

Research Bulletin No 1:

School food: top marks, research background and approach



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Introduction

This bulletin is the first in a series of seven summary papers detailing findings from an evaluation of the Food in Schools programme¹, conducted by the Public Health Agency (PHA), on behalf of the Food in Schools Forum chaired by the Department of Education (DE) in 2012.

In 2008, baseline research was conducted to investigate stakeholders' (principals, school governors, teachers, catering staff, parents and pupils) attitudes and perceptions of food in schools, including healthy eating and school meals prior to the introduction of School food: top marks. This work was replicated in 2012 to examine progress and inform future communication and policy relating to food in schools.

This bulletin gives an overview of

- the policy background;
- aims and objectives of the school food: top marks programme;
- main findings from the baseline food in schools research conducted in 2008;
- aims and objectives of the most recent research carried out in 2012; and,
- details of the sample and methodology used.

Policy Background

Childhood is a vital stage for good nutrition throughout the life course. It is not only a time of rapid growth, development and activity; childhood nutrition also impacts on adult health and the prevention of chronic diseases such as cardiovascular disease, type 2 diabetes and cancer.²

Concern over childhood nutrition and childhood obesity rates in Northern Ireland resulted in the establishment in 2004 of a cross departmental taskforce, Fit Futures, which aimed to identify priorities for action to prevent the rise in levels of overweight and obesity in children and young people. The Fit Futures taskforce highlighted that

¹ Since the completion of this research, a review of the school food marketing and promotion strategy has taken place. Following consultation with stakeholders the school food: top marks programme has been renamed and rebranded to school food (try something new today). The aims and objectives of the programme have remained the same.

² Scientific Advisory Committee on Nutrition SACN: The influence of maternal, fetal and child nutrition on the development of chronic disease in later life. November 2011. Available at: http://www.sacn.gov.uk/pdfs/sacn_early_nutrition_final_report_20_6_11.pdf. Accessed 9 November 2015.

the knowledge, attitudes and skill sets of a variety of key groups and individuals including parents, children and school employees, were important in influencing children's nutrition choices.³ However, the report also maintained that the positive influence schools have in contributing to children's nutrition can be undermined by other less healthy food and drinks options available within the school setting - particularly within school tuck shops and vending machines. The Fit Futures report, therefore, called for a food in schools programme to be established - a resourced, inspected programme introducing food and nutrient based standards for all food in schools.

Subsequently, under the branding 'School food: top marks', mandatory nutritional standards for school lunches were introduced in 2007, limiting the amount of high fat, high sugar food items and drinks that could be served as part of a school meal, while non-mandatory standards for other food and drinks sold in schools were introduced in April 2008. Due to a gap in existing legislation, the nutritional standards for other food and drinks provided by the school through tuck shops, vending machines etc. are not mandatory at present in the controlled and maintained school sectors. The Department of Education is planning to amend existing legislation to address this gap, ensuring *all* food provided by grant-aided schools is covered by compulsory standards.⁴ In the interim, the Department of Education expects all grant-aided schools to adhere to the nutritional standards for other food and drinks in schools.

The Food in Schools Policy⁵ published in September 2013, reiterates that all grant-aided schools must comply fully with the nutritional standards for school lunches. The policy advocates a 'whole school approach' to food and nutrition, maintaining that the effectiveness of nutritional standards for school meals are compromised if restrictions do not also apply to less healthy options sold in school (in tuck shops, for

³ Department of Health, Social Services and Public Safety. Fit futures. Focus on food, activity and young people. Belfast: DHSSPS, 2006.

⁴ Due to a gap in existing legislation Nutritional Standards for Other Food and Drinks in Schools are not mandatory at present in the controlled and maintained sectors where food is provided by the school (rather than an Education and Library Board) through tuck shops, vending machines etc. The Department of Education will take forward an amendment to existing legislation to address this gap and ensure that the Nutritional Standards for **Other** Food and Drinks in Schools apply equally to all food provided by grant-aided schools in the school setting. In the interim it is recommended that all grant-aided schools should seek to adhere to the Nutritional Standards for Other Food and Drinks in Schools in line with the "whole school approach" advocated through this policy. Department of Education, and Department of Health, Social Services and Public Safety. 2013. Healthy foods for healthy outcomes: A Food in Schools Policy. Available at <https://www.deni.gov.uk/articles/food-schools-policy> Accessed 9 November 2015.

⁵ Department of Education, and Department of Health, Social Services and Public Safety. 2013. Healthy foods for healthy outcomes: A Food in Schools Policy. Available at <https://www.deni.gov.uk/articles/food-schools-policy> Accessed 9 November 2015

example). Moreover, this whole school approach also encompasses foods brought into schools by pupils, such as packed lunches and snacks.⁶ However – and importantly for the purposes of this research – even though the policy *advocates* and expects compliance with the nutritional standards for other food and drinks sold in schools, this is not mandatory at present (as described above). Moreover, there is no statutory regulation of food and drinks brought into school by pupils (such as packed lunches, break time snacks or food purchased outside schools).

