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The School Curriculum and the W.H.O.
'Health for All by the Year 2000'

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A thesis submitted in partial fulfilment of
the requirements of
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School of Leisure and Food Management
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This research describes the relationship between the school curricula of two schools in Sheffield and the World Health Organisation's targets 'Health for All by the Year 2000' (HFA 2000).

A review of the literature reveals a range of initiatives have been established to promote and develop HFA 2000, although those relating to school education are small scale and few in number.

The research methods used include conducting case studies in the two schools over one academic year. A variety of lessons were observed in a primary and a secondary school, questionnaires were issued to teachers and pupils in both schools and a number of pupils, teachers and the Local Education Authority health education advisor for Sheffield were interviewed.

The results indicated that some of the WHO targets were being addressed by the school curriculum although this was by chance rather than by design. Opportunities to address this health initiative through the school curriculum were being lost due to a lack of communication from WHO to the education service.

The issues arising were that with the introduction of the National Curriculum in UK schools, non-statutory subjects like health education rely more for their implementation on the interests of individual teachers. The place of health education is at risk in the curriculum due to pressures on the timetable to cover all of the statutory subjects and if its place in the curriculum is to be maintained, health education must become part of the statutory curriculum in its own right. If health education is to be successfully delivered to pupils of school age, a strengthening of links must occur between schools, families and communities.
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CHAPTER 1 - INTRODUCTION

This research is a study of the relationship between the school curricula of two schools in Sheffield and the World Health Organisation's (WHO) targets 'Health for All by the Year 2000' (HFA 2000).

The aim of the investigation is:

(i) to examine the national, local and school health education policies in the UK in order to define the background against which decisions relating to the curriculum are made

(ii) using a case study approach in two schools, to examine how some of these decisions are implemented in the schools

(iii) to examine the extent to which the schools' curricula address the WHO targets and thus to contribute to an understanding of the relationship between policy and practice in health education in schools

The study examines the background to the WHO initiative HFA 2000 (1978), and looks briefly at other initiatives which stem from this, for example 'Healthy Cities',

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It focuses on one of the countries which is a signatory to the HFA initiative, the UK, to look at how HFA 2000 is being implemented in this country in the school curriculum.

A brief history of the development of health education in schools provides the background to the position of health education in the curriculum today. This includes the influence of the Schools Council and the introduction of the National Curriculum and associated cross curricular themes. A selection of Local Education Authority health education policies have been examined to look at how national guidelines are interpreted at the local level by various Education Authorities throughout the country.

This defines the background against which decisions in schools relating to health education in the curriculum are made. The health education policies for two Sheffield schools are examined to look at the effects of these influences on classroom practice.

A case study approach has been used with two Sheffield schools (one primary and one secondary), to examine how
some of these decisions are implemented in practice. The basis for selecting Sheffield to carry out the research and for the selection of the schools is found in chapter 4. Over a period of one academic year (1991-92) observational visits were carried out on a weekly basis with one class in each school to examine practices relating to health education in the school.

A cross section of lessons and school situations, for example tutorial lessons, were observed. In the primary school, one class (Year 4) was observed for one morning/afternoon per week for the whole year. As the class teacher teaches most aspects of the curriculum to her class, it was possible during the year to observe lessons covering all aspects of the National Curriculum, whilst concentrating on those lessons with some concern for health education.

In the secondary school, a Year 9 group was observed, again for one morning/afternoon per week. However the organisation in a secondary school is such that pupils are taught different subjects by different teachers. It was decided to observe only those subjects which it was thought could make a valid contribution to health education, and so gain more detailed data than would be possible by observing all lessons taught to Year 9 pupils.
Subject areas in the secondary school were selected prior to beginning the observations based on their potential contribution to health education. This selection was made following the research and publication of a Working Paper: 'A review of the Statutory Orders for Technology, Maths, English, Science, Geography and History in relation to their contribution to the WHO targets 'Health for All by the Year 2000', (Hunt & Ludlow, 1991b).

Once the subject areas in the secondary school had been selected for observation, schemes of work for these subjects were reviewed to select a series of lessons which appeared to address health issues. It was then possible to focus observations on those lessons which aimed specifically to address health issues.

The observation period began in September 1991 and was completed by July 1992. Towards the end of the observation period, a questionnaire was devised and issued to all teaching staff in each school to determine their attitudes towards health education. Being a cross curricular theme, with no one subject area taking total responsibility for its implementation in the curriculum, health education relies to a certain extent on the interests and attitudes towards health education held by individual teachers. It was thought important therefore to gain an understanding of teachers' opinions and awareness of health education by
way of the questionnaire and to ask teachers about the type and extent of health education they taught.

It was also thought important to determine the extent of pupils' learning about health issues and the attitudes they had developed during the research period. At the end of the observation period a questionnaire was devised and issued to the primary pupils and a separate questionnaire devised and issued to the secondary pupils in each of the classes under observation. This was followed up by interviewing a sample of pupils from each class to identify sources of knowledge about health issues during the research year.

Interviews were conducted with staff with responsibility for health education in each school to gain an understanding of the overall context of health education in the school. An interview was also conducted with Sheffield Education Authority's school health education advisor to further this contextual understanding.

The findings of the case studies were compared to the WHO targets to identify to what extent, and in which areas, the school curriculum addresses the targets.

The research carried out for this study which presents an in-depth analysis of how two Sheffield schools address the
WHO targets is closely linked to the research carried out for the project, 'Home and Health in the European Community'. This project aims to present a much broader picture of health education in a sample of schools in the EC in relation to two of the WHO targets, (see appendix 1).
CHAPTER TWO

SCHOOL HEALTH EDUCATION
2.1 The development of health education in the school curriculum

Health education has not always been taught in the school curriculum (Sutherland, 1979). Today, it has a place in the curriculum, but does not enjoy a high status (David & Williams, 1987). It is still not a compulsory subject although under the Education Reform Act 1988, it is one of the cross curricular themes for which guidelines have been produced (DES, 1988). Health education occurs on an incidental basis throughout the school day as well as being part of the formal curriculum. It is usually taught by a variety of subject teachers in the secondary school and integrated into the curriculum as appropriate in the primary school (NCC, 1990).

To understand the position of health education in the curriculum today, its aims and its scope, it is helpful to have an understanding of its development.

In this country, our public health and education services grew up alongside each other in the second half of the nineteenth century and at no time during that period did leaders in central and local government see these two services as having anything in common or being of
assistance to each other (Sutherland, 1979).

The importance of education in achieving the purposes of public health had its origins in the period which followed the social effects of the industrial revolution, such as overcrowding and lack of sanitation (Sutherland, 1979).

The report of the Inter-Departmental Committee on Physical Deterioration (1904) gave the following as major defects - want of physical development, defective vision, disease of the heart, and bad dentition (DHSS, 1976). Following this report, a renewed interest in education emerged and it was requested that schools give instruction about the effects of alcohol on physical efficiency, lessons in the care of teeth, instruction for girls in the process of infant feeding and management and instruction to older girls in cookery, hygiene and domestic economy (DHSS, 1976). Physical education, and games, inherited from the public school tradition, made a contribution in schools of the time, as did a growing interest in social biology (Sutherland, 1979).

Between the years of 1927 and 1968, the Central Council for Health Education used pamphlets, posters, leaflets, exhibitions, lectures and summer schools to put over health messages (Sutherland, 1979).
Following the Jameson Report (Ministry of Health, 1956), health education started to be seen as important. The Cohen Committee, appointed in 1960, was set up to consider recommendations on the future of health education on a national basis (Cohen Committee, 1964). By far the most significant of the committee's recommendations when it reported in 1963 was "the Government should establish a strong Central Board in England and Wales to promote a climate of opinion generally favourable to health education, develop 'blanket' programmes of education on selected priority subjects, securing support from all possible national sources.....".

As a result of the report, the Central Council was superseded by a newly formed Health Education Council (HEC) in 1968. In 1987, the Health Education Authority (HEA) took over the responsibilities of the HEC. The HEA is a Special Health Authority of the NHS in England. Its role is to provide information and advice about health directly to the public, support other organisations, health professionals and other people who provide health education to the public, as well as to advise the Secretary of State on matters relating to health education (HEA, 1992).

Today the HEA is very active in promoting health including school health education. It has funded many projects
amongst which some of the more well known are, 'Happy Heart' and 'My Body' (HEA, 1992).

Health education in schools has never been a separate subject in the system of public examinations. No effort has ever been made to form any kind of public policy and if schools wished to avoid teaching health education, they could do so. In practice, however, elementary schools, and after the 1944 Education Act, primary schools, were concerned with cleanliness of pupils and with consideration for others, and grammar and secondary schools taught health education under subjects such as biology, domestic science (later to become home economics) and physical training (later to become physical education). Health education was taught through these subjects, but there was no control over exactly what was taught, or to what extent or to what effect (Sutherland, 1979).

As health and education were controlled under different ministries, health education remained isolated in the curriculum. The Cohen Committee (1964) recognised this difficulty and made recommendations about teaching health education in schools. Unfortunately these recommendations were ignored (Cohen, 1964).

The Cohen Report is not mentioned in the Plowden Report,
"Children and their Primary Schools" (DES, 1967) or in "A Handbook of Health Education" (DES, 1968). The Crowther Report (Ministry of Education, 1959) omitted health education but included sex education. The Newsome Report "Half Our Future" (Ministry of Education, 1963) considered the claims of children who were not academic, but only mentioned health education once. The Plowden Report examined social disadvantage in detail, but failed to consider the importance of health education and the relationship between health of the family, community and education of young children.

