TCRU
THOMAS CORAM RESEARCH UNIT

Leading education and social research
Institute of Education
University of London

National Healthy Schools Programme: Developing the Evidence Base

Ian Warwick, Ann Mooney and Chris Oliver

Thomas Coram Research Unit,

Institute of Education, University of London

April 2009

National Healthy Schools Programme: Developing the Evidence Base

Ian Warwick, Ann Mooney and Chris Oliver

Thomas Coram Research Unit, Institute of Education University of London

Acknowledgements

We gratefully acknowledge the financial support of the Department of Health (DH) for this study. The views expressed in this report are those of the authors and not necessarily those of the funders. Thanks to Catherine Dennison and Sam Mellor for guidance and advice during the completion of the work, and to all those who provided information about their reviews and evaluations of health-related work in and with schools. We would also like to thank the reviewers who commented on an earlier version of this report.

Contents

Acknowledgements 3
1. Introduction 5
1.1. Background 5
1.2. Aims 6
1.3. Methods 6
1.4. Analysis 8
1.5. The database 8
1.6. Structure of the report 9
2. Health and academic attainment 9
3. Effectiveness of school-based approaches to promoting health 10
3.1. Issues in evaluating school-based approaches to promoting health 10
3.2. Findings from systematic reviews 11
3.3. Findings from single evaluations 13
3.4. Summary 15
4. Effectiveness of the National Healthy Schools Programme 15
4.1. Effects on academic attainment 16
4.2. Effects on health and well-being 17
4.3. Evidence from local healthy schools programmes 18
5. What works more generally in promoting children's and young people's health and well-being 21
5.1. PSHE – Sex education and preventing teenage pregnancy 22
5.2. PSHE – Alcohol, tobacco and drug use 23
5.3. Healthy eating 26
5.4. Physical activity 27
5.5. Mental health, emotional well-being and bullying 29
6. Conclusions 31
References 34
Appendix One 40
Methods used in national studies of the NHSP 40
Appendix Two 42
Methods used in evaluations of local healthy school programmes attached to the NHSP NHSP 42

1. Introduction

1.1. Background

The National Healthy Schools Programme (NHSP) aims to support children and young people in developing healthy behaviours, help raise the achievement of children and young people, help reduce health inequalities, and help promote social inclusion. Working with special, primary and secondary schools, the programme focuses on four key themes: Personal, Social and Health Education (including Sex and Relationship and Drug Education), Healthy Eating, Physical Activity and Emotional Health and Well-being (including bullying).

The NHSP requires that schools take a settings-based or 'whole-school' approach consisting of ten elements. [1] Schools work within a quality assurance framework and are awarded National Healthy School Status if they have met national criteria across the four themes. Increasingly, local Healthy School programmes are supporting health-related work with children and young people in early years and further education (including sixth form college) settings.[2]

During 2007, the Department of Health (DH) commissioned the National Centre for Social Research to conduct a national evaluation of the NHSP which is due to report in 2010. In the interim, the DH asked the Thomas Coram Research Unit at the Institute of Education, University of London to conduct a focused review of current sources of evidence which might assist with the development of the National Healthy Schools Programme.

---

[1] These ten elements are: leadership, management and managing change; policy development; curriculum planning and resources, including working with outside agencies; learning and teaching; school culture and environment; giving children and young people a voice; provision of support services for children and young people; staff professional development needs, health and welfare; partnerships with parents/carers and local communities; assessing, recording and reporting children and young people's achievement. For further information see DH/DCSF/Healthy Schools (2007)

[2] See, for example: http://www.healthyschools.gov.uk/Beyond-NHSS.aspx Accessed 12 June 2008.

1.2.Aims

The overall aim of the review was to provide an overview of existing evidence on the effectiveness of healthy schools approaches to promoting health and well-being among children and young people.[3]

More specifically, work was guided by a concern to:

1. consider the links between improving the health of school pupils and educational achievement;
2. identify and summarise reviews and evaluations of healthy school approaches in general;
3. summarise the findings from national studies and local programmes on the effectiveness of the National Healthy Schools Programme in England; and
4. summarise what has been learned from reviews of 'what has worked' with regard to promoting specific aspects of children's and young people's emotional health and well-being and which relate to the four NHSP themes.

1.3.Methods

The resources and timescale available for this study precluded conducting a systematic review of all research related to NHSP health topics and issues. Rather, our goal was to identify and synthesise information from published and accessible evaluations and reviews. Where systematic reviews and reviews of reviews had recently been published – such as guidance from the National Institute for Health and Clinical Evidence (NICE) on alcohol use and young people – these were taken as the most up to date synthesis of topic-specific findings. While there may be individual studies and evaluations which such recent reviews have omitted, it was beyond the scope of the present work to enquire into such possible omissions. Moreover, our remit was to report on findings from these overarching reviews rather than to examine their methodology.

To identify potential reviews and studies for inclusion a six-pronged search strategy was used.

1. First, a search was conducted of electronic databases such as the Applied Social Sciences Index and Abstracts (ASSIA), the Australian Education Index (AEI), the British

[3] We use the general terms 'healthy schools approaches' and 'healthy school programmes' to describe health promoting school programmes, whole-school approaches to promoting health and approaches such as the National Healthy Schools Programme. However, where a specific type of programme is mentioned in a review or evaluation, we use that particular term when reporting findings.

Education Index (BEI), Current Educational Research in the UK (CERUK), the Educational Research in Scotland Database, the Education Resources Information Centre (ERIC), the International Bibliography of the Social Sciences (IBSS), the Physical Education Index (CSA), PsycINFO (covering psychology and related disciplines of psychiatry, education, medicine and law), and the Social Sciences Citation Index (SSCI).

To ensure relevance, the inclusion criteria used included: studies published during or after 1999 (when the NHSS/NHSP was established),[4] which have examined whole-school approaches, have addressed health promotion and 'comprehensive school-based health programmes' (such as in the USA), and which are reviews of evaluations which have focused on health themes and topics which are included in the NHSP (PSHE, physical activity, healthy eating and emotional health and well-being). Exclusion criteria included: studies published prior to 1999, and studies that were single evaluations of specific health-topic based interventions (rather than reviews of evaluations).

2. Second, to ensure that the maximum number of relevant articles was included, an online search of a number of individual relevant journals was also conducted (using the same inclusion and exclusion criteria). These included Social Science & Medicine, Critical Public Health, Health Education, Health Education Research, Health Education Journal, the Journal of School Health, Health Development and Health Promotion Practice.

3. A search of relevant websites was undertaken. These included: the EPPI-Centre; the National Institute for Health and Clinical Excellence (NICE); the Office for Standards in Education, Children's Services and Skills (Ofsted); the European Network of Health Promoting Schools (ENHPS); the World Health Organisation's Global Health School Initiative; the American School Health Association; and the International Union for Health Promotion and Education.

4. Contact was also made with selected regional and national healthy and health promoting school networks in countries outside the UK to identify any additional reviews and evaluations. These networks were the International School Health Network; the School Health Research Network; Schools for Health in Europe; the

[4] The National Healthy School Standard (NHSS) predated the NHSP.

American School Health Association; Communities and Schools Promoting Health (Canada); and the Australian Health Promoting Schools Association.

5. Alongside reviews and evaluations of successful whole-school approaches to promoting children's health and well-being, searches were conducted for studies which focused on the *potential* for improving educational achievement and attainment through improving health and well-being. Journal indexes (as above) were searched, with inclusion criteria of studies published during or after 1999, and which examined associations between improving health and well-being through schools and pupils' learning and educational achievement and attainment. Exclusion criteria included studies published prior to 1999 and a focus solely on health-related outcomes.

6. With regard to evidence of the effectiveness of local programmes, there were a number of sources on which to draw. Regional and Local Healthy Schools Programme Coordinators were asked to identify and forward, to the study team, evidence they may have collected on the programme's impact or effectiveness on schools, children and young people or parents/carers. Furthermore, a number of published reviews and evaluations of Local Healthy School Programmes were accessed, many of which took the form of focused case studies.[5]

1.4.Analysis

Published articles and papers as well as local reviews and evaluations were analysed to identify healthy schools approaches that have been successful in promoting health and well-being among pupils. As we drew on evidence from systemic reviews, syntheses of reviews as well as single evaluations (including evaluations of local programmes attached to the NHSP) the strength of findings regarding what has worked varies across the reports. Because of this, we have reported findings from systematic reviews and single study evaluations under separate sections.

1.5.The database

A searchable, online, database is being produced as part of this study. This will enable users to identify and locate many sources of evidence drawn on here.

---

[5] See, for example, the case studies of work in primary schools in Camden: http://www.lgfl.net/lgfl/leas/camden/accounts/hsp/web/hss/documents/Case%20Studies%20Draft%20Booklet%20OCTOBER%2006%20with%20cover.pdf Accessed February 2009

1.6.Structure of the report

The remainder of the report is organised as follows. We first consider general findings regarding the link between health and academic attainment and then, drawing on systematic reviews and single study evaluations, we report on what have been found to be successful healthy school approaches.

Next, we outline the reported effects of the NHSP in England – both with regard to academic attainment and health-related outcomes. In doing so, we draw on national as well as local evaluation data.

We then summarise some of the key findings from reviews of what has worked in promoting children's and young people's health and well-being both in school and out of school settings. We conclude with a brief summary and discussion of the key issues that arose from the study and note the importance of building on local evaluation practice to refine and strengthen local healthy school programmes.

2. Health and academic attainment

A number of studies have shown there to be a close association between health and academic attainment, with academic attainment influencing, and being influenced by, health status (Healy, 2004; World Health Organisation, 1996). There is a substantial body of evidence showing that poor health can inhibit learning (Healy, 2004; St Leger and Nutbeam, 2000; Feinstein et al, 2008). Moreover, drawing on a meta-analysis of studies focusing on health and educational outcomes, St Leger and Nutbeam (2000) conclude that good health is associated with positive educational outcomes. Their analysis reveals a strong association between health and education-related outcomes such as exam grades, classroom performance, and students' behaviour and attitudes. Moreover, a review of the literature focusing on the links between health and school attainment found that '… in the longer-term the research consistently points to adverse effects of ill health on attainment' (Powney et al., 2000: 7).

