

The Health Challenge Programme

**Evaluation of a pilot intervention in Kent schools
commissioned by the Food Standards Agency**

Final evaluation report, December 2009

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Executive Summary

Introduction

- Children's health has been an increasing concern for a number of years and recent policy driven initiatives point to the importance of actively involving children and young people and their families in decisions about their health.
- The Health Challenge Programme builds on such initiatives to support children, young people, their families and the wider school community to make and sustain lifestyle changes that will have a positive impact on their health and well-being.
- The Health Challenge Programme is a school-based intervention which asks students and other participants to choose at least one challenge to maintain for a four week period. This should be related to one of three areas: healthy eating, physical activity or feeling good inside.
- The Health Challenge Programme was commissioned by the FSA as part of the Food Choice Inequalities programme. The programme was developed by the Well-being Department at NCB and piloted in January and February 2007 with six schools in Kent, in partnership with the Kent Healthy Schools Programme under the banner of the National Healthy Schools Programme. NCB provided schools with Health Challenge Programme materials and ongoing support. The participating schools were some of the most deprived in the country.

Evaluation methods

- The principal aim of the evaluation was to explore the feasibility of running the Health Challenge Programme in primary and secondary schools. It considered: whether implementation was possible and what it involved; barriers and facilitators; whether the programme appeared to work better in certain schools and why; whether it appeared capable of delivering positive benefits; and what changes needed to be made to the programme.
- The evaluation collected data mainly through a four-stage questionnaire design for students, which included questionnaires immediately before the Health Challenge period, at the end of the period, and again two months and four months later. We also collected data through monitoring with staff and interviews and focus groups with staff and students in all six schools.
- We received a total of more than 2,000 questionnaires from secondary school students and more than 600 from primary school students across the four questionnaire stages.
- We interviewed the six Health Challenge Leads in schools, nine other staff, two NCB project team members and two representatives from the Kent Healthy Schools Programme. We also carried out interviews or focus groups with a total of 25 secondary students and 17 primary school students.

- The evaluation was made complicated by one of the strengths of the programme. Schools valued the fact that the programme was not prescriptive. However the extent of variation in how schools delivered the programme made evaluation difficult and meant that schools were not always able to implement the evaluation as intended. Participation in both the programme and the evaluation was voluntary (although it was a classroom activity in primary schools which meant in practice that classes participated as a group). Participation in the evaluation declined over the four stages, and it is likely that there is some sample bias towards students and staff who were more engaged in the programme, and thus an over-estimation of completion rates and impacts.
- The flexibility of the model which allowed schools to deliver the programme within short tutor times, with much left to the discretion of tutors, impacted on the evaluation data received. It meant lower response rates than expected, limited coherence to the request for names to enable matching of questionnaire data between stages with subsequent effects on analysis, low monitoring data returns and limited data from parents. While it was not possible within such a model to measure behaviour independently through observation, the evaluation attempted to overcome any potential over-reporting of challenge completion through triangulation with other sources of data. Interviews or focus groups with staff and students broadly supported findings from questionnaires.

The Challenge context in the pilot schools

- The six schools invited to take part in the pilot were selected using free school meal data, health inequalities data and the Income Deprivation Affecting Children Index. All schools had been recruited by early November 2007.
- Existing teaching around healthy lifestyles varied in the six pilot schools, but all felt the Health Challenge Programme would add a dimension to their existing programmes and enable them to build on existing work. Schools particularly saw it linking to the Healthy Schools Programme, whether to continue work in place or to add to the evidence and knowledge required to achieve Healthy Schools status.

Planning

- Schools highly valued the support provided by the NCB project team to plan the implementation of the programme to best suit the varying and sometimes difficult circumstances of each school.
- Schools engaged students in the planning process to varying extents, but engagement of parents proved more challenging. While it was difficult to engage parents directly, their support for students in undertaking challenges was important.
- The six schools planned a wide range of challenges and activities, delivered through different means in order to suit the needs of students and staff. Schools valued the flexibility of the programme which allowed them to adapt materials, deliver the lessons through tutor time, class time and/or other events, and offer a range of individual, class and whole school challenges.

- There were clear differences in how the programme was delivered in primary and secondary schools. Primary schools delivered the Health Challenge lessons through class time, while secondary schools used a mix of tutor time, a PSHE day and citizenship lessons. Primary school students were offered relatively little choice in challenges since schools focussed on teacher-driven class challenges, while secondary students were able to select their own individual challenges.

Experiences of the Health Challenge Programme

- Staff enthusiasm was critical to both how the programme was delivered and how students engaged with it. If staff were not engaged with the programme, messages about healthy lifestyles and reminders about doing challenges were less likely to be delivered and students less likely to be encouraged to maintain challenge activities.
- A wide range of challenges was undertaken in the schools. Most primary school students reported undertaking physical activity challenges, while secondary students predominantly did healthy eating challenges. Feeling good inside challenges were less popular in both groups.
- Initial enthusiasm and motivation were high among students. Varying levels of teacher time were devoted to the programme, and more was seen as valuable. Delivering the model through tutor groups was less successful than in longer sessions. The Health Challenge Programme materials were used to varying extents in schools and by students, but overall were seen as useful.
- The majority of students in both primary and secondary schools reported sticking to their challenges at least partly for the four week period. In primary schools, 62% said they stuck to their challenge very well and a further 35% quite well. In secondary schools, 24% said they stuck to it very well and 48% quite well. In secondary schools, half the students with relatively low confidence, and half with relatively low motivation, stuck to their challenges completely or mostly.
- Physical activity challenges were the easiest to maintain. Healthy eating challenges were more difficult. This may reflect the fact that they often involved students giving up a loved food, or eating more of one they would not have chosen, as well as the limited levels of control by young people, particularly primary school students, over their diet. Factors which supported students in maintaining challenges included motivation, confidence, seeing positive results, support from others and the way the school had set up the programme. Willpower was the key factor identified by secondary students.

Sustained outcomes

- Of those who completed the four month questionnaire, over 70% of primary school students and 65% of secondary school students reported maintaining some health challenge activity four months after the Health Challenge Programme ended in their schools. A substantial number was also undertaking other forms of new healthy activity at these stages.
- Students' intentions to keep up healthy activities were also high. Four months after the end of the Health Challenge period, over 60% of primary school survey participants and just under half of secondary school survey participants were

reporting sustained changes in activity which they intended to keep up.

- There was no apparent change in how easy students thought it would be to make *further* healthy changes, although by the end of the four-month period substantial proportions thought it would be easy to do so. Similarly, there were no clear patterns in terms of changes in attitudes.
- The qualitative data suggest that the Health Challenge Programme raised students' awareness of healthy lifestyles, particularly with regard to emotional health, as well as providing them with some practical skills to make healthy choices. It also added to schools' knowledge about students' lifestyles and awareness.
- All schools intended to repeat the Health Challenge Programme in future, and all primary schools were continuing some element of challenge activity throughout the school year. Schools felt the programme had linked well with the Healthy Schools agenda and kept health high in the priorities of school life.

Discussion

- It appears that the Health Challenge Programme can lead to sustained change in health behaviours, even beyond the four week period. This extends to new healthy activities as well as those undertaken as actual challenges.
- While all three primary schools intended to retain an element of the programme, curriculum or extra-curriculum initiatives such as the Healthy Schools Programme may be the most effective platform to embed sustained activities and focus on health within school life. Schools saw the Health Challenge Programme as linking well to such initiatives.
- While the programme can work in secondary schools, it appeared to work best in primary schools, reflecting class-based delivery. Delivering the programme through classes allowed more time for staff to remind and support students, as well as less opportunity for students to opt out of the programme.
- Flexibility in how the programme was delivered enabled schools to deliver a range of activities to best suit students' needs. There was evidence that delivering a range of class and whole school activities within a school created momentum which helped to generate enthusiasm and push the programme forward.

1.0 Introduction

1.1 Background to the Health Challenge intervention

1.1.1 Children's health

There is growing concern about the impact of poor diet and low levels of physical activity on children and young people's health and well-being - now and in later life – and about levels of poor emotional and mental health among children and young people. The last several decades have witnessed a very substantial rise in the prevalence of childhood overweight and obesity in the UK. Among boys and girls aged 2-15 years, the proportion that were overweight increased by 40% between 1995 and 2004¹ and this trend is forecast to continue. In addition, 10% of British children fit the criteria for a mental disorder, including both emotional and behavioural disorders² and there is much other evidence of poor mental and emotional health.

While these statistics merit serious concern on their own, both obesity and mental disorders have implications for children's and young people's achievement and outcomes at school.³ In addition, these childhood health problems tend to increase with age and are more pronounced among disadvantaged children, hindering their healthy development and life chances in both the short- and long-term.

Children's health is an increasing policy priority, and there have been a number of key recent initiatives. First, *The Children's Plan*⁴ sets out a broad-based strategy of which promoting children's physical and mental health are integral parts. As part of a commitment in *The Children's Plan*, the Government published *Healthy Lives, Brighter Futures*⁵ which reinforces the importance of a healthy childhood in enabling all children and young people in achieving their potential in life. The Health Challenge Programme is featured as a case study. Second, following the establishment of the Cross-Government Obesity Unit, DH and DCSF jointly published a government obesity prevention strategy *Healthy Weight, Healthy Lives*⁶ which specifically sets out the criteria to reduce the proportion of overweight and obese children to 2000 levels by 2020. Alongside these was the creation of the Children's National Service

¹ Zaniotto, P., Wardle, H., Stamatakis, E., Mindell J. & Head, J. (2006). *Forecasting obesity to 2010*. London: Joint Health Surveys Unit.

² Green, H., McGinnity, A., Meltzer, H., Ford, T. & Goodman, R. (2005). *Mental health of children and young people in Great Britain, 2004*. Hampshire: Palgrave Macmillan.

³ Story, M., Kaphingst, K.M. & French, S. (2006). The role of schools in obesity prevention. *Future of Children*, 16(1), 109-142.

⁴ Department for Children, Schools and Families. (2007). *The Children's Plan: Building Brighter Futures*. Available at: <http://www.dcsf.gov.uk/publications/childrensplan>.

⁵ Department for Children, School and Families and Department of Health (2009) *Healthy Lives, Brighter Futures The strategy for children and young people's health*. Available at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_094400

⁶ Cross-Government Obesity Unit, Department of Health & Department of Children, Schools and Families. (2008). *Healthy Weight, Healthy Lives: A Cross-Government Strategy for England*. Available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_082378.

Framework, a 10-year programme intended to stimulate long-term and sustained improvement in children's health by setting national standards for children's health and social care.

As highlighted in *Healthy Weight, Healthy Lives* and in the earlier White Paper *Choosing Health: making healthy choices easier*, a major challenge with regard to improving public health is supporting children, young people and their families to instigate and maintain lifestyle changes. There is a range of factors that undermine children's, young people's and families' aspirations and attempts to live a healthy lifestyle including the perceived and actual barriers of time, money, convenience and access to healthy food and the relative cheapness of 'junk' foods as well as aggressive advertising and promotion of food and drinks high in fat, salt and sugar. Existing health inequalities make it easier for some people to pursue and maintain healthy lifestyles than others. The active participation of children, young people and their families in decisions about their health and well-being is central to increasing their motivation and taking responsibility for their own health.

A number of school-based programmes and campaigns have recently been established, aiming to support such behavioural change among children and the wider community. First, the National Healthy Schools Programme (NHSP)⁷ is based on a whole-school approach involving children and young people, parents, school staff and communities to promote physical and emotional health. The government's aim is for all schools to participate in the National Healthy Schools Programme by 2009 and for 75% of schools to have achieved National Healthy School Status. Many local authorities use the programme as a driver to achieve key health and education targets. Second, the Food in Schools (FiS)⁸ programme aims to promote food education to enable children and young people to make healthy food choices on their own. Third, the Food Standards Agency's Food Competences aim to help young people to choose, cook and eat safe healthy food, by setting out a framework of core skills and knowledge for children and young people. In addition, the National Child Measurement Programme (NCMP)⁹ measures all children's height and weight in Reception Year and Year 6 to inform local planning and delivery of services for children, gather population-level data and keep parents informed of their children's health. Finally, the Change4Life¹⁰ campaign is a national movement to tackle childhood obesity.

The Health Challenge Programme builds on these policy developments, and particularly on the Kent Healthy Schools Programme, focusing on the areas of healthy eating, physical activity and feeling good inside.

⁷ See: <http://www.healthyschools.gov.uk/>

⁸ See: <http://www.dh.gov.uk/en/Publichealth/Healthimprovement/Foodinschoolsprogramme/index.htm>

⁹ See: http://www.dh.gov.uk/en/Publichealth/Healthimprovement/Healthyliving/DH_073787

¹⁰ See: <http://www.nhs.uk/change4life/Pages/default.aspx>

1.1.2 Models of behavioural change

The concept behind the Health Challenge Programme first developed within a very small pilot study with four young people, partly funded by the Department of Health, which explored the barriers to and support needs of young people in making small changes to behaviours affecting their health. The developing Health Challenge Programme was also influenced by the Leeds 'Be Healthy' initiative, a six week healthy programme promoting healthy behaviour within school settings¹¹.

The Health Challenge Programme is underpinned by a number of models of change, including models of individual change as well as social influence models. Behaviour change involves both individual and social factors. Individual choices impact on health-related behaviours, yet such choices are greatly influenced by the social context of people's lives.

The work with young people in the small initial pilot of the concept of Health Challenge found that a fundamental factor in how young people engaged with the Health Challenge concept was the degree to which they could exercise individual choice and make their own decisions. Indeed, encouraging individual choice and control is an underlying concept of much of NCB's work, as its strong participation agenda illustrates and is something that young people want from all types of service areas¹².

However, key to the Health Challenge Programme is the recognition that individual change is not always sufficient. Social influence models show that changing an individual's attitude to a behaviour may not be enough to make a change, and must be supported by changes at a societal level¹³. External factors, or the context in which change takes place strongly influences its success, whether this context be in terms of families, schools or communities. The Health Challenge Programme encouraged schools to create a community atmosphere around the Challenge, by promoting parental engagement with the Programme, and providing school-wide activities, all of which were designed to develop a positive social context in which healthy changes could take place and be sustained. This flexibility meant that individually chosen challenges, such as 'to eat more vegetables', could be supported by school-wide activities or provision, such as choices made available in the school canteen.

1.1.3 The Health Challenge Programme

In January 2007, the Well-being Department at the National Children's Bureau (NCB) was commissioned by the Food Standards Agency to pilot a *Health Challenge Programme* in three primary and three secondary schools in Kent.

The Health Challenge Programme aims to support children, young people, their families and the wider school community to make and sustain positive lifestyle

¹¹ *Be Healthy* (2007) Education Leeds

¹² Mainey, A, Ellis, A and Lewis, J (2009) 'Children's views of services: a rapid review.' *National Children's Bureau* http://www.ncb.org.uk/Page.asp?originx2227oy_57278862158420q40c308740041 (accessed 27 May 2009).

¹³ National Institute for Health and Clinical Excellence (2007) *Public Health Programme Draft Guidance. Generic and specific interventions to support attitude and behavioural change at population and community levels*. Accessed 18 April 2007 at <http://www.nice.org.uk/page.aspx?o=BehaviourChangeMain>

changes that will have a positive impact on their health and well-being. The pilot was developed and delivered in partnership with the Kent Healthy Schools Programme under the banner of the National Healthy Schools Programme. The pilot was supported by a national advisory group made up of representatives from key local, regional and national organisations with knowledge and expertise on a range of issues relating to promoting and improving the health and well-being of children and young people in school, as well as whole school approaches and evaluation. The group met four times a year over the two years of the project. It was charged with informing the implementation of the pilot, sharing good practice, and advising on all aspects of the project, including planning, ethics, involvement of children and young people, evaluation and dissemination. NCB also established a young advisory group to help guide implementation and final production of programme materials, building on the findings from the evaluation.

1.2 Key components of the Health Challenge Programme

1.2.1 The concept

The Health Challenge Programme is a structured intervention where participants are invited to choose 'challenges' to work on over a period of four weeks. It is a voluntary programme. The Health Challenge Programme asks children and young people to identify challenges from three areas – healthy eating, physical activity and feeling good inside. In the very early stages of development, it was intended that pilot participants complete three challenges, one from each of the areas. However, during the planning phase of the programme, it was decided to ask those taking part to focus primarily on a single challenge in any one of the three areas. The aim here was to simplify prescriptive elements of the programme and allow schools to build selectively and innovatively on its core features. Indeed, as later chapters illustrate, there was substantial variation within and between schools in the number and nature of challenges undertaken. In practice, the approach taken by schools involved a combination of individual challenges (chosen by students as activities for them to pursue individually, largely outside school), class challenges (pursued by the class as a whole, for example trying new foods or taking regular exercise as a class) and school challenges (activities involving the whole school such as dance lessons or improving canteen food choices).

Schools agreed to integrate Health Challenge activities into planned school provision, with the expectation that all pupils would take part unless parents or carers requested otherwise. However schools would not prescribe how much time pupils allocated to pursuing their health challenge goals outside formal teaching time.

Participating schools were expected to:

- establish a 'challenge team' to lead and coordinate the HCP activities
- work with NCB and the Kent Healthy Schools Programme to plan the pilot, including involving students in planning and organising events to engage parents
- participate in ongoing monitoring and evaluation, including staff monitoring forms, questionnaires for students at four stages, and qualitative interviews with a sample of students, staff and parents
- organise a whole school celebration event
- participate in a national conference in March 2009 to showcase the work

The Health Challenge Programme ran from 7 January 2008 to 15 February 2008, including one week for preparation and one week for reflection either side of the four-week delivery period.

Participating schools were provided with information and materials beforehand, guidance on how to use the materials and supported by the NCB project team throughout the challenge period. They also received various resources and event invitations, free NCB membership, £200 for expenses, and an exemplar showing how the Health Challenge Programme could support schools to complete their Self Evaluation Form for Ofsted as well as an opportunity to attend a celebration event for all schools that participated organised by NCB and Kent Healthy Schools Programme.

1.2.2 The Health Challenge Programme materials

Participating schools were supplied with the following items:

- information sheets about the Health Challenge Programme tailored to staff, students and parents
- lesson plans – a 6 week lesson plan for staff to use to deliver the concept and messages and to encourage students to keep up their challenges
- Health Challenge activity booklets for participants which outlined health information and ideas for challenges
- Health Challenge journals in which participants could record their progress and motivation
- a banner publicising the Health Challenge Programme for schools to display during the four-week period
- Powerpoint slides that schools could adapt and display during the course of the Health Challenge, one for primary and one for secondary schools.

1.2.3 NCB support

The NCB project team provided guidance for those coordinating and delivering the programme in each school, both beforehand and throughout. They met with Heads of schools and nominated staff and students, attended staff meetings and planning days, and in one case with a parent group. They also provided ongoing support where required, by telephone and email, and assisted in reminding schools to return evaluation data. Section 4.2 provides more detail on the level and type of support the NCB project team provided.

The evaluation of the Health Challenge Programme was undertaken by a separate evaluation team from the Research, Evidence and Evaluation (REE) Department at NCB.

1.3 Structure of this report

In chapter 2 we provide a full outline of the aims and objectives of the evaluation, the intended approach, and how the evaluation was implemented in practice, including its limitations. Chapter 3 provides further context, looking at how and why schools

and staff became engaged in the Health Challenge Programme and providing a brief profile of each school.

In chapter 4 we describe the process of planning and preparation for the Health Challenge Programme, looking at the role of school Leads, the involvement of students and staff, attempts to engage parents, and decisions about the combination of individual, class and school challenges to be pursued. We also look at how materials provided by NCB were used, and at the resources required to prepare for the Health Challenge.

Chapter 5 looks at experiences of taking part in the Health Challenge Programme. We begin by describing the challenges undertaken by students and what influenced their choices. We look at how they were built into classroom activity and at the use of Health Challenge journals. We describe students' enjoyment of the challenges, how well they stuck to them, and what they felt made it easier or harder to complete them. In chapter 6 we then look at how far students sustained challenge and other healthy activity after the Health Challenge period. We also look at whether their capacity for healthy choices increased, in terms of sustained changes to intentions, motivations, attitudes and perceptions of how easy it is to make healthy choices. We also look at the imprint left on schools, and draw together recommendations for improving the Health Challenge Programme and its implementation.

Finally in chapter 7 we discuss learning from the evaluation and issues for the continued development of the Health Challenge Programme.

Throughout the report we make anonymised references to the six schools, referring to the three primary schools as School A, B or C and to the three secondary schools as School D, E or F.

2.0 Evaluation methods

2.1 Aims of the evaluation

The Health Challenge Programme was developed as a way of supporting children, young people and their families to make and sustain positive lifestyle changes. This pilot study in three primary and three secondary schools was designed to establish the feasibility and acceptability of the programme to schools and families. The evaluation therefore used qualitative and quantitative methods to explore both the implementation process and the impact of the Health Challenge Programme on participating individuals and schools.

It aimed to explore the feasibility of running the Health Challenge Programme in primary and secondary schools – considering:

- whether implementation was possible and what it involved;
- barriers and facilitators;
- whether the programme appeared to work better in certain schools and why;
- whether it appeared capable of delivering positive benefits; and
- what changes needed to be made to the programme.

A subsidiary aim was to establish the broad cost implications of running the Health Challenge Programme in schools.

Two separate teams from NCB were involved in the Health Challenge Programme. The NCB evaluation team worked in parallel to the NCB project team, designing the evaluation and tools, liaising with schools, and undertaking all fieldwork. It also assisted with the implementation, working alongside Well-being colleagues as 'critical friends' and as members of the project Advisory Group. The evaluation team worked independently with a direct reporting line to the Food Standards Agency.

The detailed issues to be addressed by the evaluation were:

2.1.1 Process evaluation

- the extent to which it was possible to implement the Health Challenge Programme as planned
- variations in the ways in which the Health Challenge Programme was implemented in different schools
- factors supporting or hindering implementation (context, design, procedure)
- plans for sustaining the Health Challenge Programme in pilot schools
- perceptions of the Health Challenge Programme (likes, dislikes, benefits, difficulties)
- changes required to improve the implementation process

2.1.2 Outcome evaluation

- the nature of lifestyle changes made by children, young people and their parents during the period of Health Challenge
- the extent to which changes were made – and sustained
- the impact, if any, of involvement in the Health Challenge Programme on general health behaviour, attitudes and awareness of students in participating schools
- whether the Health Challenge Programme worked better or worse for particular sub-groups (e.g. age, gender) or in particular circumstances (e.g. school, with teacher/parent participation)
- additional impacts (unanticipated outcomes) at individual, class or school level.

2.2 Overview of the evaluation design

In consultation with the Food Standards Agency and the Advisory Group, we designed a number of tools (questionnaires, monitoring forms, interview schedules) for a range of adult and child participants. Through triangulation, collecting data from a range of stakeholders at various points in the Health Challenge Programme timeframe, we planned to obtain as full as possible a picture of participants' experiences and views of the programme. The evaluation design and tools were approved by the Kent Research Governance ethical approval system, following its scrutiny of all tools, and subsequent changes to tools post piloting. Discussions with the Kent Research Governance office informed the design of the evaluation tools and process, including the development of written guidance to staff on administering the evaluation within schools and classrooms.

The evaluation design involved the following methods:

- questionnaires intended to be completed by all students participating in the Health Challenge at four stages:
 - at the start of the Health Challenge
 - immediately after the end of the four week Health Challenge period
 - two months after the end of the Health Challenge period
 - four months after the end of the Health Challenge period
- interviews and focus groups with a sample of students from all six schools
- interviews with Leads¹⁴, staff, parents and other stakeholders
- background data on school contexts
- monitoring forms for Leads to complete to capture information about their input and experiences, and about the participation of staff and parents
- monitoring forms for staff delivering the programme to students to complete about their experiences of each lesson and the types of challenges chosen
- questionnaires intended to be completed by staff and parents who undertook challenges

¹⁴ Those staff taking day-to-day responsibility for coordination of the Challenge in their school and for liaising with members of the NCB implementation and evaluation teams.

In practice implementing this very full evaluation design proved challenging for schools, as we describe below.

2.3 Evaluation data collected

2.3.1 Student questionnaires

Four questionnaires were developed in consultation with the Advisory Group and administered to students at the following points:

- a pre-challenge questionnaire was administered during the initial HCP lesson (in the week beginning 7 January 2008), to collect information about demographics, expectations, confidence, health attitudes, and challenges chosen.
- a post-challenge questionnaire was administered at the end of the four week period (week beginning 11 February 2008) to measure adherence to challenges, health attitudes and experiences.
- a two-month follow-up questionnaire was administered during the week of 21 April 2008¹⁵, to collect information about adherence to challenges, any changes in challenges, attitudes and experiences.
- a four-month follow-up questionnaire was administered during week beginning 15 June 2008, to collect similar information.

Questionnaires were piloted with children and young people in one secondary school, one primary school and several youth groups.

At initial meetings with the NCB project team, all six schools anticipated participating fully in the Challenge and its evaluation. However, one secondary school (School E) was preparing for an imminent merger. Although determined to run the Challenge, staff found it impossible to make time to administer the questionnaires and we received no questionnaires from this secondary school.

It had initially been intended that only one primary school would administer the questionnaires, piloting them to see whether the approach worked in primary schools. In fact two primary schools decided to complete questionnaires at all stages. One of these (School C) decided to complete them with Years 1 and 2 as a group, that is teachers asked each question of the group, counted the number giving each response, and returned one questionnaire per class. This approach was used for the pre-challenge, post-challenge and two-month questionnaires; there were no returns at the four month from Years 1 and 2. The third primary school (School A) subsequently asked us to design a modified post-challenge questionnaire, which was administered alongside the post-challenge stage in other schools, since they wanted feedback from students about impacts and experiences. Data from School A has been included in analyses of the post-challenge data set, but data from the composite returns from School C Years 1 and 2 was not included in the data sets and instead is reported separately in footnotes in chapters 5 and 6.

Staff delivering the Health Challenge Programme to students were asked to administer and return the questionnaires within their class or tutor settings. Copies of questionnaires and monitoring forms were given to school Leads in an 'evaluation

¹⁵ The questionnaire was administered as close as possible to a date two months after the HCP while allowing for Easter holidays.

pack' before the Health Challenge programme began. Follow-up questionnaires were provided nearer to the time they were to be administered. The evaluation pack also contained separate guidance and checklists for Leads and for delivery staff, instructing how and when to complete and return the questionnaires and monitoring data. Separate guidance was produced for primary schools and secondary schools.