Curriculum developments in the 1950's led to health being given attention in a series of projects: Nuffield Secondary Science (Nuffield, 1971), in the theme 'The Biology of Man'; the Schools Council Moral Education Project, 'Lifeline', (Schools Council, 1972a) was designed to stimulate discussion among adolescents about problems between themselves and adults; the Schools Council 'Humanities Project' (Schools Council, 1970) produced a wide range of materials on the 'Family' and 'Relations between the Sexes'; and the Schools Council 'General Studies Project' (Schools Council, 1972b) produced material on a wide range of topics, including health topics.

All of this material took into account the need among
adolescents to discuss and examine first hand matters requiring judgement and decisions about values. By 1977, the Schools Council had 173 projects completed or in progress. Two were specifically concerned with health education: Schools Council Health Education Project, 'All About Me (5-8)' and 'Think Well (9-13)' (Schools Council, 1977).

The Health Education Council supported both these projects financially, and in 1973 set up a curriculum project of its own for the age group 12-18, 'Living Well' (Health Education Council, 1977).

A green paper, 'Education in Schools' (DES, 1977a) was produced following the Prime Minister's speech at Ruskin College in 1976 in which he called for a public debate on education. This document contained no reference to health education, except as a side issue in the context of schools co-operating with parents and the local community. This document was followed by a departmental circular (14/77) 'Local Education Authority Arrangements for the School Curriculum' (Sutherland, 1979) and this time health education was included. This document asked authorities to report on their arrangements for promoting -

"balance and breadth in school curricula and in particular on any advice given to schools on how best to
reconcile the claims of curricular elements such as the understanding of our multi-racial society, careers education, health education, moral education and the development of links with the wider community.


'Health Education in Secondary Schools', (Schools Council, 1976) suggested appointing a health education co-ordinator within each secondary school as health education crosses traditional subject boundaries and therefore demands a multi-disciplinary approach. The role of the co-ordinator would include:

(a) to draw up, in association with colleagues, an overall programme for health education
(b) to examine the existing programme, to eliminate unnecessary duplication and to look for gaps in provision
(c) to take the role in organising new initiatives in the curriculum
(d) to act as a source of expertise for the staff, by attending courses and passing on information
(e) to evaluate the course and initiate any necessary revision
(f) to act as a point of contact with outside agencies and liaise with feeder schools

Attention has been given so far to the formal curriculum. Also important is the informal or hidden curriculum whose values may be equally important in the development of pupils (David & Williams, 1987). A school, like any organisation, transmits messages both intentionally and unintentionally. A school which assumes a healthy style of living by the way it treats its pupils is likely to find its role in health education more easily than one which does not. An essential part of this description is ideally the active involvement of parents and others concerned for the health of schoolchildren.

There has developed recently a perspective known as the 'health promoting school' (David & Williams, 1987) which recognises that effective school health education cannot rest only upon what is taught in the classroom. The concept of the health promoting school can be represented by an interaction of what children learn in the classroom
through the health education curriculum, what children learn from the school community through its traditions, ethos and culture and what children learn from their local environment through their families, the media, public health campaigns, etc.

The successful health promoting school is one which is able to co-ordinate all these learning opportunities to the best possible advantage, to focus all these influences towards promoting health of the pupils and teachers.

It is not difficult to see why the concept and challenge of the health promoting school has not been widely taken up. Most schools do not venture beyond classroom based experience as this is the easiest to address, (David & Williams, 1987).

Most difficult of all, is to reach families and the community. The concept of the health promoting school places great emphasis on setting school health education in the context of family life and the wider community. If this is not taken into account, then it is thought health education could remain school focussed and become in danger of becoming irrelevant to the lives of the children outside of school.

Organisation of learning in both primary and secondary
schools can also reduce the effectiveness of health education. Adopting a 'spiral curriculum' can ensure co-ordination and continuity of learning (David & Williams, 1987). The spiral curriculum attempts to relate the basic concepts of a specific subject area eg Biology or Geography to the cognitive stages of human development in such a manner as to allow them to grow, broaden and build upon each other in intellectual complexity according to the ability and capacity of the pupils to receive them.

In 1986, the DES published 'Curriculum Matters 6: Health Education 5-16' (DES, 1986). This HM Inspectorate's discussion series sets out 'a framework within which each school might develop a health education programme appropriate to its own pupils' and suggests that a school's regard for health education should be expressed 'not only through its normal academic and pastoral arrangements, but also through the whole school environment, the pattern of relationships established, the values transmitted by the personal example of the teachers and other adults working in the school, and the self esteem fostered among its pupils' (DES, 1986).

The discussion document provides detailed guidelines on topics suitable for each stage of a child's development from 5-16. It recommends that health education courses should normally cover aspects such as physical fitness and
hygiene, common infectious diseases including sexually transmitted diseases, non-infectious diseases such as cancer and dental caries, the use and abuse of food, tobacco, alcohol and drugs, mental health including stress, sex education and safety both in the home and on the road.

The guidelines issued in this document are still relevant today, although the National Curriculum Council 'Curriculum Guidance 5 Health Education' document (CG5) contains current official guidelines (NCC, 1990).

In 1988, the Education Reform Act (ERA) dramatically changed the education system in this country. A National Curriculum was introduced for all children 5-16 comprising the 'core' subjects of mathematics, English and science, and the 'foundation' subjects of technology, geography, history, music, art, physical education plus a modern language in Key Stages 3 and 4.

The ERA places a statutory responsibility upon schools to provide a 'broad and balanced curriculum which:
(a) promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society; and
(b) prepares such pupils for the opportunities, responsibilities and experiences of adult life.'
Programmes of study are given for each of the subjects of the National Curriculum. These contain guidelines (although these are not compulsory) on what is to be taught. It is possible to assess the potential contribution each subject area could make to health education by reviewing these programmes of study. The majority of subjects of the National Curriculum, as the programmes of study are written, make only a minor contribution to health education and the degree to which health education is taught is often dependent on the interests of the teacher. As such the following subjects of mathematics (DES, 1991a), English (DES, 1990a), history (DES, 1990d), modern foreign languages (DES, 1991c), music (DES, 1992c) and art (DES 1992b) which are the National Curriculum and religious education (NCC, 1991b) which is part of the basic curriculum, will probably make only a small contribution to pupils' health education.

Science (DES, 1991b), technology (DES, 1990b), geography (DES, 1990c) and physical education (PE) (DES, 1992a) however have a substantial amount of health education as part of their programmes of study, as written, and as such are probably the main subjects of the curriculum through which health education will be taught. The science curriculum includes sex education, safety, environmental aspects of health, personal hygiene etc (DES, 1991b).
Technology is a new subject in school education. It is concerned with 'that area of the curriculum in which pupils design and make useful objects or systems, thus developing their ability to solve practical problems' (DES, 1988 p6). Technology is usually taught in schools by all or a combination of teachers from the following subject departments: Art, Business Studies, Craft, Design and Technology, Home Economics and Information Technology. Most of the work relating to health education through Technology will come from the Home Economics curriculum in terms of the work related to food, nutrition, diet, personal hygiene, safety, etc (DES, 1990b).

Health education through the Geography curriculum is mainly related to improving the quality of the environment, or the effects of technological developments on the environment (DES, 1990c).

PE can make a major contribution to health education. There are obvious opportunities in terms of encouraging physical fitness, developing positive attitudes towards health, safety, hygiene and developing self esteem (DES, 1992a).

Many schools offer additional subjects to those of the National Curriculum in lower school and/or as optional
subjects to be taken at GCSE level. The National Curriculum Council (NCC) 'Curriculum Guidance 5' (CG5) publication considers that Personal and Social Education (PSE) programmes and Child Development courses can make a major contribution to health education (NCC, 1990).

As well as the subjects of the National Curriculum, the ERA identified 5 'cross curricular' themes which are to be taught across the curriculum through appropriate subject areas (DES, 1988). These are Health Education, Environmental Education, Education for Citizenship, Economic and Industrial Understanding and Careers Education and Guidance. These cross curricular themes are not part of the statutory curriculum and therefore it is not compulsory for schools to include these in the curriculum. However guidelines are published for each of the themes. In June 1990, the NCC published CG5 (NCC, 1990) as part of this series of guidelines on cross curricular aspects of the curriculum. This document offers guidance on ways in which health education programmes might be developed and implemented in schools. Those subjects which are concerned with health issues, for example science and technology will probably, as part of a co-ordinated programme, transmit most of the health education programme.

NCC Curriculum Guidance 3: 'The Whole Curriculum' (NCC,
1991a) gives general guidance on the whole curriculum, planning and implementation. It considers the following aspects of the 'whole curriculum' - National Curriculum subjects, Religious Education, additional subjects, cross curricular elements of dimensions, skills and themes, extra curricular activities, teaching methods, management of the whole curriculum, and personal and social education. The successful management of the whole curriculum will embrace all these aspects, and will look at each one to evaluate how each is co-ordinated and planned.

The essential features of health education identified in CG5 are 'the promotion of quality of life and the physical, social and mental well-being of the individual. It covers the provision of information about what is good and what is harmful and involves the development of skills which will help individuals to use their knowledge effectively'. (NCC, 1990)

The NCC recommend that schools consider a variety of factors, when planning their health education policy. Some of the factors for consideration are that health education programmes should reflect current health issues, that the curriculum is managed and co-ordinated effectively to avoid repetition and provide progression and continuity, that resources, expertise, the school ethos and
expectations of parents and needs of pupils are taken into account.