The relationship between health and attainment is, however, confounded by other factors. Poverty, for example, is strongly linked to poor health, which in turn has a negative impact on learning (Powney et al 2000). The effects of physical ill-health on attainment are stronger for children 'at risk' and in poverty, and such children are more likely to suffer ill health and as a consequence spend less time in school and have poorer learning experiences. Looking at different aspects of health and their affect on attainment, Powney et al (2000) conclude that:

- physical activity and exercise is associated with improved motivation at school, reducing anxiety and depression, and has a positive effect on studying in school;

- improved nutrition may have an impact on learning and attainment – although the findings are inconclusive (due to inconsistencies in study designs which make comparisons difficult, and the number of studies which report no effects);
- poor mental health can lead to a range of problem behaviours that affect concentration, causing difficulties and low achievement at school; and
- for some pupils, substance misuse is associated with lower school grades and negative attitudes towards school.

There have been two reviews of school-based health programmes that measure academic attainment, that undertaken by Powney et al (2000), above, and a second one by Murray et al (2007) which examined evidence from evaluations of the Coordinated School Health Program in the USA. Murray and colleagues found strong evidence that more time spent on physical activity and exercise (one component of the Coordinated School Health Program) and correspondingly less time in academic lessons, did not impair academic attainment. For children with asthma, incorporating health education and parental involvement (two other components of the Coordinated School Health Program), had a positive effect on academic outcomes such as test scores in science – although not on maths or reading.

3. Effectiveness of school-based approaches to promoting health

In this section we focus on evaluations of school-based approaches to promoting health looking in particular at those approaches that most closely mirror the style of work undertaken as part of the National Healthy Schools Programme.

3.1. Issues in evaluating school-based approaches to promoting health

There are a number of factors to bear in mind when evaluating school-based approaches to promoting health. These issues are important to bear in mind as they limit what can be concluded about, not only the effectiveness of school-based approaches to promoting health, but also the transferability of findings from one setting to another.

One issue, for example, relates to the approach schools have adopted in their efforts to promote health. The NHSP is somewhat distinctive, for example, in that it seeks to engage the whole school community. Its whole school approach identifies ten key elements of work. Other school-based approaches focus more narrowly on specific health issues. Regardless of the approach adopted, there may be variation in teacher involvement. Moon and others (1999), for example, in an evaluation of the Wessex Healthy Schools Award reported that, in some schools, a number of staff knew little or nothing about the scheme, even though their school had gained the healthy school award.

Significantly, in an education system where schools have autonomy over what is taught and how, there is likely to be variation in programme implementation. Some schools may seek

to integrate concern for health widely across the curriculum. Others may seek to address health through specific curriculum subjects. Yet others aim to promote health through ear-marked events, themes or topics, or more generally as part of tutor group work. This variation in practice makes it difficult to draw clear-cut conclusions concerning the likely effects or effectiveness of particular interventions. It also raises questions about the practicality of transferring programmes developed in one particular context (for example, the USA) to very different settings.

A further issue worthy of consideration derives from the fact that a number of factors together most usually have an impact on what pupils know, feel or do with regard to health. Rarely are health-related outcomes the consequence of one particular factor or determinant. Most usually, both in- and out-of-school factors combine together to influence pupil health outcomes. This 'complexity' presents special challenges for identifying the associations or links between any one intervention programme and its consequences.

With regard to questions of evaluation design, there are many ways in which data on health and education outcomes can be collected. The randomised controlled trial (RCT) is felt by many to be the 'gold standard'. Such designs are strong in determining cause and effect, and are helpful in eliminating selection bias and in randomly distributing factors between intervention and control schools that may influence health-related outcomes. However, the complex nature of schools and their local authority contexts may mean that RCTs are not always appropriate or manageable to implement in school settings (Denman et al., 2002). Moreover, it can be difficult to ensure that 'experimental' and 'control' schools are really unlinked, as RCT design requires.

Finally, there may be different views as to what constitutes evidence of effectiveness and how it might best be measured or identified. Teachers may be interested in the knowledge and competencies their students have gained from the health curriculum, whilst those working in the health sector may be more concerned with reducing health risk and/or increasing protective health behaviours (St Leger, 2007). Key stakeholders will need to identify and agree what they perceive to be the most useful outcomes for their programme (St Leger, 2007).

3.2.Findings from systematic reviews

One consequence of the challenges in evaluating school-based approaches to promoting health appears to be a paucity of robust evaluations (Lister-Sharp et al, 1999; Mukoma and Flisher, 2004; Stewart-Brown, 2006). Lister-Sharp and colleagues identified 1067 titles and abstracts relevant to a health promoting schools approach, 111 of these provided useful

background material and 12 met their extended criteria for inclusion in the review.[6] None of the studies however included schools that had adopted all the components of the healthy promoting schools approach (as defined by Lister and colleagues).[7] Although a wide range of experimental studies were included in the review, most did not meet their criteria for a robust study.

The authors conclude from this systematic review that the evidence is limited, but promising, with regard to promoting health through school settings. They note that carefully and skilfully executed interventions along the lines of a health promoting schools approach can have the potential to improve children's and young people's health. In particular:

- school health promotion initiatives can have a positive impact on children's health and behaviour but do not do so consistently;
- most interventions were able to increase children's knowledge. Changing other factors which influence health, such as attitudes and behaviour, is much harder to achieve, even in the short-term;
- interventions to promote healthy eating and fitness, prevent injuries and abuse, and promote mental health were the most likely to be effective and those to prevent substance misuse, promote safe sex and oral hygiene the least effective.
- overall, a multifaceted approach is likely to be most effective, combining a classroom programme with changes to the school ethos and/or environment and/or with family/community involvement.

Building on Lister and colleagues' review, Stewart-Brown (2006) concluded that those healthy schools programmes effective in changing health or health related behaviour displayed aspects of a whole school approach to promoting health in that they were, multifactorial, involved curriculum development, school environment and community activities, were intensive and of long duration.

A systematic review undertaken by Mukoma and Flisher (2004), unlike the reviews above, was not confined to controlled studies or health-related outcomes, although studies that addressed only one health outcome were excluded. Following a wide-ranging search,

---

[6] To be included, studies had to have a control (i.e. comparison) group or a before-and-after design with no control group and evaluating school-based interventions involving health promoting activity in each of three areas: (i) the school ethos and/or environment, (ii) the curriculum and (iii) the family and/or community; and demonstrate effective participation by the school. They also had to provide information about the components and delivery of the intervention and include and report health-related outcomes.

[7] Lister-Sharp and colleagues (1999) defined the health promoting schools approach as interventions involving health promoting activity in each of three areas: (i) the school ethos and/or environment, (ii) the curriculum, and (iii) the family and/or community; and highlight the need for active participation by the school.

eighteen possible studies were identified, and nine were included in the review.[8] The main findings suggest:

- schools can successfully initiate activities to become healthy schools, including revising school policies and organisational structures to facilitate activities to promote health, and/or integrating health education activities into the curriculum;
- in evaluations with control groups, intervention schools were reported in some studies to do better than control schools in some health domains, whereas other studies reported no significant differences;
- a direct causal relationship between a healthy school approach and observed outcomes cannot confidently be made because of the varying methodologies used in published evaluation studies. There is promising rather than strong evidence for the efficacy of such an approach in impacting upon the health of students and on the school ethos and environment.

3.3.Findings from single evaluations

Findings from systematic reviews provide the most convincing evidence of elements of success of healthy school programmes. However, in the present review we identified a small number of single evaluations of healthy school approaches. These studies focused on particular health topics, such as healthy eating, or issues such as promoting children's emotional well-being and/or good relationships between pupils and staff, on raising self-esteem or on encouraging children to feel connected and part of the school.

The designs and methods used varied across the investigations. One took the form of a cluster-randomized trial (Patton et al, 2006), three others involved intervention and control schools without randomization, (Xia et al, 2004; Havlinova & Kolar, 2005; Omarova et al, 2005), one used a cross-sectional design (Lee at al, 2006), another adopted a case study approach (Weiler et al, 2003), and final study took the form of a process evaluation (Inchley et al, 2006).

A cluster-randomized trial was used to test the effectiveness of an intervention in 25 secondary schools in Victoria, Australia to promote social inclusion and commitment to education. The intervention included an assessment of a school's social climate, establishing inclusive classroom environments and creating opportunities for student participation in school life beyond the classroom. The study reported that risky health behaviours, in relation to substance use, were reduced, as was anti-social behaviour and initiation of

[8] Excluded studies were brief summaries of either completed evaluations but with insufficient detail for review or evaluations in progress.

sexual intercourse (Patton et al., 2006). Differences between intervention and control groups were not significant but moved in a 'favourable direction at follow-up surveys' (p.1586).

Xia and others (2004) evaluated the impact of introducing a health promoting schools approach on nutrition in a sample of pilot schools in Zhejiang Province, China. Students, teachers and parents from six intervention schools (three primary and three secondary) and six control schools (three primary and three secondary) were surveyed before and 18 months after the intervention. The intervention programme involved included nutrition education, changes to school policy and school environment, school based health and nutrition services and outreach to families and community. Findings revealed a significant and positive change in nutrition-related knowledge among primary and secondary school pupils and their parents and guardians in pilot schools. There was, however, no clear link between knowledge gains and subsequent behaviour change.

In the Czech Republic, students and teachers in 33 health promoting schools and 33 control schools were surveyed to identify whether the ethos and atmosphere of the health promoting school contributed to less anti-social behaviour, particularly bullying (Havlinova & Kolar, 2005). There was a significant positive difference between health promoting and control school student ratings on some of the dimensions of social climate (e.g. student concentration, interest in lessons, calm atmosphere in the classroom). Significantly more students in the health promoting schools rated teachers' response to bullying more positively than pupils in control group schools. Higher levels of bullying were reported in health promoting schools. The authors suggest that this could be attributable to a greater awareness of bullying among students in health promoting schools and a greater willingness to disclose and challenge behaviour.

