how to claim FSMs is not available. Noteworthy is a letter from the head teacher encouraging pupils to make healthy meal choices within the school. An incentive that ran from the start of the school year until 31st August 2018, gave all S1 pupils a voucher to try a school meal for free, in a bid to encourage them to remain in school and choose the healthy options available. It is not possible from the website to ascertain if this initiative was successful.

In close proximity to the school is a range of retail outlets including: Greggs, Mama Mia's Chip Shop, Kebab House, J Brown Newsagents, Tesco Express, Picnic Basket and Taste. Interestingly, during school lunchtime Bryson's Garage provides facilities such as kettles and microwaves, which pupils can use to heat up their own lunch.

The majority of the pupils using the various food outlets were between S1 and S4, this can be clearly observed, as uniforms of S5 and S6 are different to those of the lower year groups. The popular meal choices were pizza, chips and cheese, kebab meat and chips.

Conclusion

It is clear that the out of school food environment is popular among many secondary school pupils at lunchtime. Private sector providers often offer the foodstuffs that are not available within schools. They also organise their service to manage the high turnover, with ticketing systems and providing equipment (kettles and microwaves) and consumables (stronger plastic forks) to encourage consumption. Some of the ways in which these services are provided (or utilised) are gendered for no determining reasons, e.g. the separate boys and girls queues, and the sequenced queues of boys, then girls at the vans in West Dunbartonshire.

Recognition too must be given to the attractions of the out of school environment that extend beyond the food provided. Lunchtime is a social time-space, in which friendship groups (typically by age and gender) meet and interact. It provides an opportunity for desired activity that is not permitted in school (e.g. smoking) and for activity for which spaces outside of school may be better suited (e.g. playing football in the park beside Trinity High in Edinburgh).

Annex 3 – *In the School* Case Studies

Introduction

What follows are summary reports from research undertaken on behalf of Assist FM in six Scottish local authorities since 2011. Beforehand, some of the key findings are summarised across four tables, which are drawn upon in the case studies that follow.

The original work was undertaken to inform marketing strategies that could thereafter be deployed to encourage more secondary school pupils to present for school meals. Although designed to achieve this end, and notwithstanding the limitations in the research design (10.4.2), the work enables us to better understand the perspectives of young people and senior staff within each school community. The original reports vary in content. No report provides comprehensive coverage of all secondary schools within its local authority. Here, we provide a single page summary of the most pertinent points for each local authority.

Table 8: Frequency with which presented for school dinners

	Never	Occasionally	Once/week	Twice/weekly	Thrice/weekly	Four times/weekly	Daily
Dumfries & Galloway							
Stranraer Academy	34	14	6	4	3	10	29
Wallace Hall	5	13	0	13	5	10	55
Dumfries High	14	13	0	9	2	9	53
Annan	28	28	4	6	4	7	17
Inverclyde							
Greenock Academy	18	10	2	6	6	10	48
Inverclyde Academy	35	39	2	10	4	2	8
Gourock Academy	25	19	2	6	10	6	31
Port Glasgow Academy	12	33	7	2	15	4	25
St Stephens Academy	18	5	4	5	8	12	48
North Ayrshire							
Kilwinning Academy	44	34	7	5	5	3	7
Auchenharvie Acad.	29	19	4	6	10	14	18
Ardrossan Academy	25	20	10	5	16	6	15
St Matthews Academy	24	24	9	3	6	15	21
Garnock Academy	18	19	5	7	8	7	31
Irvine Royal Academy	27	24	2	0	12	7	27
Largs Academy	6	6	4	12	8	29	31
Greenwood Academy	15	28	17	11	7	7	13

Note: Cells indicate the percentage of pupils who indicate this as the frequency with which they presented for school meals. The most common frequency in each school is highlighted (bold and dark grey highlighting). Issues pertaining to the quality of these data are discussed in chapter 10 of this report.

Table 9: Pupils' main reason for not eating school meals

	Don't like food	Meet friends	Like to go out	Dining room	Poor food	Waiting	Other
Dumfries & Galloway							
Stranraer Academy	21	14	10	11	13	32	/
Wallace Hall	6	15	13	8	6	52	/
Dumfries High	16	12	12	12	15	31	/
Annan	21	33	22	7	7	9	/
Inverclyde							
Greenock Academy	17	11	3	13	10	38	7
Inverclyde Academy	18	20	14	5	10	18	17
Gourock Academy	10	15	14	11	9	19	20
Port Glasgow Academy	22	19	15	10	4	12	17
St Stephens Academy	28	16	10	3	9	18	15
North Ayrshire							
Kilwinning Academy	18	12	12	9	14	20	12
Auchenharvie Acad.	20	11	20	4	11	23	7
Ardrossan Academy	20	11	18	8	13	16	14
St Matthews Academy	13	15	19	13	6	31	4
Garnock Academy	20	7	9	4	6	37	18
Irvine Royal Academy	22	22	10	7	5	25	10
Largs Academy	5	7	16	21	2	46	9
Greenwood Academy	16	9	9	6	8	35	14

Note: Cells indicate the percentage of pupils who indicate the factor as the main reason. The most important reason in each school is highlighted (bold and dark grey highlighting). Issues pertaining to the quality of these data are discussed in chapter 10 of this report.