The following nine components define the recommended framework for a health education curriculum 5-16: substance use and misuse; sex education; family life education; safety; health-related exercise; nutrition; personal hygiene; environmental aspects of health education and psychological aspects of health education (NCC, 1990).

Methods used to teach health education are seen as important. The participation of pupils is essential to encourage pupils to learn from others and although it is recognised that there is a place for didactic teaching, use should also be made of audio-visual materials, visits and contributions from visitors, and an active involvement from pupils. Teaching methods which are thought to be appropriate to this kind of approach include games, role plays, problem solving exercises, surveys, group work, (NCC, 1990).

Emphasis is placed on the importance of a 'whole school approach'. Pupils receive subtle messages about health from the daily life of the school and these must be consistent with messages received in lessons. Examples include relationships between staff and pupils, standards,
attitudes and patterns of behaviour, concern, respect and acceptance of responsibility. Organisation and management structures of a school can encourage self confidence and self esteem, and a strong pastoral system can support personal development.

The quality of relationships between the school and its local community is also important. Sound links with parents, association with local health services and local health promotion units, and with external agencies such as the police, are an advantage (NCC, 1990).

The physical environment of a school with bright, pleasant classrooms, corridors and staffrooms which are stimulating to work in can promote effective health education and can encourage the development of positive working and social relationships (NCC, 1990).

Tuck shops and school dinner systems should put theory into practice by offering a wide range of healthy, nutritious snacks and meals. Sports facilities which are available after school hours and at weekends allow pupils to exercise their knowledge about health related exercise (NCC, 1990).

The CG5 document gives examples of how the nine components of health education contribute to the curriculum of the
statutory subjects, and to PSE programmes. It also unites the cross curricular themes by showing how they too are inter-related (NCC, 1990).

This document should be used in schools alongside the Statutory Orders for National Curriculum subjects to implement health education in the curriculum and in this study evidence will be sought of how this works out in practice in school management and classroom practice.

The perspective of the 'health promoting school' and its influence on the effectiveness of health education and the degree to which a 'spiral curriculum' operates in both schools is examined. This study focuses on the links between the WHO targets (see chapter 3), health education and classroom practice and as such it was decided that it was not appropriate to address the broader aspects of community links and pupils' families. It is acknowledged however that these links are important, and that these external factors could be included in any future study.

The Schools Council and the HEA have been influential in producing school health projects and furthering the place of health in the curriculum. The HEA today remains very active in providing a huge range of resources and materials for use in schools; the degree to which schools use outside agencies and resources will be included in the
The ERA (1988) and the subsequent CG5 (NCC, 1990) publication offer the best opportunity yet in the history of school health education to secure a place in the curriculum for health. Aspects of CG5 are considered in the study eg methods of teaching employed, the physical environment of the school, tuck shops, schools dinners and extra curricular activities available.

As a result of this review of the programmes of study for the National Curriculum for the Home and Health in the European Community project, (Hunt & Ludlow, 1991b), the following secondary subject areas were selected for observation in this piece of research: biology, technology (home economics), physical education, religious education, geography and PSE (see chapter 4). It was thought more appropriate to spend the time available for observation on those subjects more likely to include health education than to spread the observation time across all subject areas. All pupils in year 9 (the year group selected for observation) study these subjects.

As stated earlier, due to the organisational arrangements in a primary school, it was possible to observe all aspects of the curriculum for the year 4 class, whilst concentrating on health promoting lessons, (see chapter
It is intended that in studying these influencing factors on school health education, it will be possible to assess its effectiveness in the primary and secondary school curriculum and to relate the WHO targets to the pupils' experiences in the classroom, (see chapter 4).

2.2 Local Education Authorities' policies on health education

This study is set in the context of national and local authority policy on health education in schools. Schools produce policies often based on their local authority guidelines/policy statements which in turn are often based on government guidelines/policies. The interpretation of government guidelines by local authorities will subsequently influence the nature of school policies and therefore classroom practice and school management. It was therefore thought important to look at how a variety of local education authorities had interpreted government guidelines by reviewing their health education policies.

The following authorities were contacted, informed of the research and were asked for a copy of their school health education policy. The authorities with an asterisk responded. The authorities which did not respond were contacted again by letter, followed up by a telephone
call, but unfortunately did not respond.

Liverpool * (p)  
Camden -  
Glasgow * (d)  
(Staffordshire)  
Belfast -  
Sheffield * (d)  
Gwynedd -  
Mid Glamorgan * (p)  
Cornwall * (d)  
Devon * (d)  
Suffolk * (d)  
Norfolk * (d)  
Lincoln -  
N Yorks * (d)  

(d) - documentation received  
(p) - information received via telephone call

Sheffield was selected as the city in which the school observations would be carried out. It was selected for two reasons. Firstly Sheffield is very active in health promotion both in the community as well as in its support for health education in schools (see chapter 6.9) and as such should provide some examples of good practice. Secondly, as the observations would be on a weekly basis
over one academic year, it was necessary that the schools should be within reasonable travelling distance of Sheffield Hallam University where the research was based.

The rest of the authorities selected were: Belfast, Camden, Cornwall, Devon, Glasgow (Strathclyde), Gwynedd, Lincoln, Liverpool, Mid Glamorgan, Norfolk, N Yorks and Suffolk.

The policies received were studied to see how each authority had interpreted national guidelines for the teaching of health education in their schools. Most authorities, in the covering letters attached to the policies, reported that they had revised or were in the process of revising their policies to take account of the CG5 document, or that they intended to use the CG5 document as their policy (NCC, 1990).

North Yorkshire County Council had already produced a policy based closely on the CG5 (NCC, 1990) document. This policy uses the same headings as those in the document and recommends that both should be read in conjunction.

Cornwall reported (1) that they would not be producing another policy but that their schools would use the CG5 document as guidelines. Cornwall authority sent only an HIV/AIDS document (Cornwall County Council, 1991). This
was based on the Science Statutory Orders and it was recommended that CG5 was used for examples of areas of study appropriate to AIDS education.

Schools in Devon had previously been working from a document produced by the county in 1978 (Devon County Council, 1978). Devon is one of the authorities now updating its policy to take account of the National Curriculum (2). Similarly Sheffield reported that they were in the process of revising their document, but this was not yet available, (1).

Other authorities have produced their own health education policy/guidelines, which have probably been influenced by literature such as HMI Series 6. These guidelines were much more extensive and provided more for their schools than just a policy statement. Strathclyde is such an authority which has produced extremely detailed, comprehensive guidelines containing programmes of study with checklists as appropriate for ages 5-16 (Strathclyde Regional Council, 1987). Similarly Suffolk education authority had produced extensive guidelines for their Personal and Social Education (PSE) programme of which health education is a part (Suffolk County Council, 1990). Only a photocopy of the health education section of this document was received, but the policy appeared to be well co-ordinated and integrated into the overall PSE
programme.

The North Yorkshire policy was based on CG5 but expanded on that document in providing detailed explanations for each aspect of health for ease of use. A separate section was provided for drugs education. The whole thing was comprehensive, co-ordinated and appeared to be well thought out (North Yorkshire County Council, undated).

Sheffield also has produced a very detailed, comprehensive document (Sheffield LEA, undated). Schemes of work are suggested for primary and secondary levels, these are divided into sections for every two years of education and provide guidelines from ages 5-16. Running alongside the schemes of work are 'Key Issues' such as self esteem, choices and responsibilities and personal relationships which are to be considered for all age groups.

Norfolk County Council appeared to provide little in the way of guidance for their schools. This could be because schools are left to run themselves independently without a great deal of back up either from the education department or from the advisory service. However it could mean that guidance and support is available but not in the form of a written policy statement. Norfolk County Council produced a statement in very broad terms indicating how sex education is defined and what should be included in the
curriculum relating to sex education (Norfolk County Council, 1991). The information given is very scant, no guidelines are given and no reference is made to any other DES documents (Norfolk County Council, 1991).

Many authorities considered health education to be part of a broader concept, usually part of PSE, eg Suffolk, Sheffield, Strathclyde and N Yorkshire. However, Cornwall and Norfolk had produced policies only on HIV/AIDS and sex education respectively. Cornwall intend to rely on CG5, with the HIV/AIDS guidelines as a supplement (1).

Similarly, Norfolk only produced guidelines to governors for use when developing their own school's policy for sex education. Norfolk may produce a publication on Personal and Social Education, although it appeared that all they have at present are the guidelines for governors for developing a sex education policy. (1)

Most authorities recognised in their policies the importance of the informal aspects of the curriculum for the success of health education in a school, eg the quality of teacher - pupil relationships, the value the schools place on safety, the type of food sold at tuck shops and at lunch time and the extent of liaison between school, parents and local community. Teaching methods used with sequencing and timing of lessons were often stressed
as being important, as was the role of senior management in health education, and also whether a school operated a no smoking policy. Strathclyde, Devon, N Yorkshire, Suffolk, Cornwall and Sheffield all stressed the importance of these factors to a greater or lesser extent. Sheffield was the only authority which mentioned including health education as part of the in-service programme for teachers.

The policy for Gwynedd County Council was only available in Welsh and it proved difficult to review this document. However it was reported that schools develop their own policy based on the county policy (2). An information sheet was sent from Mid Glamorgan County Council and this was for use by governors when developing policy statements.