A study in Latvia, involving surveys of students and teachers in 16 health promoting schools and 16 matched control schools, found that the health promoting schools programme had a significant impact on the development of an infrastructure for school-based health education and promotion (Omarova et al., 2005). Compared with control schools, teachers in health promoting schools were more likely to have accessed health-related training and established health teams to take forward the work. A greater proportion of students in health promoting schools were aware that health was a priority in their school, reported that their views were taken into account, and were somewhat more positive about their school environment. There was, however, no difference regarding teacher-pupil and peer relationships. Moreover, there was no identified impact of the programme on students' life skills or reported health behaviours.

An evaluation of the Hong Kong Healthy Schools Award compared schools which had achieved the award with those which had not. Pre- and post-intervention measures were undertaken and students in award schools were found to have higher levels of satisfaction with their lives and greater emotional well-being and reported better health and academic performance (Lee et al., 2006; see also Lee et al,2005).

A case study design was used to evaluate whether providing support for the Coordinated School Health Programme (CSHP) in eight pilot schools in Florida, USA, resulted in successful implementation of the programme and whether the approach could improve school performance (Weiler et al., 2003). The majority of the 62 teachers responding to a survey perceived their schools to be more involved in health promotion activities and saw the CSHP as providing an infrastructure for health promotion, helping schools to develop concrete goals and developing partnerships with the community and health agencies.

A process evaluation of a health promoting school programme in Scotland focused on healthy eating. The study found that there was little change in individual eating patterns although school-level change was reported in terms of an increase in the availability of healthier food options, raised awareness of the importance of healthy eating, and changed attitudes among staff and pupils towards healthy eating in general (Inchley et al, 2006).

3.4.Summary

As noted earlier, it can be challenging to assess the findings from single evaluations – the themes and topics addressed, as well as the ways in which school-based health programmes have been implemented, frequently vary across studies. Findings from systematic reviews in which evaluation designs have, as a minimum, used intervention and comparison schools, suggest that some effects (such as changes in health-related knowledge), may be brought about by the engagement of schools in healthy school approaches. Involvement in a healthy school programme can create an infrastructure to support the development and implementation of health-related activities. These activities may in turn raise levels of knowledge (and sometimes awareness) about particular health topics. There is rather more limited evidence that this leads to changes in health-related practices and behaviours among pupils, parents and staff.

4. Effectiveness of the National Healthy Schools Programme

In addition to identifying successful healthy school approaches, a further aspect of the review was to report on findings from evaluations of the National Healthy Schools

Programme (NHSP). In order to do so, we cast the net widely, looking both at the work of its predecessor the National Healthy School Standard (NHSS), and the NHSP itself.[9]

We first outline what has been learned from evaluations that had collected information from a number of schools and in which the methods used were relatively explicit. We then report on findings from evaluations which were smaller in nature, where the methods used appear relatively less clear and where the reliability and validity of findings were somewhat more difficult to determine.

4.1. Effects on academic attainment

Several studies which have used school improvement and pupil attainment data to examine the impact of the NHSP on academic attainment. The data analysed has included the results from the Standard Assessment Tests (SATs) at different Key Stages in the primary sector, GCSE results and Ofsted school inspection reports.

The Scottish Council for Research in Education compared schools in England working at Level 3 of the Healthy Schools Standard against schools which had not reached that level. [10] Using data from 1997-2001, and after controlling for social deprivation, Level 3 schools had better results in the primary sector for all Key Stage One (KS1) assessments and in science at Key Stage Two (KS2) compared with 'other' schools (Thorpe et al., 2002).

However, the same study noted that where KS1 and KS2 attainment rates are already high, low improvement rates in some schools may simply reflect their high starting position. No overall differences were found between schools for GCSE results, although the number of pupils eligible for free school meals did make a difference (suggesting a link between deprivation and academic attainment).

A further study analysing KS2 results for schools in 16 LEAs in England found higher rates of improvement, equivalent to 0.5 per cent increase in each of the three subjects, for schools having achieved healthy schools status compared to those that had not (Sinnott, 2005). However, the accelerated rate of progress was not universal; for some local authorities those not involved in the programme were doing better, perhaps reflecting variation in local healthy schools programmes.

---

[9] The NHSS was broadly similar to the NHSP although schools were not required to address the four key themes of PSHE, physical activity, healthy eating and emotional health and well-being but could prioritise which themes to address.

[10] Although no longer applicable, at the time there were three levels to the NHSP. Level 1 indicated a general awareness of the NHSP; Level 2 required schools to have accessed training and/or support through the programme; and Level 3, the most intense, required schools to have begun the process of auditing, target setting and action planning.

Research carried out by Schagen et al (2005) as part of a national evaluation of the National Healthy School Standard (NHSS) found there to be very few significant differences between Level 3 schools and other schools with regard to academic attainment. For example, analysis of the national pupil dataset revealed little evidence of an association between Level 3 schools and attainment in core subjects, and even these tended to be small.

4.2. Effects on health and well-being

Six studies were identified that focused specifically on the NHSP (or NHSS) and effects on pupils' health and well-being. Three of the studies adopted a case study approach (BMRB, 2003; Thurston, 2006; Warwick et al, 2005b), two drew on Ofsted inspection data together with supplementary data collection (Oftsed, 2006; Ofsted, 2007) and one other study involved the re-analysis of existing datasets (Schagen et al, 2005).[11]

Findings from these studies suggest that healthy schools programmes have assisted schools to develop and implement a wide range of health-related activities including work on pupil diet and nutrition, physical activity, problem behaviours (and student behaviour), pupil involvement and partnership with parents and the local community.

In an evaluation of the NHSS, key features of work in schools related to the provision of playground equipment, making changes to policies, integration of health into the curriculum and an improved school ethos. The ability to adopt a whole-school approach was perceived to be greater in primary schools and where the programme had been running several years (Warwick et al, 2005b). As part of the same evaluation, an analysis of Ofsted inspection ratings highlighted that Level 3 schools were rated higher on all but one of 11 scales relevant to the NHSS including attitudes to school, enthusiasm for school, behaviour, and provision for PSHE (Schagen et al, 2005).

The NHSP has been reported to provide a structure through which to develop health work, put health firmly on the school agenda, and acknowledge good practice (BMRB, 2003). The NHSP has also been said to offer a catalyst for change, providing a framework to review use of resources and a rationale for developing new ways of working (Thurston, 2006). Reports from Ofsted reinforce this view. In a survey of 18 schools, 14 of which were participating in the NHSP, inspectors considered that the programme was having a positive impact on raising awareness, helping schools put their ideas into practice and bring about change (Ofsted, 2006). Where the curriculum was particularly good in terms of healthy eating,

[11] Details of the methods used in these studies can be found in Appendix One.

improvements were, according to inspectors, driven by work associated with the NHSP (Ofsted, 2007).[12]

4.3. Evidence from local healthy schools programmes

In response to a request to all local programme coordinators for evaluations and reviews of local healthy schools work, 15 evaluations were received.[13]

4.3.1. Designs and methods used for local evaluations

The 15 evaluations mostly covered the period 2006-2007, although two reports describe work conducted between 2003 and 2005, before changes to the NHSP criteria were introduced.[14] The methodology for evaluations varied from the use of quantitative methods such as surveys, to use of more qualitative methods, such as focus groups.[15]

Six programmes had conducted school surveys (1-6), usually following accreditation and undertaken by post.[16] The purpose of these was usually to evaluate the process of programme implementation, though one survey focused on assessing support needs. These surveys tended to ask just one or two questions about impact or effectiveness, for example, enquiring into perceived changes or benefits that had come about, or about the usefulness of the NHSP as a school improvement tool.

Another local programme (7), although not undertaking an evaluation as such, had recorded examples of impact from material used in the accreditation of schools.

Two programmes (8 and 9) had used Ofsted reports or LEA data relating to school or pupil performance in an attempt to show the difference that participating in the NHSP could make. One (8) had analysed the data of pupils achieving level four at Key Stage 2,

---

[12] A review of Ofsted school inspection reports noted that the NHSS was perceived to support the provision of PSHE, SRE and Drug Education was also thought to be an indication of the school's commitment to supporting pupils' wider needs, and promoting healthier lifestyles, including diet and physical exercise. However, it is unclear from this review the actual numbers of reports in which this was reported. Available at: http://www.wiredforhealth.gov.uk/cat.php?catid=1098 Accessed 5th December, 2008.

[13] Local NHSP coordinators were invited to forward any type of review or evaluation so as to include all examples of such work. As a result, material was received from another four local programmes which did not contain information on impact or effectiveness of a healthy school programme. This material included the observations of assessors in two schools applying for accreditation, a report of a project on emotional health and well-being to inform future planning, the account of one teacher's experiences of their role as a healthy school coordinator in her/his school, and an evaluation of a support officer's role.

[14] The majority were reports, but one was a list of the responses to the relevant survey question and the other a list of examples of evidence of impact extracted from accreditation submissions from schools and grouped under the four NHSP themes.

[15] The table in Appendix Two provides details of the methodology and a summary of results for each of these local evaluations.

[16] The numbers in parentheses refer to the evaluations listed in Appendix Two.

comparing the differences in the proportion of pupils achieving level four in schools with the healthy schools award (24 schools) with all schools in the LEA (92 schools) not including special schools. The other programme (9) had used Ofsted ratings (outstanding, good, satisfactory or inadequate) for the school overall and for 'personal development and well-being' for schools inspected between September 2005 and December 2007 and compared the ratings for 161 schools with the healthy schools award with ratings for 51 schools that were working towards the award.

Finally, six programmes (10-15) had used mixed methods in their evaluations, combining quantitative with qualitative methods. These evaluations differed from the school surveys described above in that they tended specifically to address programme impact as well as considering process. Apart from one evaluation (15), they also sought to include the views of pupils, either through focus groups or by means of a questionnaire. In three of these six evaluations, the views of parents/carers had also been elicited. Four of these evaluations had been undertaken wholly or in part by independent organisations commissioned by the local programme.

One programme in particular (12) had developed an evaluation framework incorporating three strands of enquiry: the impact of the programme on young people, the impact on schools, and programme delivery. For each of these strands, different evaluation methods were applied. For example, case studies involving interviews, questionnaires and class activities, and a young people's reference group for sex and relationship education informed the impact on young people, whilst case studies, a survey of schools and analysis of Ofsted reports were methods used to assess the impact on schools.