The most recent obesity prevention framework, ‘A Fitter Future for All’, launched in 2012 has re-iterated the importance of monitoring and implementing nutritional standards, alongside other initiatives to increase the uptake of school meals, and healthy breaks schemes in schools.⁷

Programme aim

The aim of the School food: top marks programme is to ensure that all food and drinks provided throughout the school setting make a significant contribution to childhood nutrition, and that schools are supported in the development of knowledge and skills necessary for children and young people to make healthier choices.

Programme objectives

- To raise public awareness of the significant contribution that food and beverages make to health in both the short and the long term.
- To ensure that food available through the school dining room and all other food opportunities (for example, breakfast clubs, vending machines, and tuck shops) meets the nutritional standards for school lunches and other food and drinks.
- To increase uptake of school meals, particularly among those entitled to free school meals.

⁶ However, the Food in Schools Policy maintains “in relation to policy on issues such as... restrictions on food that children can bring into school, length of school lunchtime and rules on children leaving school premises, it is a matter for schools, in consultation with parents, and with the support of education and health partners, to determine how best to support healthy eating in their school”. Available at <https://www.deni.gov.uk/articles/food-schools-policy> Accessed 9 November 2015.

⁷ Department of Health, Social Services and Public Safety. A Fitter Future For All: Framework for addressing overweight and obesity in Northern Ireland 2012 – 2022. Belfast: DHSSPS, 2012.

- To encourage an increased uptake of healthier options offered through school meals and other sources within school.
- To encourage parents of school children to consider the eating patterns of the wider family and to adopt healthy eating habits.
- To provide training and resources to schools and other stakeholders to foster the knowledge and skills necessary for pupils to make healthier choices.

Background

In 2008⁸ research was conducted to gather baseline information on the attitudes and perceptions of food in schools, including healthy eating and school meals, with a variety of populations including principals, school governors, teachers, parents, children and catering staff within schools and Education and Library boards (ELBs).⁹ Findings from the first wave of research focused on ten key issues:

1. Healthy eating knowledge, attitudes and behaviour

- All or almost all (99%-100%) school based staff and parents (99%) agreed that it is important that children eat healthily.
- Only 17% of parents actually claimed their children consumed the recommended daily quota of fruit and vegetables. Likewise relatively low numbers of pupils (22% primary, 17% post primary) reported they consumed five portions of fruit and vegetables, with boys and those in schools with higher free school meal entitlement (FSME) levels¹⁰ being less likely to report this.

2. Promoting good nutrition in the school setting

- All stakeholders considered it was important to illustrate the benefits of healthy eating as well as the impact of consuming unhealthier foods.

⁸ Gilmore G, Gossrau-Breen D, MacDonald L, Taylor L and McGowan L. School food: top marks. A summary report on food in schools research in Northern Ireland. Public Health Agency, Belfast 2010. Available at: <http://www.publichealth.hscni.net/sites/default/files/Top%20marks%20summary%20report.pdf>. Accessed 18 July 2013.

⁹ From 1 April 2015, the five Education and Library Boards (ELBs) have amalgamated to become the Education Authority.

¹⁰ Typically, levels of deprivation among schools and pupils are inferred using data on children's entitlement to free school meals. Free School Meal Entitlement (FSME) is a proxy measure for deprivation (rather than a direct measure) frequently used in educational research and policy. (*Northern Ireland Assembly (2010). Research and Briefing Paper, Free School Meal Entitlement as a measure of deprivation, Paper 191/10 November 2010*).

- Nearly a third of parents (30%) felt they should try to encourage their children to eat more fruit and vegetables, and 11% of parents suggested they themselves should reduce the amount of unhealthy food bought.
- School staff and parents maintained that information on healthy eating should form a vital component of the school curriculum.

3. Nutrition policies within the school setting

- Nutrition policies or guidelines were commonplace in the school setting, with at least nine in ten principals reporting to have either formal or informal policies in place. However, *formal* whole school nutrition policies were only in place in four out of ten schools.
- More parents of primary school pupils were aware of nutrition policies in comparison to parents of post-primary pupils (driven by healthy breaks schemes).
- Only around four in ten school based staff agreed that schools should ban all chocolate, biscuits, sweets, crisps, buns and cakes in comparison to 56% of parents.

4. Support and compliance with the nutritional standards

- Over nine in ten staff (principals, teachers and chairpersons of Board of Governors) indicated their support for the nutritional standards for school lunches and other food and drinks in school.
- Over two fifths (41%) of school principals indicated their school was already fully compliant with these standards. This compliance was found to be higher in post primary than primary schools.

5. Barriers to implementing the standards

- Principals felt a lack of parental support was the main barrier in implementing standards, reporting that parents sent in foods and drinks at lunch and break which contradicted the nutritional standards.
- Nutritional standards coordinators, area managers and area supervisors, and Education and Library Board catering managers, and school catering staff felt that the increased availability of vending machines and tuck shops within schools undermined efforts to introduce healthy eating.