Mid Glamorgan reported that the LEA policy statement was in the process of going through committee (2). The authority supplied documents for use by governors when developing health and sex education guidelines (Mid Glamorgan County Council, undated).

The response from Liverpool indicated that they now use CG5 and that schools would base their own policy around that (1).
The study of the health education policies supplied fell into two categories. There are those authorities which produced comprehensive, detailed guidelines for school use, usually based on national guidelines but written in much more detail. The remaining authorities have produced statements, again based on national guidelines but which have not been expanded in any way and which amount only to a health education statement, leaving the schools to interpret it for themselves. None of the authorities' policies refer to the WHO initiative suggesting that the health targets form no part of the basis of any health policy.

It may follow that with the introduction of CG5, each authority will follow a similar pattern, and again some authorities will just use CG5 as their policy, as some have already reported, whilst others will expand on the document with varying degrees of detail.

The recent Education Reform Act and other changes to the national education system eg grant maintained status for schools, have resulted in a great deal of change for local authorities, schools and teachers. Updating policies for aspects of the curriculum such as health education may not be very high on the agenda of either local authorities or schools. Consequently authorities have not yet produced revised policy statements for health education or intend
to rely only on the CG5 document. As a consequence, health education may be at risk in the education system as will be shown later.

By reviewing a selection of local authority health education guidelines it is possible to see that Sheffield, the authority selected for the fieldwork, is an authority which places value on the teaching of health education. It has produced a detailed document, containing guidelines for teachers for pupils aged 5-16 which stresses the importance of the informal curriculum for successful health education. It is the only authority which appears to include health education as part of its in-service programme, and it intends producing another set of guidelines based on CG5 rather than just adopting CG5 as its policy.

(1) information received by telephone
(2) information provided in covering letter sent with documentation
CHAPTER THREE

WORLD HEALTH ORGANISATION

"HEALTH FOR ALL BY THE YEAR 2000"
CHAPTER 3 - WORLD HEALTH ORGANISATION

'HEALTH FOR ALL BY THE YEAR 2000'

3.1 WHO 'Health for All by the Year 2000'

The attainment of Health for All by the Year 2000 was the central issue of the International Conference of Primary Health Care held at Alma Ata in September 1978. In the declaration of Alma Ata, the World Health Organisation (WHO) issued a challenge to the countries of the world to attain Health for All by the Year 2000 (HFA2000). This declaration, to which the United Kingdom is a signatory, is based on the belief that the people's health is one of the most important products that any country can create and one of the most important resources required for the creation of any other kind of wealth. The declaration recognises that the successful pursuit of its aims will call for fundamental changes in most countries as well as an increased commitment by governments, health service managers, health professionals and researchers.

'Health for All' involves continuous action in every country. The required changes and developments will vary among the different countries and the European Region of WHO has developed a common health policy for all European countries. This calls for an international programme of change and development having three main elements:
'(i) the promotion and facilitation of healthy lifestyles—requires the establishment of a social, economic and legislative environment that provides the requirements for healthy living

(ii) a reduction in the burden of preventable ill-health—by the implementation of measures already known and research effort directed to enhancing our understanding of the causes of disease

(iii) a re-orientation of health care systems—so as to ensure that they not only respond to the medical needs of patients but are so organised that they are sensitive to social and psychological needs, and also take the necessary initiatives to provide services in ways likely to encourage their acceptance by those who need them most'

In 1985, the European Region of WHO defined 38 targets, (see appendix 2), for countries of the Region. It is for each country to interpret these in the context of its own needs and capabilities. These 38 targets refer only to European countries, other parts of the world have targets appropriate to their health needs. All 38 targets defined by WHO are accompanied by a target statement and methods of achieving the targets. For example:
Target 22: Food Quality and Safety — Target statement: by the Year 2000, health risks due to micro-organisms, chemicals and radioactivity in food should have been significantly reduced in all Member States. This target can be achieved if the appropriate bodies in all Member States:

- introduce effective legislative, administrative and technical measures for the surveillance and control of food contamination at all stages of production, distribution, storage, sale and use
- reduce the mean weekly intake of chemical contaminants to or below the WHO guideline values for permissible weekly intakes
- inform customers on the composition of foods, including any contaminants
- achieve full reporting of outbreaks of foodborne intestinal diseases

Health for All is far from being a reality in the UK. This country has some of the highest rates for disease, handicap and death from illnesses such as coronary heart disease in the developed world, (WHO, 1984). Little will be achieved to remedy this situation if we continue to assume that advances in medical sciences and practice can, of themselves, have the desired effect. Much of the action that is needed lies outside the traditional scope of medical practice and calls for knowledgeable and
purposeful policies and action at many levels in society. The education system is considered to have a part to play and it was recognised that curriculum development in this area would be needed if schools were to take on this challenge.

Central government has a responsibility to consider the health consequences of legislation and policies. The Health of the Nation, a recent government publication (DOH, 1992), is a step towards improving the health of people in England. The role that schools have to play in contributing towards improving health is discussed in this document.

Local government must also consider the health consequences of policy decisions. Most local education authorities produce policy statements for many aspects of their service and such statements must take account of the implications for health if 'Health for All' is to be achieved.

There is therefore a cascading system of responsibility from WHO to central government, to local authorities and to schools for health issues if the HFA initiative is to be achieved. This forms part of the context for the research.
There are implications for the education system if these targets are to be achieved. Education is one of the systems stated as having a role to play. If the education system is to address the HFA initiative, change and development will have to occur in the school curriculum, in school policy making, in teacher training and in the attitudes of all involved in the education service, as implied above.

Not all 38 targets can be addressed through the school curriculum. The targets are divided into five sections, the last two of which - targets 26-31 and 32-38 are directed specifically at improving health care and at supporting this development and as such are not appropriate to school education. Also not all targets are appropriate for both primary and secondary level, for example target 25, 'Protecting against work related health risks' would only be applicable for older pupils involved in work experience. Others such as targets 5 and 9 relating to immunisation and diseases of the circulation are not considered appropriate to primary pupils, as this age group generally does not have control over such things as immunisation and their diet. By using the researcher's experience of teaching in schools, targets have been selected which could be addressed at primary and secondary level. These are listed in table 3.1.
<table>
<thead>
<tr>
<th>Target</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2   Adding years to life</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4   Reducing chronic disease</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>5   Eliminating measles, etc</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>6   Increased life expectation at birth</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>7   Reduced infant mortality</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>8   Reduced maternal mortality</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>9   Combatting disease of the circulation</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>10  Combatting cancer</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>11  Accidents</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>12  Stopping the increase in suicide</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>15  Improving knowledge and motivation for healthy behaviour</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>16  Healthy living</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>17  Decreasing health - damaging behaviour</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>22  Food quality and safety</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>25  Protecting against work - related health risks</td>
<td>-</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 3.1: WHO targets which are educationally attainable at primary and secondary level (see appendix 2)
Target 2 'Adding years to life' could be said to be addressed by any action which promotes a healthier lifestyle and as such would be appropriate to both primary and secondary levels.

Target 12 relates to a reduction in the number of suicides. It could be said that this target could be addressed indirectly by encouraging the development of self esteem and self confidence in pupils. Both schools stated that this was central to the aims of health education and therefore any action by the schools eg sharing time in the primary school and Active Tutorial (AT) lessons in the secondary school could have an indirect influence on target 12 (see chapters 5 and 6). It is therefore considered possible to address this target in these ways through the school curriculum.

WHO defined the 38 targets, but it is for each country to pursue these health targets in ways appropriate to its own situation. The Health of the Nation shows how the UK intends to address the targets.

3.2 The Health of the Nation

The government White Paper 'The Health of the Nation' issued in July 1992, sets out a strategy for health for England. It acknowledges the WHO HFA strategy as being the
basis on which the Health of the Nation was produced (DOH, 1992).

The strategy selects five Key Areas for action:

CHD/STROKE
CANCERS
MENTAL ILLNESS
HIV/AIDS AND SEXUAL HEALTH
ACCIDENTS

Action is expected on a wide variety of fronts to achieve the strategy and the government considers that opportunities to work towards the targets will be enhanced if action is pursued in various 'settings', ie places where people live and work, such as healthy schools. Education has always played its part in contributing towards improvements in health. The government has proposed a school pilot scheme in relation to the school 'setting' as part of the 'Health of the Nation' initiative.

3.3 Healthy Schools/Healthy Cities Initiatives

An initiative on healthy schools is being developed jointly by WHO, the European Commission and the Council of Europe. This will offer opportunities to reach pupils, parents, staff and all who are associated with schools and education. The Government intends that England should play its full part in this initiative and its development. The
Government will seek to establish, jointly with the Health Education Authority and in co-operation with European partners, a pilot network of health promoting schools. This will develop and assess the effectiveness of strategies for changing and shaping pupils' patterns of behaviour, with the aim of safeguarding their long term health (DOH, 1992).

Another initiative for bringing the WHO strategy for HFA to the local level is 'Healthy Cities'. The project has generated considerable practical knowledge on how to promote health and improve the environment of the cities in Europe. Approximately 32 cities in Europe belong to this initiative. Issues such as healthy eating, smoking, HIV/AIDS etc are addressed jointly by those cities experiencing problems with these issues. Cities can opt in or out of the projects as appropriate to their needs. In this way ideas, successes and problems are shared between participating cities.