4.3.2. Findings from local healthy schools evaluations

Given the range of methods used, the use of small samples and the often low response rates to surveys, it is hard to judge the effects of local NHSP programmes on health- and education-related outcomes with accuracy.

The impact of one local programme on pupils and the school, for example, was rated through the use of a five point rating scale by respondents from 23 schools. Positive changes in knowledge and behaviour were reported and were related to healthy lifestyles (particularly healthier diets and physical activity) (3).

In a different local programme, evaluated using a multi-method approach involving case studies, interviews and questionnaires, the key findings included evidence of changes in all healthy school themes, such as taking more exercise and eating healthier food and more initiatives to promote pupil participation (12).

In another evaluation of a local NHSP programme, which used a postal survey and focus groups, (13) the majority of respondents from the 48 schools reported improvements in curriculum development, social inclusiveness and in the areas covered by the NHSP themes.

Three local programmes had looked at Ofsted inspection reports for evidence of healthy schools impact on academic achievement (9, 10,12). Reports commented favourably on the work the school had done to put into place healthy school activities.

One study (15) analysed the results for the Health Related Behaviour Questionnaire (HRBQ) from six secondary schools involved in a local healthy schools program, between 2005-2007 to identify any differences between pupils in three schools achieving Healthy Schools Status and three schools that did not. In relation to a sub-sample of 16 items of the HRBQ considered relevant to healthy schools work, positive differences were reported (but no statistical details were provided) for walking to school, self-esteem, considering health when eating, bullying as well as smaller differences for enjoyment of lessons; eating breakfast; eating five fruit and vegetables a day, wanting to give up smoking, enjoying exercise and feeling fit.

Broadly speaking, and across local studies as a whole, three types of positive impact can be identified as a result of healthy schools work – changes in school-based practice and/or environment, changes in behaviour and/or attitudes, and the wider benefits of the programme (see Figure 1).

Figure 1: Perceived impact of local healthy schools work

Examples of changes in school-based practice/environment

- Strengthened PSHE curriculum
- More effective PSHE teaching
- More opportunities for social awareness
- Healthier food choices offered
- Increased access to drinking water
- Introduction of breakfast clubs
- Improved processes of pupil participation
- More opportunities for physical activity
- Improvements in the physical environment and play facilities

Examples of changes in knowledge/behaviour

- Improved behaviour and attitudes
- Improvements in confidence among pupils
- Improved concentration
- Children making healthier food choices
- More children participating in physical activity

- Increased understanding among pupils of sex and relationship issues
- Better understanding among staff of health-related issues

Examples of wider benefits

- Catalyst to drive forward initiatives
- Programme served as a useful resources to develop school-based activities
- Positive influence on achievement, attendance and exclusion
- More developed environment for health promotion
- Useful framework for setting priorities for improving health
- Useful for school improvement
- Supports Ofsted self-evaluation

In summary, the perception among the majority of respondents in local evaluations is that healthy schools work has had a positive impact on children and young people and on schools as a whole, and can be effective in promoting school improvement. Despite the small scale nature of many local evaluations (which lack the statistical and methodological robustness sometimes associated with larger studies), their results echo findings from national studies – healthy school work, supported by the local NHSP programmes, appears to be associated with positive benefits to schools and to pupils. However, although respondents may themselves attribute changes in a school to the healthy schools programme, a clearly causal relationship cannot be inferred. Healthy schools work may be one of a number of initiatives within a school that seeks to promote change through health-related practices. Furthermore, those who have invested time and effort in healthy schools work, and who are committed to that approach, may be particularly likely to respond positively to an evaluation of the programme. Without further in-depth evaluation, it is difficult to attribute clear-cut causal effects to much of the local work that has taken place.

5. What works more generally in promoting children's and young people's health and well-being

In this section, we move beyond a review of what has been learned from healthy schools work – both generally and through evaluations of local NHSP work – to answer a more general question, namely what have been found to be some of the key factors which work in promoting children's health and well-being. The focus here is on the current NHSP themes ((i) PSHE – including education about sex, relationships and preventing teenage pregnancy, (ii) PSHE – including education about alcohol, tobacco and drugs – (ii) healthy eating, (iv) physical activity and (v) mental health and emotional well-being – including

bullying). We draw on available systematic and reviews of reviews to provide evidence of what seems to work best with regard to each theme.[17]

5.1. PSHE – Sex education and preventing teenage pregnancy

5.1.1. The studies

Two reviews (Kirby , 2001; Kirby et al 2005), one review of reviews (Swann et al, 2003) and a systematic synthesis of research (Harden et al, 2006) have investigated the evidence regarding the prevention of teenage pregnancy. The reviews reported demonstrably successful and promising approaches to preventing teenage pregnancy and findings fell into three areas: programmes that focus primarily on sex and relationships, those that attend to wider social factors (such as improving young people's experiences of school) and those that address both (Kirby, 2001; Harden et al, 2006; Swann et al, 2003).

5.1.2. Key findings – sex education programmes

Kirby (2001) identified ten key characteristics of effective sex and education programmes. In general, successful programmes:

- focus on one or more sexual behaviours that lead to unintended pregnancy;
- provide and reinforce a clear message about abstaining from sexual activity or using condoms or other forms of contraception;
- provide basic and accurate information about the risks associated with teenage sexual activity, about ways to avoid intercourse and about methods of protection against pregnancy and STIs;
- include activities that help young people identify and respond to unwanted pressure to have sex;
- use interactive rather than didactic teaching methods, which are relevant to young people (such as their age, sexual experience and culture);
- provide more than a few lessons or sessions and which are conducted by skilled and dedicated educators.

Those programmes that appeared to have longer-term impacts on the prevention of teenage pregnancy tend to be implemented in schools, consist of 12 or more sessions and include sequential sessions that run over a number of years (Kirby et al, 2005).

[17] In this section we present a summary of key findings only. The database to accompany this report will contain links to publicly available reviews on which this report draws.

Alongside education, the provision of confidential, accessible, young people-friendly sexual health services has also been found to be associated with reduced rates of teenage pregnancy. There is some evidence that involving young people's parents in information and prevention programmes may contribute to success (Swann et al, 2003).

5.1.3. Key findings – programmes that address wider social factors

Successful programmes that address the wider social factors that contribute to reduced rates of pregnancy among young people include early childhood interventions aimed at pre-school and primary school-aged children and their parents, and youth development programmes aimed at fostering social and academic development among young people aged 11-18 (Harden et al, 2006).

A thematic analysis of young people's views (who were recognised to have been 'at risk' with regard to teenage pregnancy or who had been teenage parents) identified three recurrent themes that may point to important contextual factors influencing vulnerability and risk: dislike of school, poor material circumstances and unhappy childhoods, and low expectations for the future. With regard to dislike of school, young people focused particularly on bullying, loneliness and lack of relevance of school to their own lives (Harden et al 2006).

5.1.4. Summary

Taken together, the implications from these studies for the prevention of teenage pregnancy suggest that:

- sex and relationships education programmes in schools are a contributory, rather than a sole, factor in preventing teenage pregnancy – and so should be provided as one element of a young person's education;
- interactive, focused and skills-based sex education programmes – relevant to particular groups of young people – should be taught by skilled educators over a number of sessions lasting more than a few hours in total;
- programmes in school should be complemented by work in out of schools settings.

5.2. PSHE – Alcohol, tobacco and drug use

5.2.1. The studies

Numerous studies have focused on alcohol, tobacco and drug use prevention among young people. In the space available, it is not possible to do more than review some of the principal findings from these.

One systematic review focused on school-based prevention for illicit drug use (Faggiano et al, 2006). A further review of reviews outlined successful approaches to prevention and/or reduction of illicit drug use among young people (Canning et al, 2004). Drawing on a number of sources, NICE has produced guidance on community-based interventions to reduce substance misuse among vulnerable and disadvantaged young people (NICE, 2007a).

With regard to alcohol (mis)use, NICE has also produced guidance on interventions in schools to prevent and reduce alcohol use among children and young people (NICE, 2007b).

With regard to smoking tobacco, the Health Development Agency has produced a briefing on smoking interventions with children and young people, which brings together evidence from a range of sources (HDA, 2004).

Although alcohol use, smoking of tobacco and drug use may have different antecedents and consequences, some reviews have tended to consider these issues together. One systematic review investigated the effects of drug education in schools (McBride, 2003) – and included education about alcohol and tobacco as well as illicit drug use. Another systematic review focused on the role of external contributors in school substance use education (including drug, alcohol and tobacco education) (Buckley & White, 2007).

5.2.2. Key findings

Recent research suggests that a number of actions can be taken to prevent and reduce alcohol use among children and young people (NICE, 2007b). School-based work is limited on preventing and reducing alcohol use. Notwithstanding this, key actions at the school level include:

- integrating education about alcohol into the school curriculum (such as through science and PSHE);
- carrying out education programmes that improve children's and young people's knowledge about the risks associated with alcohol, provide opportunities for pupils to build skills to resist using alcohol, and increase their awareness of the influences of parents, friends and advertising with regard to alcohol use;
- providing specialist support (such as counselling and referral to external services) to young people using harmful amounts of alcohol.[18]

[18] The NICE (2007) guidance states that 'There are no national guidelines on what constitutes safe and sensible alcohol consumption for young people ... [Practitioners] will need to judge whether or not a child or young person is drinking 'harmful amounts of alcohol'.' (p: 5).

With regard to smoking, there is little evidence that school-based programmes by themselves have an impact on the uptake of smoking among young people (HDA, 2004). However, promising approaches include multiple-component school-based strategies that increase young people's knowledge about the physical effects of smoking, alter their view that smoking as acceptable and common, assist them to build skills to resist starting to smoke tobacco and increase their confidence in continuing not to smoke (HDA, 2004).

For young people who already smoke tobacco, the following approaches show promise:

- reducing young people's access to tobacco by restricting sales to under 16 year-olds and increasing its price;
- mass media campaigns which highlight the risks of smoking and the addictive nature of nicotine;
- providing smoke-free settings (HDA, 2004).