We offered ongoing support to schools in completing and returning the questionnaires, and made considerable efforts to remind Leads of its importance and to keep in touch with schools to ensure it was returned. In practice, it was difficult to make contact with some Leads, and others found it difficult to obtain the questionnaires from staff in their schools. Leads were themselves dependent on staff to administer the questionnaires as planned and, as we discuss in chapter 5, where the Health Challenge was delivered through tutor groups it was sometimes given little time, which is likely to have impacted on the administration of questionnaires.

We received lower returns of questionnaires than we had expected, and the rate of returns declined in most schools over the course of the evaluation, with a particularly sharp drop between the post-challenge questionnaire and the two-month follow-up. The number of questionnaires returned and on which the analysis in this report is based is as follows:

Table 2.1 Student questionnaire returns

School	Pre-challenge	Post-challenge	2-month	4-month	Total
A	none	171	none	None	171
B	74	59	42	40	215
C*	70	63	69	40	242
Primaries	144	293	111	80	628
D	281	349	98	159	887
E	483	362	182	142	1169
F	none	None	none	None	0
Secondaries	764	711	280	301	2056
Total	908	1004	391	381	2684

* This table does not include the composite forms received from School C Years 1 and 2 at the pre-challenge, post-challenge and two-month follow-up stages, which covered a further 37 students at the pre-challenge stage and 38 students at the post-challenge and two-month stages.

Overall, the fact that the number of returns declined over time means it is likely that the sample became biased to staff and students who were most enthusiastic about the Health Challenge, and who had kept going with Health Challenge activity. The data on outcomes in Chapter 6 thus needs to be used with particular caution – it is likely to over-estimate levels of sustained activity and other outcomes.

We are unable to calculate a response rate since we did not know exactly how many pupils had chosen to take part in the Health Challenge – our total eligible sample. In secondary schools in particular it would have been easy for students to choose not to take part. Based on figures for the total number of students on the roll at each school, the number of returns received at the pre-challenge stage varied from 32% of all students at School E to 74% at School B (but note this does not include the composite returns for Years 1 and 2 at School C). A more useful figure is arguably the number of responses at the four-month stage as a proportion of number of responses at the pre-month stage, which varied from 29% at School E to 57% at School C.

Students were asked to write their names on questionnaires¹⁶ in order to allow matching of data for each of the four stages, but were promised confidentiality and that responses would be reported anonymously. Because of the need to keep questionnaires as short as possible, we decided not to repeat questions about gender and year-group asked in the pre-challenge questionnaire, and instead to rely on students' names to match this information across stages. We also asked staff to return questionnaires in batches, marked with the year. In practice not all students filled in their names, and not all staff identified year groups, this was more particularly the case for secondary schools. This means that we have an incomplete dataset for analysis by gender and year group. In most schools and most rounds we were able to identify year group in between 70% and 85% of cases (pre challenge were identifiable in 95 – 100% of cases), but in some instances our ability to match was more limited. We were able to match gender or identify it from first names in almost all cases. The Appendix contains more information about the coverage by school year.

2.3.2 Qualitative data

Interviews with staff and stakeholders

Telephone interviews were conducted with the six Health Challenge Programme Leads. In addition, nine other interviews were completed with a range of staff across the six schools, from teaching assistants and breakfast club staff to head teachers. Interviews were also carried out with two members of the NCB team and two representatives from the Kent Healthy Schools team in order to gain a wide range of perspectives on the Challenge and its implementation. Interviews were carried out during May and June 2008. They lasted between 45 minutes and one hour and focused broadly on the following key areas:

- roles in relation to the planning and implementation of health challenge
- approaches taken and reflection upon their application
- links with existing curriculum, healthy schools and other whole-school activity
- student, staff and parent engagement
- barriers and enabling factors

¹⁶ The decision to ask students to provide their names was taken in consultation with the Advisory Group and school staff, who advised that students were familiar with writing names on surveys and that an alternative numerical identification system would be too onerous for school staff to oversee.

- positive and negative aspects of their experience
- perceived success (achievements, learning, benefits for individuals and the school)
- sustainability of and future plans for the programme in their school
- suggestions for improvement of the Health Challenge Programme and materials as a package

Interviews with students

Twenty-five interviews were held with secondary school students, seven to ten in each school, to explore their experience of the Health Challenge Programme. Preliminary analyses of questionnaire data from “pre” and “post-challenge” stages enabled us to select a stratified sample of students. The sample was selected to contain students with different demographic characteristics (gender, age, ethnicity) and experience of the Health Challenge Programme in terms of type of challenge undertaken and whether they had sustained the challenge throughout the four weeks. Where data was not available, that is in the secondary school which had not returned any questionnaire data, staff selected students to fit these criteria as much as possible. Students were selected from those who had indicated on questionnaires that they were willing to be contacted for interview. Interviews with students were carried out in May 2008.

Interviews, lasting approximately 30-45 minutes and digitally recorded with consent, covered the following broad areas:

- introduction to the challenge and first impressions
- students’ role in planning and implementation
- expectations, motivation, existing health behaviour and beliefs
- classroom delivery and whole-school activities
- use of and views on materials supplied (journal, activity pack)
- choice of challenge and achievements over the four week period
- support received and barriers faced
- most and least enjoyable or beneficial aspects of the experience
- extent to which any learning or changes have been sustained
- recommendations for improving the Challenge in future.

Focus groups with pupils

A focus group was held in each primary school, involving between five and seven students. In consultation with schools, we decided to carry out small focus groups with primary school students, rather than individual interviews. Students for focus groups were sampled in the same way as secondary students. Focus groups in primary schools covered the same broad areas as secondary student interviews, using developmentally appropriate language and tools. Discussions centred predominantly around what were more communal experiences for this age group, in line with the class challenges and whole-school approach stressed to a great extent in all three primary schools.

Focus groups were held in June 2008. In total, 17 children took part across the three pilot primaries. There were nine boys and eight girls; the youngest in Year 2 and the eldest Year 6.

Groups lasted around an hour and a half (with a healthy fruit break mid-way) and were recorded with permission. Partial transcriptions were supplemented by flipchart material and supplementary notes taken by the facilitators.

2.3.3 Other data

We also collected other data as follows:

Background data

Background demographic and other relevant documentation, such as Ofsted reports and school census data, was sought from each of the six schools involved in the pilot.

Monitoring data

A series of monitoring forms was also devised to collect information about implementation. These included forms to monitor the participation of staff, parents and students, forms to record Leads' actions and reflections, and a tally form for staff delivering the programme to complete to record the number of students doing different types of challenges. In practice the rate of completion was very low: we received 31 monitoring forms across the five schools, from which we extracted data (used in Chapter 4). We also received some tally forms but too few to be able to make use of them.

Questionnaires for staff and parents who participated in doing their own challenges.

A questionnaire about adult experiences of undertaking challenges was inserted into extra copies of journals which were made available to interested parties. However, we know that at least one school removed the forms before making the journals available, and others did not distribute journals (and therefore the questionnaires) in any systematic way to parents or staff, and we were thus unable to include data from this element.

Qualitative research with parents

We had also hoped to include a group of parents in the qualitative research but it was only possible to interview three. It had been hoped to obtain a sample of those who had participated personally, from parent feedback forms. In the event, in line with schools' difficulties engaging parents, just one of the three we spoke to reported working on a personal challenge, the others supporting their children in completing theirs. These interviews were held in June 2008, two by telephone and one face-to-face.

2.3.4 Reflections on the evaluation strategy

The key features and strengths of the Health Challenge Programme raise particular challenges to its evaluation. By being neither prescriptive nor centrally directive, the programme allowed schools flexibility in how to deliver the programme, providing a lot of choice for schools, staff and individual students in how they went about it. However, the variance in what actually happened in schools made evaluation problematic.

It was originally intended by the NCB project team that the model would be delivered within class settings. In addition, although initially the programme asked students to complete three challenges, one from each challenge area, following

discussions with participating schools it was then decided to encourage students to focus on one challenge only. The evaluation was designed accordingly. In reality, schools delivered the programme in various classes or tutor times, in lessons of varying lengths, and focused on individual, class or whole school challenges, or a mixture of these. Students were encouraged to choose at least one challenge, but this was not restricted and indeed they often undertook a number of other challenges offered as class or whole school approaches. The programme was also voluntary, and it is not known how many students did not participate. Furthermore, the evaluation developed alongside the Health Challenge programme model and materials, which were themselves changing in response to discussions with pilot school staff.

What was and was not possible within the evaluation?

The model which allowed some schools to deliver the programme within very short tutor times with much left to the discretion of individual tutors affected the extent to which schools adhered to evaluation requirements. If the Health Challenge Programme had been designed as a single intervention within a class-based delivery model, it would have been more straightforward to evaluate schools' experiences and outcomes.

The flexibility which the Health Challenge model allowed schools therefore affected the quality and quantity of data received by the evaluation team. This was apparent in the following ways:

- Lower response rates to questionnaires than anticipated
- Limited coherence to our request for respondent names on questionnaires to allow us to match questionnaire data between stages, with subsequent effects on analysis
- Low monitoring data returns
- Limited data from parents

Response rates

In retrospect, it was perhaps overambitious to expect schools to administer a four-stage survey process, particularly given the conflicting priorities and difficult circumstances of some of the schools. While we provided clear guidance and telephone and email support, in practice some staff administered the questionnaires in ways they felt would best suit their students and others appear not to have done so at all. Again, when the evaluation had been designed it was intended that the programme would be delivered to students within classroom settings by class teachers. Discussions with schools about what support they would need or indeed welcome had focused on this model. The decision that staff would administer the questionnaires themselves, in the manner that they did, was made in conjunction with schools' wishes, to minimise as much as possible the burden on schools, and to work within the evaluation budget. The evaluation team provided written guidance for staff and Leads, as well as ongoing contact by telephone and email in an attempt to encourage returns and address any difficulties.

In reality, the programme was delivered through a variety of settings and means, and often through very limited tutor time. Our guidance for class teachers on how to

administer, encourage and return completed questionnaires was obviously less relevant to tutors trying to fit the Health Challenge into already very limited tutor sessions with conflicting priorities. Ultimately, it appears that the time required to administer and return questionnaires was an additional burden on tutors already time-limited.

Matching data returns

It had been intended that we would track respondents through the four-stage questionnaire process. After discussions with schools and the advisory group it was agreed that the least onerous way for schools was to ask students to write their names on questionnaires. We also asked teachers to return batches labeled by year group. Unfortunately in many cases students did not write their names on the forms, nor did all staff label their class returns with the year group as had been requested. It appears that the difficulties described above of limited time, exacerbated by delivering the model within tutor time, meant that staff who returned questionnaires did not label their group returns nor check that students had written names on the completed questionnaires. Since we were not able to match individual students' responses across the four stages, we were not able to measure changes in behaviour or attitudes individually.

Monitoring data

We suspect that similar reasons preventing the majority of staff from returning the monitoring data forms that had been designed to systematically capture information about use of lesson plans, planning and delivery time and reflections on the week by week programme. We received just 31 returns from class teachers or tutors who had delivered the model. We did not receive any completed monitoring data forms from Leads. While this meant that the data on time spent on the programme was not collected systematically throughout the pilot period, we did nevertheless gather this data within interviews with Leads and staff, and the small number of returns from delivery staff gave us an indication of how lesson plans were used, as discussed in section 4.6.2.

Limited data from parents

The intention of the Health Challenge Programme was that each school would involve parents in the pilot by encouraging them to undertake their own challenges, alongside their children. The evaluation design included a questionnaire for parents, inserted into the Health Challenge journals to be distributed to participating parents. We also intended to interview a small number of parents after the pilot ended. As discussed later in this report, schools reported little success in engaging parents, which obviously impacted on our ability to include them in the evaluation. Staff reported that very few journals were distributed to parents, and in one school staff removed the questionnaires from the journals. As parents on the whole did not engage in the programme, we and schools found it difficult to identify possible interviewees. In the end, we interviewed three parents, two of whom had undertaken challenges themselves, while the other had supported her child in his/her challenge. During interviews with staff, we discussed schools' difficulties in engaging parents and how this could be more successfully implemented in future.

Evaluation design

The pilot of the Health Challenge Programme was the first implementation of an innovative programme. The evaluation was designed to see if it could work and used methods which were appropriate to this. Given that schools were implementing a

pilot programme, the evaluation called for a balanced approach. We needed to be flexible in how we worked with schools and what we expected from them. Schools required flexibility in how they would implement the Health Challenge with pupils, and in how they dealt with the evaluation process.

The fact that students could choose their own challenges, that three categories of challenge were planned, and that challenges might be carried out on or off school premises, led to the decision that we should focus on asking students whether they had completed and sustained their challenge. It would not have been possible to measure behaviour independently through observation. It would also not have been feasible to collect data about behaviour at each stage and derive an independent measure of whether challenges were completed from this. Challenges were very varied even within each of the three categories and defined by students, so any attempt to measure, for example, aspects of physical activity at each stage would have required very long and detailed question coverage if it was to map the full range of challenges chosen. If students had been restricted in their choice of challenges, it may have been possible to measure behaviour and outcomes more precisely, but this would not have been consistent with the ethos of the Health Challenge as a flexible programme in which students and schools made their own choices.

This is a potential weakness in the evaluation. Students, particularly those who were enthusiastic about the programme, may have over-recorded completion of challenges, especially since the challenges they selected were sometimes framed quite generally – for example ‘doing more exercise’.

We attempted to validate the self-report questionnaire data in other ways, through triangulation with other sources of data such as interviews with students and staff, and monitoring data from staff and leads. Unfortunately returns of monitoring data were low, due to the conflicting priorities and varying methods of delivering the programme within the pilot schools, as discussed above. We did however carry out interviews with staff and focus groups with students across all six pilot schools, and these broadly supported the findings from questionnaires.

2.4 Analysis of evaluation data

Questionnaires were logged and open responses coded prior to data entry and analysis in SPSS (V.15). Separate datasets were created for primary and secondary school material. An additional file, with responses to the adapted post-challenge questionnaire administered in one of the schools, was later merged with the main primary database. The data were checked on completion of data entry and potential errors examined and, if necessary, rectified.

Thematic analysis of interview, focus group and documentary material was undertaken using NVivo7. Guided by the original evaluation questions, a coding frame was developed iteratively through exploration of the data. Background and monitoring material was analysed separately, using the same thematic framework. The evaluation team worked together closely to ensure a systematic approach in coding and early analysis.

3.0 The Challenge context in pilot schools

3.1 Introduction

Each of the six schools involved in the Health Challenge Programme was different in its structure, existing activities around health and reasons for joining the programme. This chapter therefore outlines how schools were recruited to the Health Challenge Programme pilot and why they took part. It then briefly profiles each of the six schools.

3.2 Recruitment of schools and staff

Three primary schools and three secondary schools in Kent were identified to take part in the pilot. Three of these were in West Kent and three in East Kent. An initial filtering process was undertaken using Free School Meal and health inequalities data and then a shortlist of schools was filtered again using the Income Deprivation Affecting Children Index (IDACI)¹⁷. The IDACI system was recommended by the Food Standards Agency and is the system used by the Department for Children, Schools and Families (DCSF) to identify schools in deprived areas. DCSF undertook the second filtering process in order to protect confidentiality of all schools this affected.

All six schools had been recruited by early November 2007. Representatives from the Kent Healthy Schools Programme initially approached the selected schools to invite them to take part in the pilot of the Health Challenge Programme. Schools were sent a written briefing in September 2007 outlining what would be involved, the level of commitment required, and the support that would be provided by NCB and the Kent Healthy Schools Programme.

Once schools had formally agreed to take part in the pilot, the NCB Programme Lead then contacted the Heads of the schools to discuss further and set up meetings to outline the proposals, and provide further information to schools about how the Health Challenge Programme could be implemented within the varying contexts and schedules of each school. Early on in discussions one school subsequently decided not to take part due to the workload of key staff. Another school was quickly and successfully recruited. For the first meeting schools were asked to pull together a group of staff that represented a cross-section of interests in the school including pupils. The make-up of these groups varied from school to school but involved a combination of: Head and Deputy Head Teacher, Healthy Schools Lead, PSHE coordinator, Family Liaison Officer, Education Welfare Officer or equivalent, Community Support worker or equivalent and pupils. At this meeting a programme for any further meetings, for example with parents, staff or pupils, was agreed. NCB also presented the Health Challenge Programme to local Healthy Schools coordinators and continued to keep them up to date with developments.

The intention of the Health Challenge Programme was that students would participate on a voluntary basis. In practice, in agreeing to take part in the pilot,

¹⁷ IDACI scores are calculated for each child from various data sources, and this IDACI score is attributed to a certain area of houses. Schools can be identified by a mean score of the children within that school.

schools agreed to incorporate it into the school timetable, so it became part of planned school provision. Most schools informed parents of the programme and gave an opportunity for them to excuse their child from the activities. As the programme reflected the types of health activities which many schools carry out from time to time and was happening mainly within the context of the school day this was deemed appropriate by the schools

3.3 Reasons for taking part in the pilot

3.3.1 Healthy Schools

The schools taking part in the Health Challenge Programme pilot were at various stages of Healthy Schools status¹⁸. Two schools had just achieved Healthy Schools status, one of which had yet to actually receive the plaque at the time the Health Challenge Programme began. Another was about to submit its application and has subsequently received its award. Three schools were working towards Healthy Schools status and hoped it would help to provide evidence for that application and embed healthy issues into school life in preparation for the application. One Lead believed that the experience of cross-school working would also be useful. The Kent Healthy Schools Programme confirmed NCB's assurance to schools that parts of the Health Challenge Programme could be used as evidence. Schools that had already achieved or applied for Healthy Schools status saw the Health Challenge Programme as a way of continuing that work. The Health Challenge Programme was also seen as an opportunity to reflect on what was already in place in schools.

'Well that's what's such a novel thing, that's what's so different, the fact that you're really focusing, and actually really taking time out to record it every day' (Primary school staff)

3.3.2 Classroom and curricular context

All schools reported that they were already involved in many healthy lifestyle activities within the curriculum and in other activities offered, whether or not they had achieved Healthy Schools status. Several schools reported working with outside agencies to provide teaching on mental and emotional health, healthy eating, alcohol, drugs and community issues and activities including sports activities, music and dance. In addition, the existing curriculum offers a variety of health-based learning within PE, religious education and science. Areas such as healthy eating, physical activity and feeling good inside are already embedded in the curriculum through PSHE and PE teaching.

Healthy lifestyle teaching and activities varied in the six pilot schools, but all felt the Health Challenge Programme would add a dimension to their existing programmes and enable them to build on existing work. The Health Challenge Programme was a continuation of PSHE teaching, for example where School C had already planned to hold a music and dance workshop for students, but brought it forward to happen during the pilot period. School B used the Health Challenge Programme as one of the goals for the SEAL unit 'Going for goals' as the concept fitted well and staff were therefore committed to delivering it without it requiring much additional work. Thus

¹⁸ The National Healthy Schools Programme aims to support schools to equip children and young people with the skills and knowledge to make healthy choices. To achieve National Healthy School Status schools must have met national criteria using a whole school approach across four core themes: PSHE, healthy eating, physical activity and emotional wellbeing.

some of the activities undertaken by schools as part of the Health Challenge Programme were a continuation of existing initiatives or were activities that might otherwise have been taken forward under existing initiatives.

3.4 School profiles

3.4.1 School A

School A is a small primary school of eight classes from Reception to Year 6 in one site and four classes in the other, with a total school roll of 310 pupils. It was on two sites following the school's recent merger but the school expects the two sites to come together in a new building in September 2008.

One site has achieved Healthy Schools status while the other has not. The school will submit a new application this year and hoped that the Health Challenge Programme would provide some learning and evidence for that application. The school has a number of healthy initiatives in place, such as an outside agency which works with children in mental health issues, anger management and self esteem building. Younger children are provided with fruit every day and health is incorporated into the curriculum, for instance in science lessons about teeth or use of calm activities such as quiet reading as a way to calm children down after periods of active play. The Health Challenge Programme was seen as an action towards completing the SEAL programme that the school is working towards through the PSHE curriculum. The school also hoped that the programme might encourage interaction between the two sites.

School A was in a state of change at the time the Health Challenge programme was being implemented, with staff redundancies and a new Head starting. Prior to this two Family Liaison Officers had taken the lead on the programme. While the new Head was involved in some initial planning and welcomed the initiative as a way of moving healthy activities forward in the school, he requested additional time given that staff were under pressure and with low morale. As a result, it was agreed the school should have an extra week to implement the programme and the NCB project team helped to introduce it to the whole staff group. This happened at one of the school's INSET days, where all teaching staff, including assistants, from both sites came together in one place to plan how to implement the programme.

3.4.2 School B

School B was recruited to the pilot slightly later than the other schools, replacing the school that dropped out. School B is a small primary school with a total of 20 staff and 100 children in four classes. Staff reported a strong PSHE ethos, with an active Family Liaison Officer, school counsellor and until recently a learning mentor. The school follows the PSHE SEAL programme. When approached about the Health Challenge Programme, the PSHE Lead had been intending to complete the module 'Going for Goals', and decided to undertake the Health Challenge Programme as part of this unit, feeling that it was complementary. At the time of data collection, the school was about to submit their application for Healthy Schools status, and subsequently achieved this later in the year.

Partly due to the focus on Healthy Schools, a number of factors were in play which gave opportunities to promote Health Challenge Programme activities in the school perhaps more easily than in some schools. For instance children and staff sat down to eat together at lunchtime, enabling discussion and debate about food and other

topics. PSHE teaching and PE activities already covered the three Health Challenge Programme themes of healthy eating, physical activity and feeling good inside. With such a recent focus on Healthy Schools, the school was in a prime position to implement Health Challenge Programme as a priority over other areas and use it as an opportunity to reflect on the school's healthy practices and associated evidence, despite having less time to plan for its implementation than other schools.

3.4.3 School C

School C is a small primary school which formed approximately three years ago following the amalgamation of two schools. It is currently planning to build a new school building, a children's centre. In 2008 there were 119 children over 5 year olds, or 164 pupils in total, with 10 teaching staff, eight of whom worked full-time.

At the time of the pilot, the school had recently achieved Healthy Schools status. The school described its Healthy Schools work as a whole school approach, encompassing school meals, lunch boxes, PE policy and provision of activities for all students. There was a very strong focus on health within the school: the latest Ofsted inspection in 2007 identified health as one of the areas of strength. A range of clubs were offered, including a breakfast club to provide a healthy start to the day to promote learning, and high value was placed on personal development, for instance through the 'Nurture Group'. A Family Liaison Officer was part of the staff team.

3.4.4 School D

A growing secondary school, with 737 students, including approximately 85 in the sixth form, School D expects to have approximately 1,100 students within the next few years. It opened as an academy in 2005, and transferred to a new building in 2006 with half the existing staff. Until it became an academy the school was deemed to have the worst academic results in the county. However, the latest Ofsted monitoring inspection in 2007 reported that the school is improving, that pupils have low attainment on entry to the academy but there is a strong focus on bringing results up. The school runs an extended school day where students are expected to attend from 8.30am – 5.00pm.

The school achieved Healthy Schools status at the end of 2007, just before the Health Challenge Programme was piloted. Healthy eating had been a key priority for the school, with significant menu changes taking place over the previous few years.

3.4.5 School E

A large secondary school of 1,531 students, including approximately 200 sixth formers, from Years 9-13, School E is an improving school, with low attainment and difficult staffing issues according to Ofsted 2007. The school was in the process of becoming an academy and changes were taking place at the time of the Health Challenge Programme pilot. School E is working towards Healthy Schools status, having recently carried out an audit in preparation for planning initiatives to raise healthy behaviours and profile across the curriculum. The school council has been campaigning to improve catering but the school's current catering contract has to date prevented any action. Some health related work is evident within the curriculum, for instance emotional well-being is taught through Buddhism in Religious Education (RE) classes. The local Kent Healthy Schools Coordinator is currently working with the school and a meeting is scheduled to help move planning forward on work around achieving Healthy Schools status.

3.4.6 School F

School F is a secondary school with three sites, one of which agreed to take part in the Health Challenge pilot. The staff at this school were facing redundancies, upheaval, and other priorities at the time of the Health Challenge Programme. In addition, staff reported some children at the school exhibit difficult behaviours and have a traditionally poor diet and understanding of healthy lifestyles. There were 284 students and 25 staff at the site which undertook to run the Health Challenge Programme.

At the time of the pilot, the school was working towards Healthy Schools status. Staff reported a number of initiatives in place, such as a local football club programme of community activities including learning around drug and alcohol use, visits from school nurses, and other outside sports based agencies. The school had recently been addressing the poor quality of food available through the canteen and a breakfast club, including healthy options, was available to students who may otherwise not eat before their school day begins.

3.5 Summary

The schools taking part in the pilot are some of the most deprived in the county. Three of the schools had recently or indeed were still undergoing significant upheaval at the time of the Health Challenge Programme pilot in January 2008. Schools were keen to take part in the pilot of the Health Challenge Programme in order to keep health high on the school's agenda, or to raise its profile in line with efforts to achieve Healthy Schools status. Some schools also hoped that undertaking the programme across sites or in newly formed schools would bring sites together or create a sense of cohesion.

The experience of the schools taking part in the pilot illustrates the importance of recognising context when considering possibilities for other schools. Schools implemented the programme to suit their circumstances. This highlights that the Health Challenge Programme's flexibility and adaptability are important aspects which help schools to become engaged regardless of their circumstances.

4.0 Planning

4.1 Introduction

The intention of the Health Challenge Programme model was that schools would encourage students to choose one challenge, from one of the challenge types (healthy eating, physical activity or feeling good inside), and support them to maintain that challenge for a four week period. However while finalising the materials and working with the schools, the NCB project team realised that schools would value more flexibility so that they could choose how best to deliver the model to suit the needs of their students and staff. In practice the six schools taking part in the pilot in Kent chose to deliver the Health Challenge Programme in a variety of ways.