Table 10: Pupil evaluations of the contemporary school dining environment

	Service	Variety	Healthy	Quality	Waiting	Environ.	Price
Dumfries & Galloway							
Stranraer Academy	3.58	2.86	3.47	2.79	2.16	2.75	2.60
Wallace Hall	3.95	3.26	3.69	3.49	1.88	2.51	3.02
Dumfries High	3.75	3.02	3.20	3.11	3.01	2.52	2.53
Annan	4.00	3.45	3.76	3.45	3.23	3.41	3.32
Inverclyde							
Greenock Academy	3.44	3.48	3.63	3.39	2.33	2.86	3.08
Inverclyde Academy	2.65	2.28	3.47	2.59	2.22	3.07	3.04
Gourock Academy	3.22	3.08	3.21	3.02	2.81	2.57	2.70
Port Glasgow Academy	2.78	3.76	3.21	3.07	2.40	2.68	2.33
St Stephens Academy	3.35	3.41	3.59	3.09	2.32	3.14	2.83
North Ayrshire							
Kilwinning Academy	3.08	2.80	3.28	2.88	1.74	2.86	3.06
Auchenharvie Acad.	3.55	3.00	3.61	3.13	2.29	3.94	3.26
Ardrossan Academy	3.17	2.50	3.03	2.59	2.14	3.18	3.08
St Matthews Academy	3.08	3.39	3.12	3.66	2.22	2.86	3.01
Garnock Academy	3.03	2.82	2.74	2.92	2.16	2.69	2.65
Irvine Royal Academy	3.33	3.35	3.52	3.03	2.64	3.10	2.93
Largs Academy	4.21	3.51	3.54	3.82	2.53	3.16	3.43
Greenwood Academy	3.00	2.93	3.27	2.76	1.86	2.65	2.70

Note: Cells are the average rating on a scale of 1 (low) to 5 (high) by pupils surveyed. Highest rating (bold and dark grey highlighting) and lowest rating (bold and light grey highlighted) are indicated for each criterion. Issues pertaining to the quality of these data are discussed in chapter 10 of this report.

Table 11: Pupil evaluations of the extent to which factors could improve uptake of school meals in their school

	Plasma screen	Larger menu	More choices	Lower prices	Split spend	Better décor	Improve seating	Prize draws	Faster service	Rewards
Inverclyde										
Greenock Academy	3.56	3.57	3.92	3.76	2.98	3.10	3.70	2.93	3.51	2.60
Inverclyde Academy	3.45	3.78	4.02	3.90	3.40	2.88	3.11	3.40	3.65	2.52
Gourock Academy	3.26	3.64	3.72	3.85	3.52	3.15	3.73	3.04	3.54	2.91
Port Glasgow Academy	4.61	4.00	4.10	3.95	4.00	3.93	4.01	3.56	4.00	3.91
St Stephens Academy	3.64	3.42	3.71	3.79	3.39	3.24	3.40	3.16	3.63	2.95
North Ayrshire										
Kilwinning Academy	3.05	3.52	3.62	3.83	3.34	2.87	2.96	2.31	4.36	2.58
Auchenharvie Acad.	3.57	3.53	3.76	3.74	3.99	2.63	3.51	3.18	4.02	3.10
Ardrossan Academy	3.62	3.65	4.35	4.15	3.61	3.24	3.57	2.65	3.47	2.35
St Matthews Academy	3.70	3.55	3.16	3.93	4.02	3.41	3.61	2.96	4.36	2.83
Garnock Academy	3.87	3.75	4.01	4.01	3.95	3.51	3.48	3.27	4.02	2.58
Irvine Royal Academy	3.79	3.55	3.95	3.64	3.54	3.25	3.00	3.23	4.08	2.64
Largs Academy	4.20	4.13	4.24	4.18	3.97	3.24	3.87	2.97	4.43	3.10
Greenwood Academy	3.03	3.80	3.90	3.90	3.45	3.12	3.89	2.88	4.33	2.78

Note: Cells are the average rating on a scale of 1 (low) to 5 (high) by pupils surveyed. The criterion rated most highly in each school is highlighted. Issues pertaining to the quality of these data are discussed in chapter 10 of this report.

Case Study 1: Dumfries and Galloway

As background work for the preparation of a marketing strategy, Totalize Media conducted research in 2011 in six schools. This involved an interview with staff responsible for the service across the Council, interviews with Catering Managers in the six schools visited and survey results from pupils in four of these schools.

Any pertinent points about the organisation of school meals provision?