6. *School lunches*

- Only 35% of primary and 40% of post-primary pupils reported they take a school lunch most of the time.
- Slightly over a fifth of school principals (22%) reported a decrease in school meal uptake while slightly less maintained uptake had increased (18%) since implementing nutritional standards for school lunches.
- At least half of pupils who participated in the research said they took either a school meal or packed lunch simply because they liked the food.

7. *Encouraging uptake of school meals*

- Pupils maintained a greater choice of food, lower costs, and shorter queues were key to encouraging uptake of school meals.
- Although, school meals actually represent good value for money in terms of their nutritional content, four in ten parents considered school meals to be too expensive.

8. *Free school meal (FSM) uptake and stigma*

- When pupils were asked why they thought some children did not use their entitlement to free school meals, reasons given were by and large the same as for not eating school meals in general (i.e. quality of food, queuing, crowded/disliked canteen).
- When asked about potential reasons as to why FSM uptake was low, those who were actually entitled to FSM were less likely to cite factors such as bullying, teasing or embarrassment compared to those who were not entitled to FSM.

9. *Other food and drinks in schools*

- At break time, pupils were more likely to have brought snacks in from home rather than purchasing food from school. Foods brought in from home or outside school were more likely to be noncompliant with standards, particularly at post primary school.

10. *Sources of food internal and external*

- Principals' indicated varying levels of compliance with the nutritional standards for other food and drinks sold in schools, with canteens offering more compliant foods

than vending machines. The most common food purchases by children from vending machines and tuck shops were high fat or sugary foods.

- Teachers and chairpersons of Board of Governors both agreed strongly that food outlets outside school discourage children from eating school meals and undermine the schools' healthy eating policies.

Aims and objectives of the 2012 research

Following on from initial baseline data collected in 2008, the aim of the 2012 research was to re-investigate stakeholders' (principals, chairpersons of Board of Governors, teachers, catering staff, parents, and pupils) attitudes and perceptions of food in schools, including healthy eating and school meals.

Objectives for the research were to:

- explore stakeholder attitudes towards:
 - food and drinks available in schools;
 - healthy eating;
 - uptake of school meals/free school meals;
 - current policies and practices;
 - meal time environment;
 - changes to school meals;
 - targets for change.
- look at practical aspects of lunch time arrangements and food available in schools;
- investigate other factors which may influence the implementation of school food: top marks, such as:
 - formal school policies, such as adherence to the nutritional standards, and onsite policies prohibiting pupils from leaving school at break or lunchtimes;
 - any existing health initiatives, in particular healthy eating initiatives such as healthy snacks schemes, school nutrition action groups (SNAGs), or bans on certain foods and drinks;
 - availability of vending machines, mobile or fixed catering facilities close to school;

- existence of other food sources within the school, e.g. breakfast club, tuck-shop etc. and what foods and drinks are available/provided here;
- establish awareness of the school food: top marks brand and respondents' awareness of associated marketing and information materials;
- make recommendations and establish any further work necessary to aid the implementation of the School food: top marks programme.

Methodology

The research adopted a mixed methods approach. Questionnaires collected data from principals, teachers, chairpersons of Boards of Governors, parents and pupils, while interviews and focus groups were used with catering staff. In order to track changes in attitudes and perceptions of food in schools, where possible, the 2012 research instruments largely replicated those used in the initial wave of the research in 2008.¹¹

Quantitative research (see Appendix 1)

- ✓ Surveys with school staff
 - 209 school principals in primary and post-primary schools;
 - 212 teachers in primary and post-primary schools;
 - 82 chairpersons' of Boards of Governors of primary and post-primary schools
- ✓ Questionnaires returned from 3306 primary (1142) and post-primary (2164) pupils
- ✓ A survey of 1119 parents of primary and post-primary pupils

Qualitative research

- ✓ focus groups with 8 Education and Library Board (ELB)⁸ catering managers
- ✓ focus group with 5 nutritional standards co-ordinators
- ✓ focus group with 5 area managers and area supervisors
- ✓ Interviews with 13 school-based primary and post primary catering managers

Questionnaires used with school staff explored current school food policies; school meals and the dining environment; food bought inside and outside school by pupils; encouraging healthy eating in schools; promotion of the School food: top marks programme; and communication with other stakeholders. Questionnaires used with

¹¹ A copy of the questionnaires used with each of the stakeholder groups, and the focus group and interview schedule is available upon request.

the primary and post-primary children included questions about foods and drinks consumed in school, (including snacks, sweets and drinks) and the sources of these; as well as questions about healthy eating behaviours. The post-primary instrument explored issues in more depth and included additional questions, compared to that given to primary children.

The questionnaire used with parents included awareness and attitudes to regulations around food in schools; school meals and other food in schools; and healthy eating inside and outside school. All questionnaires were piloted prior to fieldwork.