With respect to illicit drug use, Faggiona et al (2006) in their recent review of educational approaches (chiefly for 12-14 year olds in the USA) found that skills-based interventions appeared to more effective than programmes addressing knowledge only with regard to increasing knowledge about drugs, decision-making skills, self-esteem, and resisting peer pressure to use drugs (including marijuana other 'hard' drugs such as heroin). Successful programmes were mainly interactive and used external contributors to the drugs education lessons. Universal prevention programmes for young people appear to be more effective for those at lower- rather than higher-risk of starting using drugs (Canning et al, 2004).[19]

More widely, guidance from NICE (2007a) recommends that local strategies to reduce substance misuse should be developed to guide local programmes. Vulnerable young people should, if possible, be identified and referred to specialist services. Such services could usefully provide: group behavioural therapy and/or motivational interviewing for young people as well as family- and carer-based programmes (NICE, 2007a).

External contributors to school-based education about substance use (alcohol, drugs and tobacco) show promise when they are part of a wider programme of related work in schools (Buckley & White, 2007). Pupils are reported to enjoy external contributors – such as nurses, police officers, theatre groups, researchers and peer educators – to a drug education

[19] Universal approaches are designed to reach all young people regardless of their vulnerability to drug use. Targeted approaches focus on those young people most at risk. Young people 'At-risk' or vulnerable to drug use include: children whose parents misuse drugs, young offenders, looked-after children, young homeless people, young people who are excluded or truant from school and those engaged in sex work.

programme. In general, no contributor appears to be more effective than another, with regard to enjoyment by pupils and/or leading to changes in knowledge or values.

5.2.3. Summary

Taken together, the implications from these studies suggest that, to prevent the misuse of alcohol, tobacco and other drugs, school-based programmes should be developed that:

- encourage children and young people to identify the risks associated with alcohol, tobacco and other substance misuse and identify influences to use and build skills to resist use;
- use external contributors can add value to school-based programmes;
- provide specialist services (such as counselling) for 'at-risk' or vulnerable young people, should be available;
- complement local programmes that focus on prevention misuse of alcohol and drugs.

5.3. Healthy eating

5.3.1. The studies

Two systematic reviews have investigated the barriers and facilitators to healthy eating among children aged 4-10 years (Thomas et al, 2003) and among young people aged 11-16 years (Shepherd et al, 2005).

5.3.2. Key findings

Small but significant gains can result from school-based interventions designed to increase primary school aged children's consumption of vegetables and fruit in particular (Thomas et al, 2003). Programmes are most effective that focus primarily on increasing fruit and vegetables in children's diet. Interventions were less effective if they comprised:

- single components, such as classroom lessons or fruit-only tuck shops;
- placed an emphasis on foods as being healthy, rather than tasty.

Evidence for the effectiveness of school-based programmes to improve healthy eating targeted at young people aged 11-16 years was mixed, with young women and younger age groups (12-13 years) benefiting most (Shepherd et al, 2005). More specifically, activities that focus on weight management and physical strength are more likely to appeal to young women and men respectively (Shepherd et al, 2005).

Like children of primary school-age, pupils in secondary schools value the opportunity to express choice in selecting food. Poor quality school meals, cost, and lack of availability of healthy foods were identified as barriers to healthy eating. By contrast, fast foods are often seen as pleasurable, relatively inexpensive, and their consumption provides opportunities to spend time with friends (reference). Conversely, the wider availability of healthy foods, family support, and a concern to maintain an appealing physique are powerful facilitators of healthy food choices (Shepherd et al 2005).

A key finding of both the reviews focusing on healthy eating (was that insufficient attention has been given to the relationship between diet and social inequalities (Thomas et al, 2003; Shepherd et al, 2005). As is the case for tobacco, alcohol and drug use, environmental and contextual variables have a powerful role to play in influencing young people's eating practices. Actions and interventions in schools alone cannot be expected to compensate for the ongoing effects of the home and broader societal pressures to eat in ways that are not healthy (Thomas et al, 2003; Shepherd et al, 2005).

5.3.3. Summary

Taken together, the implications from available reviews suggest that, to promote healthy eating, activities should be developed which:

- focus on food as tasty rather than healthy;
- take children's views into account;
- create options to enable children to exercise food choices.

5.4. Physical activity

5.4.1. The studies

With respect to physical activity, one systematic review has focused on identifying the effectiveness of school-based interventions among children and young people (Dobbins et al, 2001), one other on the effectiveness of interventions to promote physical activity in children and adolescents in and out of school settings (van Sluijs, 2007), and one other focused on physical activity among children aged 4-10 years outside of PE lessons (Brunton et al, 2005).

A fourth review of recent qualitative research has examined young people's and adults' motivations for engaging in physical activity, as well as barriers of, and facilitators to, their involvement (Allender et al, 2006). In this review, the majority of studies included in the review focused on young people's participation in physical activity in community settings.

5.4.2. Key findings

Despite variability in the evaluation methods used, school programmes to promote physical activity among both primary and secondary aged children are generally effective in increasing the rate and duration of participation in physical activity (Dobbins et al, 2001). The most effective school-based physical activity interventions include printed educational materials and curricula that promote increased physical activity during the whole day (such as, during breaks and lunchtimes, class-time, and in physical education classes).

With respect to primary school aged children, evidence indicates that programmes and interventions in out of school-settings can be at least moderately effective in enhancing motivation to engage in physical activity, as well as rates of participation. An out of school intervention that aimed to increase physical activity by reducing time spent in watching television, videos and video-games showed promising evidence for effectiveness. Moreover, multi-component interventions promoting healthy eating, physical activity, teacher training and reduced-cost access to community facilities, show evidence for effectiveness (Brunton et al, 2005; van Sluijs, 2007).

The systematic review of qualitative studies on physical activity by Allender and colleagues (2006) aimed to explore the broader cultural, social and economic contexts that influence young people's engagement in physical activity. Drawing on published and unpublished studies in the UK, the review identified weight management, social contact and enjoyment as common motivators for participation in sport or other physical activities.

Interventions need to take account of children's and parents' views about what helps and what hinders them from engaging in physical activity. Children identify a need for environmental changes to improve and quality and safety of play and other social spaces, as well as better access to a wider range of physical activities. Children also value physical activities and sport as opportunities for socialising with friends (Allender et al, 2006)

For young people up to the age of 15 years, facilitators to involvement physical activity included the provision of:

- a variety of physical activities;
- parental support;
- activities that facilitate family involvement;
- venues that are easily accessible to children and good 'drop off' arrangements for parents.

Barriers to participation included:

- the competitive nature of sports;

- highly structured activities;
- environments perceived as unsafe by parents;
- poor quality playgrounds;
- a lack of local and easily accessible facilities;
- traffic problems causing problems in road safety for children.

5.4.3. Summary

Taken together, the implications from these studies suggest that, to promote physical activity, programmes should be developed that:

- encourage physical activity in school as this can be effective in increasing participation
- identify and act on the barriers to, and facilitators of, participation in physical activity; particularly with regard to questions of access, diversity, safety and cost of activities;
- are responsive to girls', boys', young women's and young men's views regarding how best to promote their own physical activity.

5.5. Mental health, emotional well-being and bullying

5.5.1. The studies

Three reviews have assessed the effectiveness of programmes and interventions for children of primary school age. These have focused on the use of universal approaches to promote mental health and reduce bullying and other aggressive behaviours (Adi et al, 2007), the promotion of social and emotional well-being (Green et al, 2005), and on treatment programmes to address specific mental health issues such as anxiety and mood disorders (Shucksmith et al, 2007). A further three reviews have explored the effectiveness of mental health promotion initiatives targeted at primary and secondary school students (Wells et al, 2003; Browne et al, 2004), including young people aged 11-21 years (Harden et al, 2001).

5.5.2. Key findings

A review of universal and targeted interventions designed to improve problem-solving, coping strategies and self-esteem, and to reduce aggressive and bullying behaviour, identified a lack of good quality evaluations, with some studies showing limited evidence for effectiveness (Green et al, 2005). Studies of whole-school approaches, and initiatives based

on partnerships with parents and local communities, were also in the minority. Nevertheless, evidence indicates that successful programmes share a focus on:

- promoting mental health rather than preventing mental illness;
- securing long-term rather than short-term goals;
- improving the whole school 'climate';
- providing a wide range of opportunities for practising new skills;
- engaging with multiple sites including the school, the family and the community;
- delivering both universal and targeted activities .

Focusing specifically on initiatives designed to reduce bullying and aggressive behaviour in primary school settings, the evidence would appear to be more mixed. One review found good evidence that multi-component programmes that combine curriculum-based social skills development, teacher training and parenting education is effective in managing problem behaviours, sometimes over the long term (Adi et al, 2007). This review noted that the Olweus Anti-bullying programme was effective with regard to reducing victimisation, reports of bullying and improving peer relationships in the shorter term. The PeaceBuilders programme demonstrated effectiveness in enhancing social competence and reducing aggressive behaviour. Curriculum-based programmes, such as the Second Step programme and The Good Behaviour Game, have been shown to be effective in reducing violent behaviour in the short term.

Evidence for the effectiveness of programmes aimed at pupils with an identified behavioural problem or pupils considered at risk of developing behavioural problems, is mixed. Many such approaches tend to use cognitive behavioural methods and social skills enhancement to improve coping strategies and reduce stress. There is evidence that cognitive behavioural therapy-based programmes can be effective in reducing anxiety and depression among pupils with behavioural problems, although not behaviours associated with Attention-Deficit Hyperactivity Disorder (ADHD). Evidence for the effectiveness of peer mentoring programmes in developing pro-social skills is promising. However, working with troubled children in group settings has been shown to be potentially harmful. It is suggested that such interventions may inadvertently function as a form of 'deviancy training' which reinforces aggressive behaviours (Shucksmith et al, 2007).

For secondary-aged pupils and young people, the most effective interventions to promote mental health and emotional well-being tend to share a number of characteristics which include:

- multi-component programmes (Browne et al, 2004);
- interactive rather than didactic methods of delivery;

- targeting children at risk of mental health problems or during early onset;
- positive adult-child relationships (Browne et al, 2004);
- longer-term initiatives (usually of a year or more) rather than shorter-term programmes (Browne et al, 2004; Wells et al, 2003).