'Healthy Sheffield' was launched in July 1987. Although not part of the WHO Healthy Cities initiative, Sheffield has developed its own 'Healthy' initiative. Originally Sheffield devised its own targets for the city but these were later abandoned as it was thought the targets were too medical and did not address the needs of the people of Sheffield. 'Healthy Sheffield' embarked on its own scheme
for improving health in the city.

Areas of work undertaken under the banner of 'Healthy Sheffield' include the development of a Public Health Strategy for the people of Sheffield - 'Our City Our Health' (1991). This was supported by all sectors including the educational/academic sector and involved consulting as many people in the city as possible about their health needs and concerns.

A number of health promotion programmes have been established, such as:

- food
- alcohol
- smoking
- school tuck shops
- drugs
- young people's health
- dental health
- accident prevention
- physical activity
- sexual health/HIV/AIDS

These health promotion programmes have been targetted at specific groups in the community. The school tuck shop programme is aimed directly at schools and some of the other programmes are also relevant to the health of school age children.

The only programme to stem from the Healthy Cities initiative which is particular to schools is the school tuck shop programme. A working party was established to
look at the sort of food available to pupils at break and lunch time from school tuck shops. As part of the scheme, the tuck shop is inspected by a member of the working party and a certificate awarded to the school if the food sold is considered healthy, e.g. low fat crisps, fruit, etc. Advice is available should a school decide to improve its tuck shop food and the school would then be inspected at a later date and a certificate awarded if appropriate (1).

Although Healthy Sheffield was established in July 1987, this is the only school based programme undertaken as yet. The Health of the Nation document has only recently been produced despite the original WHO initiative beginning in 1978 and the targets being defined in 1985. The only school based initiative to stem from this document relates to the pilot network of health promoting schools which is currently being developed, (DOH, 1992).

Any attempt to address the health problems of people living in the UK is welcome. The education service offers the opportunity to reach the majority of young people aged 5-16 and those targets which are relevant to school education could be part of the curriculum. However during the 1991/2 research study period, there was no sign of initiatives filtering down into the classroom in Sheffield schools other than the healthy tuck shop programme and although there were signs of some of the targets being
addressed (see chapters 5 and 6), it appeared that the reason this was not happening as successfully as it might have was due to a lack of communication about the targets to the education system from WHO (see chapter 8).

(1) information received via telephone conversation with member of tuck shop working party
CHAPTER FOUR

THE STUDY AND ITS METHODOLOGY
4.1 Context
The research project, 'Home and Health in the European Community' aimed to determine the extent to which schools in the 12 Member States of the European Community address the WHO targets 'Health for All by the Year 2000' (see appendix 1). This research was undertaken by two universities, Sheffield Hallam University and Manchester Metropolitan University with two research assistants, one in each institution, holding responsibility for the progress and direction of the research. This involvement in the European project led to the researcher at Sheffield Hallam University becoming interested in the position of school health education and the delivery of the WHO targets at the local level and provided the springboard for this piece of research. Due to the broad nature and constraints of researching within the European Community, it was impossible to look at school practice and the delivery of the WHO targets in any amount of depth. The researcher decided that it would be interesting to obtain this information and therefore designed the study to look at the extent of delivery of the WHO targets in just two schools in Sheffield. It was hoped that this would provide detailed data which could not be obtained in the European study.
4.2 Hypothesis

During the early stages of the research for the Home and Health project, the researcher suspected that the HFA initiative was not being implemented in schools at all.

The formulation of an initiative such as the WHO 'HFA' policy does not necessarily mean that the initiative will be taken up and put into practice. Even when countries sign agreements to support such initiatives, as for example the 'Health of the Nation' document which is the response from the UK based on WHO HFA 2000, it does not necessarily mean that any action will be taken or that the action that is taken will be substantial.

For any new initiative to succeed, as for example the HFA 2000, it must be publicised to all relevant bodies, in order that they may adopt new strategies to promote the initiative. It was decided to look at the extent to which the WHO initiative was being addressed in local schools, (selected as representing good practice) and in an authority, Sheffield, which is highly regarded for its health education (see 6.9) to test the hypothesis that the WHO initiative was not being addressed in schools and that the education system was unaware of the initiative.

By selecting an authority and schools on the basis of good
practice, it can be assumed that the targets would be addressed less frequently and successfully in other authorities and schools.

4.3 Case study methodology

To conduct the research into health education in the primary and secondary school curriculum it was decided to use qualitative methods and in particular a case study methodology. Case studies deal with primary/secondary documents, cultural/physical artefacts, direct observation, systematic interviewing and investigate within a real life context. (Yin, 1984). Case studies are appropriate for use in a study which aims to examine a set of events in detail:

"the essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result" (Yin, 1984)

A case study involves an in-depth study of a single example of whatever is being investigated. It does not claim to be representative of other similar examples as the essence of a case study is that an individual, a group, an event or an institution, is treated as a unit on its own. As such no conclusions can be drawn other than about the study subject. However, the case study
methodology, when applied to carefully selected subjects such as an education authority and a range of schools, selected because of their record of good practice, can lead to valid conclusions being legitimately drawn.

In using a case study methodology and a variety of methods ie observation, questionnaires, interviews and school documentation, it was possible to study the position of health education in the curriculum of two schools in Sheffield, one primary and one secondary, and to examine the health education experiences of the pupils within these schools.

This enabled a comparison to be drawn between the policies and the practice of teaching health education in the classroom and it enabled the experiences of pupils in both schools to be compared with the WHO targets remembering that Sheffield Education Authority is recognised for its good practice within this area of the curriculum.

Sheffield is an authority which is progressive in terms of the health education the schools provide. The city is part of the Healthy Cities movement and has an active team involved in promoting Healthy Sheffield (see chapter 3.2). Health education is part of the in-service programme available for serving teachers, the city has a specialist health education advisor and a number of advisors
responsible for individual health issues eg drugs, HIV/AIDS, Road Safety. (For further evidence of Sheffield's commitment to health education see chapter 6.9).

Two schools were selected, one primary and one secondary under the control of the local authority. It was necessary to limit the number of schools to allow time for regular observations in each school to obtain the data required over one year. Studying a primary and secondary school would provide a cross sectional picture of pupils' potential experiences of health education throughout their school life than would be possible by looking only at the primary or the secondary level. By choosing schools in the same pyramid, ie the primary school would be a feeder school to the secondary school, it was hoped to see the total school health education experiences for at least those pupils who had attended both schools.

To select these schools, a list of criteria was devised as part of the research based upon personal experience. These were:

(i) both primary and secondary schools to be in Sheffield Education Authority
(ii) the schools should have devised and operate a health education policy or statement
(iii) health education should be valued by the Headteacher
(iv) the primary and secondary school should both be part of the same pyramid
(v) both schools should be examples of good practice in terms of the health education curriculum
(vi) both schools should be reasonably representative of the city of Sheffield in terms of social class and numbers of ethnic minority children in the school (it was thought that there may be particular differences in the curriculum of a school which had a very high percentage of ethnic minority children which would not then be representative of other schools in the city)
(vii) staff would be willing to be involved in the research

Once the criteria had been established, the local education authority advisor for Science and Health Education was contacted for help in selecting the schools. Two sets of schools were recommended as complying with the criteria. To select from these, the Home Economics advisor was contacted and the choice of schools was made. The choice was subsequently confirmed by a lecturer with school experience at Sheffield Hallam University.

4.4 Selection of secondary school
The Deputy Head at the secondary school was contacted and
a meeting arranged to discuss the research. The deputy was keen and enthusiastic from the start and willing for the school to be involved. Having explained the research methods and what would be required from the school, it was agreed that the research could take place providing agreement could be obtained from the subject teachers who would be involved in classes being observed.

The deputy had a background in Physical Education (PE) and had responsibility in the school for co-ordinating health education. The research was particularly appropriate as she was about to undertake a review of health education as part of the introduction of cross curricular themes in relation to the National Curriculum in the school sometime during the academic year 1991/92 and she felt the research would present an opportunity to gain further knowledge of health education practices in the school.

The National Curriculum had recently been introduced and teachers were extremely busy adjusting to the new legislation and the cross curricular guidelines for health education had just been released. The staff were under a lot of pressure due to the many changes. The deputy was reassured that it was not intended to add to these pressures and that most of the researcher's time would be spent observing lessons in the school.
A request was made to observe the following subject areas: technology (home economics), physical education, religious education, geography and biology. These subjects had been selected as those which could make a significant contribution to health education, (see Hunt & Ludlow, 1991a and 1991b). The PSE programme was also observed; in this school in Year 9, it is known as 'active tutorial'. By observing only these subject areas, more time would be spent on the subjects considered of particular relevance to health education.

A year 9 group (aged 13/14) was selected for observation. This year group was chosen because the children would be well established in the school, they would not have selected options for study at GCSE level, and it was thought desirable to avoid the first year in the school where the curriculum may take account to a greater extent of the different experiences of children attending different primary schools.

The deputy selected the particular Year 9 group. This was achieved by looking at the teachers for all Year 9 groups in the school and choosing a combination most likely to support health education in the curriculum. The willingness of teachers to be involved in the research was also considered. The deputy informed Heads of Department of the subject areas selected and obtained their agreement
and promise of co-operation. A timetable for the year group was provided as well as schemes of work for the subject areas to be observed.