This chapter describes the varying approaches the schools took to plan and deliver the Health Challenge Programme and the reasons behind them. It begins by discussing the support provided by the NCB in working with staff teams to plan how the model could be implemented within the schools. We look at how Leads and other staff worked together, how they involved students in the planning process and where attempts were made to engage parents in the programme. We then examine the various decisions which schools needed to make, including how to introduce and deliver the Health Challenge Programme lessons to students; whether to offer individual, class or whole school challenges, or a combination, and what these challenges might be. In the following sections we explore how the Health Challenge Programme materials were used and received, and what resources were required by schools to implement the programme. Finally we discuss what hindered and what helped schools in their planning and preparations for the Health Challenge Programme pilot.

4.2 Support for schools provided by NCB

Once schools had been recruited, the NCB project team, and often a representative from the Kent Healthy Schools Programme, met with the Head and any key staff identified by the Head. By this point the school had identified a Health Challenge Programme Lead whose role would be to coordinate the Health Challenge Programme within the school. On two occasions a member of the evaluation team was also present to discuss what would be required by the evaluation.

This initial visit was followed by further visits, including attending staff meetings where possible and meeting with pupils in at least four of the schools. In most cases, the NCB team helped to introduce the Health Challenge Programme to the whole staff team. The key areas where the NCB project team provided support were in making sense of the programme with Leads and staff, looking at their existing work and structures to plan how to implement the programme, helping Leads to generate interest and commitment from staff, including running events for staff, and providing ongoing support, reassurance and reminders where appropriate.

While ongoing support was available, the level of this follow-up support varied between schools depending on what Heads or Leads required and on the approach to the Health Challenge Programme taken by the school. For instance, some schools required little further support, feeling that they were able to plan its implementation on their own whereas others were in close contact with NCB because of staff illness,

ongoing challenges of getting wider staff engagement, methods chosen to familiarise staff and students with the Health Challenge Programme, or attempts to involve students in planning the Health Challenge Programme. In one primary school NCB worked with the lead of a parent group, and met with parents to do some planning around the Health Challenge Programme.

In School A, NCB attended a planning day with all staff from both sites in which the Health Challenge Programme concept and materials were introduced and staff worked in year groups to brainstorm ideas and plan approaches. All staff were present, and those interviewed reported finding NCB's presence useful as someone was on hand to answer questions and help to make sense of the materials and written information.

'...when you read all the literature at the start you think, this is really, it hits you and you think. God how are they going to choose all of these? And at first it's that sort of thing that you think, oh my goodness, this is a lot. It's going to be a lot of work. But actually, when you get to that meeting, and you start breaking it down, and what was really helpful was to have those people here. That we could say to them, well how does it work, and they were reassuring and telling us, it's 20 minutes a day. You don't have to give them this broad spectrum of choice, you can narrow it down according to what you think their needs are. That when it became a bit more, you think, oh this is going to be quite manageable' (Primary school staff)

Staff reported that even where they had not required a lot of support, it had been helpful to know that someone was available to answer *'even the silliest of questions'* and that NCB had always been on hand. For some the support was more crucial.

'I don't think I could have got through it ... I felt really daunted when it started and [the NCB Programme Lead] pretty much put it in layman's terms for me' (Primary school staff)

The NCB project team reported that schools required between two and four days' support to get the Health Challenge Programme up and running, and most of this related to planning stages. Once underway schools required little ongoing support from the NCB team, although telephone and email support was available and provided as appropriate. This source of information and support was clearly valued by school staff, as illustrated above. The NCB team were keen to support staff in planning the Health Challenge Programme, and to ensure they had the scope to be creative and develop a programme that would work best for their students and staff. Any future roll-out should consider the type as well as level of support required by schools, given that pilot schools highly valued having a staff team available to explain the process and be available on an ad-hoc basis at the end of the phone.

NCB had further contact with schools towards the end of the Health Challenge Programme period, when filming took place for a promotional DVD funded by the Kent Healthy Schools Programme¹⁹. Representatives from the schools were also invited to attend a celebration event in May 2008 organised by NCB and the Kent Healthy Schools Programme.

¹⁹ 2008 *Small steps lead to big changes* DVD, Cather Media Ltd.

4.3 Leadership and coordination

The Heads of all the schools taking part in the pilot identified key staff to carry out the coordination of the Health Challenge Programme in the schools. The staff identified to be the Leads for the Health Challenge Programme came from a variety of roles and with varied experience, including two Family Liaison Officers, a Healthy Schools coordinator, a PSHE coordinator, a Learning Manager for Food and Nutrition and an Assistant Head.

The Lead was a crucial role in all schools, with responsibility for coordinating and supporting the Health Challenge Programme within the school. For some this was a new type of role; one Lead reported no experience of working across the school before the Health Challenge Programme, and found it a *'big learning curve'* when also taking on additional responsibilities at the same time as running the Health Challenge Programme. In secondary schools, while it seemed to be particularly difficult for one Lead to make time for this role, another was very proactive and aimed to do more than just the minimum in the school. Leads' motivation and ideas were key to sparking staff and therefore students' interest. One primary school Lead put up a board outside the staff room so that teachers would tick off when they had completed their class challenge that day or that week. This effectively kept the Health Challenge Programme profile high among staff, acted as a motivator and discussion point. As the NCB project team identified, to run the Health Challenge Programme in schools one *'need[s] a leader, a champion, because it won't happen otherwise.'*

Leads reported that in most cases they either worked with the whole staff team to plan the Health Challenge Programme or pulled together a working group of interested parties or representatives from all departments, as suggested by the NCB project team. In this way most Leads were backed up by their Heads of School, and a key team of staff, which included, across the schools, Deputy Heads, senior teachers, and other staff such as a Healthy Schools coordinator's assistant and an Education Welfare Officer. In School F the Lead had spoken to various staff about implementing the Health Challenge Programme but this did not develop into a working team as such. Consequently, the role of implementing the Health Challenge Programme fell almost entirely on the Lead, which proved particularly challenging.

The staff team was critical to the successful implementation of the Health Challenge Programme in schools.

'Everybody did pull together, and how much people do work as a team, and with anything that does on, and health challenge particularly .. how everybody just did it and didn't think twice' (Primary school staff)

'From my point of view the enthusiasm of the Lead, and enthusiasm therefore of the staff team, was absolutely vital.' (NCB project team)

4.3.1 Initial reactions from staff

In general staff reported feeling enthusiastic about the concept of the Health Challenge Programme though sometimes a little concerned initially by the limited time available for planning before the pilot was to be implemented. Interviewees from two (primary) schools reported staff were excited about taking part in the pilot of a potentially national programme, and saw it as a positive reflection of their existing healthy schools work. One staff member from a secondary school saw it as a real opportunity to develop her teaching (in dance) with students.

4.3.2 Communicating the Health Challenge Programme to staff

Some Leads found it difficult to communicate the Health Challenge Programme approach or requirements to staff, despite help from the NCB project team in introducing the concept to the whole staff group. In one school there was confusion about when to deliver the first lesson because an additional week had been allowed for planning due to earlier pressures on staff, so that the date on the pre-printed material was now not right. The Lead in another school was away with illness during the limited planning time, and found it difficult to understand the approach and manage the implementation. However, again, support from NCB had helped alleviate this.

'It was quite challenging to get it up and running actually' (Primary school staff)

4.3.3 Staff participation – staff challenges

The Health Challenge Programme encouraged staff to undertake their own challenges as a way of supporting students. Many of the staff and Leads interviewed had undertaken challenges and reported that some others had as well. Twenty (31%) respondents to the monitoring questionnaire indicated after the first Health Challenge Programme lesson that they would be undertaking their own health challenge. This was confirmed by one staff interviewee from School D who reported that citizenship teachers undertook their own challenges in order to motivate students. This will be discussed further in Chapter 5.

4.4 Preparation

4.4.1 Student Involvement in planning the Health Challenge Programme

All the schools involved students in the planning around the Health Challenge Programme to some degree, and this varied between schools. In all but one school (a primary) the student council was consulted about the Health Challenge Programme early in the planning process. This happened in a number of ways and to a varying extent.

Student representatives came to initial meetings with the NCB team and staff to learn about the Health Challenge Programme and decide whether they thought students would be interested in taking part. In three schools (two secondary and one primary) this was taken further. The Health Challenge Programme was discussed at school council meetings and students were asked for ideas on how to engage others, possible activities or challenges. Staff reported these ideas were valuable, although a few were not practical, for instance taking a whole year group swimming at one time, and others needed more planning time and so could not be implemented, such as free swimming pool access for all students during the four week period.

School C involved the school council throughout the Health Challenge Programme period. As well as being represented at the initial planning meeting where NCB introduced the Health Challenge Programme, they also came up with their own ideas for challenges, invented a new name for Health Challenge Programme to inspire other students, and helped to present the Health Challenge Programme to their class alongside their teacher several weeks before the pilot began, thereby facilitating

discussion and choice of class challenges. A staff member reported that *'the school council were very much like the people in charge'*. By offering time for students to discuss the challenge and bring ideas back to class, the school also managed to involve the wider student body in making decisions about challenges.

'I actually think it's one of these things that has to be planned really carefully and it was important that it wasn't something like, 'right next week we're going to do it', it was like, 'right we're going to be doing this in a few weeks time, how are we going to do it, what are we going to do, what do we need to put into place?' (Primary school staff)

In School D groups of students other than the school council got involved in planning how the Health Challenge Programme would run. Sixth formers supported students in lower years by planning and running activities themselves, such as a music room at lunchtime where younger students could come to calm down or chat through problems.

School B did not appear to involve the school council early in the planning stage. This primary school had agreed to take part in the pilot later than other schools, and it may be there was insufficient time to engage students within the initial planning process. Students had limited opportunities for making decisions about their challenges as teachers on class challenges, though some classes could vote from a few options, and children were supported to choose their own individual challenges where these were taking place. However, the school council was heavily involved in planning the school's own celebration event. Six students from the school council, with support from the school's Health Challenge Programme Lead, planned an afternoon of games and activities for the school, including a treasure hunt and dance activity.

The students interviewed confirmed that where they had been involved in planning, they had contributed ideas and these seemed to have been taken into account.

4.4.2 Difficulties involving students in Health Challenge Programme planning

Staff identified several time-related difficulties in engaging students in the planning around the Health Challenge Programme. At the time students' input was required, Year 11 students in one school, who played a key role on the school council, were coming out of mock exams and finishing coursework, so were not able to commit to the exercise.

Several schools reported that limited planning time meant that students' ideas were not able to be scoped further or put into place. However some Leads reported that although the learning from this exercise could not be acted on within the pilot period, it would be taken into account if the school should repeat the Health Challenge Programme in future.

4.4.3 Parent engagement

The Health Challenge Programme provided schools with an opportunity to engage parents in the programme, by undertaking their own challenges and supporting their children.

The Health Challenge Programme materials included a letter to send to parents explaining what the Health Challenge Programme was about, how to take part, and extra copies of the journal for parents to fill out themselves. All Leads expressed

enthusiasm for the concept of involving parents in this way, but in practice none managed to do so to any real extent.

All schools told parents about the Health Challenge Programme through either sending the information sheets provided by NCB or through school newsletters. One school Lead discussed the Health Challenge Programme with parents at every opportunity and materials were left in reception for parents to take if they wished. One primary school Lead reported that some children had taken extra copies of journals home for their parents. Only one school (School C) actively sought to engage parents by starting a coffee morning group focused on the Health Challenge Programme, but attendance '*fizzled out*' after two weeks.

Lack of time, space and facilities to engage parents were cited as the reasons schools had not been able to make more than minor attempts to involve parents in the Health Challenge Programme. All Leads reported that engaging parents in school activities is traditionally difficult. However, several Leads reported that even where parents had not undertaken challenges themselves, some had been good at supporting their own children in undertaking challenges – an issue discussed further in Chapter 5.

Despite the lack of success in engaging parents, Leads made useful suggestions on how this could be done more effectively in future. These included:

- classes and activities for parents
- cookery lessons for parents
- a book of recipes for students to use with parents
- widespread advertising in the local area before and during the Health Challenge Programme period
- regular events for parents throughout the Health Challenge Programme
- providing incentives such as vouchers for parents

Three parents were interviewed as part of the evaluation. They reflect the different roles parents took in the programme. Two had supported their children's challenges by encouraging them or taking part alongside them. The other parent had undertaken her own challenge of walking for 30 minutes a day, which she did with her daughter as a 'challenge buddy'. She reported it being more difficult than she had expected to find the time among conflicting priorities, but that she had benefited from time to herself, and time spent with her daughter. The journal had been a useful tool for motivation. Her interest did raise the issue of whether the information received by parents at the school was clear enough, since she had taken the initiative herself to ask the school if parents could undertake challenges. She also suggested that it would have been easier to undertake a challenge if she had been doing it with a group or been sponsored.

4.5 Planning

The Health Challenge Programme model gave schools flexibility in their approach to delivering the lessons and concept to students and in what type of challenges they choose to offer as options. Schools reported that this was valued as they wanted to be able to develop an approach that suited their students.

Each school needed to decide how to deliver the Health Challenge Programme to students (through classes or tutor time for instance), whether to offer individual, class

or whole school challenges or a mixture, how much choice in challenge to allow students, and what the specific challenge activities would be.

4.5.1 How to deliver the Health Challenge Programme lessons

The three primary schools all chose to deliver the Health Challenge Programme lessons to students within class time by the class teacher, with support from other staff such as teaching assistants where appropriate. This appeared to fit well with the Health Challenge Programme materials, including the lesson plans.

In secondary schools however, planning when to deliver the Health Challenge Programme to students was more complex as it meant finding time in an often busy timetable, without jeopardising curriculum requirements, and in a lesson or contact slot where students were available for at least one session a week.

All the secondary schools decided to run at least part of the Health Challenge Programme within tutor time, though this varied among schools. Tutor time is usually a 20 minute period once or twice a day. School E delivered the initial Health Challenge Programme lessons to students within a PSHE day – the first lesson at the start of the day, and the second lesson at the end of that day – in order to deliver the concept and get everyone started at the same time. This initial intensive Health Challenge Programme lesson was followed up through mixed age tutor groups, where tutors were asked to remind and motivate students about their challenges in the regular sessions throughout the four week period.

School F introduced the Health Challenge Programme to students at an assembly, then left it to tutors, with some direction from heads of departments, to maintain the Health Challenge Programme within tutor time for the four week period.

The working group in School D utilised regular citizenship lessons and integrated studies to deliver the Health Challenge Programme to Key Stage 3 classes but in tutor time for other years. The citizenship head, part of the school's working group around the Health Challenge Programme, was instrumental in planning how these lessons could be delivered, through adapting and rewriting the lesson plans to suit the timetable and citizenship curriculum. Integrated studies was only timetabled for Key Stage 3 so in other years tutors delivered the Health Challenge Programme within tutor time in a similar way to the other secondary schools.

The differences in how schools chose to deliver the Health Challenge Programme to students meant that at the extremes one class spent two hours every week on the programme, while in others it was dealt with as one of a number of issues within a short tutor form session. This is discussed further in Chapter 5.

4.5.2 Individual, class and/or whole school challenges

Schools also needed to decide whether to offer students the option to undertake individual, class and whole school challenges. The initial intention of the Health Challenge Programme was that schools would support students to choose one challenge to maintain for four weeks. This could be individually chosen and carried out by students, or carried out in class groups, or even by the whole student body. In practice, schools simultaneously ran a number of opportunities for challenges. The result was that students may have carried out only one individual, class or whole school challenge. Alternatively, a student may have been undertaking additional challenges from any or all of the three types – individual, class or whole school.

Individual challenges were generally chosen and undertaken by students individually, although sometimes friends or groups of friends would choose to undertake and support each other with the same challenge. Class challenges tended to be activities which were decided on by either the teacher or the class, and usually carried out within class time, or non-teaching times in or immediately around the school day. Whole school challenges, on the other hand were organised by the school, usually to support the ethos of the Health Challenge Programme, and were activities either carried out across the school as a group, or school-wide activities open to all who wished to access them. Most, but not all, of these were available during the school day. These aimed to complement individual or class challenges.

All the primary schools felt class challenges were easier to manage and students would be more likely to be motivated through class activities and peer support. All the primary schools offered a mix of class challenges and whole school activities, and only one did not offer individual challenges as well. However, where individual challenges were offered, these were only available for older pupils, with a Lead reporting they had felt it was important to encourage children's self-awareness and individual responsibility as they get older.

'I think obviously as children get older I think it's more and more important to give them more of a choice, and encourage them to think for themselves, and look at their own lifestyle, and where they need to change their lifestyle possibly'. (Primary school staff)

In secondary schools, the working groups or the Leads in consultation with staff decided whether the school would run class challenges, whole school challenges or individual challenges, or indeed a mixture of types. All the secondary schools offered students the chance to undertake individual challenges, some classes within each school undertook class challenges, and all provided some form of whole school activities.

4.5.3 What choice were students given in challenge topics?

In all three primary schools, staff worked together to plan challenges either via a planning day or in a series of meetings with the Head.

Class challenges were chosen by primary school teachers according to their class needs, although one school offered classes a couple of options and students voted for their choice. Teachers used the activity booklets for initial ideas.

The secondary schools offered students the chance to choose their own individual challenges. In practice some students paired up to do their challenges so peers may have made decisions together. Class challenges in secondary schools were fairly dependent on individual teachers and staff. It appears that where a teacher was interested in a particular area and enthusiastic about the Health Challenge Programmes they may have offered students the chance to undertake a class challenge, usually of the teacher's choosing.

Whole school challenges and activities were almost always chosen by the schools rather than the students. In School D, which offered a large range of whole school challenges, the sixth form developed a mentoring strand of the Health Challenge Programme, where they provided activities for students in the lower years. Apart from this however, schools decided what activities and challenges would best support the Health Challenge Programme. The working group in the same school decided that in order to keep students motivated throughout the four weeks, they would develop smaller changing challenges across the whole school so that everyone could

succeed at something. For instance, they ran theme days such as Monday as 'Manners Day' where students were reminded to say thank you or ask how someone's day was going. The school made a conscious decision to concentrate on feeling good inside and healthy eating since students already received five hours of physical education a week so this was not an area they felt students needed to address. Despite this they also offered a number of physical activities as whole school challenges.

4.5.4 What were the challenges?

Table 4.1 shows the range of challenges in schools.

Class challenges in primary schools also covered all three areas. Staff at School B reported choosing relaxation exercises for students from Year 1 to Year 4 classes. Teachers believed these would help children to calm down after sometimes stressful lunch-breaks. School C ran a class challenge of walking a mile a day, which was taken by many classes and involved teachers so in practice became almost a whole school activity. Class challenges in secondary schools were less frequent but still covered all three challenge areas. In School E, some classes with PE tutors undertook physical class challenges. School F's Key Stage 3 technology classes undertook the challenge of providing unsalted popcorn for the rest of the school as a healthy alternative snack.

All the schools offered some form of whole school challenge to support the Health Challenge Programme. All three primary schools encouraged students to eat more fruit daily, while two extended free fruit provision for younger children through Healthy Schools for children across the school. School A also encouraged all students to drink a bottle of water a day, and provided regular exercise opportunities for anyone who wished to join in. School C ran a salsa dancing event where every student in every year could join in, promoted its healthy school menu, and carried out a keep fit exercise at weekly assemblies during the Health Challenge Programme period.

While focussing on individual challenges, School E ran some whole school events such as an 'indulgence evening' and rowing, dancing and aerobics activities for all. School F provided plain popcorn for sale as a healthy alternative to other snacks, and the existing breakfast club promoted healthier options.

In addition to the theme days described earlier, School D made healthy eating more visible around the school, with messages displayed on screens and signs identifying healthy options in the canteen. As mentioned, sixth formers in this school developed activities for younger students, making themselves available as mentors during lunch breaks via sports activities and a music room where they could talk through difficulties. The school also offered a skipping and boxercise event, a skipping club and a rowing competition to all students as part of their Health Challenge Programme approach.

Table 4.1. The range of challenges undertaken in the schools

	Individual	Class	Whole
School A	<p>Some students from Years 3 – 6. Various, including:</p> <ul style="list-style-type: none"> • Going to bed earlier at night • Drink a bottle of water a day • Eat fruit and vegetables • Skipping for 10 minutes a day 	<p>Reception – fruit; smoothie making, trying new fruits</p> <p>Year 1 - One afternoon a week – different challenge each week around trying new fruits, e.g. fruit kebabs, smoothies, fruit salad etc</p> <p>Year 2 – different exotic fruit each week e.g. pomegranates, dragon fruit, pineapple delivered through numeracy lessons</p> <p>Hop scotch every morning outside their classroom</p> <p>Year 3 – yoga – 10 minutes of yoga every afternoon with CD/children’s yoga pack.</p> <p>Years 3 – 6 classes – supplied with water bottles if didn’t have one and encouraged to drink a bottle of water a day. Filled up for children rather than up to them to do it. Marked on bottles how much drunk that day so could try to beat it next day.</p> <p>Year 4 – Healthy Mind challenge after lunch: listening to classical music while doodling in diaries, playground exercise</p> <p>Year 5 – variety, class challenges daily – 10 minutes exercise in playground and 10 minutes at home. Laps of playground. Dance. ‘Chain of thoughts’ - children wrote how feeling on an associated colour of paper, read out to class and talked to teacher afterwards if wanted to - created a chain of thoughts as a display.</p>	<p>All students were encouraged to eat a piece of fruit a day, though this was delivered through classes. Free fruit is already provided to Years 1 and 2, but this was extended to include Years 3 to 6 so available for all. To eat a piece at break-time</p> <p>Exercise in the Hall before school for those who wanted to join in</p>
School B	<p>KS2 students only, including</p> <ul style="list-style-type: none"> • Going to bed earlier • Talking about feelings with mum every day • Walk the dog • Walk around the playground • Dance every night • Drink 6 glasses of water 	<p>Reception – 6-8 laps of playground a day at whatever time suited teacher</p> <p>Year 1 – 2 and 3-4 - ten minutes relaxing after lunch, with music and cushions</p> <p>Year 1 – one class ate fruit during maths lesson instead of giving out at break time</p> <p>Year 5/6 – two laps of school a day, usually after lunch</p>	<p>Fruit available for all as an extension of existing provision for KS1, and children could take leftover fruit home at end of day</p>

School C	N/a	<p>Years 1 and 3 – dance</p> <p>Year 2 – exercise to music every morning before class</p> <p>Special class where children need extra curriculum help – daily relaxation exercises to music</p> <p>Classes from various years (particularly older students) walked a mile a day</p>	<p>Salsa dance: dance teacher with two live musicians taught students learnt some steps</p> <p>Weekly assemblies with lots of opportunity to reflect on the Health Challenge Programme – classes feeding back on activities, certificates for keeping up challenges etc and a school song with exercise</p> <p>Lunchbox ideas – opportunity to put forward ideas on what could be healthier in lunchboxes</p> <p>All encouraged to eat fruit daily</p> <p>Held a celebration event and gave out medals</p>
School D	<p>Various, for example:</p> <ul style="list-style-type: none"> • Eat more healthy food • Do more exercise etc • Gain more self-esteem • Eating with the family • Turning the television off during meals • Having a daily 10 minute conversation with mum 	<p>Healthy eating challenges</p> <p>Weekly dance and aerobic warm ups (Years 7-9)</p> <p>Some PE lessons - timing heartbeats, aerobics, other physical activity</p> <p>Walk or run for certain distance once a week as a class (Year 9 class)</p> <p>Walk for 20 minutes during tutor time once a week (several tutor groups)</p>	<p>Theme Days across school, including Monday Manners Day, Tuesday Self-esteem Day, Wednesday Water Day, Physical activity Thursday and Healthy eating Friday</p> <p>Catering – signposting the healthy option, signs encouraging students to eat healthily e.g. remember to 'eat your five a day', 'save your toastie money for something else'. Stopped selling junk, more fruit crisps etc, smoothie sales</p> <p>TV screens advertised where the quiet room is, theme day reminders on a continuous loop (existing strategy)</p> <p>Sixth formers as mentors using lunchtimes for various activities to support younger students e.g. sports workshops, aerobics, quiet/music room with sixth former for support and chat</p> <p>Rowing machine competition among year groups –w ho could row the furthest in a week</p> <p>Skip 2 be fit – one hour long event, every student did skipping and boxercise (Years 7 – 11)</p> <p>Skipping club started, Skipathons & Music at weekly assembly</p>
School E	<p>Various, for example:</p> <ul style="list-style-type: none"> • Going to the gym • Running around the block 	<p>Healthy breakfasts</p> <p>Home-made soup for lunch (made by tutors)</p> <p>Physical activity challenges took place in some classes with PE tutors</p> <p>Eating healthy pasta salad</p> <p>For staff and Year 11 - Indulgence evening- Reiki, reflexology, hot stone massage, Indian head massage, and jewellery sales.</p>	<p>Rowing</p> <p>Dancing</p> <p>Aerobics (all the things that they do normally anyway)</p> <p>Salsa dancing event</p> <p>Launch day – provided fruit for all students</p>
School F	<p>Various, for example:</p> <ul style="list-style-type: none"> • Walk to school every day • Eat more fruit 	<p>KS3 technology classes produced popcorn and packaging</p>	<p>Plain popcorn for sale at lunch and breaks</p> <p>Breakfast club promoted healthy options, less sugar, made more fruit available</p>

4.6 Materials

The Health Challenge materials included an activity booklet, lesson plans and a journal. The activity booklet and lesson plans were designed primarily to support staff to plan and deliver the programme, and how this ensued is discussed here. The journal was intended as a motivational tool for students, and as such will be discussed in Section 5.5.2 about students' experiences of the programme.

4.6.1 The activity booklet

The Health Challenge Programme activity booklet contained basic health information and ideas on challenges relating to the three Health Challenge Programme areas of healthy eating, physical activity and feeling good inside. Due to time constraints, it was developed by the NCB project team using images from the Leeds Be Healthy initiative²⁰ rather than involving young people in its production from the outset. However NCB plans to involve young people in the design of future Healthy Challenge Programme materials through a logo competition and work with a Young People's Advisory Group.

Staff interviewees reported that the booklets were very useful in the early stages of the Health Challenge Programme. Staff found the range of ideas useful to inform their thinking and planning, even where they decided the range was too broad to offer to students. In choosing what the challenges would be, teachers appear to have used the activity booklets for initial ideas, narrowing down choices before presenting any options to students. The activity booklets were mainly distributed to students only where they were offering students a choice of challenge.