Evidence regarding the effectiveness of school-based suicide prevention initiatives is limited and there are signs that some suicide prevention initiatives can be harmful (Harden et al, 2001).

Harden et al (2001) highlight the lack of attention given to young people's understandings of 'mental health' and their views about the appropriateness of mental health interventions in much of the work that has taken place so far. These authors state that young people have a wide vocabulary for describing feelings and moods, but tend to reject using terms such as 'mental health' and 'mental well-being'. There is evidence that young people tend to perceive mental health promotion initiatives as failing to take their views and feelings into account.

5.6. Summary

Taken together, the implications from the above studies suggest that careful consideration should be given to the choice of intervention when seeking to bring about improvements in mental health and well-being – much depends on the groups of children and young people involved, as well as the setting. More generally, to promote mental health and emotional well-being, programmes should:

- address individual needs and involve multiple domains and support systems relevant to young people;
- combine universal programmes – for all young people – and targeted approaches for higher-risk groups;
- be adequately resourced in the longer-term;
- take into account the age, gender and ethnicity of pupils.

6. Conclusions

Taken together, the evidence on which this review draws suggests that well designed, broad-based whole-school approaches to promoting health can have an impact on health- as well as education-related outcomes among children and young people.

Healthy school approaches such as the National Healthy School Programme appear to assist those in schools to develop and implement a wide-range of health-related activities for pupils. The NHSP, in particular, has been perceived to bring about changes associated with

improved learning among pupils – such as improved concentration, greater participation in physical activity and increased confidence.

Although limited, some evidence suggests that there is a link between school-based programmes to promote health – such as those that focus on increasing physical activity and improving nutrition – and improved academic attainment.

Findings from the reviews highlight that successful, whole-school approaches are multi-factorial. They engage with different levels of work within the school, such as policy development and implementation, curriculum development and improving the school ethos (such as pupil/pupil and pupil/staff relationships), attend to contextual resources (such as availability of fresh fruit), and are intensive and of long duration.

Similar findings emerge from reviews of what has worked to promote children's and young people's health and well-being with regard to particular health topics. More specifically, successful programmes build on children's and young people's own needs, concerns and interests with regard to a health issue; are responsive to issues such as age, gender, and vulnerability; are interactive (rather than didactic) in nature, and enable children and young people to acquire new knowledge, clarify their values, and to practise new skills.

Particular challenges have arisen in evaluating local healthy schools activities such as those linked to the NHSP. Difficulties include attributing causality, for example, to a local programme where a school may be involved in a number of school improvement activities simultaneously and where the study design is not rigorous enough to enable the identification of causal influences.

While some common principles or 'guides to action' emerge from this review, new health- and education-related programmes and activities need to be responsive to schools' current circumstances. These vary between local authorities, between schools or even, as new groups of pupils enter schools, within a school across different years. As Biesta (2007: 20) suggests when discussing educational interventions more generally, there needs constantly to be an 'open and informed discussion' in schools about what to address and how best to do so. A number of implications follow from this.

Programmes to promote health appear to work well when they intervene at several different levels – by including health in policy statements, revising a curriculum and involving pupils. However, we do not yet know which of these levels *must* be addressed or can be omitted in order to bring about change.

Giving children and young people a voice is a central feature of successful practice. But the degree of consultation needed and the room there is for negotiation with children and

young people is not clear. Moreover, while parental involvement in children's education has consistently been shown to have a positive impact on educational achievement (DCSF, 2008), we do not yet know the extent to which this holds true with regard to parental involvement in healthy school work.

Deciding on the nature, implementation and projected outcomes of local healthy school programmes requires dialogue among those commissioning and developing this work. While a national framework can outline the themes it is important to address, the criteria to utilise and the support materials to learn from, the success of local programmes depends on the expertise of local professionals. Teachers and other professionals need access to information regarding what has worked to date in order to bring together findings into a coherent responsive local programme and to test out whether and in what ways their intentions are realised.

Finally, supporting good quality local evaluations of effects, impact and effectiveness may provide useful information, not only at the local level, but also nationally if findings are used to identify common factors that led to successful work.

As noted above, there appear as yet to have been few local programmes in England that have evaluated their work and reported on their findings. Of those that have done so, there is marked variability in the nature of the evaluation activities conducted. On the one hand, this can be perceived to be a strength – in that such variation allows evaluations to respond to local circumstances and different stakeholders' needs. On the other hand, there is room for improvement in identifying whether and in what ways, local programmes have an impact.

While there should remain a commitment to evaluating healthy schools work at a national level, the provision of support to local evaluations could usefully assist in testing out ideas in practice, identifying what has worked best and providing opportunities for examples of best practice to be shared in other settings. Supporting the development of local evaluations will require more than a guidebook or printed resource. Successful professional development, for example, tends to be collegial rather than individualistic, invites practitioners to identify their individual and shared learning needs, supports dialogue between them and engages them over a period of time in order to apply what they have learned (EPPI-Centre, 2003: Warwick et al, 2005a; Cordingley et al, 2007).

With much good work underway in local healthy school programmes, documenting and learning from existing practice could provide a valuable resource for sustaining health-related initiatives into the future.

References

Adi, Y., Schrader McMillan, A., Kiloran, A., Stewart-Brown, S. (2007) *Systematic review of the effectiveness of interventions to promote well-being in primary schools. Report 3: universal approaches with focus on prevention of violence and bullying*. London: NICE.

Allender, S., Cowburn, G., and Foster, C. (2006) Understanding participation in sport and physical activity among children and adults: a review of qualitative studies, *Health Education Research*, 21 (6):826-835.

Biesta, G. (2007) Why 'what works' won't work: evidence-based practice and the democratic deficit in educational research. *Educational Theory,* 57 (1), 1-22.

BMRB (2003) *Health in the context of schools and their local community Qualitative Research Repor.* London: BMRB.

Browne, G., Gafni, A., Roberts, J., Byrne, C. and Majumdar, B. (2004) Effectiveness/efficient mental health programs for school age children: A synthesis of reviews. *Social Science and Medicine*, 58, 1367-1384.

Brunton, G., Thomas, J., Harden, A., Rees, R., Kavanagh, J., Oliver, S., Shepherd, J. & Oakley, A. (2005) Promoting physical activity amongst children outside of physical education classes: A systematic review integrating intervention studies and qualitative studies, *Health Education Journal*, 64 (4):323-338.

Buckley, E. M. and White, D. G. (2007) Systematic review of the role of external contributors in school substance use education, *Health Education*, 107 (1): 42-62.

Campbell, C., Waters, E., O'Meara, S. and Sumerbell, C. (2001) Interventions for preventing obesity in childhood. A systematic review. *Obesity Reviews*, 2, 149-157.

Canning, U., Millward, L., Raj, T. and Warm, D. (2004) *Drug use prevention among young people: a review of reviews*. London: Health Development Agency.

Cordingley P, Bell M, Isham C, Evans D, Firth A (2007) What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers? Report. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Department for Children, Schools and Families (2008) *The Impact of Parental Involvement on Children's Education*. London: DCSF.

Denman, S. (2002) *The Health Promoting School: Policy, Research and Practice*. London: Routledge.

Department of Health/Department for Children Schools and Families/Healthy Schools (2007) *Whole School Approach to the National Healthy Schools Programme.* London: DH/DCSF/Healthy Schools.

Dobbins, M., Lockett, D., Michel, I., Beyers, J., Feldman, L., Bohra, J. and Micucci, S. (2001) *The effectiveness of school-based interventions in promoting physical activity and fitness among children and youth: a systematic review.* Ontario: McMaster University.

EPPI-Centre, (2003) *The impact of collaborative CPD on classroom teaching and learning*. London: EPPI-Centre, Institute of Education, University of London.

Faggiono, F., Vigna-Talianti, F.D., Versino, E., Zombon, A., Borraccino, A. and Lemma, P. (2006) School-based prevention for illicit drugs' use, *The Cochrane Database of Systematic Reviews Issue 1*.

Feinstein, L., Sabates, R., Sorhaindo, A., Herrick, D., Northstone, K. & Emmett, P. (2008) Dietary patterns related to attainment in school: the importance of early eating patterns. *Journal of Epidemiology and Community Health*, 62(8):734-9.

Green, J., Howes, F., Waters, E., Maher, E. and Oberklaid, F. (2005) Promoting the social and emotional health of primary school aged children: Reviewing the evidence base for school-based interventions. *International Journal of Mental Health Promotion,* 7(2):30-36.

Harden, A., Rees, R., Shepherd, J., Brunton, G., Oliver, S. and Oakley, A. (2001) *Young people and mental health: a systematic review of research on barriers and facilitators.* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Harden, A., Brunton, G., Fletcher, A., Oakley, A., Burchett, H. and Baackhans, M. (2006) *Young people, pregnancy and social exclusion: a systematic synthesis of research evidence to identify effective, appropriate and promising approaches for prevention and support*. London: EPPI Centre, Institute of Education, University of London.

Havlinova, M., & Kolar, M. (2005) Is the Social Climate More Secure in Health Promoting Schools? A Comparative Research Study. Chapter 22 pp 409-422 in Clift, S. and Jensen, B.B. (eds) *The Health Promoting School: International Advances in Theory, Evaluation and Practice.* Copenhagen: Danish University of Education Press.

HDA (2004) *Smoking interventions with children and young people*. Briefing no.6. London: HDA.

Healy, K. (2004) *Linking Children's Health and Education. Progress and Challenges in London*. London: Kings Fund.

Inchley, J., Muldoon, J. and Currie, C. (2006) Becoming a health promoting school: evaluating the process of effective implementation in Scotland, *Health Promotion International* 22(1):65-71.

Kirby, D. (2001) *Emerging Answers: Research findings on programs to reduce teen pregnancy. (Summary).* Washington, DC: National Campaign to Prevent Teen Pregnancy.

Kirby, D., Laris, B.A. and Rolleri, L. (2005) *Impact of Sex and HIV Education Programs on Sexual Behaviors of Youth in Developing and Developed Countries*. North Carolina: Family Health International.