- The sixteen schools in Dumfries & Galloway were classified into three groups on account of school meal uptake. At the time of the research, plans were in place to provide a deli-style menu in schools with all but the highest level of uptake, in order to reduce waste and staff hours. A-class schools with high uptake were to maintain a three-week menu cycle, with greater choice.
- School meals branding is less widely used in PPP schools.
- No schools have a staggered lunch hour,
- The practices of (i) allowing pupils to take food out of dining areas (ii) pre-ordering , and (iii) permitting pupils to bring externally purchased food into school, vary across schools.
- No school has sufficient seating for all pupils; at Castle Douglas there are 50 seats for 576 pupils.
- In all schools, pupils entitled to FSMs can use their allocation during the mid-morning break
- Mid-morning break uptake by free meals pupils is not included in the lunchtime take-up figures.
- Lunchtime has reduced in recent years.
- Totalize media conclude that the schools are falling short of the standards set in H4S.

What is thought to work well by the service providers?

- At some schools first year pupils have access before other groups, which is thought to help with flow and turnover.
- Introducing cash tills at Stranraer is thought to have increased uptake among pupils

What is thought to work less well by the service providers?

- Prefects who are not trained to supervise the lunch hour might be a disincentive as they are very strict.
- Pupils are thought not to understand the meal deal system.
- The cost of school food (£1.80 for a meal deal) is thought to be in excess of the money that some pupils bring to school for food, forcing them to go outside.
- In one school it is estimated that there has been a significant fall in uptake following the implementation of the Health and Nutrition Act
- The cashless only system is thought to be a disincentive

What do pupils think?

- Pupil evaluations varied markedly across schools; of the seven 'dining environment' elements rated, service was the most favourably rated in each school and waiting times the least favourably rated in most schools (Table 7).
- Waiting times were also listed as the main reason for not eating school meals by slightly more than one half of pupils in Wallace Hall (Table 6).
- The frequency with which pupils used school dinners varied markedly across schools (Table 5).
- The majority of pupils in each school would like to pay with cash.

Case Study 2: Inverclyde

As Case Study 1, as background work for the preparation of a marketing strategy, Totalize Media conducted research in five of Inverclyde's seven schools in 2011. This involved an interview with Catering staff and administering a survey with pupils in the schools visited.

Any pertinent points about the organisation of school meals provision?

- No school meals branding
- No schools have a pre-order system
- All schools use a cashless system
- The practices of allowing pupils to take food out vary across schools.
- No school has sufficient seating for all pupils; at Port Glasgow there are 20 seats for 458 pupils.
- In all schools, pupils entitled to FSMs can use their allocation during the mid-morning break
- Schools reported a day of the week effect, with service being reported to be busier on certain days (typically Monday and Thursday).
- Schools reported that the weather had a significant impact on uptake
- Not affording purchases that are not for the full meal deal is thought to reduce footfall.
- Totalize Media conclude that the schools are falling short of the standards set in H4S.
- The very different contexts –in terms of out of school food environment, school estate and in the socio-economic mix in schools – is thought to lead to very different challenges and experiences across secondary schools in Inverclyde.
- In addition to not having enough seats, it is observed that the layout of seating does not enable peer groups to have sufficient space to congregate – with being able to meet friends noted as an important reason for some for not eating school meals.

What is thought to work less well by the service providers?

- Not selling fizzy drinks is thought to encourage pupils to consume elsewhere.
- The cashless only system is thought to be a disincentive

What do pupils think?

- Pupil evaluations were broadly comparable across schools, with the 'healthiness' of the food being generally highly rated. By way of exception, the variety of food was highly rated in St Stephens, but poorly rated in Inverclyde (Table 7).
- The main reason for not eating school meals varied across schools – a wide range of factors were noted in Inverclyde, food-related concerns were more prevalent in Greenock and St Stephens, while waiting times was more of an issue in Greenock Academy (Table 6).
- The frequency with which pupils used school dinners varied markedly across schools (Table 5), with Inverclyde Academy characterised by low use (35% never and 39% occasional), in contrast to St Stephen's (10% four times/week and 48% daily).
- Pupils were often strongly in favour of particular developments to encourage uptake of school meals, with plasma screens being strongly rated in Port Glasgow. More choice was also considered an attractive incentive for uptake across all schools. (Table 8).

Case Study 3: North Ayrshire

As Case Study 1, the research was undertaken as background work for the preparation of a marketing strategy; Totalize Media conducted research in eight of North Ayrshire's nine schools in 2011. This involved an interview with senior staff, three focus groups with pupils and survey research in eight schools (pupils in the island school were not surveyed).

Any pertinent points about the organisation of school meals provision?

- Head teachers, citing insufficient demand, did not favour staggered lunch hours.
- The practices of (i) allowing pupils to take food out and (ii) permitting pupils to bring externally purchased food into school, vary across schools.
- No school has close to the equivalent of one seat per pupil; at Greenwood there are 280 seats for 1610 pupils, with 450 taking lunch. However, no concern was expressed that this was insufficient.
- Lunchtime was set to be reduced in several schools.
- Totalize Media conclude that the schools are falling short of the standards set in H4S.