Focus groups with nutritional standards coordinators, area managers and area supervisors, and Education and Library Board⁹ catering managers looked at attitudes towards the nutritional standards; compliance and implementation issues; and effectiveness of the nutritional standards in encouraging healthy eating in schools and increasing school meal uptake.

Interviews with school-based catering managers included the same themes discussed in the focus groups. In addition, personal experience of implementing the nutritional standards; perceptions of other key stakeholders' attitudes¹² and reactions to the standards and recommendations for the future roll-out of the top marks programme were also explored.

Sampling

A twofold approach for recruiting the various target groups was adopted. Strand 1 of the research included a sample of school principals, teachers and chairpersons from schools' Boards of Governors. Strand 2 involved research with primary and post-primary children and parents. Both approaches are discussed briefly below.

Principals, teachers, and chairpersons of Boards of Governors

In order to explore principals', teachers' (particularly those with responsibility for health education), and chairpersons' of the Board of Governors attitudes towards food in schools, primary, post-primary and special schools across Northern Ireland were contacted. As there are fewer post-primary schools in Northern Ireland than

¹² Other key stakeholders, refers to principals, teachers, children and parents.

primary schools, all post-primary (n=216), and half of the total number of primary schools (n=427) were sampled. One quarter of all special schools (n=11) were sampled.¹³

School samples were representative of school management type; Education and Library Board⁹ area, gender (i.e. coeducational/single sex school), and school size. Each school in the sampling frame was contacted initially by telephone to ensure participation prior to mailing out questionnaires to be completed by the principal, chairpersons of Board of Governors, and teachers. Reminder letters were mailed to principals between two and four weeks after the initial mail-out to encourage response rates. Appendix 1 details the breakdown of each of the sample groups.

Table 1.1 Comparison of response rates for each of the stakeholder groups

	Number sampled	Total returned	Response rate
Principals¹⁴	654	209	32%
Teachers¹⁵	654	212	32%
Boards of Governors (chairperson)¹⁶	654	82	13%

Primary, post-primary children and parents

The second element of the sampling process involved selecting pupils and parents from a subsample from the main sampling frame. This subsample had been involved in the original 2008 research, with schools selected on a quota basis according to the five Education and Library Board⁹ areas (North Eastern, South Eastern, Western, Belfast and Southern), school management type (maintained, controlled, voluntary/integrated), gender and school size. However, unlike the previous wave of the research, there was no incentive offered. In cases where the original schools declined to participate (n=30), matching reserve samples of primary and post-primary schools were drawn, and a replacement school was selected from the

¹³ Based on 2011/2012 schools data. Available at <https://www.deni.gov.uk/publications/school-enrolments-school-level-data-201112> Accessed 10/11/2015

¹⁴ In the original research conducted in 2008, 739 principals were sampled, 298 principals returned a questionnaire, representing a slightly higher response rate of 40% compared with the 2012 research.

¹⁵ 739 teachers were sampled in 2008, and of this 162 completed a questionnaire, giving a response rate of 22%, which was lower than the response rate for teachers in the most recent research.

¹⁶ In 2008, out of a sample of 739, a total of 92 chairpersons of the Boards of Governors completed and returned a questionnaire, representing a response rate of 12%.

reserve sample which matched the characteristics of the original school (i.e. ELB⁸, school management type, and free school meal entitlement {FSME}). In total, 36 primary and 56 post-primary schools participated in this element of the study, resulting in a final sample of 92 schools in strand 2 of the research.

One or two classes (depending on the size of school) from Years 6 and 7 were drawn from primary schools in the subsample, with only these pupils and their parents asked to participate.¹⁷ Two classes of post-primary pupils from Years 8 to 12 of secondary or grammar schools were drawn, with these pupils and their parents asked to complete questionnaires. In order to ensure a good representation of post-primary pupils of different ages, and to ensure that parents with children of different ages were included, schools were told which year groups to select for the pupil and parental surveys (see Tables 1.2 and 1.3). Further information on the sample breakdown of pupils and parents is provided in Appendix 1.

Table 1.2 Response rates for primary and post primary schools¹⁸

	Schools sampled	Schools participating	Response rate
Primary pupils (n=1142)¹⁹	48	36	75%
Post-primary pupils (n=2164)²⁰	74	56	76%

Table 1.3 Response rates for parents

	Number sampled	Total returned	Response rate
Parents²¹	5460	1119	20%

Qualitative research

Focus groups were convened with the three key catering stakeholder and/or management groups, i.e. Education and Library Board⁹ (ELB) catering managers; nutritional standards coordinators; and area managers or area supervisors. A representative from each Education and Library Board⁹ attended each focus group,

¹⁷ The questionnaire was specifically designed for Primary 6 and 7 pupils, taking reading ability and recall into account.

¹⁸ Although teachers were asked to record information relating to the number of children present on the day the survey was completed, in order to calculate response rates, returns were largely incomplete and could not be used. However, response rates are given according to the schools who agreed to participate.

¹⁹ In 2008, 44 primary schools agreed to participate, and of these 36 completed questionnaires, giving a response rate of 82% or 1126 primary pupils.