This meant that the activity booklets tended not be used directly with primary school students, although one primary school did use them with parents in their attempts to engage a parent group in the Health Challenge Programme. While the NCB project team provided guidance on how materials should be distributed, there is little evidence from primary school pupils that they received or remembered the activity booklets.

Secondary school students, however reported having access to a copy of the activity booklet at the start of the Health Challenge Programme. Where they had their own copy, they took it home, kept it in their bags, or lost it. A respondent in each of two schools said that they had not got their own booklet but shared with others in the class.

Students interviewed expressed mixed views of the activity booklet's layout and content. Those who liked it admired the pictures and general layout, *'it looks good, draws your attention to it'*. One pupil said *'it's very attractive, it jumps out at you so you want to read more'*. Pupils liked that it had a mixture of pictures and writing and that it had *'fun'* activities to do. However, it was seen by others to have too much text in places and that there should be more pictures and different activities. Another criticism was that the green and purple colour scheme was *'boring'* and that it should be more colourful or *'bright'*. The colour scheme and quality of printing was also criticised for making it hard to read. It was suggested that those designing the Health Challenge Programme should have a competition among pupils to help with the booklet's design.

²⁰ Be Healthy (2007) Education Leeds

Literacy skills were raised as an issue. A Year 7 pupil saying he found it *'tricky to read'* as he did not understand some of the words. A teacher said that some pupils in his school would be *'immediately turned off'* as they would struggle with reading the booklet (and the journal).

While students said that they had seen the booklet it was often unclear to what extent they had made use of it. Comments of indifference such as it was *'alright'* were common with some saying that they had just read *'bits here and there'*. However, where it was perceived to be useful, this was in providing ideas for individual challenges- *'there were a lot of different ideas... and it encouraged you to come up with your own'*. Staff also valued the booklet as a source of ideas for challenges. A school Lead suggested that some of the key messages of the booklet may be better presented in poster format.

4.6.2 The Health Challenge Programme lesson plans

All the schools reported using the Health Challenge Programme lesson plans to some extent. According to staff interviewees, all teachers received the lesson plans. In School D these had first been substantially modified to suit delivery through citizenship lessons, as discussed below. In most cases, it was left to teachers or tutors (whoever was delivering the Health Challenge Programme directly to students) to decide whether and how they would use the Health Challenge Programme lesson plans. The Lead in School A reported that most teachers had already planned their Health Challenge Programme lessons at a whole school planning day (with the NCB project team) before they had examined the Health Challenge Programme lesson plans. While it was up to teachers how they used them, the Lead reported that most used their initial ideas since it was difficult to fit further planning in after Christmas in a new term.

School D adapted the lesson plans to fit within citizenship lessons, in terms of timetable and content. As citizenship lessons are usually 50 minutes, and later lessons in the Health Challenge Programme allow for 20 minutes, the Citizenship Head expanded the lesson plans to fill this time, by including further discussion topics, various activities and extra worksheets, such as resources on the smoking debate. He also made them as simple as possible because they would be used by a number of different teachers. An interviewee from School D claimed that the original lesson plans were much more suitable for primary schools, since a secondary school may not have a regular one hour lesson in which to deliver the Health Challenge Programme, and the lesson plans were too lengthy for shorter or less regular teaching sessions.

Staff delivering the Health Challenge Programme directly to students were asked to complete a monitoring questionnaire after each lesson. While a very small proportion did so (thirty one teachers across five schools), the information they provide gives an indication of how the lesson plans were used and received.

4.6.3 Time spent preparing and delivering

Respondents reported spending between 10 minutes and a day on each lesson. On the whole preparation time for each lesson related to the amount of time staff spent delivering the lessons, although this varied between schools, reflecting the different modes of delivery, for example in tutor time or as a whole class session. This may not necessarily have been additional time however. As noted by two staff interviewees time would have been spent preparing lessons anyway.

For those who filled in the monitoring questionnaires after each lesson, it does not appear that preparation time decreased as Health Challenge Programme continued. It seems to have varied between lessons, although in most schools the average time for preparation was greatest for the first lesson. In some cases, preparation time increased for the final lesson, particularly in schools which organised celebration activities for students.

4.6.4 Use of the Health Challenge Programme lesson plans

The majority of respondents reported using the lesson plans to some degree throughout the four week delivery period. Most (between half and 70%) partly used the lesson plans, while an additional 10 to 22% reported following them fully.

The responses also support interviewees' assertions that lesson plans were used more rigorously for the first lesson than subsequent ones. Nearly 90% of respondents used the lesson plans fully or partly for the first two lessons, falling to 72% by the final lesson. Staff interviewees in two schools reported that once teachers were familiar with the Health Challenge Programme some did not refer to the lesson plans as much or at all. This ability to adapt the lesson plans was important, especially for older students, and something School B said it is used to doing.

4.6.5 Additions made to the lesson plans

The monitoring questionnaires asked staff to describe anything extra they had introduced in each of the lessons. Their responses indicate a small range of additional topics and approaches, which were:

- discussion on fast food
- discussion on fast food and its advertising
- life long health benefits
- ranking benefits of health care
- diabetics' diet
- smoking ban and responsibility for health
- quizzes in classroom, individually and as group
- idea of bringing CDs in for dancing
- use of music to relax class
- drawing a picture of what would like for our reward
- get groups to talk about what they felt about challenge
- warm up game
- planned a celebration assembly

Several staff interviewees also described additions they had made to the lessons, including several who taught the Health Challenge Programme through citizenship lessons where there was a lot of flexibility to discuss related topics.

4.7 Resources

The six pilot schools each received £200 for taking part in the pilot, which most schools planned to spend on rewards or celebration events for children at the end of the Health Challenge Programme period. However, planning and delivering the

Health Challenge Programme created some additional costs for the six schools taking part in the pilot. These fell into three broad categories: planning time; time spent preparing lessons; and extra materials or activities.

4.7.1 Planning time

Leads were asked to keep estimates of how much time they had spent on the Health Challenge Programme before during and after the four week period. However, no Leads recorded or returned this data. In interviews, most reported that planning and maintaining the Health Challenge Programme in their schools had been time-consuming, although some saw this as an acceptable part of their staff role, and mentioned that they might have done work around a similar scheme if Health Challenge Programme had not existed, for example the Going for Goals unit.

As discussed earlier, the NCB project team provided initial and ongoing support to schools, most of which was to help them to develop a programme which met their students' needs. While this support varied according to schools' needs, it averaged between two and four days support. This may have implications for cost and sustainability in any future roll-out of the Health Challenge Programme.

4.7.2 Time preparing lessons

As discussed earlier, the small number (31) of staff who returned monitoring forms about lesson planning reported varying amounts of time planning these lessons from 10 minutes to a day per lesson. While this varied according to how staff delivered the lessons, two interviewees pointed out that lessons would have had to be planned with or without the Health Challenge Programme. Even the staff member who spent a considerable amount of time adapting lesson plans to suit citizenship lessons claimed that without the Health Challenge Programme he would have had to plan another scheme 'from scratch'. However a few other staff reported difficulties finding time to plan the lessons when delivering them within limited tutor time.

4.7.3 Additional costs – materials and activities

Four schools reported additional costs relating to materials or external activities.

Two primary schools extended the free fruit across the schools, beyond existing provision to Years 1 and 2. One of these schools found the funds to extend it for the rest of the year, beyond the Health Challenge Programme period at a cost of approximately £1,000. The Lead suggested that would not have been possible if they were a bigger school. The other school funding free fruit also provided extra fruit for tasting sessions for Key Stage One students, but interviewees were not able to estimate how much this had cost.

School D spent £600 on an outside agency to deliver one hour of skipping and boxercise for every student apart from the sixth form. The school managed to fund this from the PE Department's budget. Apart from that no additional money was spent:

'We had to make sure we didn't spend any money because there just wasn't any money to spend' (Secondary school staff)

School E spent approximately £100 buying 1,000 pieces of fruit to distribute during the launch of the Health Challenge Programme within their PSHE Day. They also spent £40 on ingredients for a demonstration of smoothie making for the DVD made

by the NCB project team towards the end of the Health Challenge Programme period. The Lead was unable to say how much the school had paid to hire a rowing machine for the duration of the Health Challenge Programme.

Interviewees stressed that the additional costs for the Health Challenge Programme were usually minimal or able to be covered from existing budgets. As one interviewee stated:

'I just think you've got to be a bit clever on what you choose. It depends if you've got extra budget then you can be a bit more, you can open your options, can't you? But if you know you've only got, that you don't have any money to spend on it then you can. Our Year Sixes were doing running and things like that' (Primary school staff)

4.8 Barriers and difficulties

The planning process threw up a number of difficulties for staff in schools, some of which related to the context of each school rather than to the Health Challenge Programme itself.

4.8.1 Socio-economic factors

The schools selected to take part in the pilot were some of the most vulnerable and deprived in the county. Staff at all the schools described an area of high socio-economic deprivation.

Three schools described parents resistant to becoming involved in daily school life, which extended to the Health Challenge Programme. Staff indicated that many parents don't know how to cook at all, nor how to cook healthily on a budget, that many students do not eat well at home, and may not spend much time with or receive much support from their families. One secondary school said its approach to the Health Challenge Programme was dictated by the need to provide something for students to do at school, rather than expecting them to do something in their own time, because of lack of family support and the difficult home circumstances of many students.

4.8.2 Significant changes in staff roles and school circumstances

Three schools in the pilot group were going through or had recently been through significant changes and upheaval.

School E had recently undergone a massive staff turnover, with approximately 35 staff leaving.

School A had recently formed through the merging of two schools, which at the time of the Health Challenge Programme were still located in two separate sites. Initial ideas to bring classes from the two sites together to undertake challenges were subsequently deemed impractical given the time it would take to walk between sites. A new Head also started in December, towards the end of the allocated planning period for the Health Challenge Programme. He was enthusiastic about the Health Challenge Programme but concerned about staff capacity, changing roles and morale in light of merger and change of Head and requested that they start the Health Challenge later to give them some planning time after Christmas, hence the INSET day in January.

*'Wouldn't pick a school that was going through the process that we were at the time ... I think that played quite a big part in what was happening'
(Primary school staff)*

School F at the time of the Health Challenge Programme pilot had recently formed from the merger of two schools still located in three sites. Such a time of upheaval meant there were additional calls on staff time *'so they couldn't keep flagging it up as a priority'* and staff enthusiasm for the Health Challenge Programme initiative was low despite initial interest.

'The circumstances were far bigger than, were a far bigger issue than the health challenge to compete with, because obviously as I said earlier there was quite a bit of unrest, what with redundancies and the interview process was taking place later on in January also it was a heightened stress level at that time.' (Secondary school staff)

It may be that schools in this position should not have taken on the extra workload of the Health Challenge Programme pilot. However, in all three cases their determination to do so led to the programme being delivered, albeit to varying extents.

4.8.3 Lack of planning time

All but one school indicated that the time to plan the Health Challenge Programme within their school was limited, given the requirement to begin in the new term immediately after Christmas. Schools had been approached in September, and meetings in all but two schools had taken place in October. The two schools in difficult circumstances at the time, Schools A and F, did not have full discussions with the NCB team until November. Although schools had been approached earlier many began the planning process just before the Christmas break. Staff illness exacerbated pressures to prepare for the programme in two cases where Leads were absent at key times for planning. However, there was some flexibility in the timescale when required. For instance School A was able to begin the Health Challenge Programme period a week later than others because of difficulties around planning and staffing. Furthermore, what schools managed to achieve in this time showed that activities could be planned effectively, even where schools felt the time was limited.

While schools were given support from the NCB project team to plan within the existing timeframe, the Leads reported that if they had received more planning time they would have been able to undertake more activity around the Health Challenge Programme. This included engaging students more in planning, taking students' ideas more fully into account, involving certain staff who otherwise did not offer activities, and liaison with parent groups to engage parents in the Health Challenge Programme

4.9 Enablers and supports

Schools were allowed flexibility and discretion in how they planned to deliver the model. One of the strengths of the Health Challenge Programme for staff was that it was not too prescriptive, and allowed schools the opportunity to adapt the programme and materials to fit their needs.

'Because it is good fun, there is ways around it, it can be very simple, it can be as awkward as you want to make it really. It's been the most simplest of things to do something like this and we've found that out, and we've actually proved that in the things that have gone on' (Primary school staff)

Planning and implementing the Health Challenge Programme in schools was made possible by a combination of Lead and staff effort. Several things assisted this: having a small staff team used to working together, an enthusiastic Head of School, being able to plan together at the INSET day with all staff, and senior staff organising whole school events to support what staff were doing at the classroom level.

Existing activities or approaches towards health in the schools also helped. For instance, as already mentioned one school carried out the Health Challenge Programme instead of the Going for Goals unit within SEAL and others used existing or previously planned activities with the Health Challenge Programme delivery. Even the ethos of continual improvement in the canteen meant staff were happy to look again at what they could improve during the Health Challenge Programme. The fact that the Health Challenge Programme fitted well and complemented these other activities made it easier for the schools to plan activities to deliver.

They also found the Health Challenge Programme materials useful. Overall schools reported that the materials were clear and useful, albeit with some suggestions about accessibility and interest for children as will be discussed in Chapter 5. One secondary school Lead said it was *'a good pack'*, *'not sparse'* and compared favourably with other resources

4.10 Summary

The NCB project team's support to schools varied according to schools' needs and was highly valued by staff. The Health Challenge Programme Leads were crucial in generating and maintaining staff motivation and activities around the programme. Staff enthusiasm was critical and many of the staff interviewed undertook their own challenges to motivate students. All the schools involved students in planning the programme to some extent. This usually focused on existing structure for engagement such as student councils, but also included engaging older students to develop activities for younger pupils. Schools' attempts to engage parents met with less success. However, qualitative interviews reflected that some parents had taken on challenges and others had played an important role in supporting their children.

It appeared simpler to deliver the programme in primary schools than in secondary schools. Primary schools delivered the programme through regular class time, whereas secondary schools struggled to find a regular slot in a busy curriculum. All secondary schools ran at least part of the programme through tutor time, with citizenship lessons and a PSHE day as additional methods in two of the schools. A vast range of challenges was undertaken across the six schools. Secondary school students were offered choice in individual challenges, while class and whole school challenges in all schools tended to be decided by staff.

Responses to the Health Challenge Programme materials used within classes varied, but overall they were seen to be useful and were utilized to varying extents by staff and students. Suggestions for improvement focused on literacy issues for students, and the need to adapt lesson plans to fit certain classes or times available for teaching.

Planning and delivering the programme obviously required time from Leads and delivery staff, with additional support from the NCB project team. Additional costs were minimal and schools made their own decisions about whether to offer activities that required additional resources. Difficult socio-economic and structural circumstances created some problems for schools. While schools did not necessarily use all the available lead-in time to plan the programme's implementation, most indicated that with more time in future they would offer more activities around the programme, particularly in pupil and parent engagement. The flexibility of the model was identified by staff as a key strength. It also linked well and supported existing activities around Healthy Schools and other initiatives such as SEAL.

5.0 Experiences of the Health Challenge Programme

5.1 Introduction

This chapter describes students' and staff experiences of the Health Challenge Programme, drawing on the pre- and post-challenge questionnaires and on the qualitative research with students and staff. This involved three focus groups encompassing 17 primary school students, 25 interviews with secondary school students, and interviews with all six school Leads and with nine other staff.

In this chapter we begin by describing the nature of the challenges described by students and, where they had a choice (in individual challenges), why they chose those challenges. We also look at how students initially felt about the Health Challenge Programme. We then look at how it was actually delivered in school settings, and students' enjoyment of it. In the final section we turn to how well students did – whether or not they kept going during the four week period, who and what helped, and what was difficult.

5.2 The challenges described by students

5.2.1 The three challenge categories

To limit the complexity of the questionnaires, and in line with the programme priority that participants 'change one thing', we asked students to report consistently on one challenge, picking their class one if they did not do an individual challenge, but their individual challenge if they did.

We asked what challenge category they had chosen in both pre- and post-challenge questionnaires. We use the post-challenge data here because it allows us to include the primary school (School A) which completed only this stage of questionnaire, and since it is more likely to represent what students actually did²¹.

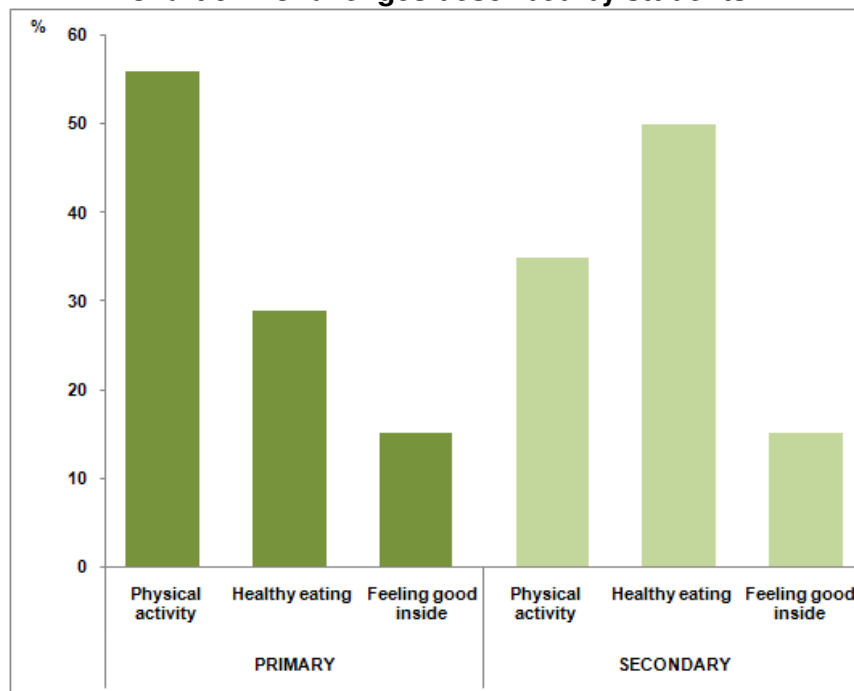
In primary schools, 56% of students said they did a physical activity challenge, 29% a healthy eating challenge and 15% a feeling good inside challenge. All students at School C described a physical activity challenge²²; 28% at School B described a feeling good inside challenge compared to 15% at School A, and 44% at School A described a healthy eating challenge compared to 15% at School B.

The balance was different in secondary schools. Here, again at the post-challenge stage, feeling good inside challenges were again less common. However more students described healthy eating challenges (50%) than physical activity challenges (35%).

²¹ It should be remembered, however, that not all students were given a choice of challenge, or challenge type. School D for instance, presented mainly healthy eating and feeling good inside choices since the school felt students already did sufficient physical activity within the curriculum. Most primary school challenges were chosen by teachers, so many students carried out the same challenge, for instance, walking a mile a day.

²² Including all in Years 1 and 2 in the composite forms completed by School C

Chart 5.1: Challenges described by students



Source: Post-challenge survey
Primary (n=2934)
Secondary (n=706)

There was very little change in which of the three challenge categories students selected between the pre- and post-challenge stages. Under 4% of primary school students and around 8% of secondary school students said they had changed their challenge (and we noted a change in what they actually described in a few more cases), but these were largely ‘tweaks’ rather than substantial changes. For example people described their challenge more or less specifically, or had added another challenge, or had made their challenge more strenuous. Some students had taken on several challenges and the change between questionnaires may reflect them choosing a different one as their main challenge. Staff also said that some students changed their challenges when they proved unrealistic.

5.2.2 More detailed descriptions of challenges

As noted, we asked students to describe their challenge in their own words. The most common healthy eating challenges described, by primary and secondary students, were:

- eating (more) healthy or healthier food, or less unhealthy food
- eating more fruit and/or vegetables
- drinking more healthy drinks or more water

Students in the qualitative research described trying new fruit and vegetables, cutting down on chocolate and fast food, bringing fruit into school instead of chocolate and crisps, and eating ‘*salad and stuff*’. Some specifically mentioned trying to eat their ‘five a day’. As we reported in Chapter 4, we know that class challenges in primary schools also involved trying new and exotic fruit and supplying bottles of water and that whole school activity included providing more fruit. In secondary schools, whole

school activity included healthier options being provided in the canteen, ideas for healthier lunchboxes and making and selling plain popcorn as an alternative to other snacks.

In terms of feeling good inside, primary school students' questionnaires described:

- listening to music
- helping others
- smiling, sleeping more and doing a 'chain of thoughts' – a class activity in which children wrote how they felt on an associated colour of paper, read it out to the class, and created a colourful chain of thoughts as a display
- and in the qualitative interviews primary students also talked about doing yoga, relaxing and doing doodle diaries.

In secondary schools the range of feeling good inside activities described was broader and included:

- being happier, less stressed, more confident and trying to have better mental health
- meditating, doing doodle diaries, listening to music, giving yourself treats, smiling, and sleeping more
- earning or giving compliments, spending time with friends and talking to people, helping others out or to feel good
- and in the qualitative interviews they also talked about things like trying to boost their self esteem and *'just stopped worrying about pathetic little things'*.

The physical activity challenges described by students in primary and secondary schools in the surveys were:

- doing physical activity, sport, exercise or keep fit
- getting fitter or healthier
- doing specific activities (especially running, walking, dance, yoga and star jumps in primary schools; strengthening and toning exercise, gym work, cycling, football and other specific sports in secondary schools)
- and, in secondary schools only, losing weight.

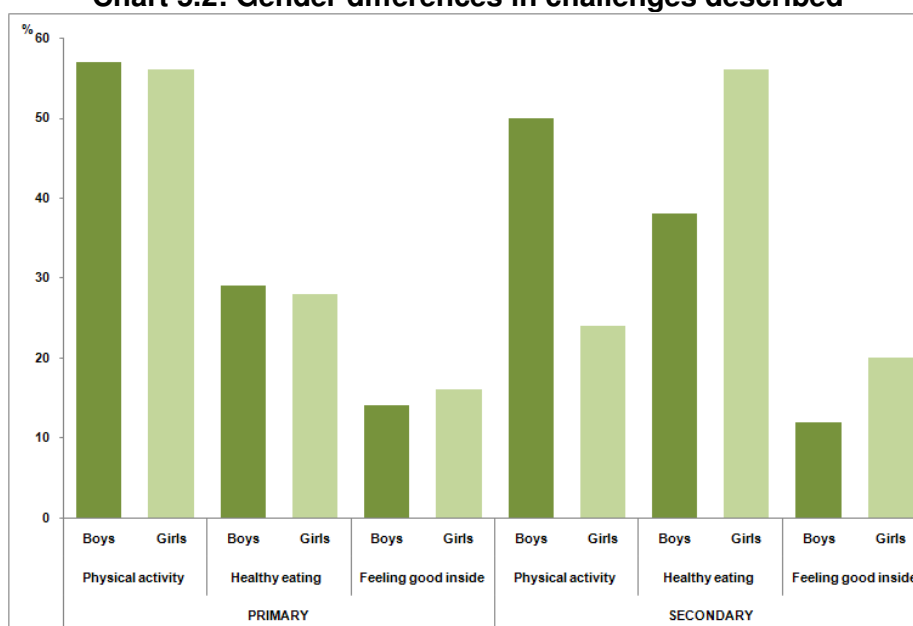
Class and whole school activities included having a regular exercise class in the hall before school, playing hopscotch, doing laps of the playground, dance sessions and, in secondary schools, hiring a rowing machine, organising skipping, boxercise and salsa classes, doing aerobics sessions and starting a skipping club. In the qualitative interviews physically active challenges had a sociable dimension for secondary school students that the other challenges did not have, for example going to the park with friends to skate or play football, which added a 'fun' element to the challenge.

There was clearly some cross-over between the three challenge categories suggesting that children saw the three challenges as to some degree linked even at this early stage. For example, describing their feeling good inside challenges students mentioned running or eating healthier food, and getting fit was described as a healthy eating challenge.

5.2.3 Demographic differences in challenges described

Looking at differences between demographic groups, we see that in primary schools there was no difference by gender but there was between year groups, whereas in secondary schools there was no difference between year groups but there was by gender²³. In primary schools, older children were more likely to do a physical activity challenge (67% of those in Year 4 to 6 compared to 36% of those in Years 1 to 3), and younger children more likely to do a healthy eating challenge (46% compared with 20% of older children²⁴). In secondary schools²⁵, girls were more likely to say they did a healthy eating challenge (56% of girls compared with 38% of boys) and boys more likely to say they did a physical activity challenge (50% of boys compared with 24% of girls).

Chart 5.2: Gender differences in challenges described



Source: Post-challenge survey for primary schools and pre-challenge survey for secondary schools
 Primary (n=258)
 Secondary (n=745)

We see further differences between boys and girls at secondary school in the more detailed descriptions of physical activity and feeling good inside challenges (but not in healthy eating challenges). Although the numbers are very small, all those describing their physical activity challenge in terms of weight loss were girls, and almost all those describing their challenge in terms of doing weights, muscle-toning or gym work were boys. Boys were also more likely to say they planned to go running and to do some sports particularly football. In feeling good inside challenges, girls were more likely to describe their challenge in terms of their mindset (e.g. feeling good about yourself, worrying less, higher self-esteem) and boys more likely to describe it in terms of a behaviour or activity (e.g. sleeping more, helping others, keeping busy and socialising).

²³ This will reflect the fact that in primary schools challenges were largely class activities whereas in secondary schools there were more individual challenges

²⁴ This is based on the post-challenge data set to include School A although there is more missing data on sex and year group. The same pattern, although more muted, is found in the pre-challenge data set.

²⁵ We use the pre-challenge data set here as it is more complete and records gender and year group more accurately.

5.2.4 Factors influencing choice of challenge

Not everyone had chosen their challenge, as we described in chapter 4. Where they had, young people involved in the qualitative interviews identified different motivations for choosing their particular challenge:

- *To get healthy*: choosing their challenge to get 'healthy', 'get fit' or 'feel better'
'I thought it would be good [to do running] because the fitter you get you just feel better inside.' (Secondary school student)
- *To do more of an existing activity*: using the challenge as 'another incentive'. For example a Year 10 student who had been on the athletics team in his previous school said 'I've always been doing physical activity, I thought well, why not try and improve on it'; another extend his hobby of cycling by cycling to school.
- *Complementing other activities*: to improve their performance in activities in which they were involved, for example, taking up running to help get fitter for football.
- *Doing something different*: for others their challenge was chose as an opportunity to do something new. For example one girl thought about doing the physical activity challenge but already did a lot of exercise so decided to eat more fruit and drink more water instead. Another said she and her friends chose to eat less chocolate as no one else in the class had chosen that as a challenge.
- *To do the challenge with someone else*: for example opting for a challenge chosen by friends to make it more fun, or doing healthy eating or a type of physical activity because a parent or sibling was.
- *'An independent thing'*: choosing a challenge they could do in their own time and on their own.