A series of meetings was arranged with the class subject teachers. Time was spent with each member of staff to explain the research and to reassure any with doubts about the intentions in observing lessons. It was stressed that it was not intended to take up too much time and staff were reassured that the research acknowledged they were extremely busy implementing the new National Curriculum.

Each subject teacher provided a list of approximate dates when they expected to be covering aspects of health education as part of the Year 9 syllabus. The visits were then organised to coincide with these dates.

4.5 Selection of primary school

There are six feeder schools for the selected secondary school. The school recommended by the Science and Health Education advisor was contacted by telephone to arrange a meeting to discuss the research. This proved abortive and another school was approached. Another problem occurred and a third school was approached. This all related to the willingness of Heads and teachers to be involved.

In the final choice of primary school, the Head agreed to
involve her school in the research. Unlike the organisation of lessons in the secondary school, children at primary level remain with one teacher for the whole academic year. This represented a greater burden as all the observations would be in one teacher's lessons. The Head emphasised she would have to ensure co-operation from one of her teachers.

It was decided that observations would take place with a Year 4 (7/8 age) group. The school is small and classes are arranged in vertical groups, ie in this case the class selected was a mixture of Years 3 and 4. This age mix represented children in the middle of their primary years in a similar way to the secondary group represented children in the middle of their secondary education.

A meeting was arranged with the Head after she had had time to discuss the research with her staff and to select someone willing to be involved. Time was then spent with the class teacher who had agreed to take part, explaining the research and reassuring her of the aim of the research in terms of her time and that the observations related only to health education.

4.6 Observation procedures
A series of observational visits was arranged to take place on one morning/afternoon per week over one academic
year in each school. The observations took place with these selected groups of pupils. Each school was visited fortnightly; however due to timetabling arrangements, it was sometimes necessary to make weekly visits to each school. All observations were carried out during the academic year 1991/92.

Due to the organisation and more integrated nature of the primary curriculum, which is often based around 'themes', it was possible to observe lessons covering all aspects of the National Curriculum whilst concentrating on those with some element of health education. The researcher began by observing one of each type of lesson from the timetable, i.e. a maths lesson, a PE lesson, an assembly, etc. This took until the February half term to complete the observations. By this time the researcher had observed one of each type of lesson and the teacher had reported all aspects of health education which had taken place between visits. A decision then had to be made about how to carry out the observations for the second half of the year. It was decided that to repeat this process would not be beneficial to the research. Instead a new schedule was devised, visits were arranged fortnightly and at each occasion the teacher informed the researcher of all aspects of health education which had occurred during that time. Each visit was arranged to take place when the teacher would have time to talk to the researcher and
discuss what teaching had occurred. The teacher kept notes on the health education she had taught and reported this to the researcher.

In the secondary school, observations took place in the subject areas already listed. The schemes of work in the secondary curriculum, although flexible to a certain extent, are usually planned for the whole academic year. It was therefore possible to select from the schemes of work for each subject, areas for observation where lessons were likely to include a certain amount of health education. Consequently the observation schedule for the secondary school was organised around blocks of specific health education teaching.

It was the intention of the researcher to use a mixture of participative and non-participative observation methods in both the primary and the secondary schools. In using non-participative methods the researcher was able to remain seated at a desk in the classroom and observe both pupil and teacher activities.

On such occasions the researcher recorded a detailed structure of the lesson as it took place in a similar way to a lesson plan and noted the teacher's activities and the pupils' activities as the lesson progressed. All aspects of each lesson related to health education were
highlighted. This included what the teacher taught, what the pupils actually did ie whether they were engaged in a practical activity or whether they were writing or drawing and whether the activity formed part of a theme or stood as a piece of teaching on its own.

It was thought that participatory methods were also an essential part of the observation schedule. By talking to pupils as appropriate about their work it was possible to get an idea of their understanding of what they were doing and in particular of the health related aspects of their work. By remaining a passive observer, seated at a desk in the classroom, it would be very difficult to know what the pupils were actually doing or whether they understood the lesson. This was particularly true in the primary school, where lessons carry on over breaks and lunchtimes with no further instruction from the teacher. If the first lesson of the day was not observed, it would be difficult to understand what activities the pupils were engaged in without integrating into the lesson in this way.

Using these two methods of observation to obtain data proved successful to a large extent. However as the teachers and pupils became more familiar with an observer in the classroom, it became more and more difficult not to get too involved in lessons. At the beginning of the observation period, each secondary teacher introduced the
researcher to the pupils as being someone who would be sitting in on some of their lessons, although no actual purpose for this was explained to the pupils. Some pupils asked the researcher at a later date what the purpose of the visits were and a brief explanation was given. As time progressed, in some instances, the researcher became to be viewed as another class teacher eg pupils asked for help with their work. There were advantages in this in that it was possible to talk regularly to pupils and they became more open in their discussions as time progressed.

Due to the informal organisation of desks in the primary classroom (see chapter 5.1), it was possible to sit with different groups of pupils on each occasion. This facilitated integration with the pupils and led to the early development of a relationship between researcher and pupils. This integration with the pupils was also achieved in the secondary school, although the seating arrangements for pupils varied according to the lesson. All PE lessons observed were in the gym, consequently the researcher remained non-participatory at all times. Conversely, half of the Home Economics lessons observed were practical; in such cases the observer used participatory methods. In Biology, Geography, Religious Education and Active Tutorial lessons, the researcher used a mixture of participatory and non-participatory methods as appropriate. The seating arrangements for pupils in these
lessons were in rows facing the front of the classroom and the researcher sat in an available spare seat to observe. This position varied from lesson to lesson, but usually was at the front of the classroom.

After each observation period, a report was written up by the researcher listing the organisation of the lesson and the teacher and pupil activities with particular details of any health related activity. An additional section, 'Observer's Comments' was included following the lesson report. This enabled the researcher to note points about the lesson which did not form part of the lesson plan. For example, on some occasions the researcher recognised opportunities to include some form of health education in certain lessons, but the teacher did not take these opportunities. It also allowed the researcher to comment on other aspects of teaching such as use of resources and their appropriateness to the lesson content.

The researcher showed these written reports, excluding the section for observer's comments, to the primary school teacher. There were three reasons for this. Firstly, showing the report to the teacher served as a check against its accuracy as being a true representation of the lesson. Secondly, by reading through the report, it reminded the teacher of other health related lessons which had taken place between observation visits and these could
then be recorded by the researcher. The third reason was to do with establishing trust between teacher and researcher. The researcher felt a slight reluctance from the primary teacher about having an observer in her classroom. It was thought necessary to reassure her about the intentions of the research. One of the ways in which this was achieved was by asking her to check the weekly reports for accuracy and by doing so it was hoped she would be reassured of the aims of the research.

4.7 Other data collected
Alongside the academic aspects of the curriculum, it was thought important to consider the informal curriculum. The informal curriculum has a vital role to play in terms of the implicit attitudes and values which pupils acquire from things such as the food offered for sale at lunchtime and in the school tuckshop, the degree and quality of extra-curricular activities available in the school and the role models offered by the teaching staff. The school tuck shop and extra-curricular activities were considered in terms of the messages they were giving to pupils.

4.8 Teachers' questionnaire
At the end of the observation period i.e. in the summer term 1992, a questionnaire was designed by the researcher and issued to all staff in each school to obtain quantitative data relating to teachers' opinions, attitudes and
knowledge about health issues. The questionnaire contained 10 questions (see appendix 3) and covered the following areas: the frequency with which teachers taught a variety of health issues as part of a planned scheme of work and as the opportunity arose, use of teaching methods, use of resources, degree of parental involvement, the hidden curriculum and the teachers' own background knowledge of health. The questionnaire was piloted with student teachers and lecturers at Sheffield Hallam University.

Teachers answered in relation to the pupils taught in the year 1991/92. Primary school teachers answered in relation to the class they taught for the whole of that year. Secondary school teachers answered in relation to Year 9 pupils only.

The main question, question 3(a) and (b) aimed to find out the extent to which health education was part of the planned scheme of work for each teacher and the extent to which each teacher felt they addressed health issues as part of their everyday teaching. It was decided to adopt a frequency scale of once a day, once a week, once a term, etc for both parts of this question. In the initial design and piloting of the questionnaire, teachers were asked to record the amount of time in hours they spent on health issues during each day, week, term, etc. This proved to be too difficult to record, consequently the scale was
changed to an approximate frequency and the questionnaire re-piloted. Using this scale it became possible for teachers to estimate their responses.

A specific list of health topics was provided for question 3. These had been chosen from the WHO list of 38 targets as those topics which it was thought possible to address through the school curriculum (see table 3.1).

Questions 5 and 6 asked about teaching methods and resources used in relation to health education and aimed to show the degree to which teachers made use of such strategies. Teachers were asked to rank the top 4 most used methods and resources. It was thought that by limiting the number of responses, teachers would be more specific in their answers.

Question 7 aimed to determine the extent to which parents were involved in the health education curriculum. Links with parents and the community influence the effectiveness of school health education (David & Williams, 1987), it was therefore thought necessary to look at such links in the schools. The scale used in this question was broad and allowed for the fact that not all teachers would know the extent of parental involvement. Indeed in the secondary school, where often only one person has responsibility for a particular aspect of the curriculum, this can be the
only person who would know such details.

It was thought important to address the informal or hidden curriculum and to determine teachers' opinions of the effects of the hidden curriculum on health behaviour. Question 8 covered 5 aspects of the hidden curriculum and asked teachers to indicate their perceptions of the importance of each on pupils' attitudes towards health.