²⁰ In the original research 69 post-primary schools were sampled, with 55 returning questionnaires. This represented a return rate of 80%, with 2151 post-primary pupils taking part in the research.

²¹ 5055 questionnaires for parents were sent to schools in 2008, with 1271 completed. This represented a response rate of 25%, which was higher than that for the most recent research.

resulting in five nutritional standards coordinators; five area managers and area supervisors; and eight ELB⁹ catering managers participating in focus groups.

Interviews were conducted with school based catering staff in order to further explore some of the issues raised in the survey work and in the focus groups with stakeholders (i.e. nutritional standards coordinators; area managers and area supervisors; and with Education and Library Board⁸ catering managers). In order to ensure that all school management types and geographical areas were represented, efforts were made to recruit interview participants from each Education and Library Board⁹ area, school type and sector. A total of 13 school catering managers in seven post-primary and five primary schools across each Education and Library Board⁸ participated in interviews. Each interview lasted between 25 minutes and 40 minutes. Again, a breakdown of the sample of school-based catering managers is indicated in Appendix 1.

Analysis

All quantitative data were analysed using SPSS. A variety of non-parametric techniques were used to interrogate the data, depending on the type of variable - namely Chi-Square, Mann-Whitney U Test or Kruskal-Wallis Test, and Spearman's rank order correlation. The key factors for analysis included age; gender; Education and Library board area; school management type; primary / post-primary school; and free school meal entitlement ratio for each school. Where appropriate, other variables specific to individual groups were used (e.g. parents), such as social class.²² P-values are presented in the bulletins to indicate whether or not an observed difference in percentages was statistically significant or if it may have occurred by chance. Differences between subgroups are shown with indicative significant associations at three specified levels (at a 95% level, where $p \leq 0.05$ (suggesting that the observed outcome would be expected to occur by chance only 5% of the time); 99% level, where $p \leq 0.01$ (suggesting that the observed outcome would be expected to occur by chance only 1% of the time), and a 99.9% level, where $p \leq 0.001$ (where the observed difference could only be expected to have

²² Occupational grouping is based on the Standard Occupation Classification (SOC) 2000 and was derived using the three classes of socio-economic classification where ABC1 is higher managerial, administrative, professional and intermediate occupation, C2D is routine and manual occupations and E is never worked, long term unemployed and retirees without pension.

occurred by chance in 1 in 1000 times in repeated tests). Only significant differences are reported in each of the bulletins. Reported margin of error associated with varying sample sizes are available in Appendix 1.

Focus groups and interviews were taped and partially transcribed. Content analysis was used to sort qualitative data into a framework of codes and categories. These were subsequently grouped into three main themes; including attitudes towards school meals, attitudes towards the nutritional standards, and whole school approach to school food.²³

Reporting

A series of seven summary bulletins (listed below) have been developed to report the outcomes of the 2012 research. Where appropriate findings have been compared to 2008, and findings on a common theme are cross referenced across bulletins. All bulletins are available at <http://www.publichealth.hscni.net>

- ✓ **Research Bulletin No 1: School food: top marks, research background and approach.**
- ✓ **Research Bulletin No.2: The influence of deprivation on knowledge, attitudes and healthy eating behaviours.**
- ✓ **Research Bulletin No. 3: Adherence and attitudes to nutritional standards and healthy eating policies in schools.**
- ✓ **Research Bulletin No.4: Marketing the School food: top marks programme and healthy eating messages.**
- ✓ **Research Bulletin No.5: The influence of school nutrition policy and practice on children's eating habits.**
- ✓ **Research Bulletin No. 6: Uptake and factors impacting on demand for school meals.**
- ✓ **Research Bulletin No. 7: School food: top marks discussion and recommendations.**

²³ Research Bulletin No 3- Gilmore G, Beattie K. Research Bulletin No. 3 Adherence and attitudes to nutritional standards and healthy eating policies in schools. Public Health Agency, Belfast 2016. Available at <http://www.publichealth.hscni.net>

Appendix 1

Sample breakdown: Principals

Based on a sample of 654, a total of 209 principals completed and returned a questionnaire, representing a response rate of 32%. In total, 58% of school principals were recruited from primary schools, while 41% were recruited from the post-primary sector (see Table 1.4).