What is thought to work well by the service providers?

- School meals branding and 'mimicking' retail outlets is thought to be helpful
- At some schools pre-order systems are thought to work well.
- Seating year groups separately is thought to work, with some schools separating S1/2, and others providing separate space for senior pupils.
- Seating is not perceived to be a problem.
- The quality of service provided - staff, product and environment – is considered to be a strength

What is thought to work less well by the service providers?

- Concern was expressed over packaging waste, particularly given the school's eco-school status.
- The government restrictions on food standards were reported by one senior school staff member to be the main disincentive to pupils eating in school.

What do pupils think?

- The reval unit for the cashless system was criticised (particularly for time taken to use), with pupils expressing that they would rather use cash.
- Pupils welcome the concept of a coffee bar.
- Waiting times was acknowledged as a major disincentive, as were the difficulties in being able to sit alongside friends.
- Littering was accepted, with some expressing the opinion that it was 'not cool' to put waste in bins.
- Some concern was expressed at the way in which the service was operated.
- Pupil evaluations varied markedly across schools; of the seven 'dining environment' elements rated, service was highly rated in most schools and waiting times the least favourably rated in most schools, with particularly low ratings in Kilwinning and Greenwood (Table 7).
- Waiting times was the most common main reason for not eating school meals in most schools (the exception was Auchendarvie where more reported that they "did not like the food" (Table 6).
- The frequency with which pupils used school dinners varied markedly across schools (Table 5), although non-use was particularly high in Kilwinning Academy (44% never used).

Case Study 4: Renfrewshire

As Case Study 1, the research was undertaken as background work for the preparation of a marketing strategy, Totalize Media conducted research in Renfrewshire schools in 2011. No information is provided on the work undertaken, although extracts are presented, from which this summary has been developed.

Any pertinent points about the organisation of school meals provision?

- The out of school environment differs markedly across schools, impacting on the likelihood of pupils presenting for school meals.
- Similarly, the dining environment varies across schools.
- How pupils spend varies across schools, with meal deals being more common in some schools (e.g. Renfrewshire High), whereas individual item purchase is more common in others (e.g. Castlehead).
- The practices of allowing pupils to take food out of halls vary across schools; where permitted, this is reported to reduce the pressure on space in the school dining hall.
- It is suggested that school meal uptake directly reflects the proportion of seats that are available to pupils (with, for example, high uptake/high proportion of seats per pupil in Castlehead and low uptake/low proportion of seats per pupil in Paisley Grammar); however, this conclusion is not strictly accurate and there are anomalies, e.g. uptake is high in Gryffe (49%), despite having a low proportion of seats per pupil (22%).
- The reduction of lunchtime has exacerbated the problems in delivering school meals.
- Head teachers are not keen to stagger school lunch hours.
- It is reported that the guidelines are being 'stretched' in some schools.
- Concern is expressed that the management and operation of the service is not to the same standard as commercial operators.
- It is noted that the cost of the school meal is higher than most other areas in Scotland (at £2.30, twice the cost of what a meal costs in Glasgow, for example).

What do pupils think?

- Pupils expressed the opinion that the cost of school food was too high.
- Pupils are reported as being critical of the ambiance in the school dining environment.
- A sense of injustice is reported by those presenting for school meals, as those who bring packed lunches are able to secure a lunch space before them.
- There is much uncertainty among pupils as to what the meal deal comprises.
- Food product is rated well and is not thought to be the main reason why pupils eat out of school; rather peer pressure, price, wanting to get out of school and the school dining hall being too busy as cited as the 'push' factors.
- Pupils are dissatisfied at the range, size and type of drinks on offer.

Case Study 5: Stirling

In 2015, Stirling Council adopted for an original and participative approach when reviewing their own catering brand as it reached its ten year anniversary. A Dragon's Den project was organised in which pupils presented a business case for their proposed changes to the operation.

Any pertinent points about the organisation of school meals provision?

- Although the existing brand was recognised (Fresh), it did not resonate with the pupils.
- The kitchen areas are considered to be too small to allow the catering service to adequately meet the needs of school pupils.

What is thought to work less well by the Totalize when reflecting on the provision in Stirling?

- It is suggested that it would be better to try and develop/present the dining room space as a unique space, rather than a dining room within a school.
- Similarly, it is suggested that there is a need to treat the pupils as customers and to deliver the customer/dining experience that they would experience beyond the school gate.
- The inconsistencies in permissions given to presenting posters and promotional material are noted, such that the catering service is unable to adequately promote its offer.
- It is considered that some school rules / operational practices (e.g. forbidding children from taking food outside dining areas) is counter-productive and a disincentive to potential pupil customers.

What do pupils think?