Lee, A., St Leger, L. and Moon, A. (2005) Evaluating health promotion in schools: a case study of design, implementation and results from the Hong Kong Health Schools Award Scheme, *IUHPE – Promotion and Education* 12(3-4):123-130.

Lee, A., Cheng, F.F.K., Fung, Y. and St. Leger, L. (2006) Can Health Promoting Schools contribute to the better health and wellbeing of young people?, *Journal of Epidemiol Community Health* 60:530-536.

Lister-Sharp, D. Chapman, S., Stewart-Brown, S. et al (1999) Health promoting schools and health promotion in schools: two systematic reviews. *Health Technology Assessment*, 3 (22).

McBride, N. (2003) A systematic review of school drug education, *Health Education Research*, Vol 18 (6):729-742.

Moon A., Rogers L., Thompson, R., Speller, V., Roderick, P. and Mullee, M. (1999) Helping schools to become health-promoting environments - an evaluation of the Wessex Healthy Schools Award, *Health Promotion International*, 14(2), 111-122.

Mukoma, W. and Flisher, A.J. (2004) Evaluations of health promoting schools: a review of nine studies, *Health Promotion International,* 19(3):357-368.

Murray, N. G., Low B. J., Hollis, C., Cross, A. W., and Davis, S. M. (2007) Coordinated school health programs and academic achievement: A systematic review of the literature. *Journal of School Health*, 77, 9, 589-600.

NICE (2007a) *Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people*. London: NICE.

NICE (2007b) *Interventions in schools to prevent and reduce alcohol use among children and young people.* London: NICE.

OFSTED (2006) *Healthy schools, healthy children? The contribution of education to pupils' health and well-being.* London: Ofsted.

OFSTED (2007*) Food in Schools. Encouraging healthier eating*. London: Ofsted.

Omarova, S. Mikelsone, V. and Kalnins, I. (2005) An Evaluation of the Impact of Health Promoting Schools in Latvia 1993-2000. Chapter 22, pp 423-489, in Clift, S. and Jensen, B.B. (eds) *The Health Promoting School: International Advances in Theory, Evaluation and Practice.* Copenhagen: Danish University of Education Press.

Patton, G.C. Bond, L. Carlin, J.B. Thomas, L., Butler, H., Glover, S., Catalano, R. & Bowes, G. (2006) Promoting Social Inclusion in Schools: A Group-Randomized Trial of Effects on Student Health Risk Behaviour and Well-Being, *American Journal of Public Health,* 96(9):1582-1587.

Powney J, Malcolm H, Lowden K (2000) *Health and attainment: a brief review of recent literature*. Glasgow: SCRE Centre, University of Glasgow.

Sinnot, J. (2005) *Healthy Schools and Improvement in Standards.* *www.wiredforhealth.gov.uk/Word/improved_standards_05.doc* Accessed April 2009

St. Leger, L. Kolbe, L. Lee, A. et al (2007) "School Health Promotion: Achievements, Challenges and Priorities" chapter 8 pp. 107-124 in McQueen, D. V. Jones, C. M. (eds) *Global Perspectives on Health Promotion Effectiveness*. New York, Springer Science.

St. Leger, L. and Nutbeam, D. (2000) Research into Health Promoting Schools, *Journal of School Health* 70(6):257-259.

Schagen, S. Blenkinsop, S. Schagen, I., Scott, E., Eggers, M., Warwick, I., Chase, E. & Aggleton, P. (2005) Evaluating the impact of the National Healthy School Standard: using national datasets. *Health Education Research,* 20(6): 688-696.

Shepherd, J., Harden, A., Rees, R., Brunton, G., Garcia, J., Oliver, S., and Oakley, A. (2005) Young people and healthy eating: a systematic review of research on barriers and facilitators, *Health Education Research*, 21 (2):239-257.

Shucksmith, J., Summerbell, C., Jones, S., and Whittaker, V. (2007) *Mental wellbeing of children in primary education (targeted/indicated activities).* Middlesbrough: University of Teeside.

Stewart-Brown, S. (2006) *What is the evidence on school health promotion in improving health or preventing disease and, specifically, what is the effectiveness of the health promoting schools approach?* Copenhagen: WHO Regional office for Europe (Health Evidence Network Report).

Swann, C., Bowe, K., McCormick, G. and Kosmin, M. (2003) *Teenage pregnancy and parenthood: a review of reviews.* London: Health Development Agency.

Thomas, J., Sutcliff, K. Harden, A. et al (2003) *Children and healthy eating: a systematic review of barriers and facilitators*. London: EPPI-Centre, Institute of Education, University of London.

Thorpe, G., Kirk, S., Whitcombe, D. (2002) *The impact of the National Healthy School Standard on school effectiveness and improvement*. Research Brief RBX09-02, London: DfES

Thurston, M. (2006) *The National Healthy Schools Programme: a vehicle for school improvement? Case studies from Cheshire.* Chester, Centre for Public Health Research.

van Sluijs, E.M.F., McMinn, A.M. & Griffin, S.J. (2007) Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials. *British Medical Journal (online).* 335:703, doi: 10.1136/bmj.39320.843947.BE Accessed February 2009.

Warwick, I., Aggleton, P. & Rivers, K. (2005a) Accrediting success: evaluation of a pilot professional development scheme for teachers of sex and relationship education. *Sex Education*, 5, 3, 235-252.

Warwick, I. Aggleton, P. Chase, E. et al (2005b) Evaluating healthy schools: perceptions of impact among school-based respondents, *Health Education and Research,* 20(6):697-708.

Weiler, R.M. Morgan Pigg, R. McDemott, R.J. (2003) Evaluation of the Florida Coordinated School Health Program Pilot Schools Project, *Journal of School Health,* 73(1):3-8.

Wells, J., Barlow, J. and Stewart-Brown, S. (2003) A systematic review of universal approaches to mental health promotion in schools, *Health Education*, 103 (4), 197-220.

World Health Organisation (WHO) (1996) *The Status of School health*. Geneva: WHO.

Xia, S-C. Zhang, X-W. Xu, S-Y. et al (2004) Creating health-promoting schools in China with a focus on nutrition, *Health Promotion International,* 19(4):409-418.

Appendix One

Methods used in studies of the NHSP

Author	Title	Methods
BMRB (2003)	Health in the context of schools and their local community Qualitative Research Report	A case study design was used. Data were collected from 12 schools and, in each school, interviews were conducted with, Head teacher/ Deputy head teacher; the teacher responsible for co-ordinating their Healthy Schools Programme in level three schools or with the PSHE teacher in level one schools and a group interview with pupils.
Ofsted (2007)	Food in Schools. Encouraging healthier eating	Data were collected through inspections conducted during 2006/07 by Her Majesty's Inspectors (HMI) who visited 18 primary/middle schools and nine secondary schools in 12 local authorities. The schools were selected to represent small clusters within authorities that made different types of provision for school meals. Information from two Ofsted survey reports on personal, social and health education, and from school inspections conducted since 2005, provided additional evidence.
Ofsted (2006)	Healthy schools, healthy children? The contribution of education to pupils' health and well-being.	Between summer 2005 and spring 2006, Her Majesty's Inspectors (HMI) visited ten primary schools, six secondary schools and two special schools, selected because of their positive outcomes reported in Ofsted inspections and either their good practice in the context of health education or because they had achieved the National Healthy Schools Programme (NHSP) accreditation. The report refers to these as the survey schools. The survey was supplemented by evidence from Ofsted's surveys of individual subjects in 102 schools during the same period. On these visits, inspectors evaluated the effectiveness of health education in relation to the subject they were inspecting. Additional information was gained from section 10 and section 5 inspections and other surveys carried out by HMI.
Schagen et al (2006)	Evaluating the impact of the National Healthy School Standard: using national datasets	A number of datasets produced from previous research were analysed with regard to the health-related outcomes of schools which had attained Level 3 of the NHSS, compared with those of other schools. The most useful sources were said by the authors to be the Health-Related Behaviour Questionnaire (HRBQ) survey and the Ofsted database of school inspection ratings. Using HRBQ data, many pupil-level outcomes were explored, but relatively few indicated significant differences and even those tended to be quite small. The Ofsted school-level data yielded stronger evidence of NHSS impact.
Thurston	The National Healthy	A case study approach to the research was adopted. Three

(2006)	Schools Programme: a vehicle for school improvement? Case studies from Cheshire	primary schools at different stages of involvement with the healthy schools programme were recruited to the study. Data were collected through, semi-structured interviews with school teachers with a specific role in the implementation of the initiative in their school; focus groups with school children; non-participant observation of activities that had been introduced as a result of involvement with the healthy schools programme; documentary analysis of sources that had been produced as a result of the accreditation process, for example, the school audit, agendas and minutes from school council meetings; analysis of secondary data sources such as the latest Ofsted Inspection Report.
Warwick et al (2006)	Evaluating healthy schools: perceptions of impact among school-based respondents	Data were collected from respondents in 20 schools via semi-structured interviews focusing on the perceptions of (1) the work of local programmes and their impact on the recruitment of, and work in, schools; (2) the nature of, and activities associated with, healthy schools work; (3) the processes of carrying out healthy school activities in schools among staff and with pupils; and (4) whether, and in what ways, healthy school activities have had an impact on the school, among pupils and staff, and among other school-community members such as parents and carers, and health professionals. Interviews were conducted with school staff (including healthy school coordinators), external health professionals working with the school (such as school nurses), pupils and parents.