Table 1.4 Demographic breakdown of principals in 2008 & 2012 sample compared to all Northern Ireland (NI) schools (2011/12)

		2008	2012	All NI schools
ALL		298	209	1111
Sex	Male	43% (127)	51% (106)	-
	Female	56% (167)	49% (103)	-
	Missing	1% (4)	-	-
Experience	Less than 20 years	26% (77)	19% (40)	-
	More than 20 years	72% (214)	80% (167)	-
	Missing	2% (7)	1% (2)	-
School type	Primary	60% (180)	58% (121)	77% (854)
	Post-primary²⁴	38% (112)	41% (85)	19% (216)
	Special school	-	1% (3)	4% (41)
	Missing	2% (6)	-	-
Management type²⁵	Controlled	45% (135)	46% (96)	44% (476)
	Maintained	39% (117)	40% (83)	46% (492)
	Integrated/ voluntary	13% (40)	14% (30)	10% (102)
Education and Library Board area	BELB	13% (40)	14% (30)	11% (123)
	SEELB	18% (54)	17% (35)	21% (226)
	SELB	22% (65)	22% (45)	24% (258)
	NEELB	24% (70)	26% (55)	18% (189)
	WELB	22% (64)	21% (44)	26% (274)
	Missing	2% (5)	-	-
School sector (post-primary only)	Secondary	66% (71)	67% (57)	69% (148)
	Grammar	34% (36)	33% (28)	31% (68)
% Free School Meal Entitlement²⁶	Less than 10%	42% (121)	19% (40)	19% (202)
	10-25%	31% (89)	39% (82)	39% (416)
	More than 25%	27% (77)	38% (80)	42% (452)
	Missing	4% (11)	3% (7)	-

²⁴ Post primary schools were oversampled to facilitate analysis by school type

²⁵ Does not include special schools.

²⁶ From the start of the 2010/11 school year the eligibility criteria for free school meals was extended, which may explain the difference in the proportion of Free School Meal Entitlement between the baseline and the follow up survey. NISRA Statistical Press Release. School meals 2012/13. Available at http://www.deni.gov.uk/school_meals_census_201213_press_release_final.pdf (accessed 14/4/2015)

Sample breakdown: Teachers

More teachers took part in the research in 2012 than at baseline – 162 returned questionnaires in the original 2008 research, whereas this increased to 212 in 2012, representing a response rate of 32%. Approximately half (51%) of teachers who participated worked in post-primary and 47% worked in the primary sector.

Table 1.5 Demographic breakdown of teachers in 2008 and 2012 sample compared to all Northern Ireland (NI) schools (2011/12)

		2008	2012	All NI schools
ALL		162	212	1111
Sex	Male	19% (31)	13% (27)	-
	Female	78% (127)	87% (185)	-
	Missing	3% (4)	-	-
Teaching experience	Less than 5 years	1% (2)	8% (16)	-
	5-10 years	10% (16)	19% (41)	-
	11-20 years	32% (52)	34% (73)	-
	More than 20 years	54% (87)	39% (82)	-
	Missing	3% (5)	-	-
School type	Primary	56% (91)	47% (99)	77% (854)
	Post-primary²⁷	41% (67)	51% (109)	19% (216)
	Special school	1% (1)	2% (4)	4% (41)
	Missing	2% (3)	-	-
Management type²⁸	Controlled	42% (68)	46% (98)	44% (476)
	Maintained	43% (69)	34% (71)	46% (492)
	Integrated/ voluntary	13% (27)	21% (43)	10% (102)
	Missing	2% (3)	-	-
Education and Library Board area	BELB	12% (19)	13% (27)	11% (123)
	SEELB	15% (24)	21% (44)	21% (226)
	SELB	22% (35)	24% (51)	24% (258)
	NEELB	25% (40)	21% (44)	18% (189)
	WELB	25% (41)	22% (46)	26% (274)
	Missing	2% (3)	-	-
School sector (post-primary only)	Secondary	62% (41)	66% (72)	69% (148)
	Grammar	38% (25)	34% (37)	31% (68)
% Free School Meal Entitlement²⁹	Less than 10%	35% (56)	19% (41)	19% (202)
	10-25%	33% (53)	39% (83)	39% (82)
	More than 25%	26% (42)	38% (80)	42% (452)
	Missing	7% (11)	4% (8)	-

²⁷ Post primary schools were oversampled to facilitate analysis by school type

²⁸ Does not include special schools.

²⁹ From the start of the 2010/11 school year the eligibility criteria for free school meals was extended, which may explain the difference in the proportion of Free School Meal Entitlement between the baseline and the follow up survey. NISRA Statistical Press Release. School meals 2012/13. Available at: http://www.deni.gov.uk/school_meals_census_201213_press_release_final.pdf Accessed 14/4/2015.

Sample breakdown: chairpersons of Boards of Governors

Compared to the 2008 sample of Boards of Governors (n=92), fewer participated in the most recent survey: in 2012, 82 chairpersons of the Board of Governors responded, representing a response rate of 12%. Approximately half of the chairpersons of Board of Governor were recruited from primary schools and half from post-primary schools (49% respectively). Slightly more respondents from this group were from grammar schools than secondary schools (see Table 1.6).