- Many of the recommendations made by the pupils concerned improving the food offer, e.g. introducing a Gelato stand, a bakery stand, and offering a wider range of pizzas, pasta and salad/fruit.
- Concerns were expressed at aspects of dining room environment, with problems observed including (i) dining spaces were unattractive; (ii) lack of seating in relation to school roll;
- It was noted that branding was less prominent and widespread in PPP schools.

Case Study 6: Highland

As Case Study 1, the research was undertaken in 2016 as background work for the preparation of a school catering brand. No research report is available, with this case study being developed from summary findings that were available in an unpublished research report. This fieldwork involved focus groups in three schools and surveys in the dining areas of all 28 secondary schools.

Any pertinent points about the organisation of school meals provision?

- Many of the issues that were reported and observed are common to other schools in Scotland.
- The rural location of many of these schools mean that, outside of the larger urban settlements (Fort William, Inverness, Thurso and Wick), the schools have little direct competition out of the school gate.
- The promotion of the brand is less than optimal.
- There is wide variety in the nature and size of spaces that are available for school dining.

What is thought to work less well by the service providers?

- Although the service is branded (Smart Café) many staff observed that it was a little dated.

What do pupils think?

- The cashless system was criticised, particularly on account of the fact that it did not allow students to receive change. Pupils expressed a preference for a cash system.
- The cost of school meals were criticised, with recent price increases being reported as making it even more attractive to consume out of school, where the food is cheaper.
- Concern was expressed at the quality of food, lack of choice, presentation and portion size. Pupils in one school (Nairn) noted that food was better under a previous head cook.
- Criticism was also levelled at the service, with staff criticised for not being pupil friendly.
- Finger food, rather than a full meal, was often what the pupils wanted. This was a key reason for consuming out of school (even more so than the absence of fizzy drinks in the school).
- Seating was a problem for some pupils, who expressed a desire to sit together with their friends at lunchtime.
- Although waiting time was noted as a problem, other issues (noted above) were deemed to be more important.

Conclusion

Notwithstanding the need to be cautious in drawing conclusions, waiting times were commonly held to be a problem. Some strategies introduced to attend to wider agendas – cashless systems (tackling stigma), healthy foods with no fizzy soft drinks (healthy food) – are reported to be significant disincentives to school meal uptake. There is considerable variation in practice and rules across schools, even within the same local authority.

Annex 4 – Local Service Development Case Studies

Reflective Commentary

What follows are five case studies of some of the ways in which local authorities have responded to the challenges that pertain to providing school meals in Scotland in recent years.

It is clear that local authorities can, and are, deploying a number of strategies to encourage more pupils to present for school meals. These strategies are sometimes comprised by wider changes beyond the control of the school meals catering service (e.g. introduction of local external competition, reduction in dining hall capacity with changes to the school estate, etc.). Most success is achieved when the actions of school leadership and catering service align, e.g. when rules are imposed to restrict access to the out of school food environment. However, it is clear that improving the fortunes of the school meal service is both possible and does not necessarily require punitive measures.

Case Study 1: Reversing the decline in school meals consumption in Dumfries and Galloway

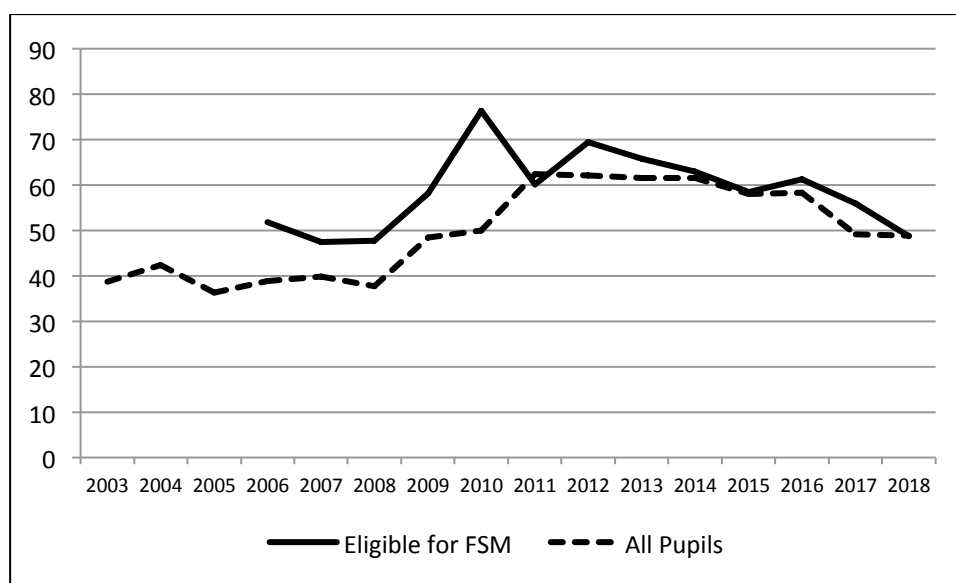
Between 2003 and 2010, the fall in the proportion of secondary school pupils in Dumfries and Galloway presenting for school meals was the greatest in Scotland (from 61.6% in 2003 to 28.2% in 2010). However, from 2010 to 2018, the increase in the proportion of its secondary school pupils who present for school meals has been the greatest in Scotland (back up to 52% in 2018). Notwithstanding that progress has stalled in recent years (there has been no overall increase from 2015-2018), the following table summarises the local initiatives that were implemented following the recruitment of a Catering Development Officer. It would appear that these initiatives have arrested the decline in school meals consumption that could be attributed to the introduction of cashless catering, full implementation of Hungry for Success and changes in food offering that followed adherence to nutritional legislation.