Teachers' own background and training also influences what they teach and can affect the amount of health education included in their teaching (Williams & Roberts, 1985). Question 9 asked about teachers' initial training and in-service training relating to health education. Question 9(d) allowed teachers to indicate the importance they attach to health education and this would probably be reflected in their teaching.

The final question asked teachers whether they were aware of the WHO targets, if so, how they became aware and what they felt was the purpose of the targets.

The response rate from teachers was 2-primary (33%) and 27-secondary (79%). The higher response rate for the secondary school may have been due to the deputy head attaching a memo to the questionnaire requesting that staff complete and return it to her.
At the end of the observation period, quantitative data relating to pupils' health knowledge and attitudes were also obtained. The purpose of this was to find out the opinions, attitudes, knowledge and beliefs pupils held relating to health. The researcher designed three questionnaires in total, one for the secondary pupils and two for the primary pupils. The questionnaires were followed up by interviewing a sample of pupils in each school.

Primary pupils were given a formal questionnaire which contained 19 questions and included multiple choice questions and some free response questions, (see appendix 4). All questions were designed by the researcher. Pupils had to either circle an answer from a range of options, or were asked a question which required a free response answer. The range of response methods was purposely kept simple due to the age of the children replying. All questions were based on health related lessons which had been observed during the year, for example litter in the school, fire precautions and the use of the first aid box; other questions aimed to determine something of the pupils' level of self esteem. As the promotion of self esteem and confidence was actively promoted in this school it was thought necessary to include questions which would
indicate pupils' perceptions of themselves in this area. These questions were particularly hard to define and this combined with the need for simplicity in question wording led to only very basic questions being asked.

Primary pupils were also given a second questionnaire, based on a design by Williams, Whetton and Moon (1989), (see appendix 5). Whetton has specialised in designing questionnaires for use with young children who are unable to answer formal written questionnaires due to their level of language development. The technique is called 'Draw and Write'. Pupils are asked to draw things and to write what the drawing is at the side (with help from the teacher if spellings are a problem). For example, pupils may be asked, 'draw some foods that make you healthy'. Pupils are using their knowledge and understanding to draw the food items but do not encounter the problems associated with expressing themselves in words, sentence construction and spelling.

It was decided to use this technique alongside that of the formal questionnaire to attempt to elicit more information from these younger pupils. Again all questions related to the health topics pupils had covered during the year. Five topic areas were selected: exercise, teeth, foods, safe behaviour, happiness and unhappiness at school.
Once devised, both questionnaires were piloted in another Sheffield primary school. Although these pupils would not have studied the same curriculum as the pupils in the observation school, most of the questions were general enough to allow piloting in this way. The pilot proved the questionnaires were appropriate and few changes had to be made to the designs.

A few problems were encountered however when the pupils came to complete the questionnaires. The pupils in the pilot school were of a much higher ability generally, and sped through both questionnaires quickly and easily. Some of the pupils in the school under observation found the questions hard to understand, had to have things explained to them and took much longer to complete the questionnaires. It became obvious that some pupils could not read the questions, spelling was a real problem for some pupils and much time was taken up in helping these pupils with the formal questionnaire. Had this been realised sooner, it might have been better to give the pupils experiencing real difficulties the Draw and Write questions only. Some of these problems were due to the vertical grouping of pupils in this school, resulting in a wider than average variation in ability levels.

The questionnaires should have been piloted with pupils of similar ability levels to the school under observation,
allowing such problems to be ironed out earlier. But in the end all primary pupils completed the two questionnaires with whatever support was needed.

One questionnaire was designed and issued to the secondary pupils (see appendix 6). The questionnaire contained 30 questions and included some multiple choice questions and some questions where pupils had to say whether they agreed or disagreed with a statement, but they were mainly free response questions.

All questions related to the health education taught during the school year. The questions were organised in sections, eg Home Economics related questions or PE related questions. The teacher of Religious Education, had as one of her aims for the lesson, the development of understanding and tolerance towards religions and faiths different to the Christian faith. One of the questions therefore (Q21) attempts to identify the degree of tolerance and understanding felt by pupils by asking them to agree or disagree with statements; there was also a box for those not sure. The statements made in this question relate specifically to topics covered in RE lessons.

The results of the questionnaires (primary and secondary) would indicate a level of understanding from pupils taking part. To try to identify what health education pupils had
learnt during the year from their school lessons and experiences as opposed to other sources of information eg the media, parents, family, peers, school, it was thought necessary to follow up the questionnaires by interviewing a sample of pupils (primary and secondary) to establish the source of their health knowledge.

4.10 Interviews with pupils
Following the questionnaires, a sample of primary and secondary pupils were selected for interview. The class teacher in the primary school and the form tutor in the secondary school assisted in selecting 6 pupils: one boy and one girl of high ability; one boy and girl of medium ability; and one boy and girl of low ability, (6 primary pupils and 6 secondary pupils). Ability level was determined by the teachers' perceptions and the types of responses found in the questionnaires.

An interview room was organised and tape recorded interviews were conducted with these pupils. A sample of questions from the questionnaire was chosen to expand upon during the interviews, (6 questions from the formal questionnaire and 1 from the Draw and Write Technique for primary pupils and 10 questions for secondary pupils). Pupils were reminded of the question and their response and asked if they could explain how they knew the information required to answer each question. No prompting
was required with the secondary pupils, however some explanation was required with the primary pupils to encourage them to respond. For examples of transcripts of taped interviews, see appendix 7 (primary pupils) and appendix 8 (secondary pupils).

4.11 Interviews with Headteacher and Deputy Head
The structure and organisation of the school, the school ethos, the school health education policy, the methods for ensuring co-ordination across each year group and between year groups, the provision for in-service training and the importance placed on health education in the school all have consequences for its effectiveness (NCC, 1990). It was therefore thought important to look at each of these in each school by interviewing those in the school charged with responsibility for health education - ie the Deputy Head in the secondary school and the Headteacher in the Primary school.

4.12 Interview with LEA advisor
The local education authority advisor for school health education was interviewed to identify the authority's position regarding health education. The provision for in-service health education for serving teachers was discussed as was the advisor's opinion on the effectiveness of health education in primary and secondary schools.
CHAPTER FIVE

HEALTH EDUCATION IN THE PRIMARY SCHOOL
CHAPTER 5 - HEALTH EDUCATION IN THE PRIMARY SCHOOL

After observing a variety and substantial number of lessons in the primary school during the academic year 1991/92, it has been possible to quantify the health education experiences of this particular group of pupils over this timescale and compare these experiences with the WHO targets.

5.1 Description/organisation of primary school
The school was an inner city school in a working class area of the city. It had a staff of one Headteacher, six class teachers, one general assistant and 125 children on roll.

As the school was small, children of a wider age range than would normally be the case, were grouped together. Pupils aged 7, 8 and 9 were grouped into three classes. This meant that there were some year 3 pupils and some year 4 pupils in each of the three classes. This vertical grouping resulted in a wide variation of ability in each class.

The classroom occupied by the group being observed was a large, open-plan, well-lit room which was bright and had lots of pupils' work displayed on the walls. The atmosphere created in the classroom was conducive with
that of the health promoting school (David & Williams, 1987). A number of specialist rooms were available and used as appropriate eg a sewing room, a small reading room, a 'wet' area which was used for art work and experimental work, a purpose built kitchen area which was used for baking and a special video room used for TV and watching videos.

The pupils were taught by one teacher for all lessons apart from music, sewing and baking. Outside visitors were welcomed into the school and often this would be parents who came to talk to the class about a specialist area, or a speaker from an outside agency.

At the beginning of each term, the teacher reinforced general 'rules' of the classroom, for example safety in the classroom or playground, and walking not running in the building. The teacher tried to promote a 'caring' attitude between pupils at all times and a rota operated to encourage various aspects of polite behaviour eg pupils opened doors for the rest of the class when moving between classrooms.

As stated in chapter two, the Health Promoting School is one which co-ordinates health experiences in the school, the family and the community and has an ethos, organisational structure and atmosphere which promotes
health development and healthy behaviour. This primary school could be said to be a Health Promoting School in that the atmosphere and ethos of the school promoted many aspects of health development, indeed one of the school's aims, as stated in its Health Education Policy, was to create a healthy school environment (see chapter 5.2).

5.2 School policy statements

The primary school operated within a 'Curriculum Philosophy' statement which defined the ethos of the school. This statement was planned within a wider context which included Sheffield Education Department guidelines, equal opportunities and commitment to children with special needs.

The school policy stated that the curriculum was delivered through a project based approach, that it was believed that 'children learn most efficiently and imaginatively when they can make connections between the separate subject areas and link areas of learning to one another' (Primary school curriculum philosophy statement, 1991).

The statement continued that, within that, all National Curriculum subjects were considered and where necessary certain subjects would be taught separately from the project work. The cross curricular themes had recently been introduced at the time the research began and the
staff at the primary school were in the process of developing a health education policy. They had begun the process by producing a statement and reviewing the CG5 (NCC, 1990) document.

The statement produced at the time considered that health education was a part of the whole school curriculum, that is that it should pervade the general aims and objectives of the school, that it should develop decision making skills in pupils, that it should encourage pupils to develop healthy lifestyles and to allow pupils to develop attitudes, behaviour and values based on accurate information. The aim was to set these objectives in the context of a 'healthy school' environment.