Table 1.6 Demographic breakdown of Board of Governors in 2008 and 2012 sample compared to all Northern Ireland (NI) schools (2011/12)

		2008	2012	All NI schools
ALL		92	82	1111
Sex	Male	64% (59)	65% (53)	-
	Female	36% (33)	35% (29)	-
Experience	Less than 5 years	17% (16)	12% (10)	-
	5-10 years	32% (29)	37% (30)	-
	11-20 years	51% (47)	51% (42)	-
School Type	Primary	55% (50)	49% (40)	77% (854)
	Post-primary³⁰	43% (39)	49% (40)	19% (216)
	Special school	2% (2)	2% (2)	4% (41)
	Missing	1% (1)	-	-
School Sector (post-primary only)	Secondary	62% (24)	48% (19)	69% (148)
	Grammar	39% (15)	52% (21)	31% (68)
Management type³¹	Controlled	35% (35)	39% (32)	44% (476)
	Maintained	46% (42)	34% (28)	46% (492)
	Integrated/ voluntary	19% (18)	27% (22)	10% (102)
Education and Library Board area	BELB	16% (14)	12% (12)	11% (123)
	SEELB	10% (9)	13% (11)	21% (226)
	SELB	29% (26)	26% (21)	24% (258)
	NELB	24% (22)	32% (26)	18% (189)
	WELB	21% (19)	17% (14)	26% (274)
	Missing	2% (2)	-	-
% Free School Meal Entitlement³²	Less than 10%	29% (27)	27% (22)	19% (202)
	10-25%	36% (33)	39% (32)	39% (82)
	More than 25%	28% (26)	33% (27)	42% (452)
	Missing	7% (6)	1% (1)	-

³⁰ Post primary schools were oversampled to facilitate analysis by school type

³¹ Does not include special schools.

³² From the start of the 2010/11 school year the eligibility criteria for free school meals was extended, which may explain the difference in the proportion of Free School Meal Entitlement between the baseline and the follow up survey. NISRA Statistical Press Release. School meals 2012/13. Available at http://www.deni.gov.uk/school_meals_census_201213_press_release_final.pdf Accessed 14/4/2015.

Sample breakdown: Primary school pupils

In 2012, 1142 pupils from 36 primary schools across Northern Ireland participated in the research; resulting in 639 completed questionnaires from pupils in primary 6, and 503 returned from primary 7 pupils (see Table 1.7).

Samples of primary school pupils for 2008 and 2012 are broadly comparable in terms of sex and age. However, a greater proportion of those in the 2012 sample attended schools with higher free school meal eligibility (FSME) enrolments. This could possibly be explained by a change in the FSME eligibility criteria set by the Department of Education thereby increasing the proportion of children eligible for this benefit.³³ FSME ratios ranged from 0% to 58.3% of the school population.

Table 1.7 Demographic breakdown of primary school pupils in 2008 and 2012 sample

		2008	2012
ALL		1126	1142
Gender	Male	(574) 51%	(574) 50%
	Female	(548) 49%	(568) 50%
Age	9 years	(40) 4%	(96) 8%
	10 years	(531) 48%	(543) 48%
	11 years	(544) 49%	(498) 44%
Year group	Primary 6	(571) 51%	(639) 56%
	Primary 7	(549) 49%	(503) 44%
Education and Library Board area	BELB	(119) 11%	(183) 16%
	NEELB	(299) 27%	(171) 15%
	SELB	(240) 21%	(263) 23%
	SEELB	(173) 15%	(228) 20%
	WELB	(295) 26%	(297) 26%
Management type	Controlled	(555) 49%	(502) 44%
	Maintained	(461) 41%	(582) 51%
	Voluntary/ integrated	(110) 10%	(57) 5%
% Free School Meal Entitlement³²	10% and under	(432) 40%	(152) 13%
	10.1% to 20.0%	(299) 28%	(447) 39%
	20.1% to 40.0%	(328) 30%	(444) 39%
	40.1 +%	(19) 2%	(99) 9%

³³ From the start of the 2010/11 school year the eligibility criteria for free school meals was extended to include full-time nursery and primary school children whose parents are in receipt of Working Tax Credit and have an annual taxable income which does not exceed £16,190 (in 2012/13). The new criterion was introduced on a phased basis and extended in September 2011 to Key Stage 2 pupils. NISRA Statistical Press Release. School meals 2012/13. Available at http://www.deni.gov.uk/school_meals_census_201213_press_release_final.pdf (accessed 14/4/2015). This may explain the variation between the proportions of FSME in the 2008 and 2012 sample.

Table 1.8 Comparison of FSME breakdown of primary school pupils in 2012 sample compared to overall NI school population (2011/12 school data)³⁴

	Primary school 2012 sample (N=1142)	All primary pupils in NI 2011/12 (N=164,812)
10% and under	(152) 13%	(25,956) 15%
10.1% to 20.0%	(447) 39%	(46,836) 28%
20.1% to 40.0%	(444) 39%	(59,936) 36%
40.1 +%	(99) 9%	(32,084) 19%

Sample breakdown: Post-primary school pupils

Again, the most recent post-primary pupil sample is broadly comparable to 2008 (see Table 1.9). 2164 pupils from 56 post-primary schools took part in the research. Due to exam pressures, in both years of the survey there were fewer returns from Year 12 pupils. In 2012, FSME ratios within each school ranged from 2.4% to 58.9% of those enrolled.