Title	Date Introduced
Catering development groups introduced	2007/08
Developed a local whole school approach	2008
Introduced theme days	2008
Re-introduced cash at point of sale	2009
Appointed P1-3 FSM implementation officer	2009
Created Audit and Inspection officer posts	2009
Developed Café DG brand (in the mood for food)	2009/10
Direct debit payments introduced to Lockerbie/Annan Academy	2009/10
Set unit specific key performance indicators based on £/per hour	2009/10
Seasonal menus	2010
Developed and implemented secondary school catering marketing strategy	2010
Annual training day introduced for Catering Managers	2011
Linked marketing strategy with key suppliers i.e. pasta king, sub central	2011
Introduced area specific team plans and action plans	2012
Catering and Facilities development officers introduced	2012
Introduced online customer surveys	2012
Introduced simplified pricing sales mix concept (meal deal)	2013
Introduced online payments into secondary schools	2013
Introduced School Meals Implementation Assistants	2014
School Cook of the Year launched	2015
P1-3 FSM	2015
Launched dedicated school meals website	2015
Introduced staff recognition scheme – Made a Difference	2015
Developed Provenance Brand – Naturally D&G	2015
Wee Dee Gee Cartoon/Whiteboard animation to promote school meals	2015
Nursery meals	2016
Developed parent evening display boards	2016
Introduced a catering focused management structure i.e. provenance development chef, catering improvement and efficiency officer, hospitality manager	2016/17
Catering manager training book	2017
Multi skilling work book	2017
Radio campaigns	On-going

Case Study 2: Working hard to prevent loss of business to out-of-school private providers in South Lanarkshire

Figure 16 shows that a trend of steady increase in the proportion of secondary school pupils in South Lanarkshire presenting for school meals between 2008 and 2010/11, was followed, for all pupils, with a few years of stability (2010-2014) then a slight decrease in recent years (2014-2018) and, for pupils eligible for FSMs, a steady decrease in uptake since 2012. Presently, around one-half of secondary school pupils present for school meals in South Lanarkshire; in 2018, it was the only authority in school with a minority of eligible pupils in attendance presenting for FSMs.

Figure 18: Secondary school uptake of school meals in South Lanarkshire on census day, 2003-18



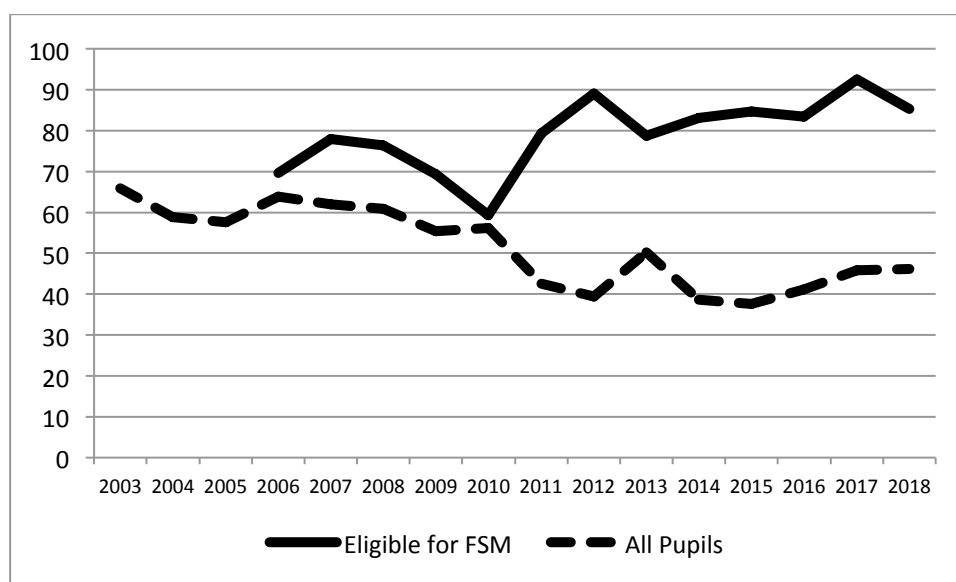
The evidence is mixed. For example, the spike in FSM uptake in 2010 could be attributed to two interventions (writing to parents to explain that their children were not using their allowance and allowing eligible children to use their allowance at the morning break). Likewise, the high levels of overall uptake (South Lanarkshire is consistently well above the Scottish average for overall uptake) can be attributed to many initiatives that have been introduced, including introducing pre-ordering facilities, introducing mobile units and vans in schools serving 'healthy options', delivering marketing training to catering staff, modernising dining areas and adding menu screens, strengthening branding and marketing and consulting with stakeholders.