Some students cited several motivations:

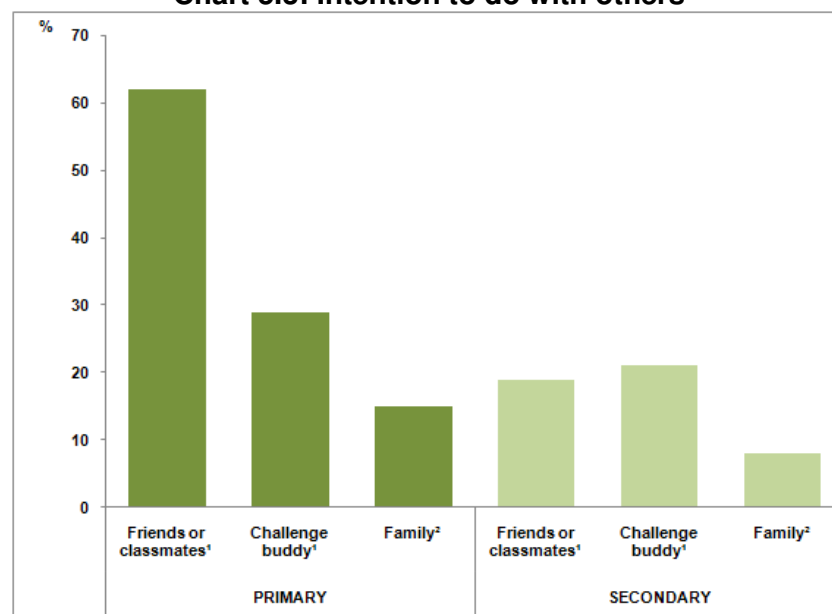
'I was going to start bike riding anyway because I do sports outside school and I thought [running] plus the biking would help my, like, stamina and all that stuff. Because I was thinking of [cycling] before [Health Challenge] came along and this was another incentive to do it. My mate was up for it as well.' (Secondary school student)

5.2.5 Doing challenges with other people

We also asked students whether they were planning to do their challenge with anyone else: a challenge buddy, friends or classmates, or family. Primary school students were more likely than secondary school students to be doing it with someone else: 62% said they would be doing it with friends or classmates, 29% with a challenge buddy, and 15% with family²⁶. In secondary schools, 19% were planning to do it with friends or classmates, 21% with a buddy, and just 8% with family. One primary school teacher opted for setting up small groups of three or four rather than a challenge buddy to avoid problems if children fell out with each other.

²⁶ In the composite forms, all in Years 1 and 2 in School C reported that they would be working as a class.

Chart 5.3: Intention to do with others



¹ Are you going to work on this challenge with anyone else?

² Is anyone in your family going to work on a challenge?

Source: Pre-challenge survey *Primary figures include composite forms

There were no obvious demographic differences among primary school students in whether or not they worked with someone else. In secondary schools, students doing feeling good inside challenges were more likely to be doing them with a buddy compared with other challenges, as were girls and people in younger years. Girls were also more likely than boys to be doing their challenge with friends or class mates.

5.3 Staff challenges

As we described in Chapter 4, staff in both primary and secondary schools were invited to take on a challenge. Primary school teachers were more likely to take on a challenge as they needed to accompany classes doing group challenges such as walking or running. Staff also described other challenges: doing more physical activity, walking or cycling; eating healthily, mainly with the aim of losing weight; drinking more water; and stopping drinking alcohol or caffeine. They felt that doing a challenge alongside students helped to engage students too.

5.4 How students initially felt about embarking on their challenges

In primary schools, students and staff reported described lots of enthusiasm when the challenges began. In secondary schools reactions were more mixed. Some students were clearly excited, others more sceptical, although some of these became more engaged over time. And there was a group who made it clear they had no interest from the start.

'I thought it would be quite good, because you get more healthy and you get to do more things.' (Secondary school student)

'[At the start] I was, like, oh no, I don't really want to do it. But then after a while it was really uplifting.' (Secondary school student)

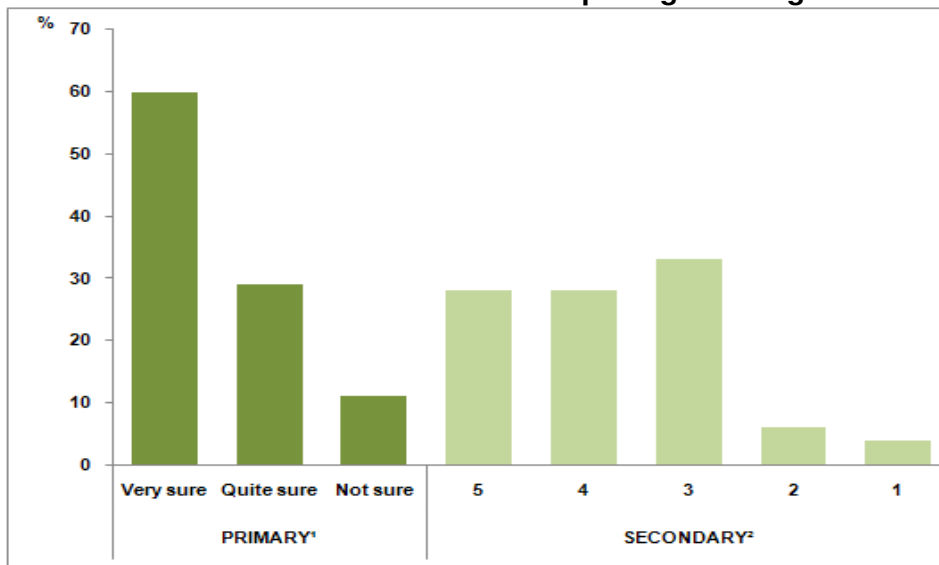
'In any situation we have a group of students who will always get involved in everything and those who don't want to get involved in anything. But I was surprised at how seriously some of them took it.' (Secondary school staff)

Even where teachers felt it had been difficult to sustain interest, the fact that students had been interested at the start made them confident that the programme could be made to work more successfully – see further Chapter 6.

We explored initial feelings about the Health Challenge in the pre-challenge questionnaire too, asking student how confident they felt that they would be able to do their challenge, how motivated they felt, what they were looking forward to and what difficulties they anticipated. The questions were asked differently in the primary and secondary questionnaires to reflect what we felt was age-appropriate.

Looking first at confidence, there were high levels of confidence especially in primary schools. There, 60% of students said they felt very sure they would be able to do their challenge, and 29% quite sure²⁷. Girls were slightly more confident than boys. In secondary schools we asked students to say how confident they felt on a scale of 1 to 5, where 1 meant not at all confident and 5 very confident. Fifty-six per cent of students opted for 4 or 5 – particularly those doing physical activity challenges (71% opted for 4 or 5) and boys (61% of boys across all challenge types), an interesting reversal of the gender split on confidence at primary schools, where girls were more likely to say they felt confident. People doing their challenge with a friend or buddy in secondary schools were slightly more likely to feel confident, as were those in older years (9 to 11) – there were no differences in primary schools.

Chart 5.4: Confidence about completing challenges



¹ How sure are you that you'll be able to do your challenge?

² How confident are you that you'll be able to do your challenge on a scale of 1-5 ('not at all' to 'very')

Source: Pre-challenge survey

Primary (n=140) Secondary (n=746)

²⁷ In the School C composite forms, 18 out of 20 in Year 1 and 16 out of 17 in Year 2 reported they felt very sure

Motivation was similarly high among secondary school students. Fifty-two per cent rated their motivation 4 or 5, with those doing physical activity challenges again slightly more likely to rate their motivation thus. Interestingly, in contrast to the confidence measure where older students were more confident than younger, younger students were more motivated than older ones. Sixty-eight per cent of those in Years 7 and 8 rated their motivation 4 or 5 compared with only 48% of those in Years 9 to 11. Students at School A were more confident and motivated than those at School B.

It was clear that primary school students were looking forward to the challenge: 61% said they were looking forward to it 'very much' and 30% 'quite a bit'²⁸. We did not ask a parallel question of secondary school students but in both types of school we asked an open question about what they were most looking forward to. Most students referred here to doing the challenge or activity itself. In primary schools they also talked about:

- getting fresh air or being outside
- the impact of the activity in terms of becoming more healthy, fit or strong, less tired or feeling relaxed
- doing particular kinds of activities, with friends, or doing new things.

Secondary school students talked particularly about:

- the expected impact (again, being healthier, fitter or stronger, losing weight, feeling good or better including about yourself)
- the satisfaction of achieving their challenge
- about trying new foods and activities and having fun.

We also asked an open-ended question about what they thought will be difficult about their challenge. Again, most referred to the challenge itself. Primary school children also particularly mentioned:

- bad weather
- having to stay still or keep quiet (referring to planned relaxation sessions)
- worries about fitness or stamina.

Secondary school students also talked about:

- sticking to the task, resisting temptation, motivation levels and remembering to do it
- not enjoying the activity
- not having enough time
- bad weather
- not doing enough to meet the challenge or the amount involved
- having access to healthy food.

²⁸ In the composite forms in School C, 18 out of 20 in Year 1 were looking forward to it very much, and 16 out of 17 in Year 2.

5.5 Experiences of doing challenges

We now turn to looking at the actual experience of doing health challenges, looking at classroom activity, use of the journals, and what young people enjoyed about doing their challenge.

5.5.1 Classroom activity

Staff felt it was important that the Health Challenge Programme was integrated into the curriculum – to ensure delivery, avoid over-burdening the school day, promote learning, build up momentum and encourage ownership from staff. For example, Year two teachers used tasting sessions of new fruit as an opportunity to teach fractions; others used science lessons to discuss nutrition and eating habits. Delivering the Health Challenge programme through citizenship classes worked well for one secondary school, and it was also seen to link well with existing PSHE work. The main difficulties staff reported in interviews and monitoring questionnaires were gaining and maintaining students' interest, and shortage of time to delivery lessons and, occasionally, to prepare them.

In primary schools, students largely described healthy challenge activity as being classroom-based, although there were differences in the amount of time individual teachers devoted to the programme. All three secondary schools delivered at least part of the programme through tutor time, but there were differences in how much time was spent on it in classrooms and tutor groups. Thus descriptions ranged from spending two hours a week in classroom activity, to having it dealt with very briefly as one of a number of topics in a short tutor group session. Staff and students felt that delivering through tutor groups was not always successful. Teaching the concepts of the Health Challenge Programme in such short sessions meant staff were not able to spend time on activities to motivate students or extend learning.

'It's always going to be one of many competing priorities. So you might have something planned, and then all of a sudden ... they're kept in ten minutes late for an exam so you see them for five minutes that day. Or you've got an issue that you have to deal with, with a child, so you can't actually talk to your group at all.' (Secondary school staff)

Short sessions described by staff and students focused on filling in journals, with some light touch 'chat' with classmates and teachers about how the week had gone, or were a chance to discuss challenges in more depth if the journal was filled in outside classes. Where the Health Challenge Programme was only one of a number of topics discussed students said that it was not covered in any depth. One student described how it would be the last thing his teacher would do in the form group and *'we hadn't enough time and the bell just went and everyone run off'*. The emphasis in these short sessions was on monitoring and checking whether students had done their challenge rather than more in-depth support.

Discussions about progress were more thorough in the longer classes. Young people spoke about how they were getting on as a whole class, small group or with buddies in what tended to be an informal format. Staff and students perceived this to be useful as it provided them with an opportunity for sharing ideas and to talk about problems they had encountered. Students said they also found it encouraging to hear from teachers about how they were getting on with their own challenge. Where there were longer classes the school Lead described having a class structure that allowed for discussion on related topics such as the smoking ban.

'They shared ideas with each other ... [Boy's name] for example wrote his food diary and so did [girl's name] and they had to give each other ideas of how they could increase their five a day. So they came up with 'if you're having Weetabix could you chop up a banana on it?', that sort of thing. So that was useful, really good.' (Secondary school staff)

'They did [the journals] every Thursday or Friday, spent a few minutes reflecting, then a couple of minutes ... reflecting in pairs as to how it went, with their buddies or in their groups depending on how they did that. And then we'd go round the class and discuss who did well, who did not so well, why, what could we do to support each other. And generally after that I'd have a half an hour activity on topics.' (Secondary school staff)

5.5.2 Using the Health Challenge journals

The NCB project team provided primary and school classes with a Health Challenge journal, intended as an aid to students' motivation, to allow them to reflect on how things were going, to think about the week ahead, and to see their progress. The journal had a section for every day and used questions (sometimes with smiley picture responses) and space for students to add pictures or write down their thoughts.

In primary schools

Primary school students varied in the extent to which they filled in their journal, doing it daily, sporadically, sometimes at the beginning of the programme but not as it progressed, or simply not at all. If the arrangement was for them to be completed in class time students had little choice in the matter. Those who were left to fill it in their own time were free to choose, and some chose not to. They liked having the option of writing or drawing. Staff agreed that it was a good idea to have a combination of activities, often commenting positively about the use of 'smiley faces'. The colour scheme was seen as *'bright'* and the format *'child friendly'*.

Literacy levels, particularly at Key Stage 1, were an obvious barrier to young people engaging with the journal. For example, one class was supposed to fill in the journal straight after a relaxation session. The teacher felt that they would struggle with the journal and that this would make them *'frustrated'*, undermining the benefits of the relaxation activity. Another Key Stage 1 teacher had the class fill in a single journal together, producing a book about their challenge which they showed to other students and parents. She considered it to have been a great success and to have engaged students irrespective of reading and writing ability. Having students who had English as an additional language also raised problems, and a teacher said keeping things *'visual'* helped them to engage.

In secondary schools

There were also differences in how secondary schools used the journal. In two schools it was seen as a key part of the Health Challenge activity by staff and students, but in the other it had not been used because it was felt that students would not engage with it. Where full class sessions were allocated to Health Challenge the journal was used extensively, but in shorter sessions the process was more mixed – some filled it in, others were left to do it in their own time. They also described other students who *'threw it in the bin'* or had not been *'bothered'*. There were felt to be advantages to doing it in the class because if others are *'it makes you*

want to do it as well'. Some staff retained the journals themselves so that they would not be lost or forgotten by students, but in one class students said the teacher often forgot to give them out and in another, when the teacher changed, students were no longer given their journals. Students thought that incentives or rewards might have encouraged them to use the journals more. Some staff said it was harder to engage older students in the journal, although they were interested in the program itself.

Views of the journal's layout and content were mixed but overall students who had engaged with the journal liked it. There appeared to be as much variation within age groups as across them. They thought the design was *'quite cool'*, *'interesting'* and *'colourful'*. They liked the combination of activities, either for variety or as an aid to expressing difficult feelings. As with the booklet it was suggested that the colour scheme should be changed. It needed to be *'more bright'*, and one suggestion was that young people should colour them in themselves.

'The way they set them out was really interesting because normally you get paragraphs then you have to keep writing loads and loads and loads, but it was mainly ticking and drawing, which was like, really got the kids into it because it wasn't what they normally do'. (Primary school student)

Students who had used the journal saw it as a tool through which they could see their progress over the course of the programme, *'recap on what we done and talk to our friends'* and something that motivated them to continue. It reminded them of their challenge or made them realise what good progress they were making, and encouraged them to keep up momentum.

Staff said that they were concerned that the journal was not age appropriate but this was not the view of any of the students interviewed. A teacher considered the *'smiley faces'* to be *'patronising'* to older students. She suggested merging the booklet and journal together and developing it into a magazine-like format more suitable to the older students. On the other hand other staff said the journal had to be kept simple for all ages as some older students had reading ages well below their age. Some staff felt the journal was too repetitive and needed more variation. Others felt it usefully stimulated conversation but should have been more challenging to get students thinking about the issues involved.

'It wasn't as structured in Key Stage 4, that's why not all the journals were filled in. It was left more up to the individual pupils and there were some that completed it ... There was an awful lot that didn't bother to do the journals because they weren't being pushed to do it ... because ... [the journal] didn't motivate Key Stage 4 at all, because it was exactly the same questions every day' (Secondary school staff)

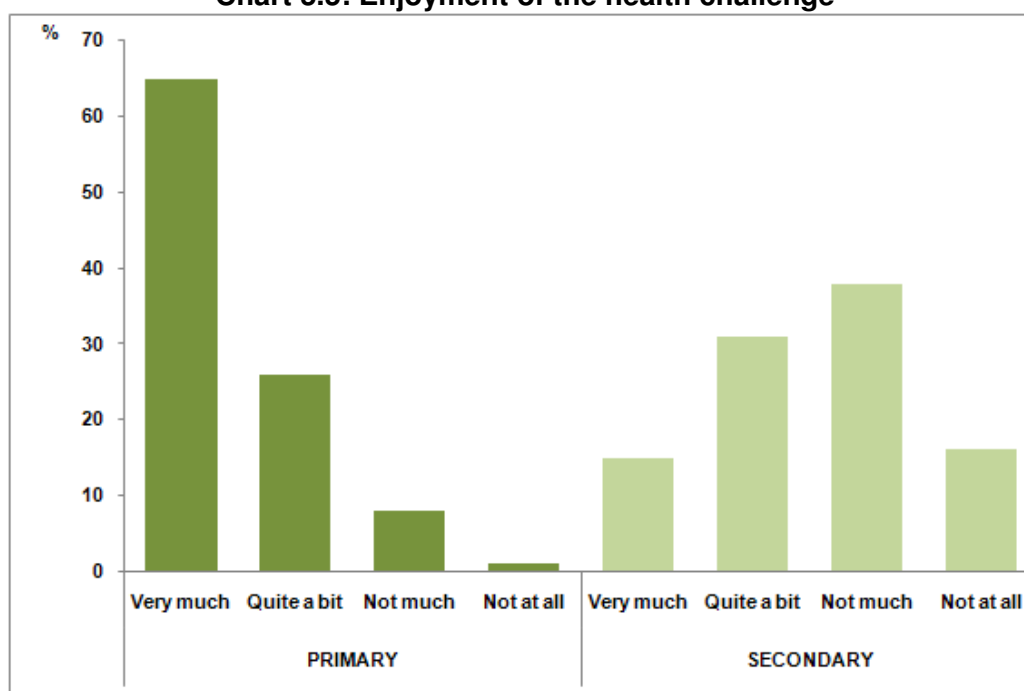
Overall, in both primary and secondary schools, there were differences between teachers in whether they used the journal primarily as a motivational tool (as intended by the NCB project team) or a monitoring tool to check whether students had been doing their challenge.

5.6 Enjoyment of the Health Challenge

Students had clearly enjoyed taking part in their health challenges, particularly in primary schools. In the post-challenge questionnaires, two-thirds of primary school students said they enjoyed their challenge 'very much', and a further quarter enjoyed it 'quite a bit'. This did not vary between challenges or by gender²⁹. Students' responses were cooler in secondary schools: 15% said they enjoyed their challenge 'very much' and 31% 'quite a lot'. In secondary schools, students describing the physical activity challenge were particularly like to say they enjoyed it, as were boys and those in younger year groups.

Chapter 6 looks further at what students (and schools) got out of doing the Health Challenge.

Chart 5.5: Enjoyment of the health challenge



Source: Post-challenge survey
Primary (n=291)
Secondary (n=691)

We also asked students what was the best thing about taking part. Here, the enthusiasm of primary school students in particular was clear. They talked about enjoying

- doing the challenge or a particular activity
- the impact (feeling healthier, fitter or stronger; feeling good or better; being less thirsty, having more energy or feeling less tired, and being relaxed)
- doing activities with friends
- eating new or particular types of food
- mud! And fresh air
- having fun
- incentives, rewards and satisfaction

²⁹ In School A the composite forms shows that 14 out of 20 in Year 1 had enjoyed it very much and all 18 in Year 2.

Some (unedited) examples of what they wrote in questionnaires are:

'Eating a pomegranate'
'Seeing Mrs Waters surf in the mud'
'Learning to juggle'
'The best thing was being able to know that your doing something to help your body'
'The silence'
'To be friends with people your not normally friends with'
'When teacher gave out stickers as rewards'

Secondary school students described the same sorts of things but also particularly referred to losing weight and boosting self-confidence or self-esteem. Some examples of their verbatim comments in questionnaires are:

'Being able to set a target and get it done'
'Done dance every week'
'Eating healthy and making new friends on a team'
'Feeling fresh in the morning and more relaxed'
'Having the healthy food during tutor time'
'Knowing no one could actually make me do it'
'Lost some weight, toned up a bit and felt a lot better about myself'
'My dog got exercise as well'

Enjoyment came across strongly in the qualitative interviews too:

'Ever since the Health Challenge came in, it's just something completely different that gets everyone involved to go out, get some fresh air and run around. It's just fun It will just keep you healthy, meet up with your mates, and just have a load of fun and get fit at the same time.'
(Secondary school student)

'It's difficult to measure enjoyment but I think they did get a lot of enjoyment out of it as well And I know that if we were going to say 'right, we're going to do this again' that the children would be really happy about it.' (Primary school staff)

Just over three-quarters (76%) of secondary school students said doing their healthy challenge made them feel better, but 22% that it made them feel worse, linking this to not completing the challenge or not having enough willpower, and feeling tired or ill.

5.7 How well did students do with their challenges?

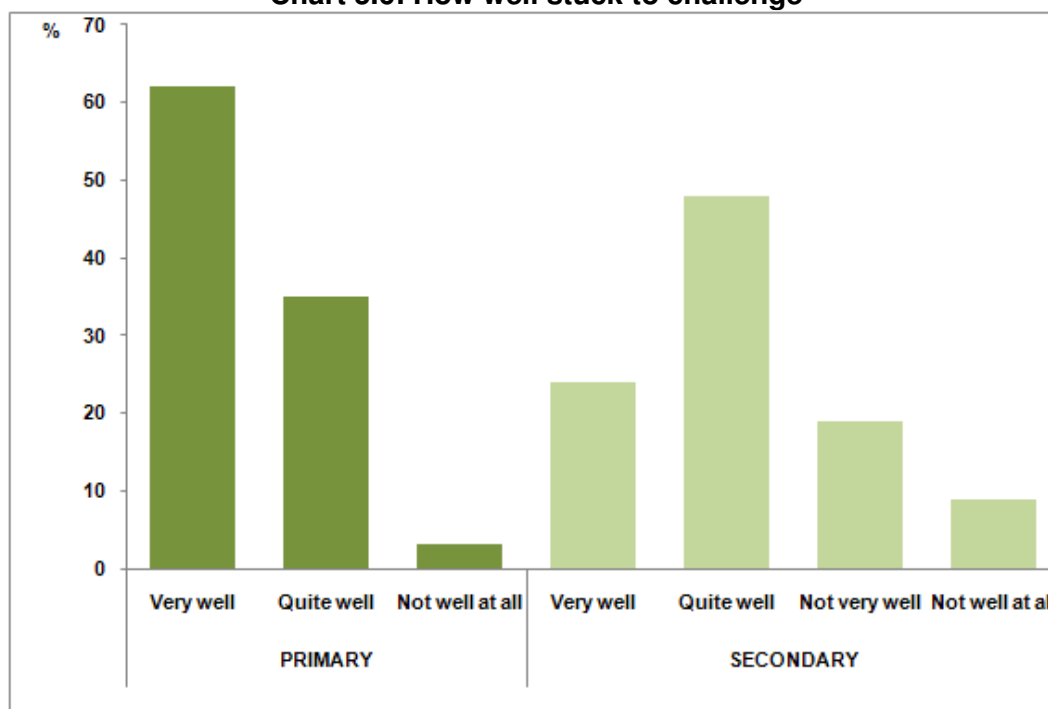
A key issue is of course how people got on with their challenges and whether they stuck to them. We look in this chapter at how far they stuck with them during the challenge period (during on the post-challenge questionnaires), and in the next chapter at how far this was sustained at the two- and four-month follow up stages. We asked both school groups the same question ('Overall, how did you get on with your challenge') but gave the primary school students three response options³⁰ and

³⁰ 'Very well – I stuck to it completely', 'Quite well – I stuck to it quite a bit' and 'Not well at all – I didn't stick to it at all'

the secondary school students four³¹, reflecting the need to keep the primary school questionnaire as simple as possible.

Across both school groups, but particularly primary schools, the majority of survey participants reported success in sticking to their challenge. In primary schools 62% said they had stuck to their challenge very well and a further 35% quite well – only 3% said they had not stuck to them at all³². Among secondary school students, 24% said they had stuck to their challenge very well, 48% quite well (sticking to them 'mostly'), 19% not very well and 9% not well at all.

Chart 5.6: How well stuck to challenge



Source: Post-challenge survey
 Primary (n=290)
 Secondary (n=691)

Primary school students found it harder to stick to healthy eating challenges (51% did very well compared to, for example 67% for feeling good inside). However, students at the school that did more healthy eating challenges (School A) did better with healthy eating challenges than the other school that did them (School B). Students at School C, who all did physical activity challenges, were particularly likely to say they did very well (82% overall). There were no differences by gender, but students in Years 1-3 were more likely to say they did very well than those in older years (76% compared with 55%).