Slightly over two in five (43%) of the post primary sample in 2012 attended grammar schools, whilst the remainder were recruited from secondary schools (57%).

³⁴ Based on Department of Education 2011/2012 schools data. Available at <https://www.deni.gov.uk/publications/school-enrolments-school-level-data-201112> Accessed 10/11/2015.

Table 1.9 Demographic breakdown of post-primary pupils in 2008 and 2012 sample

		2008	2012
ALL		2151	2164
Gender	Male	(950) 44%	(952) 44%
	Female	(1199) 56%	(1212) 56%
Age	11 years	(34) 2%	(63) 3%
	12 years	(554) 26%	(499) 23%
	13 years	(575) 27%	(522) 24%
	14 years	(463) 22%	(551) 26%
	15 years	(486) 23%	(510) 24%
	16 years	(34) 2%	(19) 1%
Year group	Year 8	(554) 26%	(498) 23%
	Year 9	(589) 27%	(523) 24%
	Year 10	(450) 21%	(521) 24%
	Year 11	(530) 25%	(602) 28%
	Year 12	(26) 1%	(20) 1%
Education and Library Board area	BELB	(223) 10%	(216) 10%
	NEELB	(583) 27%	(563) 26%
	SELB	(560) 26%	(433) 20%
	SEELB	(349) 16%	(476) 22%
	WELB	(435) 20%	(498) 23%
Management type	Controlled	(769) 36%	(736) 34%
	Maintained	(573) 27%	(519) 24%
	Voluntary/ integrated	(808) 38%	(887) 41%
School type	Grammar	(905) 42%	(927) 43%
	Secondary	(1245) 58%	(1237) 57%
Proportion of school with FSME	10% and under	(902) 42%	(754) 35%
	10.1% to 20.0%	(342) 16%	(499) 23%
	20.1% to 40.0%	(726) 34%	(720) 33%
	40.1 +%	(181) 8%	(191) 9%

Table 1.10 Comparison of FSME breakdown of post-primary pupils in 2012 sample compared to overall NI school population (2011/12 school data)

	Post-primary 2012 sample (N=2164)	All post-primary pupils in NI 2011/12 (N=146,747)
10% and under	(754) 35%	(50,799) 35%
10.1% to 20.0%	(499) 23%	(38,934) 27%
20.1% to 40.0%	(720) 33%	(45,630) 31%
40.1 +%	(191) 9%	(11,384) 8%

Sample breakdown: Parents

Fewer parents took part in the research in 2012, compared with the initial research in 2008. A total of 1119 parents took part in the most recent survey, giving a response rate of 20% (see Table 1.11). The majority of parents who completed questionnaires were female (89%), with the remaining 11% male. The majority of the parents were aged 36 – 45 years old (65%), and in ABC1 (65%). Slightly over a third (34%) of parents were recruited from primary schools; whilst 66% responded via post-primaries, in line with the higher sample numbers in the post-primary sample.

Table 1.11 Demographic breakdown of parents in 2008 and 2012 sample

		2008 (N=1271)	2012 (N=1119)
Gender	Male	44% (95)	11% (124)
	Female	56% (1148)	89% (987)
Age	Under 36 years	18% (228)	14% (155)
	36 – 45 years	61% (758)	61% (679)
	46 years and over	21% (255)	25% (275)
Social class	ABC1	58% (715)	65% (651)
	C2DE	42% (522)	35% (355)
School type	Primary	29% (350)	34% (384)
	Post-primary	71% (872)	66% (735)
Education and Library Board area	BELB	Not available	10% (116)
	NEELB	Not available	26% (287)
	SEELB	Not available	23% (260)
	SELB	Not available	19% (212)
	WELB	Not available	22% (244)

Sample breakdown: Catering staff

The table below summarises the characteristics of those that participated in the catering staff interviews in 2012 (see Table 1.12). All thirteen of the catering managers interviewed were female. Five of those who took part in the interviews worked in primary school canteens or kitchens, whilst the remaining eight were recruited from post-primary schools.

Table 1.12 Breakdown of school-based catering staff in 2012 sample

		Number participating in interviews
Gender	Male	0
	Female	13
School sector	Primary	5
	Post-primary	8
School type (post-primary only)	Grammar	3
	Secondary	3
	Integrated	2
Management type	Controlled	5
	Maintained	5
	Integrated	3
Education and Library Board area	BELB	2
	NEELB	4
	SEELB	1
	SELB	2
	WELB	4

Survey margins of error

Table 1.13 illustrates the margin of error of different sample sizes. In general, the lower the margin of error, the more accurately the views of those surveyed match those of the entire population.

Table 1.13 Margin of error (at 95% confidence limits) for different size survey³⁵

Survey sample size	Margin of error
2,000	2
1,500	3
1,000	3
900	3
800	3
700	4
600	4
500	4
400	5
300	6
200	7
100	10
50	14

³⁵ Margin of errors are indicated at a 50% survey split.