Nevertheless, there has been a recent increase in external competition from privately operated food vans, leisure centre cafes and fast food outlets. For example, in 2016 there were three schools that had a privately operated van located outside, but in 2017 this had increased to twelve of the authority's seventeen secondary schools. Local laws are not being used to challenge the threat presented by private operators whose offering is not consistent with the wider social agendas that are being pursued through school food.

Case Study 3: Hidden hands shaping the experience of school meals uptake locally in Argyll and Bute

Uptake of FSMs in Argyll and Bute is consistently above the Scottish average (85.3%, compared to 72.8% for Scotland in 2018), although as recently as 2010 proportionately more pupils in Scotland presented for FSMs than in Argyll and Bute. On the other hand, levels of uptake for all pupils tend to hover around the Scottish average (46.2%, compared to 43.9% in 2018). Indeed, trend evidence points to a sharp divergence since 2010 in experience according to eligibility, to the point where there is now a substantial difference in uptake between pupils eligible for FSMs and those who are not. The reasons for these divergent experiences are worthy of further analysis.

Figure 19: Secondary school uptake of school meals in Argyll & Bute on census day, 2003-18



However, it is also important to focus on local circumstance:

- New school openings in 2008 and 2009 reduced dining hall sizes and kitchen capacity significantly). Further new schools openings in Oban and Campbeltown in 2018 has meant the loss of dedicated dining halls and the introduction of 'atrium spaces', which are too small to seat all pupils.
- A Waitrose opened up near Hermitage Academy in Helensburgh in 2012. This had a dramatic and adverse impact on school meal uptake, which dropped by 50% overnight.

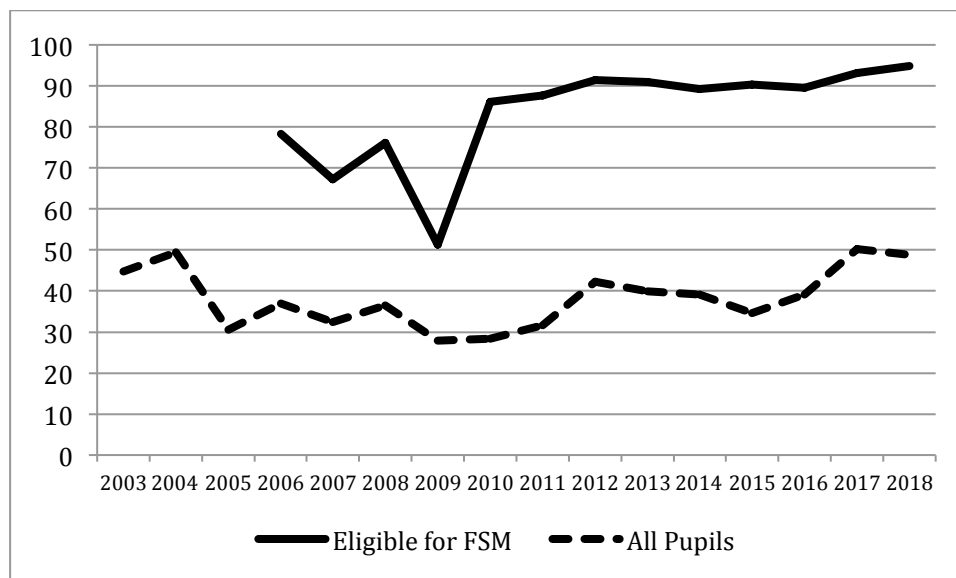
On the other hand, developments are not all 'negative', some of which have been introduced by new Head Teachers in Dunoon Grammar School and Hermitage Academy.

- Younger pupils being prevented from leaving the school campus at lunchtimes.
- Pupils being prevented from taxi-ing in fast food take-away.
- Introduction of 'coffee barrel' outdoor service points.
- Introduction of pre-ordering and quick collection for 'grab and go' meals.

Case Study 4: Multiple Strategies to Maximise Uptake in the Scottish Borders

Uptake of FSMs is higher in the Scottish Borders than in any other local authority in Scotland (94.9%, compared to 72.8% for Scotland in 2018). On the other hand, the uptake of school meals for all pupils falls far short of this level and, until recently, was below the Scottish average.