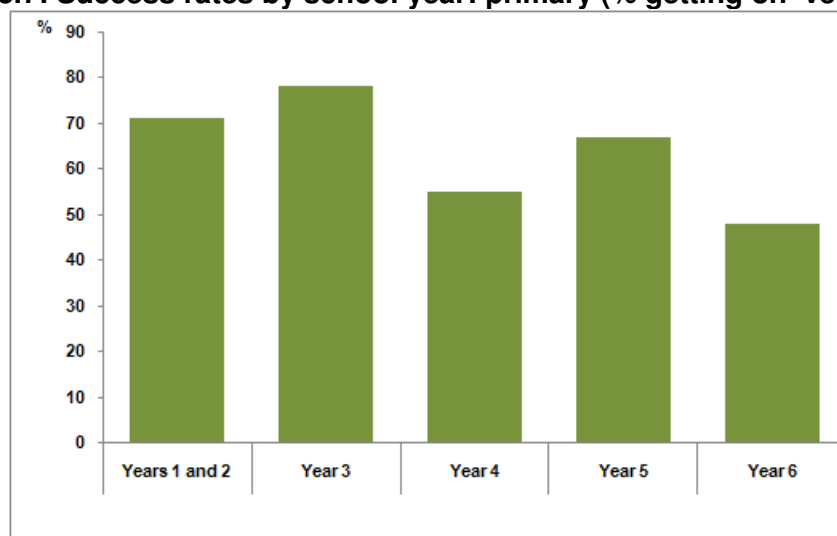
In secondary schools, healthy eating challenges were not significantly harder to stick to than feeling good challenges (20% of those doing healthy eating and 23% feeling good inside said they stuck to their challenge very well), but students doing physically active challenges were more likely to say they did very well (31%). Boys were markedly more likely than girls to say they did very well (32% compared with 17%).

³¹ 'Very well – I stuck to it completely', 'Quite well – I stuck to it mostly', 'Not very well – I stuck to it a bit' and 'Not well at all – I didn't stick to it at all'

³² In School C 14 out of 20 in Year 1 and all 18 in Year 2 said they had stuck to challenges completely

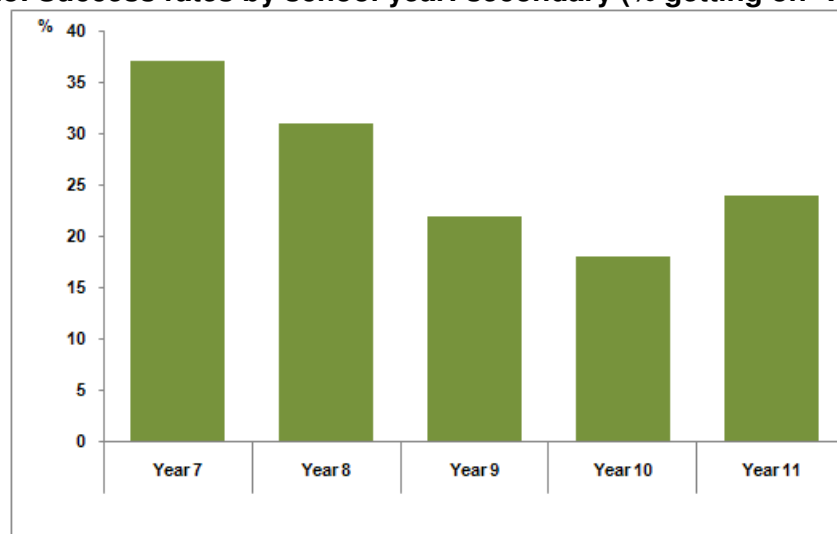
As for primary school students, success rates were lower for older age groups³³. Success rates were higher at School D than at School E although this will also reflect the age range of the schools, School E not having Years 7 and 8.

Chart 5.7: Success rates by school year: primary (% getting on 'very well')



Source: Post-challenge survey
(n=179)

Chart 5.8: Success rates by school year: secondary (% getting on 'very well')



Source: Post-challenge survey
(n=141)

There was no clear evidence that working with a challenge buddy or as a group or class increased the likelihood of sticking to challenges. Secondary school students who worked with a challenge buddy were slightly more likely to say they stuck to their challenge, but otherwise there was either no difference or a slight difference in the opposite direction. Not surprisingly, students who said they felt confident and motivated at the start were more likely to do better with their challenges. What is perhaps surprising though is that, in secondary schools, half the students with relatively low confidence, and half with relatively low motivation, stuck to their challenge completely or mostly.

³³ This was true both across the sample and within the school with Years 7-12.

5.8 What helped, and what made it hard?

5.8.1 How easy was it

We asked students how easy they had found it to stick to their challenge, again giving primary school students three response options ('not easy at all', 'quite easy' and 'very easy') and secondary students four ('not at all easy', 'not very easy', 'quite easy' and 'very easy'). Overall, 57% of primary school students said they found it very easy, and 38% quite easy: only 4% said it had not been easy³⁴. Secondary school students were much more muted in their response: 22% said they had found it very easy, 44% quite easy, 24% not very easy and 10% not at all easy. Again, the data suggests high levels of perseverance: nearly 40% of secondary school students who found it not very or not at all easy nevertheless completed their challenge completely or mostly³⁵.

In primary schools, students were more likely to find physical activity challenges very easy (63%, compared with 53% for healthy eating and 44% for feeling good inside). Interestingly, this is a little different from the pattern in completion of challenges, where we found lower completion of healthy eating challenges but equally high completion of physical activity and feeling good inside. There were no gender differences, but students in years 1 to 3 were more likely to say it had been very easy than those in older years (65% compared with 54%), in line with the higher success rates reported by younger than older students). Again in line with success rates, students in School C were more likely to say it had been very easy than in the other two schools³⁶, which may reflect the focus on class activity as well as on physical activity challenges.

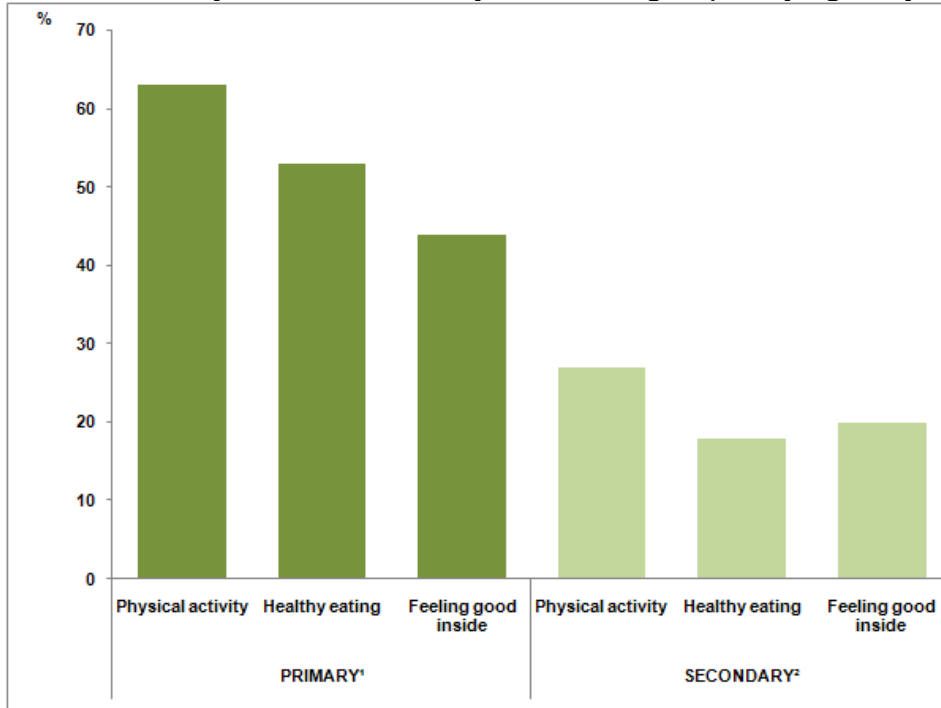
In secondary schools, in line with the data on sticking to challenges, students were more likely to find physical activity challenges very easy to stick to (27%) than healthy eating or feeling good inside (18% and 20% respectively). Boys were more likely than girls to say they found it easy, again in line with the question on sticking to challenges: 72% of boys said they found it very or quite easy (and 28% very easy) compared with 60% of girls (15% finding it very easy).

³⁴ In School C the composite forms showed that 14 out of 20 in Year 1 had found it very easy and all 18 in Year 2.

³⁵ Very few students overall said they had found the challenge easy but also reported sticking to it a bit or not at all.

³⁶ Despite the fact that they were older, since this excludes the composite forms for Years 1 and 2.

Chart 5.9: How easy was it to stick to your challenge? (% saying ‘very easy’)



¹ From 3 response options

² From 4 response options

Source: Post-challenge survey³⁷

Primary (n=168)

Secondary (n=148)

5.8.2 Who or what helped, and what made it difficult

We asked primary and school students about a range of people or things that might have helped them with their challenges, and also explored this in the qualitative data. Primary school students were asked whether different types of people – a challenge buddy, other friends or a group, your family, your teachers or other staff and anyone else - had helped them stick to their challenge with a ‘yes/no’ response option; secondary school students were asked how important the same list of people’s help was in sticking to their challenge with a choice between ‘not at all’, ‘not very’, ‘quite’ and ‘very’. Primary school students were more likely to say ‘yes’ to each person being helpful than secondary school students were to say they had been ‘very’ or ‘quite’ helpful, with the interesting exception of family where secondary school students were more likely to see them as helpful (although we need to be careful in comparisons between different scales).

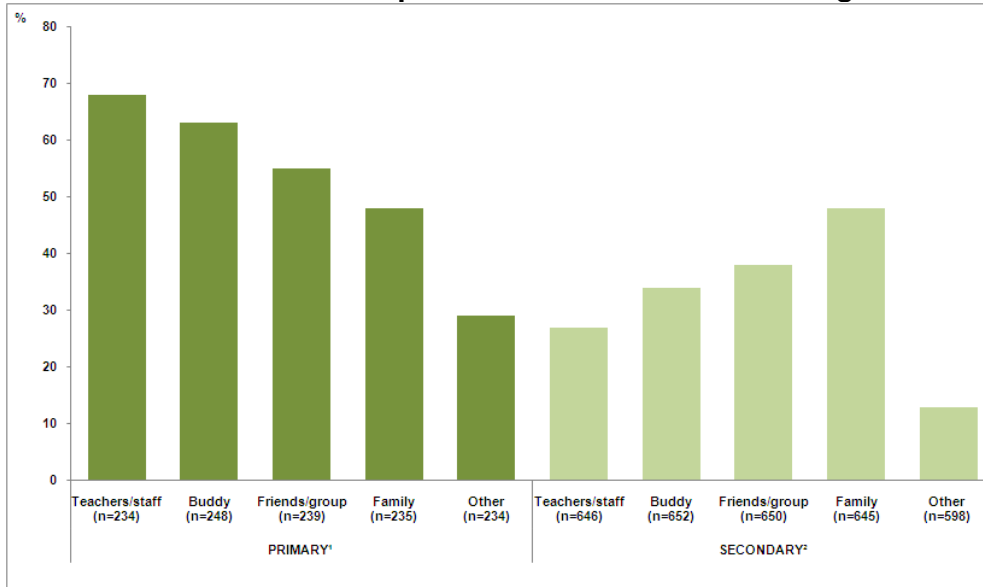
Overall among primary school students, staff and challenge buddies were most likely to be said to have helped (68% and 63% respectively), followed by other friends or a group (55%), family (48%) and anyone else (29%)³⁸. For secondary school students it was family who were most likely to be rated as having been very or quite helpful (48%), followed by friends or a group (38%) and challenge buddies (34%), staff (27%) and anyone else (13% - students again mostly referring to teachers, friends or

³⁷ This represents the total number of respondents saying ‘very easy’ and who also reported what their challenge was.

³⁸ In the composite School C forms, in Year 1 everyone said they had been helped by friends or a group, teachers and staff, and family. In Year 2 all had been helped by friends or a group and by teachers or staff, and 12 of 18 said their family had helped.

family, either generically or a specific person, and pets were also mentioned here!) The emphasis on help from family among secondary school students is striking, particularly compared to the low rating given to teachers and other staff, and is likely to reflect the fact that challenges were individual and often done outside school. As noted earlier, however, there was no clear evidence that working with other people increased the likelihood of sticking to challenges.

Chart 5.10: What helped students to stick to challenges



¹ Did any of these people help you stick to your challenge? % saying 'yes'

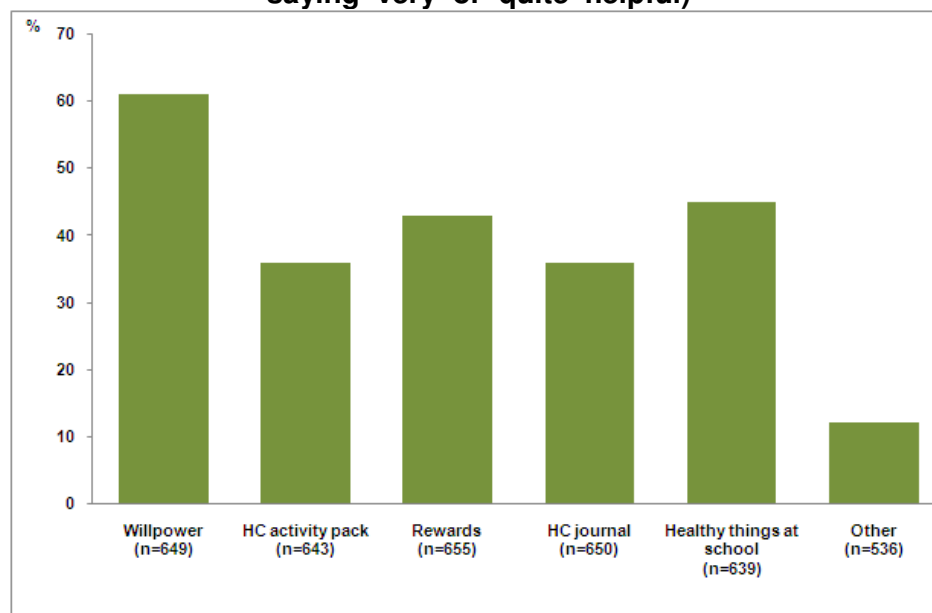
² How important was other people's help in sticking to your challenge? % saying 'very' or 'quite'

Source: Post-challenge survey

In primary schools overall, other people were more likely to be seen as helpful in physical activity challenges than other types of challenge. Staff were much more likely to have been seen as having helped in physical activity challenges (66%) than in healthy eating (25%) or feeling good inside challenges (10%). Challenge buddies were less likely to be seen as having helped with feeling good inside challenges. Family were more likely to be cited for physical activity challenges than healthy eating or feeling good inside. Other friends and groups were less likely to be cited as having helped with healthy eating challenges – perhaps reflecting that for this age group there is less individual choice in food. Challenge buddies, but not staff, were more likely to be seen as helpful by younger children, and girls were more likely than boys to cite either family or staff.

In secondary schools we also asked how helpful other things had been: willpower, rewards, keeping a Health Challenge journal, the Health Challenge activity pack, healthier things going on at school, and anything else. Overall willpower was seen as helpful by more people – 61% - while between 36 and 45% saw the other aids as helpful.

Chart 5.11: What else helped secondary school students stick to challenges (% saying 'very' or 'quite' helpful)



Source: Post-challenge survey

We also explored what had helped or made challenges difficult in the qualitative interviews, and asked about difficulties in open questions in the primary and secondary questionnaires. Similar issues were raised in primary and secondary schools, and generally the same factor was cited as a facilitator (if it was present) and a barrier (if it was not). The issues raised encompassed factors relating to enjoyment and motivation; features of the Health Challenge Programme; the school approach; and other people.

Enjoyment and motivation:

- *Enjoyment:* enjoying the activity was an obvious facilitator. Staff noted that it was a lot easier to engage young people when they enjoyed their challenges, for example where there were dance sessions every morning. Students enjoyed discovering new foods, mainly fruit, that they liked eating, or had fun playing football with their friends or running around the park.

'I think it helped me to go round [walking the playground] quicker when I was talking to my friends. Because people say 'time flies when you're having fun' and I was. It only felt like five minutes.'

'If you start doing healthy stuff like this [sport] but a little bit of fun you get addicted to it don't you? You say hang on do that more, more, more. If you do the first thing and it's boring no, you won't do it never.' (Secondary school student)

By contrast students among the things students reported as having made it difficult were not liking their challenge activity, not enjoying it or finding it boring. This lack of enjoyment may also help to explain why it appears that students found it more difficult to complete healthy eating challenges than other types – these challenges were often about depriving oneself of an enjoyable food, rather than taking up a new more enjoyable activity.

- *Motivation*: in the questionnaires students talked about finding it difficult to stay committed to their challenge, not having enough willpower and about temptations and making other choices. For some students the key barrier was a general lack of interest in the Health Challenge Programme and not being *'bothered'* about taking part – particularly in secondary schools. Staff said that there were some students who would never take part. A Health Challenge Programme Lead said about Key Stage 4 students *'we kept trying and trying... but in the end you kind of think, well the ones that are willing to do it, are doing it, the other ones, you're just flogging a dead horse'*. Others had initially been motivated but this waned - for example, students who had stopped getting up early enough to have breakfast before school or to walk to school. Lack of motivation also made people forget about the challenge and the activity they had chosen.
- *Making time*: students also talked about finding it difficult to make time for their challenges, to do them at a particular time, or to change habits and routines

'My baby brother, because while I was doing [the challenge] I had to take him out and play with him and so I wouldn't have time to do it.' (Secondary school student)

- *Seeing positive outcomes from the activity*: Students' motivation was boosted by seeing results from the challenge activities. Getting fitter was an important outcome: students found they could run further or faster, for example.

'I thought it would be really hard and I wouldn't be able to do it, but when I was actually running and getting round with my friends it just, I felt a lot better in me that I could actually do it. And my asthma wasn't kicking in as fast as it used to, so I could run a lot longer, so I thought it was really good and if I do it all the time it will improve my asthma so I can do it even longer.' (Secondary school student)

People who ate more healthily found they had more energy and other people talked about feeling better about themselves more generally. By contrast, feeling that you were not healthy or fit enough to stick with the challenge was a problem for some. Children talked about not having enough stamina, feeling tired, having aches and pains.

- *Rewards or a competitive element*: these also helped to sustain motivation. For example in one primary class a bubble was put on a chart beside children's names for drinking a bottle of water, and in another a teacher described giving students a paper clip for every time they did their challenge with which they made a chain. One school included the Health Challenge in their existing assembly-based award system, which they felt motivated children. Parents also gave rewards.

'I kept telling my dad how good I'd got and my dad kept taking me down town and buying me new stuff.' (Secondary school student)

Features of the Healthy Challenge Programme

- *Structure*: there was a view that a programme of four weeks allowed students to notice differences. Allowing schools to deliver it via whole school activities was seen as valuable in keeping momentum going. Classroom activity were also, as noted, seen by staff and students as helpful. Giving teachers the discretion as to how best deliver so they could adapt it to students' abilities was perceived to be particularly helpful by primary school teachers. The voluntary nature of the

programme was seen as very important by staff and students.

'Because [students] actually chose activities that were appropriate to their age, then it meant they were enthusiastic. I think if we had said 'right, the whole school is going to do ten minutes dance' or 'ten minutes aerobics' that wouldn't been different Because the teachers and the classes thought about something that was appropriate to them, that was a success.' (Primary school staff)

- *Health Challenge materials:* as noted above, the journal could be used to keep up motivation.
- *Timing:* staff expressed mixed views about the wisdom of doing challenges in the winter term immediately after Christmas. Most thought the weather and darkness affected the motivation of students and staff, as well as making outdoor activities more time-consuming because of the need to get coats and boots on an off. Students also saw the cold and dark as disincentives. Some staff thought it would work better as a spring or summer activity, linked to the school sports day. However, the timing was also seen as advantageous both to link in with (especially parents') New Year's resolutions and because it was seen as a less pressured time than other terms.

The school approach

- *The school structure:* The less structured nature of the primary school day meant there was flexibility around the timing of challenges, so that for example if it was raining in the morning, the class walk would be put off until the afternoon. In secondary schools, having a weekly class designated to the programme was perceived to be helpful by providing regular reminders and support. In one school, however, staff said the fact that the Health Challenge class was scheduled immediately before lunch made it difficult to hold students' attention as they were hungry
- *Individual vs. class challenges:* Class challenges were perceived by staff and students to be easier to sustain.
- *Supportive teaching staff.* School Leads saw staff working together as a critical success factor.

'Well, where it went well, it helped having staff who were motivated, who were on board, who were understanding and could sell it to the kids well.' (Secondary school staff)

Teachers were seen by students as a source of support in a number of ways. They organised class challenge activity, making classes fun and 'cooler' and discussing the Health Challenge Programme, or reminding students to do their challenge. They sometimes brought in healthy food to give to students. They showed students how to do their challenge – for example a student who decided to run more had been shown by a teacher how to control his breathing. Students also found it particularly encouraging when staff did challenges themselves, or ate with them in the canteen and used the opportunity to talk about healthy eating.

'[Having a teacher who is doing a challenge] makes people want to do it. If teachers can do it then they can do it' (Secondary school student).

By contrast, if teachers did not engage with the programme it meant that students were not reminded or encouraged to do so, and staff felt that students would have sustained challenges more if they had had support from their teacher.

- *Access to healthy food in schools:* students said it helped that their canteens had 'healthy options' and where schools gave them fruit, both for school and to bring home, although they were critical of schools charging for fruit. Removing unhealthy snacks and sweets from school canteens and shops and replacing them with healthy options enabled young people to stick to healthy eating challenges.

Other people

- *Buddy and friend support:* Health challenge buddies were sources of practical and moral support. They discussed what had gone well or not so well, and reminded and encouraged each other.

'Well, it was more boosting because you'd say things like 'oh, I haven't eaten any fruit today' and they're like 'well they sell it in the canteen'. So I was like 'oh I haven't done any exercise today.' 'Well I'm sure you could jog home'. People turned it into a joke because you're friends with them already.' (Secondary school student)

Students also liked the feeling that they were 'not the only one' and that others were doing similar challenges, and enjoyed doing things together. A student who had chosen to eat more fruit and whose buddy had chosen to take more exercise, said that as a result they had each taken on some of the other's challenge - he had started to take more exercise and his buddy to eat more fruit. A teacher felt that this form of peer support was particularly important, and that buddies were better placed to 'monitor' one another's progress than teachers. People were also supported by friends outside the class or school.

By contrast, negative comments by other students and young people discouraged participation. One girl said that continued bullying by other students had made it impossible for her to meet her challenge of building her self esteem

'The fact that most of my friends weren't doing anything and they were just saying 'why are you still doing it? It's really boring.' (Secondary school student)

- *Family support:* Children talked about families helping by providing healthy food, particularly fruit and vegetables, taking young people on walks or to places where they could take exercise, giving ideas of what to do for their challenges and encouraging or reminding them or giving rewards.

Not having this type of support from a family made challenges more difficult, and staff said that some parents were unenthusiastic, refused to change family habits or could not afford to buy healthy food. It was hard to do a healthy eating challenge if the family continued to eat 'junk food'.

'I did everything I had to do but my mum wants to make me fat. Beef burgers, pizza – I eat pizza every day.' (Secondary school student)

One student said he was unable to do his challenge at home as his brother was

always *'teasing'* him. Not having family members to accompany you could also be a barrier.

'It would depend – like if your parents would help you do it. Like some people are only allowed in certain places and not allowed out that far. And their parents have to go with them. It's if their parents can be bothered to get up and go with them.'
(Primary school student)

5.9 Summary

In primary schools, most students described a physical activity challenge in the questionnaire: healthy eating and then feeling good inside were less popular. In secondary school healthy eating was more common than physical activity, and feeling good inside again less popular. There were gender biases in secondary schools with boys doing more physical activity, and tending to describe feeling good inside challenges in terms of activity and behaviour rather than mental state. There were high levels of confidence and enthusiasm from the start in primary schools: in secondary schools student were more sceptical, but some became more engaged as the programme rolled out. There was clearly scope for Health Challenge to be integrated into curriculum activity and this was seen as helpful. The amount of class time devoted to it varied but more was seen as advantageous, and using tutor group instead posed some problems in secondary schools. The journal could be employed usefully to chart progress and keep up motivation, although it was not always used in this way. Overall there were differences in how far students engaged with the Healthy Challenge Programme, and the school approach appeared to play a critical role as well as students' own views and circumstances.

Overall in primary schools the vast majority of students stuck to their challenge completely or partly, and the majority of secondary school students stuck to it completely or mostly. Even a significant minority of students with low confidence or motivation, or who had not found it easy, managed to stick to it. In both primary and secondary schools, physical activity challenges were the easiest to stick to. Healthy eating challenges were harder to stick to. This may reflect that they often involved students being deprived of a loved food, or eating more of something they didn't like much, as well as as the limited levels of control by young people, particularly primary school students, over their diet.

Students described a virtual circle where motivation, enjoyment and seeing positive outcomes made it easier to keep going. Getting the school set up right and having support from other people inside and outside the school were also important. But overall for secondary school students the most important thing was 'your own willpower'.

6.0 Sustained outcomes from the Health Challenge Programme

6.1 Introduction

In the previous chapter we looked at how far students were able to keep up with their challenge activity during the four weeks of the challenge, and what helped and hindered this. In this chapter we move on to look at how far healthy activities were sustained after the challenge period. We draw here on the questionnaires completed by students just after the challenge period, and then two months and four months later³⁹ (see Chapter 2 for fuller details of dates). We also draw on the qualitative research in which students, staff and school leads took part, which took place between the two-month and four-month follow-up questionnaires.

In this chapter we look at four broad issues. First we look at whether students' activity was sustained between the post-challenge, two-month and four-month follow-ups. Then we look at whether their capacity for healthy activity increased over the same points, looking at changes in intentions, motivation and attitudes. We draw on the qualitative data to provide more description and explanation of these changes. The third issue we explore is whether the Health Challenge Programme left an imprint on schools, through sustained changes in practices or policies, or plans for further activity. Finally, we draw on suggestions from students and staff about how to improve the Health Challenge Programme.

6.2 Sustainment of activity levels

6.2.1 Sustaining the original challenge activity

In Chapter 5 we reported that 62% of primary school students said they stuck to their challenge very well over the four week challenge period and 35% quite well (sticking to it 'quite a bit'), and that in secondary schools 24% had stuck to their challenge very well and a further 48% quite well (sticking to it 'mostly').