Appendix Two

Methods used in evaluations of local healthy school programmes attached to the NHSP

Review /Eval	Date	Evaluation methods	Sample	Response rate	Findings	Notes
1	2006-7	Questionnaire to schools achieving healthy schools status. Focused on process but question on usefulness of programme as school improvement tool.	7/22	32%	3 point scale: Very useful (6) fairly useful (1) not at all useful (0)	
2	Autumn 2006	Postal survey of schools to measure satisfaction with support. One open-ended question asking about changes made as a result of NHSP	79/128 (all school types)	62%	Responses to this question listed separately e.g. food improved; breakfast club; whole school approach; more exercise; change in staff understanding.	
3	July 2007	Questionnaire distributed to school staff attending celebration event. Mainly about process but included a question on benefits and one on impact – predetermined responses	23	n/a	5 broad benefits of programme to schools: develops environment for health promotion (19); provides framework for setting school priorities for improving health (13); helps to give overview (11); improves PSHE (9). Programme impact rated highly for children and on school as a whole. E.g. positive changes in knowledge and behaviour relating to healthy lifestyles.	
4	July 2007	Survey of schools to assess support needs to schools with HS status and working towards. Open-ended question about usefulness as school improvement tool	15/45	33%	Responses listed e.g. great to put on Ofsted form; it supported all we have done; very good	
5	Jun 06 to Jan 07	Postal survey of HS coordinators in schools achieving HSS to elicit views about process and future	109/151	73%	100% agreement that HS effective in involving whole school 90% agreement that would not have achieved as much without programme	5 point rating scale used to rate agreement with statements "we would have

Review /Eval	Date	Evaluation methods	Sample	Response rate	Findings	Notes
						achieved just as much without being part of the healthy school programme".
6	Not known	Questionnaire completed by schools on achieving HS status measuring satisfaction with NHSP included one question on usefulness as school improvement tool	62	40%	Very useful as school improvement tool (52); fairly useful (10); not very useful (0)	
7	2005-7	Examples of impact provided by schools applying for accreditation	32	n/a	Presented as list of statements that schools have made under each of the four themes e.g. children making healthier food choices; more children participating in physical activity	
8	2003-4	Comparison of KS2 Level 4 results for LEA as whole, and schools at different stages of healthy schools status	24/92 (13 with Level 3 and 4 HS)	n/a	% of pupils achieving Level 4 between 2003-4 Eng Maths Science LEA (92) 71 64 80 All HS (24) 75 69 79 Gold/Plat (13) 82 79 87	Cannot imply causal relationship – good schools may be better able to achieve HS status
9	2005-7	Analysis of Ofsted inspection ratings for schools overall and for personal development and well-being and comparison made between schools with healthy schools status(HS) and those working towards (WT)	161 HS 51 WT	n/a	More schools with HS rated as good or outstanding compared with schools working towards HS HS WT 161 51 Outstanding 17% 10% Good 55% 29% Satisfactory 26% 59% Inadequate 2% 2%	Includes excerpts from inspection reports commending HS approach. As above, cannot imply causal relationship
10	Oct 2006	Postal survey to NHSP schools to evaluate process, and how NHSP was making a difference to health related behaviour 3 focus groups of young people Comments extracted from Ofsted reports to reinforce impact of NHSP	106/287	37%	Improved PSHE provision (87%) ; healthier eating habits (87%); NHSP supports Ofsted self-evaluation process (84%); schools provide healthier food options (73%); pupils more involved in decision-making (70%); increased levels of physical activity (69%);	

Review /Eval	Date	Evaluation methods	Sample	Response rate	Findings	Notes
					increased uptake of physical activity in groups /clubs (56%); more pupil awareness of SR issues (44%) and drugs (40%); improved effectiveness of learning environments (40%); reported reduction in playground incidents (37%) and in bullying incidents (36%). All young people considered their school was a healthy school and cited in the main changes in school food and physical activity as evidence, but sometimes referred to school relationships	
11	Autumn 2006	Consultation(focus groups and questionnaires) with staff, pupils, and parents on impact of NHSP	7 schools: 58 pupils 38 staff 43 parents	d/k	Views for each group on impact reported across the four themes e.g. staff asked about impact of curriculum on pupils in each of the four themes: 35 staff (92%) felt healthy eating curriculum had an impact on pupils. 15 parents felt NHSP made a difference to their children at home	Undertaken by Stockport Participation Project funded by Children's Fund. Local Programme notes problems with evaluation and its limitations e.g. pupil questionnaires too long and inappropriate terminology used e.g. PSHE. Evaluation team did not fully understand their brief
12	Aug 07	Establishment of evaluation framework to consider impact on young people, impact on schools and			Key findings: • Qualitative evidence of changes in all	Mixed methods

Review /Eval	Date	Evaluation methods	Sample	Response rate	Findings	Notes
		programme delivery. Involves a number of strands – see below. Framework developed by evaluation consultant with strategic partners and HS team			healthy school themes e.g. eating healthier food, taking more exercise • Some evidence of change related to achievement and attendance • Decline in quality of SRE curriculum as young people get older. • Ofsted reports confirm progress reported by schools in personal development, safe practices and partnership working. • Growth in initiatives to promote pupil participation. Progress in dev of PSHE, emotional health policies and curriculum. • Many schools embedded whole school approach, but significant numbers have difficulties engaging parents/carers. • Many changes to physical environment and playgrounds though level of care reported for school environment were mixed.	
	Nov 06 Jul 07	In-depth case studies Interviews with range of stakeholders including parents and children/young people	5 primary	n/a	View that positive changes occurred e.g. healthier food and drink consumed; more physically active; improvement in attitudes, behaviour, achievement and in school ethos	
	Sep 05 Dec	Analysis of Ofsted reports – grades awarded on 13 areas with relevance to HS and a textual analysis of reports	32 primary 7 high	n/a	5 of the 13 areas graded as o/s or good for at least 80% of primary schools e.g. extent to which learners: adopt healthy lifestyles;	91% of primary schools had achieved HSS, but

Review /Eval	Date	Evaluation methods	Sample	Response rate	Findings	Notes
	06		6 special		safe practices; make positive contribution to community.	no info about HSS for other schools in sample
	06 and 07	School feedback - Questionnaire survey to schools achieving HSS (either gold, silver or bronze level) about process	99/128	77%	Process relatively easy Successful in engaging whole school community though difficulties in some in engaging governors and parents	
13	2005	Evaluation of process, programme delivery and impact Postal Survey to schools Focus groups with pupils in sub-sample of schools Interviews with health professionals involved in programme	48/102 schools 9 FGs 7 interviews	47% of which 77% primary	68% thought HSP successful because e.g. encouraged whole school approach – interviewees echoed this view. Majority of schools and students agreed schools were healthy. Majority of schools reported improvements in curriculum development, social inclusiveness and in the areas covered by the standards. Pupils reported improvements in respect of food and healthy eating.	Mixed methods Independent evaluation (Centre for Children and Youth, Northampton) Issue of sample bias raised – those committed to the programme more likely to respond to survey
14	2007-08	Evaluate effectiveness of HSP and compare schools who have achieved HSS with those working towards it and those not engaged. Methodology unclear, refer to interviews (number unknown) with head teacher and/or school HS coordinator and focus groups with pupils (number unknown), but elsewhere refer to survey. Respondents had to rate on 5 point scale impact HSP had made in 12 areas including attendance, behaviour, well-being, healthy behaviours. Evidence also provided from survey of schools, but no details of sample size or response rate. 35 primary	12 schools	n//a	Many schools already working on health-related initiatives before started HSP. Perceived benefits: involving whole school, supports work already in progress and provides a structure to the work; pupil involvement; enhances motivation and a positive atmosphere; helps with policy development. Interviewees asked to say what difference was made or was anticipated as result of HSP in the areas of school ethos/environment; the curriculum; family and community. Under each area a	No information provided on number of primary and secondary schools or how many had achieved HSS, were working towards HSS or were not engaged. Responses to

Review /Eval	Date	Evaluation methods	Sample	Response rate	Findings	Notes
		returned and 3 secondary			number of positive statements are listed e.g. better play equipment, school council, embedding policies throughout schools, cross-curricula approach, emphasis on healthy eating, greater parental involvement. Aspects related to healthy eating were most frequently mentioned in response to question asking what has made most difference. Majority of schools perceive HSP has had most impact (a lot better) on children and schools/community and less of an impact on parents (a little better). Largest reported impact on learning, PSHE, motivation, behaviour and self-esteem. Least impact on attendance. Pupils (no idea of number in each school) who were interviewed were described as positive about benefits of HS, felt consulted, enjoyed school, felt safe and supported. Changes as a result of HSP elicited responses to healthy eating and physical activity.	questions listed, but no idea how many schools/interviewees these responses represent Ratings for the 12 areas presented as percentage of respondents rating each of the 5 points of the scale but no information on sample size
15	2008	64 schools with HSS surveyed to consider impact. 2 open-ended questions on impact on school as whole an on pupils, parents, staff; and developments that have occurred in the four themes. Then asked to rate HSP impact on four vision statements (e.g. integrated services), specific groups of children (e.g. LAC, BME groups) and priorities (e.g. exclusions, reducing obesity, improving well-being; safety) using 4 point scale Results from Health Related Behaviour Questionnaire	13/64 11 Primary 2 Sec	20%	HSP effect perceived to be in providing a structure to achieve developments; on school ethos – awareness and choices about health; healthier pupils – physically and emotionally; good Ofsted reports; greater consultation and involvement of school community; greater use of external agencies for delivery and support. Number of developments cited in each of 4 themes. Positive impact perceived regarding vision	

Review /Eval	Date	Evaluation methods	Sample	Response rate	Findings	Notes
		(HRBQ) analysed for the 6 secondary schools involved between 2005-2007 to consider if any difference between pupils in 3 who achieved HSS and three that did not.			statements, specific groups and priorities, but numbers are very small as each school respondent did not answer all questions In relation to 16 items of HRBQ said to be greater improvement in schools having achieved HSS compared with those that did not. Clear positive differences reported (but no statistical details provided) for walking to school, self-esteem, considering health when eating, bullying and less significant but definite differences for enjoyment of lessons, eating breakfast, 5 a day, wanting to give up smoking, enjoying exercise and feeling fit.	No details of how analysis of HRBQ undertaken

The Thomas Coram Research Unit (TCRU) is a multi-disciplinary research unit within the Institute of Education, University of London. Founded in 1973 by Professor Jack Tizard, its principle function is to carry out research of relevance to the health and wellbeing of children, young people and families.

Thomas Coram Research Unit
Institute of Education
27-28 Woburn Square
London WC1H 0AA

Tel: 020 7612 6958
Fax: 020 7612 6927
Email: tcru@ioe.ac.uk
Website: www.ioe.ac.uk/tcru