Figure 20: Secondary school uptake of school meals in Scot. Borders on census day, 2003-18



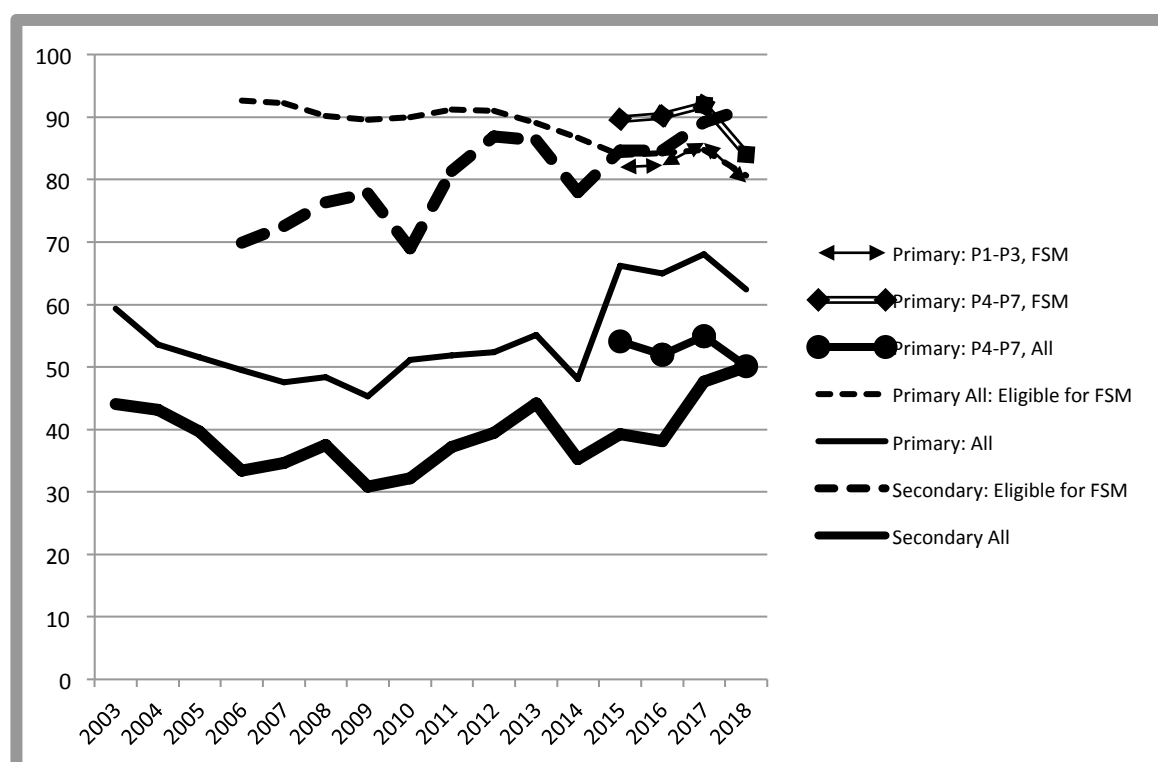
A wide and diverse range of strategies has been deployed to encourage school meal uptake in the Scottish Borders, including:

- Introducing the 'street food' concept to all secondary schools
- Cutting queues by introducing peripheral units
- Introducing a reduced calorie tray bake range
- Rebranding food in secondary schools
- Ensuring that every school meal consumed in a Scottish Borders school is made from local production units or CPUs
- Providing free salad pots in all secondary schools
- Limiting the cost of tea to 50p (including speciality teas).
- Using price promotions to encourage healthier choices
- Introducing a cashless system in all secondary schools
- Introduced new recipes (including a pizza and pasta sauce with five vegetables)
- Sourcing items with reduced fats and lower calories
- Upskilling staff
- Assigning a member of the catering management team to work with school stakeholders (management, kitchen staff and pupils) to drive improvements
- Undertaking regular pupil/parent consultation events
- Supporting pupils to enter national competitions pertaining to school food

Case Study 5: Performance indicator for North Ayrshire

North Ayrshire Council holds itself to account by measuring Council performance on five priority areas, one of which is 'supporting all our people to stay safe, healthy and active'. Two of the performance indicators for this priority pertain to school meals, i.e. uptake of school meals for secondary schools (reported as 73.38% in the 2017/18 performance report (North Ayrshire Council, 2018) and uptake of school meals for primary schools (reported as 85.52% for 2017/18). As can be seen from Figure 19, North Ayrshire goes beyond the use of a census day to better understand the realities of school meal consumption across North Ayrshire – this is particularly significant, given that the census day data seem to underestimate school meal uptake.

Figure 21: Uptake of school meals in North Ayrshire on census day, 2003-18



Notwithstanding the fall in uptake for primary schools that was reported in the census day data between 2017 and 2018, uptake in North Ayrshire has been higher than the Scottish average for both primary and secondary schools in recent years, rates that could be attributed to actions such as:

- Regular marketing through leaflets targeted at parents
- Engaging users and parents at parents' nights, school Council meetings and class forums
- Promoting Gold food for life with parents and local councillors.

Encouraging healthy living through school meals consumption is consistent with the aspiration of North Ayrshire to be a child-centred council.