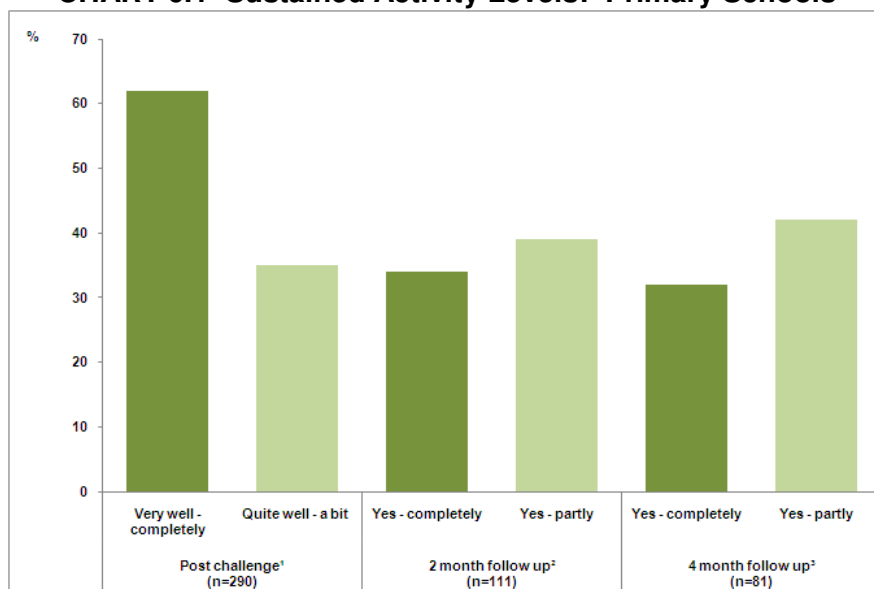
Although levels of activity declined somewhat in the subsequent two questionnaire stages, there was nevertheless a considerable volume of sustained activity. Two months after the end of the challenge period 34% of primary school participants said that they had 'tried to keep going' with their challenge 'completely' and a further 39% that they had done so 'partly'. At the four-month stage, very similar proportions were still doing their challenge⁴⁰: 32% said they were still sticking to it 'completely' and

³⁹ As we noted in chapter 2, we have 111 questionnaires from primary schools and 280 from secondary schools at the two-month stage, and 80 and 301 respectively at the four-month stage. This is a decline in participation levels and it is likely that surveys were administered and completed by more enthusiastic staff and students. Because the questionnaires were deliberately kept as short and focused as possible, we did not collect repeat information about for example the type of challenge done. The number of cases where we could link to this information from previous stages through participants' names was relatively small, and this and the number of responses limits the amount of detailed sub-group analysis we are able to do.

⁴⁰ Although note that the questions are not directly comparable between the primary school two-month and four-month questionnaires, the two-month questionnaire asking whether students had 'tried to' keep up with their challenge and the four-months whether they were 'still sticking' to it.

42% 'partly'. Thus at both stages, over 70% of primary school students were reporting some sustained activity^{41 42}.

CHART 6.1 Sustained Activity Levels: Primary Schools



¹ How did you get on with your challenge?

² Have you tried to keep going with your challenge?

³ Are you still sticking to your challenge?

Source: Post-challenge, 2-month and 4-month surveys

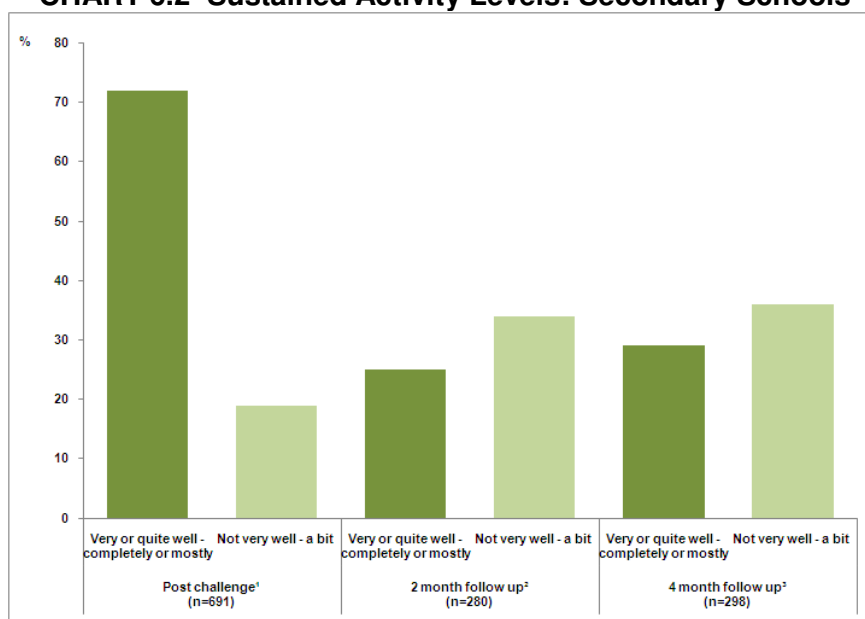
There was less sustained activity in secondary schools, although here too the majority of students sustained some. At the two-month stage only 25% of participants reported that they had kept going with their challenge 'completely' or 'mostly', although a further 34% had done so 'a bit' meaning that over half, 59%, had sustained some challenge activity. At the four-month stage sustained activity levels were very similar: 29% had stuck to challenges 'completely' or 'mostly', and overall almost two-thirds (65%) were still sustaining some challenge activity⁴³.

⁴¹ In the composite forms at 2 months, School C were reporting that 5 out of 20 in Year 1 had kept going completely (and 13 not at all) and that 13 out of 18 in Year 2 had kept going completely. They did not complete composite forms at 4 months, but at 2 months 4 in Year 1 intended to keep going fully and 1 partly, and 8 in Year 2 intended to keep going partly (9 not at all).

⁴² We also calculated sustained challenge activity based on the pre-challenge questionnaire sample, that is the number of those sustaining activity at the two and four month stages as a proportion of those who competed the pre-challenge questionnaire. This shows that 56% of primary and 21% of secondary students were sustaining at least some challenge activity at the two month stage, and that 42% of primary and 25% secondary students reported sustaining at least some of their challenge activity four months after the Challenge started. This is likely to be an underestimate, but nonetheless the figures, particularly for primary school students, are quite encouraging.

⁴³ The fact that sustained activity levels were higher at the four-month follow-ups for secondary schools reinforces the fact that the sample became more biased to engaged students over time – this seems a more likely explanation than that there was a real increase.

CHART 6.2 Sustained Activity Levels: Secondary Schools



¹ How did you get on with your challenge?

² Have you kept going with your challenge?

³ Are you still sticking to your challenge?

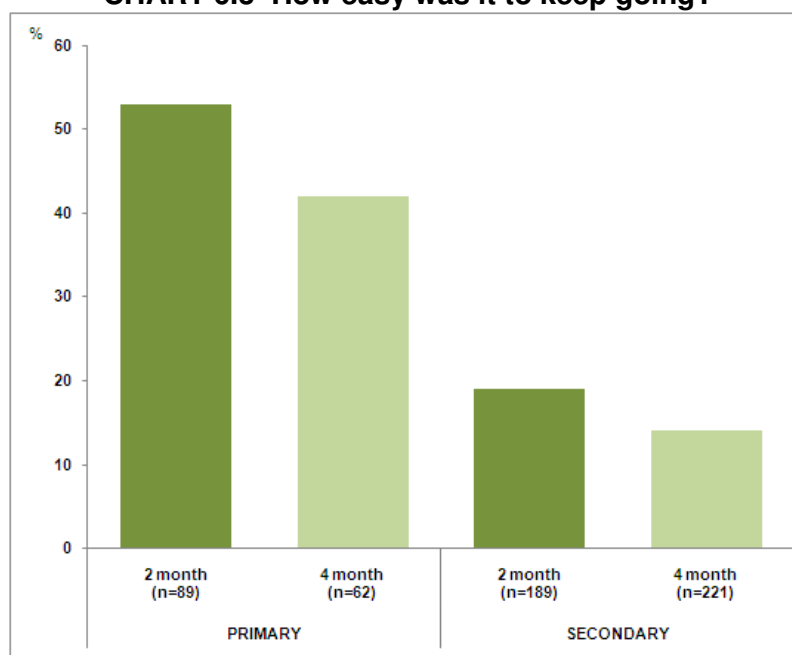
Source: Post-challenge, 2-month and 4-month surveys

In primary schools, among those who had tried to keep going⁴⁴ at the two-month stage, 53% had found it very easy and 39% quite easy – only 4% had not found it easy at all. Similarly at the four-month stage, of those who were continuing 42% said this had been very easy however a slightly larger proportion (47%) said it had been quite easy.

Secondary school students found it harder to keep going than primary school students, and increasingly difficult as time went on. At the two-month stage 19% of those who had kept going had found it very easy and 44% quite easy. At the four month stage, again of those who had kept going, 14% had found it very easy and 50% quite easy. What is perhaps most striking here is that 30% had kept going to some degree at the four-month stage despite finding it ‘not very easy’ or ‘not at all easy’ – an impressive if somewhat poignant indication of their perseverance!

⁴⁴ In both primary and secondary school questionnaires, those who had not kept going to at least some degree were asked to skip this question

CHART 6.3 How easy was it to keep going?



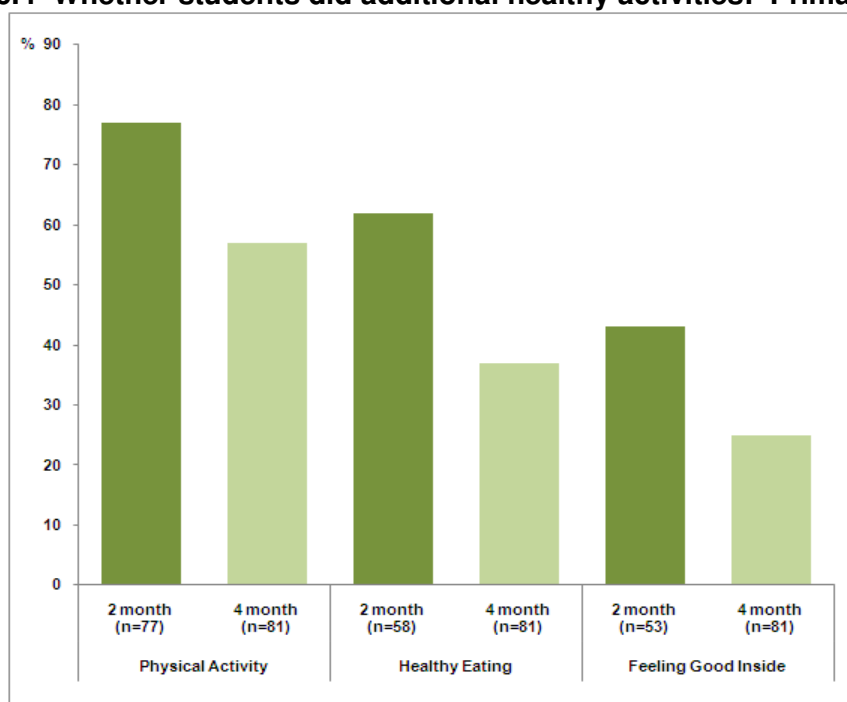
Source: 2-month and 4-month surveys

6.2.2 Doing additional healthy activities

We also asked students at both the two-month and four-month follow-ups whether they had made any other health changes since they started doing Health Challenge⁴⁵. In primary schools at the two-month stage 77% said they had done additional things in the physical activity area, 62% in healthy eating and 43% in feeling good inside. At the four-month stage we found lower levels of additional activities being reported, although a substantial minority were reporting them.

⁴⁵ In primary schools we asked the question in this form and asked students to say which challenge area/s these changes had been in. In secondary schools we whether they had *tried* any new healthy activities, asking separately whether they done so at school or at home / out of school, whether they had done so during or after the healthy challenge period, and in which challenge areas they were done. In both primary and secondary schools, at the two-month stage we asked about new activities during and after the health challenge period; at the four-month stage we asked only about new activities 'in the last two months'.

CHART 6.4 Whether students did additional healthy activities: Primary School

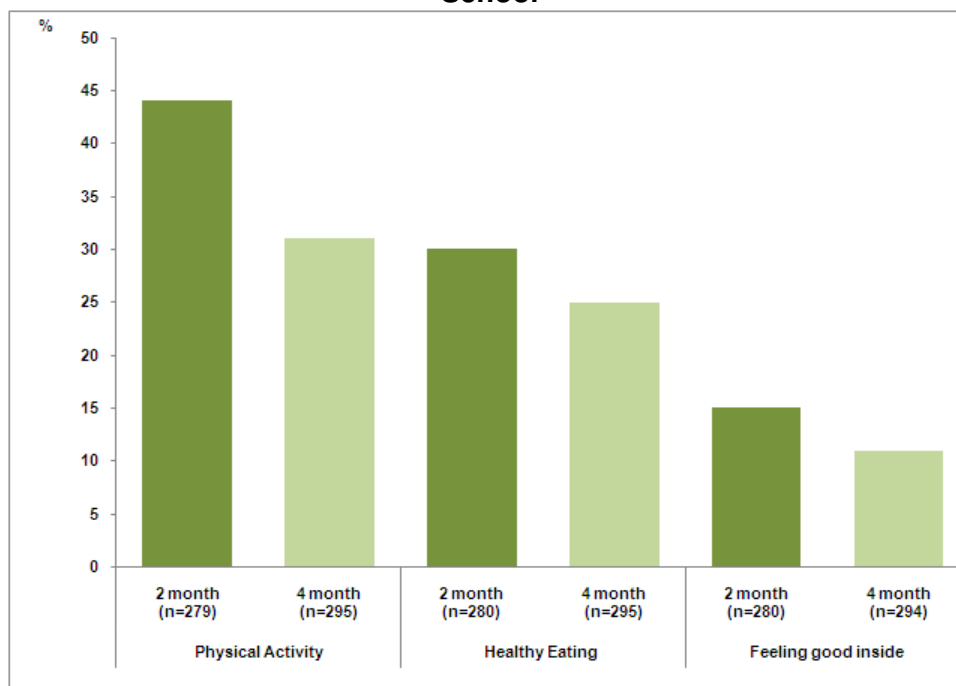


Source: 2-month and 4-month surveys

In secondary schools additional activity was also reported at the two- and four-month follow-ups, and at only slightly lower levels than in primary schools. Thirteen per cent of students said they had tried other activities at school during and 16% after the challenge, and 9% had tried new activities out of school or at home during and 28% after the challenge. Again, physical activity was most likely to be reported. At the two-month follow-up 44% reported additional physical activity, 30% additional activity in healthy eating and 15% in feeling good inside. At the four-month stage these levels were slightly lower. Nevertheless, in both primary and secondary schools substantial groups of students reported additional healthy activities since the challenge period ended⁴⁶.

⁴⁶ We also calculated additional healthy activity based on the pre-challenge questionnaire sample i.e. the number of those reporting new activities at the two and four month stages as a proportion of those who completed the pre-challenge questionnaire. This shows that 25% of primary school students reported new activities relating to healthy eating at the two month stage, with 16% reporting additional activities around feeling good inside and 41% around physical activities. At the four month stage, 21% of primary students reported new activities in healthy eating, 14% new activities to do with feeling good inside, and 32% new physical activities. For secondary school students at the two month stage, 11% reported additional healthy eating activities, 5% feeling good inside activities, and 16% additional physical activity. This remained fairly constant at the four month stage, with 10% of secondary students reporting new healthy eating activity, 4% feeling good inside and 12% new physical activity. This is likely to be an underestimate of the amount of additional healthy behavioural change, but nonetheless points to a positive increase in healthy behaviours following the Health Challenge Programme, particularly among primary school students.

CHART 6.5 Whether students did additional healthy activities: Secondary School



Source: 2-month and 4-month surveys

Across both types of school, physical activity changes described included more activity, exercise, sport or keeping fit generally, walking, running or jogging, and other specific activities. Healthy eating changes generally involved eating more fruit and vegetables, and feeling good inside changes involved things like listening to music or relaxing, spending time with friends, and taking care of oneself.

We asked students at both the two- and four-month follow-ups what had helped or made it difficult to make health changes⁴⁷. Students reported the same sorts of factors as discussed in the previous chapter as enablers and difficulties during the challenge stage itself. The things that had helped were family, friends and the challenge buddy; doing a particular physical activity or eating a particular type of food; aspects of the experience such as being outside or having fun, and motivational issues such as willpower, feeling good or better and knowing it will make them more healthy. Things that made it difficult were bad weather, (not enjoying) the activity itself, motivation or willpower, lack of fitness (or ill-health or injury), making time or changing habits and routines, and other people's less than helpful actions or comments.

6.2.3 Evidence of sustained activities from the qualitative interviews

The qualitative research with students provides more detail. We identified three groups of people: those who had sustained their challenge, those had sustained it but at a lower level than during the challenge, and those who had not sustained activity:

⁴⁷ In the questionnaires this came after questions about the original health challenge and additional healthy activity and is thus likely to have been interpreted as covering both.

- *Students who had sustained their challenge:* Sustained challenges were reported both by students who had adopted a new behaviour in their challenge and by those whose challenges were about doing more of an existing activity. Students had built the challenge activity into their daily lives, prompted by the benefits it brought. For example a Year 9 student who had started to eat breakfast every day found that she felt better going to school and so had made it part of her daily routine. Another who did not like taking exercise had committed to taking her dog for a walk three times a week. She and her dog had really enjoyed the walks and at the time of interview she was still walking him three or four times a week- *'the dog's a lot happier'*. A secondary school student had been quite physically active before the Health Challenge Programme and had set himself a workout programme as his challenge. He enjoyed it so much he decided to keep it as part of his fitness regime: *'you just wanted to carry on doing it, this is getting good, so carry on doing it'*. Another who took up running as his challenge had joined a school running club.
- *Students who had sustained their challenge, but at a lower level than during the Health Challenge period:* Other young people had continued at least some element of their challenge but were not doing it to the same extent as when the Health Challenge Programme was running. For example, a Year 10 student had chosen to eat more fruit as his challenge having eaten very little, if any, before. He had found the challenge hard at times but said that since the challenge period he was still eating some fruit: *'it's sort of improved, sort of'*. Another had chosen to run regularly and drink more water. When asked how she had been getting on since the end of the programme she was not doing the activities as often but was *'doing quite well'*. These students recognised the benefits of the challenge activity but found old habits hard to shift completely.
- *Students who had not sustained activity:* Some students stopped doing their challenge activity either before or immediately once the four week period had ended. They had not enjoyed the activity, or had not experienced sufficient benefit to persuade them to keep going. They seemed not to have considered moderating the level of challenge activity instead. For example, a Year 8 student had taken on the challenge to take more exercise by walking for about 40 minutes every day. He had stopped doing this once the challenge was over saying: *'I did it then stopped, four weeks was enough'*.

6.3 Increased capacity for healthy choices

Overall, then, the data show striking levels of sustained activity among primary school students and, albeit at lower levels, secondary school students who participated in the follow-up questionnaires. However, we were also interested in people's *capacity* for healthy choices, in the sense of their intentions, motivation and beliefs. Intentions and motivations are of interest as indicators of students' enjoyment of the Health Challenge Programme as well as of changing capacity.

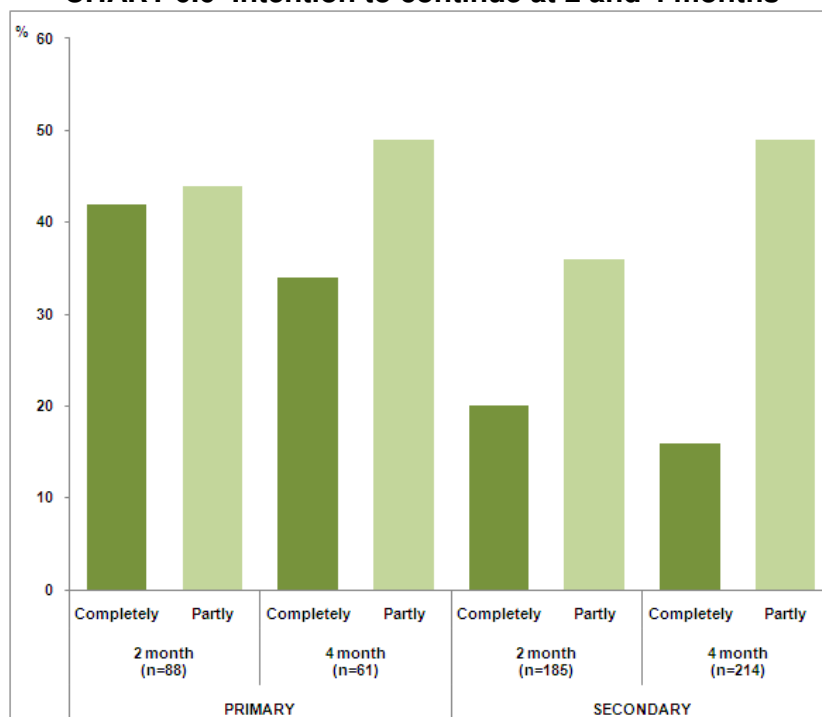
6.3.1 Intention to do more

In primary schools, at the post-challenge stage, there was a high level of enthusiasm to keep going. Sixty per cent of students who had kept up challenge activity to some

degree⁴⁸ were planning to keep going with their challenge ‘completely’ and a further 30% ‘partly’. Only 10% said ‘no, not at all’.

At the two-month stage in primary schools, again of those who had kept going to some degree so far, 42% intended to keep going completely and 44% partly – only 14% said they were not planning to keep going⁴⁹. At the four-month stage, 34% of primary school respondents who had kept going with their challenge to at least some extent said they planned to keep going with the same challenge completely and 49% partly.

CHART 6.6 Intention to continue at 2 and 4 months



Source: 2-month and 4-month surveys

In secondary schools we find lower but still substantial proportions of students intending to keep going, at levels that are fairly consistent across the data collection points. At the post-challenge stage 20% of those still doing some activity had said they planned to keep going completely and 39% partly, with 16% saying ‘not at all’ and 24% that they did not know (a response option we did not offer primary school students). At the two-month stage 20% planned to keep going completely and 36% partly. At the four-month stage 16% planned to keep going completely and 49% partly.

What is perhaps most striking as a measure of the impact of the Health Challenge Programme is that, four months after the end of the Health Challenge period, over

⁴⁸ In both primary and secondary schools, those not doing any activity were asked to skip questions about intention and motivation.

⁴⁹ Although the number of cases where we can link across data collection points is limited, intentions were translated into action for the majority of our sample. For example 78% of primary school students and 76% of secondary school students who, at the post challenge stage, had intended to keep up their challenge reported that they had done so to some extent at the two-month stage. Similarly high levels of students intending to keep going at the two-month stage reported some continued activity at four months, although on very small sample sizes.

80% of primary school survey participants and just over half (66%) of secondary school survey participants were reporting sustained changes in activity which they intended to keep up.

6.3.2 Anticipated ease of doing more and motivation to do so

The second area of capacity building in which we were interested was whether there was change in students' sense of how easy it would be to make *further* healthy lifestyle changes, on top of their existing health challenges, and their motivation to do so. Given the Health Challenge message of small steps making a difference, we wanted to explore whether people felt more or less able to make these changes. We asked students how easy they thought it would be to eat a more healthy diet, do more healthy things that make you feel good inside or do more physical activity. (This was asked of the whole sample irrespective of what challenge they had identified)⁵⁰.

Here we found no real evidence of change. At the post-challenge stage, 67% of primary school students thought it would be very easy to do more physical activity, 61% thought it would be very easy to do more healthy things to make you feel good inside, and 44% thought it would be very or quite easy to eat more healthily. In secondary school 37% thought it would be very easy to do more physical activity, 32% that it would be very easy to do more things that make you feel good inside, an 25% that it would be very easy to eat a more healthy diet.

When we repeated these questions at the two- and four-month stages, we found no real change. It is difficult to know what interpretation to place on the presence or absence of change. An increased proportion saying it would be easy to make change might indicate a greater capacity to do so – but equally a decrease in the proportion saying change would be easy to make could indicate a more acute understanding of what is actually involved in doing so. Nonetheless, it is perhaps worth noting that by the end of the four-month period the vast majority of both primary and secondary school students felt it would be easy to eat more healthily, to do more physical activity and to do more things to make themselves feel good inside – in other words, to make *further* healthy choices *in addition* to those they had already made and sustained through their health challenges.

We also asked secondary school students how motivated they felt to make changes. Here again the figures were broadly flat, although there was a small increase in the proportion saying they were very motivated to make changes in the area of physical activity by the four-month stage. By that stage, 43% were very motivated to do more physical activity, 30% to do more things to make you feel good, and 25% to eat a more healthy diet.

We also looked, in secondary schools⁵¹, at whether students were more likely to think it was easy to make further healthy changes in their own health challenge area. We found some evidence for this at the two-month follow-up stage. Students who had done physical activity challenges were more likely to say it would be very easy to do more physical activity (although they were also more likely to say it would be easy to

⁵⁰ We used a three response option for primary schools: 'very easy', 'quite easy' and 'not easy'. In secondary schools we used a four response option: 'very easy', 'quite easy', 'not very easy' and 'not at all easy'.

⁵¹ Because information about the nature of the challenge came from the post-challenge questionnaire, the sample in primary schools, and in secondary schools at the four-month stage, was too small to allow this analysis

make changes in the other challenge categories too). Those who had done feeling good inside challenges were more likely than those who had done healthy eating challenges to say it would be easy to do more to make yourself feel good inside. A similar pattern existed in relation to motivation.

6.3.3 Changes in attitudes

The third area of changes in capacity for healthy lifestyle choices we explored in the surveys was attitudinal. We asked a series of attitudinal questions at three data collection stages in primary schools⁵² and at all four stages in secondary schools. Here we found limited evidence of change.

6.1 Attitude questions: Primary Schools

Statement	% agreeing					
	Pre-challenge		2-month follow-up		4-month follow-up	
	%	Number responding to each statement	%	Number responding to each statement	%	Number responding to each statement
I like eating healthy food	76	114	84	108	85	79
It's hard to get 5 portions of fruit and veg everyday	69	112	59	106	56	80
I like taking part in physical activity	88	115	90	106	86	76
It's hard to do an hour a day of physical activity	40	111	41	102	40	76
I've got a hobby or activity that helps me relax	64	114	71	108	76	78
I can talk to my friends about worries or problems	69	108	70	108	71	77
I can improve my health by the choices I make	91	114	89	105	79	79
My school should try to make healthy choices easier	75	113	72	104	72	76

In primary schools, we saw a small increase over time in the proportion agreeing with 'I like eating healthy food', and a decline in the proportion agreeing with 'It's hard to get five portions of fruit and veg every day'. We also saw a small increase in the proportion agreeing with 'I've got a hobby or activity that helps me relax'. But we saw an unexpected decline in the proportion agreeing with 'I can improve my health by the choices I make'.

⁵² We did not include attitude questions at the post-challenge questionnaire stage – since space was constrained, we prioritised other measures of the Health Challenge experience and outcomes.

6.2 Attitude questions: Secondary schools

Statement	% agreeing (selecting 4 or 5 on scale where 1 = strongly disagree and 5 = strongly agree)							
	Pre-challenge		Post- challenge		2-month follow-up		4-month follow-up	
	%	Number responding to each statement	%	Number responding to each statement	%	Number responding to each statement	%	Number responding to each statement
I like eating healthy food	46	742	49	670	45	265	53	283
It's hard for me to get five portions of fruit and veg a day	33	743	35	663	30	264	31	283
My friends eat unhealthy food most of the time	37	732	39	655	41	262	47	277
I like taking part in physical activity	63	735	62	664	57	265	68	280
It's hard for me to do an hour a day of physical activity	17	732	22	655	20	262	22	280
My friends don't do much physical activity	25	728	23	652	26	263	31	274
I've got a hobby or activity that helps me relax	56	731	52	657	55	264	58	282
It's hard for me to get enough sleep	36	725	34	651	31	263	38	282
I can talk to my friends about my worries or problems	57	721	57	656	54	265	50	281
Being healthy is more about luck than effort	13	727	17	656	12	262	22	277
I get enough health information at school	39	726	38	653	31	261	43	279
I can improve my health by the choices I make	69	719	62	658	55	262	64	278
My school should try to make healthy choices easier	40	718	41	660	29	263	44	280

In secondary schools we saw an increase over time in the proportion agreeing with 'My friends eat unhealthy food most of the time', small increases in the proportion agreeing with 'I like to take part in physical activity' and 'My friends don't do much physical activity'. However, we saw an unexpected fall in the proportion agreeing 'I can talk to my friends about my worries or problems', and an unexpected rise in the proportion agreeing with 'Being healthy is more about luck than effort'.

Attitudinal questions might be expected to give less stable readings than behavioural questions, and the changes may be an artefact of the changing profile of the samples at each stage and the fact that the sample size declined at each consecutive stage. Many of the figures also dip down at the third collection stage, which reflects a sharp decline in responses from one of the secondary schools at the two month questionnaire stage. As noted earlier, it may also be that they reflect a more acute understanding of the difficulties involved in making healthy changes – not a reluctance to try, but a recognition that it is not easy. The decline in the proportion of primary school students agreeing they could improve health by the choices they make, and the increasing proportion of secondary students agreeing that being healthy is more about luck than effort, might reflect a recognition that a supportive context (parents, friends, school and so on) is important as well as one's own effort.

6.3.4 Evidence of capacity building in the qualitative research data

We were able to explore this issue of changing capacity to make changes in more depth in the qualitative research. Staff and young people described the Health Challenge Programme as improving students' capacity to live healthier lifestyles in two ways: by raising students' awareness about the benefits of leading a healthy lifestyle and what it entails, and by providing them with the practical skills with which to do so.

Raising awareness

Staff valued the Health Challenge Programme's holistic approach to raising awareness about three things: the importance and benefit of leading a healthy lifestyle, the importance of emotional well-being in particular, and the connection between physical activity, healthy eating and emotional well-being.

In terms of raising awareness about the importance and benefits of a healthy lifestyle, a recurring theme was that the Health Challenge Programme encouraged students to think that being healthy was a good thing. Among those who had done a personal challenge, they often referred to realising the benefits of increased physical activity or healthier eating - they felt fitter and better.

'Because I think, I feel like I need to be more health conscious now, because before I just didn't really care, and now I need to.' (Secondary school student)

'I feel more lively and stuff [since doing the challenge of running more], not just like, I don't feel lazy any more or tired, stuff like that.' (Secondary school student)

'If she forgets breakfast] by lunchtime just eat and eat and eat, like the first few lessons of the day you just don't feel like as outgoing as you normally would.' (Secondary school student)

Even where staff did not think there had been a significant change in young people's behaviour, they sometimes thought it was effective in raising awareness.

'As a life changing or as a health changing thing I think probably minimal impact, but as an awareness raising campaign I would say it's very good' (Primary school staff)

The specific focus on emotional well-being was seen as bringing something new to young people by some of the staff and appeared to be particularly valued by staff in primary schools. Both the following schools had done a relaxation health challenge:

'The feeling that they realise that you have to feel good on the inside you have to be mentally healthy as well. And I think that's something they never realised, that all this PSHE stuff that we do is about them being mentally healthy ... And putting a name to it and saying that that is part of being healthy for some of them was a big thing.' (Primary school staff)

'The Health Challenge as well it broadens the healthy lifestyle to a child doesn't it? It's not just about eating vegetables and drinking water and not fizzy pop or something. It gives a whole other range of, there's so much more to leading a healthy lifestyle. So I think that's good in that way and hopefully bits like that will stay with them.' (Primary school staff)

The holistic approach of the Health Challenge Programme provided the opportunity to raise awareness among students of the knock on effects of different activities. This had been evidenced to some young people through their challenge. Although feeling good inside challenges were less commonly chosen than the other two, students reported emotional benefits from healthy eating or physical activity challenges.

'Well after the challenge finished I felt really good inside for the fact because I've eaten more than I ever did and I did more dance which I enjoyed, you weren't just like stressful and thing, it was just to feel good inside and complete your day and have a big smile on your face. That's what it was for, not to feel down.' (Secondary school student)

'The more fitter you get you just feel better inside. You get better sleeps, so I just thought it would be nice to do that, so I gave it a go and I'm getting there....I always come back [from running around the field] and I feel just a lot calmer and woken up.' (Secondary school student)

Providing practical tools and strategies

Students and staff thought the Health Challenge Programme had provided young people with an opportunity to learn practical skills which would enable them to live a healthier lifestyle. This arose in five areas:

- *Ideas for small actions that can make a difference:* this was identified as particularly useful as it made improvements appear achievable.

'The one really good thing was the 'small steps lead to big changes' because they could see that something small, could have an impact. They hadn't got to go on a crash diet to get more healthy. They didn't have to run a marathon every week to be healthy. So I think the message was fantastic.' (Secondary school staff)

- *Physical activity skills:* students describing their physical activity skills improving both through experience and as a result of specific help. In a secondary school for instance a PE teacher provided students with advice on how to run more effectively or to do exercises such as sit ups or press ups correctly. Both of the students who referred to getting this support had sustained their physical activity after the challenge.

I did learn some new thing about running. That you had to keep your arms up and that and try and keep moving them because they motivate you and make you move faster” (Secondary school student)

- *Emotional literacy and language:* staff felt emotional well-being challenges had been successful by providing young people with the ‘language’ with which to talk about their emotions, helping them to discuss their feelings, and to focus on positive rather than negative thoughts.

‘For me one of the most interesting one was the chain of thought because to see children at the beginning not saying anything, not wanting to speak out, and then at the end they were speaking out feelings, I thought it was really interesting how at the beginning they were sad, angry, upset and at the end everything, everybody seemed to be putting down their positive thoughts.’ (Primary school staff)

- *Relaxation techniques:* Staff felt that students had learnt more about how to relax and avoid stress. Yoga was taught in one primary school and more general relaxation sessions in another. Where yoga was taught the teacher said that while students found it difficult at the start:

‘As it went on they picked up on it so quickly, doing it daily. And by then they were getting themselves, bending in places that we couldn’t have done, so we left them to it.’ (Primary school staff)

‘It’s quite ironic, you do have to teach children how to do these things. You wouldn’t think that you would have to teach a child how to lie down, close eyes, and go somewhere else for ten minutes, but they do need to be taught that, and you think ‘how bizarre?’. (Primary school staff)

A secondary school teacher who had spoken to his students about how music can help them relax, reported that a student had learnt to use music as a strategy for dealing with stress.

‘So they were saying, ‘well actually sir, I now realise that... when my mum and dad are really winding me up, I just go to my room, I turn my music up, ten minutes I ignore them and so it’s really angry music, but it’s really good because it gets it out of me’.’ (Secondary school staff)

- *Expanded repertoire of healthy food:* The Health Challenge Programme was taken as an opportunity to expand the range of foods eaten by students. Instances of trying and often liking new fruit and vegetables were common in both primary and secondary schools. The following secondary students had taken healthy eating on as part of the Health Challenge Programme:

‘I was eating more fruit and new fruits I haven’t heard of and all that.’ (Secondary school student)

‘My mum always buys fruit, fruit and veg. The veg that I always used to like was broccoli, carrots and stuff, but now I like peas and greens and stuff.’ (Secondary school student)

Not all new food experiences had been as successful!

'Some of the fruit was disgusting ... the kiwi thing.' (Primary school student)

Finally, we also explored what students had got out of the Health Challenge Programme in the follow-up surveys⁵³. Looking across their responses, the issues that emerge are:

- *New learning*: about how to be healthy and the benefits of a healthy lifestyle, more awareness about food, the fact that being fit can be fun, and that small changes can make a difference
- *New experiences*: enjoying new foods and new activities, specific activities, doing new and different things and being outside in the fresh air
- *Actually being healthier and experiencing the benefits of a healthier life*: feeling better, stronger, fitter and more energetic, losing or gaining weight, feeling happier, more positive, less stressed and more self-confident
- *Improved relationships with others*: particularly within families as a result of doing things together or managing emotional responses to avoid arguments, also talking to more people and enjoying working together
- *Improved family diets*: where parents and families engaged in the student's healthier eating
- *Motivation and incentive*: learning that it is possible to make changes, the value of sticking to things, that it's worth trying, and that the more you put in the more you get out.

Other students however recorded their lack of enthusiasm for the Health Challenge saying they had got nothing out of it, that it was boring and pointless, and that doing the same thing was tedious.

6.4 Changes within schools

6.4.1 What schools gained from the Health Challenge Programme

Having looked at student-level change we now turn to look at whether and how the Healthy Challenge Programme left an imprint on schools.

Where schools were undergoing or had recently undergone change, school/class wide activities were perceived to have helped build a sense of unity.

'I think one of the things that they [students] really liked was the fact that we got together and did something as a school because, as I say we've only been on the go for three years, it was an amalgamated school and to do something that was whole school project was really good for us and I think that was one of the highlights for us as well.' (Secondary school staff)

⁵³ We asked secondary school students in the two-months follow-up what difference taking part had made to them. In the four-months follow-up we asked primary and secondary school students about the most important thing they had learnt, and we also asked secondary school students what advice they would give others about taking part in it.

'I thought it would be helpful to our school in building community in that it was something that everyone was involved in and that will be a useful tool for us to use at the start of the next academic year in building our community feeling in the new academy.' (Primary school staff)

Staff in both primary and secondary schools commented on there being a better atmosphere in the school which had improved classroom readiness and performance, particularly as a result of relaxation time, healthier diets and being more physically active.

'I think certain children certainly benefited from the fact they were eating better and they were a lot more alert and lively within the class... they were definitely more alert, they would have learnt more, nicer.' (Secondary school staff)

'Dance and exercise is very good, it releases all your good endorphins and makes you really positive. So to start that in the beginning of the morning, and then they started their class work, and that worked really well obviously.' (Primary school staff)

The fact that Health Challenge Programme was a resource for a holistic approach to health was seen as a particular advantage.

'For me the main difference was the holistic approach ... we wanted to emphasise how diverse being healthy was, really [!]t gave more opportunities ... to bring it into the classroom This gave me the opportunity to actually talk about the music, how it made them feel ... so that it gave me the opportunity to try different things that fall under the umbrella of being healthy.' (Secondary school staff)

Staff talked about having personally learnt from the Health Challenge Programme – about their students' lives and particularly their diets, the home circumstances of some individual students, and about their knowledge of health issues.

'Just learning how bad their diets are.' (Primary school staff)

'The same thing I learn from everything with the kids, I think, is I'm amazed at how much they don't know about things that you expect them to know a lot about. And how insightful they are when you don't think they're going to be.' (Secondary school staff)

All three primary schools had kept up at least one aspect of their health challenges at the point of the qualitative research and were intending to continue with it. None of the secondary schools reported plans to continue with specific Health Challenge activities, although they saw it as contributing to other ongoing healthy activities work. One primary school had expanded its free fruit policy to cover all students for the course of the programme and, budget permitting, planned to continue this in the forthcoming school year. Another decided to continue providing bottles of water to students every morning. Two decided to continue holding relaxation sessions because of the more constructive and calm atmosphere they produced, in one case particularly for children with special educational needs.

'After that [relaxation time] they just got on with their work and the class was quiet, it was really calm, and she [the special needs teacher] said she was going to, well most teachers have said they're going to continue

doing what they can to keep the Health Challenge going. Obviously it might not be able to be every single day, but they're certainly not just going to forget about it now it's gone.' (Primary school staff)

In the same primary school, having seen benefits from children taking some form of physical activity every day, the PE teacher had ordered a book of short activities that could be done in the classroom with the aim that the following year every class would do ten minutes of some sort of activity every day.

The Health Challenge Programme was also seen as supporting continued work within the Healthy Schools agenda. For schools that had achieved Healthy School status, the Health Challenge Programme reinforced the Healthy Schools ethos and was a way of keeping the Healthy Schools agenda at the *'forefront'* of what they were doing.

"What was nice about it is we could say, right now, we've got our plaque, we've actually won the status of Healthy School, and now we're doing a health challenge to keep it going." (Primary school staff)

Where schools had yet to achieve the Healthy Schools status, the Health Challenge experience provided some impetus for working towards it. School leads described how it had made the school much more focused on the Healthy Schools agenda, given staff useful knowledge and experience, and provided an impetus to discuss the issues involved.

"It raised the status of the HS and things like that within the school and it's like right, yes, we really must get on with this" (Primary school staff)

6.4.2 Schools' future intentions regarding the Health Challenge Programme

The leads in all six schools were keen for their school to take part in the Health Challenge Programme again next year. While they were not always certain what longer term impacts it had brought, they appeared confident that it was a good idea and a useful programme. A recurring theme was that undertaking it again would provide them with an opportunity to build on what they had learnt from carrying out the programme this year. It was suggested that with a longer lead in time, they would have more time to prepare for its delivery and in some cases could provide a broader spectrum of linked activities. Some Health Challenge Programme leads thought this could help to engage more staff in the programme. Even where staff were disappointed that students had not engaged more with it, they felt there was scope to make more of it next year.

'The interest was there, which I think is the key thing in this process, because it means we just need to refine procedures.' (Secondary school staff)

6.5 Recommendations for improving the Health Challenge

A number of recommendations were made by students and staff, often covering similar issues.

First, students and staff wanted to see a wider range of challenges on offer, with lots of suggestions about specific activities to include (such as wrestling, basketball, skipping, dance, yoga or karate). They thought it might be useful to make more use

of existing clubs such as sports clubs or Cubs and Scouts. Bringing in specialised staff such as football or cycling coaches was suggested. They also talked about ways in which activities done this year could be made more fun, such as listening to music when they walked or turning a walk into a scavenging hunt. There was less focus on feeling good inside activities but students suggested having singing clubs and art classes. Staff felt that with a longer lead in time they could make a wider range of activities available.

It was also suggested that more time should be put aside for health challenges – both in terms of extending the four week period and in terms of more time allocated to activities.

There were suggestions for ways in which schools could do more around healthy eating next time – for example improving the food served in canteens, more lessons about healthy eating, setting up a breakfast club '*with oats and porridge*', and extending canteen hours.

It was felt there was more scope to use rewards, incentives and competition. Suggestions here encompassed giving rewards to classes or individuals who had engaged particularly well, giving out certificates or medals to people completing challenges, making it a certificated course like an AQA award especially for older students, or setting the Health Challenge Programme up as a competition between individuals, groups, forms or years. Group-based competition was particularly felt to be useful, encouraging teamwork and mutual support, and one Lead was planning on introducing this next year.

There were also suggestions that in future students should be encouraged to choose clearer and more realistic challenges – something that again would be easier with more lead-in time, more support from leads to other staff, and more support from staff to students. It was suggested that having more examples of possible challenges would be useful – drawing on ideas from the pilot sites and developing case studies and information packs. Students also thought there would be value in students being more involved in planning and organising Health Challenge activity.

Staff and students thought that more support from staff would be useful – more classroom time (and particularly this in place of tutor time), more reminders, and Health Challenge activities being more built into other learning or school activities. Staff also thought that more preparation and support for teachers to deal with helping students talk about emotional issues.

Both students and staff thought there was more scope to tailor the Health Challenge more to different age groups. Suggestions here were for weekly '*mini challenges*' for the youngest year groups, who found it hard to retain the focus for four weeks. It was felt that older students need different types of challenges, and that they should also be encouraged to take on a role with younger pupils.

As noted earlier there were mixed views about whether winter was the ideal time to run Health Challenge, and suggestions that spring and early summer would be more appropriate.

Staff thought it would be good to raise the profile of Health Challenge in schools, engaging senior staff, building it into assemblies, and having more timetabled time rather than running it in tutor groups.

The support that the NCB project team had provided was valued and there were mixed views about whether the same level of support would be useful next year or whether schools would need less. It was suggested that NCB should be part of an end of programme assembly. A further thought was that NCB should develop on-line resources and that if it became a national programme with for example a students' forum for blogging and sharing thoughts this would be a strong incentive to students.

Finally, students and staff would have liked to have seen families more engaged with the Health Challenge Programme. At the two-month follow-up stage 23% of secondary school students thought that the Health Challenge should be for school students only, and 65% that it should be for students and families. As we noted in Chapter 4, schools had some suggestions for how parents might be better engaged, particularly running classes or activities for parents including cookery classes, providing a recipe book for students and parents to use together, regular events for parents throughout the Health Challenge period, incentives for parents to do challenges themselves, and widespread local advertising before and during the Health Challenge period.

6.6 Summary

Over 70% of primary school students who completed the two month questionnaire reported that they sustained some health challenge activity at two-months, and the same proportion of those who completed the four month questionnaire reported some sustained activity four-months post-challenge. Sustained activity levels were lower but still substantial in secondary school. Students also reported doing additional healthy activity on top of their original challenges. At the four-month follow-up stage, over 60% of primary school students and just under half of secondary school students completing the four month questionnaire were reporting sustained activities that they intended to keep up.

The vast majority of primary and secondary school students felt, at the four-month stage, that it would be very or quite easy to do more healthy activity – a measure that did not change over time, but that suggests a readiness to make further efforts.

Evidence from staff and students suggests the Health Challenge Programme raised students' awareness of the benefits and importance of a healthy life, of emotional health in particular, and of connections between different aspects of health. It was also felt to have given students practical strategies and tools – ideas for activity, physical activity skills, emotional literacy and language, relaxation techniques, and a wider repertoire of food choices.

In terms of the impact on schools, all six intended to repeat the Health Challenge next year, and all three primary schools were planning to keep up at least one element of Health Challenge activity. Staff felt schools had gained through doing unifying activities and adopting new approaches to health and learning, and saw this learning as linking with, and supporting, the Healthy Schools agenda.

7.0 Discussion

This chapter draws out the key findings of the evaluation and their implications for a possible roll-out of the Health Challenge Programme.

7.1 What the Health Challenge Programme can achieve

The evaluation has shown that the Health Challenge Programme can engage students and lead to changes that are sustained, not only in behaviours undertaken as part of the Health Challenge Programme but also in additional activities. It can lead to new experiences, insight and practical skills for students, and students described a virtuous circle where experiencing healthy activities as fun, and feeling for themselves the positive benefits of healthy choices, underpinned a new motivation to make healthy changes.

For schools too, the evaluation showed that the Health Challenge Programme can bring benefits. Staff described an atmosphere of improved readiness for learning, a unifying effect across the school, and more insight into aspects of students' lives: the programme appeared to give some staff an alternative or additional 'reading' of the health behaviours of their students.

7.2 Critical factors in implementation

All the schools engaged young people to some degree in planning the Health Challenge Programme. Where it worked best the schools engaged the student council in early planning and involved other students in choices around challenge activities. Schools usefully worked with existing structures, building on ongoing engagement practices rather than starting from scratch to engage the student body. This suggests it may be easiest to implement the Health Challenge Programme where such structures are already more advanced. Where they are less advanced, schools may need to consider doing other more foundational work to establish ways of involving students in school decisions – and the Health Challenge Programme might itself help to support such initiatives.

The pilot schools did not appear to have similar structures in place for engaging parents. Although all tried to engage parents in the programme through a range of activities, this proved difficult. Staff reported that with more time, they may have been more active in publicising the programme to parents and in encouraging them to take part. Their experiences reflect how difficult it can be to engage disadvantaged communities in positive health activities. Overall however the lack of success in engaging parents in the Health Challenge Programme appears also to be a reflection of the absence of existing structures and systems for parental engagement. It may be that engaging parents in programmes like the Health Challenge requires a more grounded approach, with a focus on building relationships with parents and finding systems and structures to engage them in the fabric of school life more generally, not just the implementation of activities around the programme. This suggests that schools should be encouraged to consider whether such work is necessary as an early element of implementing the Health Challenge programme.

Schools highly valued the support provided by the NCB project team in getting the pilot programme up and running in schools. Any future roll-out should consider the level and type of support required by schools, given that schools valued initial support in planning but also having a staff team on hand to respond as needs arose. This has potential implications for the cost and sustainability of any future programme. Broad costs for schools in running the programme, such as planning time, lesson preparation time and materials, were minimal.

It is helpful that the Health Challenge model appears to link well to and support the Healthy Schools agenda. It also seems to fit well with SEAL, in particular the 'Going for Goals' unit. Existing Healthy Schools work provided a useful foundation to implementing the Health Challenge Programme and sometimes meant that staff were well informed about health and how to embed healthy activities in school life. An existing culture of working across the school on health issues also seemed to be helpful – two of the three schools that did most whole school activities already had Healthy Schools status. Healthy Schools also provides a useful structure for sustaining and embedding Health Challenge activity.

It was clearly important to allow schools flexibility in how to deliver the Health Challenge Programme to meet the needs of their students. The schools in the pilot were deliberately selected from some of the most deprived areas of Kent, and staff had very useful experience of working with such communities. In addition, some schools were in the midst of significant structural change.

It was important that schools had the opportunity to decide through which classes to deliver the programme, how much of the scheduled timetable to devote to it, and how broad a scope to offer students in terms of individual, class or whole school challenges. Such flexibility allowed schools to tailor the programme to meet the needs of a diverse range of students, by age, family circumstances, interests, abilities, and enthusiasm.

While the Health Challenge Programme was incorporated into planned school provision, individual student choice in whether and how to participate remained important. For secondary schools in particular, allowing students to choose their own challenges rather than having these imposed on them appeared critical to student motivation and behaviour. Class challenges worked particularly successfully in primary schools, but there was scope for student choice within this: one school managed to allow classes some flexibility in challenge choice from a number of pre-determined options.

Alongside this, it seemed that there was value for students and schools in an approach which encompassed a range of challenge types, including individual, class and whole school challenges. Embedding the Health Challenge Programme through class and whole school activities was valuable, and helped to support students doing individual challenges: a 'groundswell' was created which appears to have maintained staff and student motivation and commitment to the programme.

The Health Challenge model clearly can work in secondary as well as primary schools, although it was less successful in secondary schools reflecting different decisions in implementation, more freedom for students to opt out and no doubt also older students' different relationships with schools and school-based initiatives. It is important that there is scope to tailor implementation to the different needs of the youngest and oldest age groups, particularly in types of challenges, duration of challenges and students' roles in supporting each other, for instance where older students could take on mentoring roles to support younger students. Materials for

students too need to be designed for specific age groups and abilities, recognising differences in literacy and English language abilities.

There was some evidence that students would have benefited from additional support to choose realistic challenges. We cannot say whether students who chose more specific challenges were more likely to complete them. However students themselves talked about the importance of realistic challenges, particularly with regards to feeling good inside challenges, which students found harder to define than others. This suggests the programme needs to find a balance between giving students free choice and supporting them to make choices which will work, or to change them early on if chosen challenges proved impossible. This is particularly important given that 'failing' can have negative impacts on morale and self-esteem. Facilitating effective choices may appear to require more support from staff to students, more support from Leads to other staff and more lead-in time.

While it is difficult to say which schools had the most success with the programme, we can say that overall the programme worked best where there was strong engagement by staff, where it was class-led rather than tutor-led, and where students had a say in what they did.

Two schools appear to have made the most of the opportunities the programme offered. Both offered a range of activities around the programme, including a number of whole school challenges. Primary School C involved the student council in planning and student classes in choosing challenges. Most staff undertook the same challenges alongside students, particularly those who walked a mile a day alongside their students. Secondary school D delivered the programme through a mixture of citizenship lessons and tutor time. It offered a broad range of whole school activities to support the programme, alongside students' individual challenges. This included a mentoring scheme run by older students to support younger ones. While not all staff and students were aware of the breadth of activities happening in the school, the overall effect was that Health Challenge activities were integrated throughout school life. The overall impact was ongoing momentum and enthusiasm around the programme.

In contrast, delivering the Health Challenge mainly through tutor time, and implementing it at a time of restructuring and low staff motivation, created some difficulties in other schools.

It is clear that staff enthusiasm can make a significant difference to student motivation and whether they sustained challenges. If staff did not engage with the programme students were less likely to be encouraged to do so and health messages and reminders about challenges were less likely to be delivered. The effect of strong staff engagement was two-fold: more time and support for students and also more buy-in from staff, meaning more enthusiasm from all concerned. Finding a space in which to deliver the programme within class-time is not without difficulties, particularly in secondary schools. However as well as providing benefits in time and support, class-based Health Challenge work may also be a useful platform for staff ownership and enthusiasm for the programme.

7.3 Evaluation design

It is clear that the flexibility of the Health Challenge Programme, while highly valued by schools, had implications for the quantity and quality of the evaluation data received. If the programme had been designed as a single intervention within a

classroom based delivery model, evaluation of schools' experiences and outcomes would have been straightforward.

We need to acknowledge that both staff and student enthusiasm for the pilot programme may have been affected by an ambitious and probably over-burdensome evaluation design. Any future roll out should include plans for continued evaluation which is less onerous for participants and which supports rather than impedes their enjoyment of the programme.