Teachers had started to look at each of the 9 aspects of CG5 (see chapter 2) in relation to their current schemes of work. They were attempting to identify gaps or repetitions in their teaching and so work towards including the 9 health areas in their curriculum.

The staff had just begun to consider the cross curricular theme of health education in their teaching, so this process of reviewing the CG5 document continued throughout the academic year (Primary school health education policy, undated).
5.3 Schemes of work for 1991/92

A primary curriculum is usually based around a theme or topic (NCC, 1989). Aspects of the curriculum are taught through that topic, with extra time usually being devoted to specific skills teaching eg maths and English.

Issues relating to health education are included somewhere in the curriculum, although the amount of time devoted to these issues is usually at the discretion of the individual teacher, and probably depends on their own interests and training. Since the introduction of the National Curriculum, some aspects of health education form a part of the programmes of study for some subjects and in such cases will be a statutory part of the curriculum.

The curriculum for all children in this primary school was similarly organised. The curriculum was planned around a theme which was taught for one term, and the whole school worked around that theme for each term; however within this there was great flexibility to include topical issues as they arose. During the year of the observations (1991/92), the themes were as follows:

Term 1 - Autumn Trees and Wood
Term 2 - Spring Water
Term 3 - Summer Greece and the Olympics

(see appendices 9, 10 & 11 for schemes of work for each term)
The work was planned to ensure that National Curriculum subjects were integrated into the theme. The cross curricular themes were also integrated although as these had recently been introduced, less integration of these themes occurred. Some subject areas eg maths and English had their own slot on the timetable, while other subjects were integrated into topic work, eg geography and history, (for timetabling arrangements for this class see appendix 12).

Health education was taught both on an incidental basis ie as the opportunity arose, as well as on a planned basis. Incidental health education occurred in response to incidents arising in the school day. For example, head lice is fairly common among young children and there were three incidences of head lice in the first term. The teacher used the opportunity to explain how it could be caught and how to try to prevent it, and also stressed that it is not just dirty hair that becomes infected, so as to prevent children feeling ashamed. A letter was sent home to all parents each time. Planned health education occurred as part of the set scheme of work related to the topic, eg personal hygiene as part of the Water topic, or as part of the 10 minute a day 'sharing time' which gave pupils the opportunity to develop self confidence.
Running alongside both the planned and incidental health education curriculum, the teacher tried to develop self confidence, self esteem and social skills, allowing pupils to make decisions and choices in relation to their work and activities as far as possible.

5.4 Analysis of health education experiences
It was possible to identify two methods by which health education was either taught or pervaded the primary curriculum:

a) health education as a planned part of the curriculum, usually as a component in another subject area such as science

b) an incidental approach which capitalised on current events, assemblies, school visits or visitors to the school

The method which occurred most frequently was health education which was part of the planned curriculum, ie when health education was part of the term's scheme of work because it was a component of another subject area, eg science or PE.

Appendix 13 lists all types of health education observed during visits or reported as having taken place by the class teacher during the whole academic year. Observations have been divided into those aspects which were part of the planned curriculum and those which occurred on an
incidental basis and the approximate time spent on each aspect of health education has been given. The WHO target which each aspect of health education addresses is also numbered. Table 5.1 below shows the WHO targets which were addressed at primary level and the total amount of time spent on each target over the whole year.

<table>
<thead>
<tr>
<th>WHO target number</th>
<th>Teaching occasions</th>
<th>Total time spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-Accidents</td>
<td>5</td>
<td>5hrs 20 mins</td>
</tr>
<tr>
<td>12-Stopping increase in suicide</td>
<td>1</td>
<td>19 mins</td>
</tr>
<tr>
<td>15-Knowledge and motivation for healthy behaviour</td>
<td>12</td>
<td>4hrs 5 mins</td>
</tr>
<tr>
<td>16-Healthy living</td>
<td>4</td>
<td>2hrs 57 mins</td>
</tr>
<tr>
<td>17-Decreasing health-damaging behaviour</td>
<td>2</td>
<td>3hrs 10 mins</td>
</tr>
<tr>
<td>22-Food quality/safety</td>
<td>1</td>
<td>5 mins</td>
</tr>
</tbody>
</table>

Table 5.1: Frequency with which WHO targets were addressed at primary level in the case study schools
In relation to the planned curriculum, PE offered the most opportunities for addressing certain health issues on a regular weekly basis, eg safety, care of muscles during exercise, providing opportunities to develop decision making skills. PE is taught every day and the amount of time spent on health education throughout the year totalled just over 11 hours. Due to the nature of PE, the teacher has to be aware of these issues and safety in terms of use of equipment and physical safety is an integral part of all PE activities. By addressing these issues on a weekly basis, the pupils are regularly being exposed to these aspects of health education. Also as the subject is a practical one, pupils are engaged in this learning situation in physical activities rather than simply hearing about health.

In the science curriculum, surprisingly little health education occurred during the period of observation and the two examples observed during the year can barely be said to amount to actual health education. Safety, in terms of use of thermometers (not putting in the mouth, making sure they did not roll off the desk) was more of a side issue than any substantial form of health education and merely amounted to an instruction with an explanation. However the teacher did take the opportunity of including this aspect of health education in the lesson.
Hand washing and its importance featured in a science lesson and this aspect of the lesson specifically looked at how dirty hands could be even though it may be impossible to see the dirt. This only lasted approximately 20 minutes after which pupils used the hand lenses to look at other things which were not health related.

Due to its nature, topic work offered opportunities to include more or less any subject area. During the year, as part of the three topic themes, pupils watched a video about footwear and the consequences of wearing badly fitting shoes, the 1970's fashion of wearing platform shoes was illustrated on the video. A few foot diseases were shown eg verrucas and athletes foot.

Pupils watched a video about the Jewish festival of Hannuka (lights). This in itself did not amount to any form of health education, however it linked in with a lesson in assembly which was concerned with developing tolerance in attitudes towards other faiths.

Sharing time occurred 4 times a week for 10 minutes per session. This provided an ideal opportunity for pupils to express themselves and develop self confidence by standing up and talking to their peer group about something of importance to them. However approximately only 3 pupils had the chance to speak each day and over the year the
estimated time spent on this per pupil was 38 minutes. The teacher made a point of trying to ensure all pupils took at turn, whilst not forcing the more shy pupils as this would have had a detrimental effect on their confidence development.

During the practical food lessons simple instructions to do with food and kitchen safety and hygiene were given to the pupils. This probably amounted to 5 minutes per lesson.

Art/craft and music offer the opportunity for relaxation and to develop self expression through various mediums eg fabric, paint, musical instruments. It is hard to judge to what extent this actually occurs for all pupils, indeed some may not enjoy these subjects at all. Approximately 2 minutes per week has been estimated for each subject area in terms of the relaxation and self expression aspects of health education.

Health education which occurred as part of the incidental curriculum did not amount to very much. The following represents the total incidental health education which occurred during the year.

Dental health received approximately 25 minutes spread out over one week. Pupils had been issued with a booklet and
they received a sticker if they had brushed their teeth morning and night on the previous day.

Around Bonfire Night, the fire brigade visited the school, conducted a fire drill and gave some advice about safety around bonfires. This lasted approximately 20 minutes.

The 'Tuck Shop Working Party' visited the school, looked at the food on sale in the tuck shop and awarded a certificate to the school. The school followed this up at the time by issuing a questionnaire to the pupils to decide whether to include new 'cereal bars' in the tuck shop sales.

A small amount of time was spent (approximately 10 minutes per occasion) during different assemblies on the importance of not dropping litter in the playground, learning to be tolerant about religious festivals of faiths other than each pupil's own faith, and in awarding the 'house cup' for the 'house' with most points.

As head lice had occurred on three separate occasions during the first term, some time was spent on each occasion by the teacher explaining how it was caught, etc.

The school had a number of rules eg walking not running around the building, safe use and handling of equipment.
Pupils were reminded of these periodically throughout the school year.

The total amount of time spent on health education activities as part of the planned curriculum over one year was approximately 23 hours. The total amount provided by the incidental curriculum was approximately 3.5 hours.

The degree to which the health education experiences, both incidental and planned, during the year related to the WHO targets is shown in table 5.1. Teachers were unaware of the WHO targets (see chapter 5.5) and therefore did not include them in their teaching as much as they could have, however some of the targets were still addressed through the primary curriculum due to an overlap of content between some targets and the cross curricular guidelines.

5.5 Analysis of teachers' questionnaires

Two questionnaires only out of six were completed and returned by the staff at the primary school. This represented a 33% response rate, but was still only two questionnaires. However the two teachers who had had most involvement in the research were the ones who replied and as such represented key points of view, consequently the researcher was satisfied that by analysing these two responses, useful results could be obtained in relation to the research, (see appendix 3 for sample of teachers'
questionnaire).

There were some differences in the responses to the main question - 3(a) and (b) to do with the degree to which an issue was taught and the perceptions of what was being taught. In response to question 3(a) - health education as part of a planned scheme of work - both teachers agreed that the following aspects of health education were taught either once a day or once a week:

- development of self confidence/esteem
- safety eg home, road, classroom
- decision making skills
- physical activity
- health related exercise

and that the following issues would be addressed once a term:

- air/water pollution
- family life
- child development

The teachers differed on the rest of the health issues, depending on whether they felt they were addressed once a term or once a year:

- environmental risks eg chemicals, radiation
- illness/disease eg measles, malaria
- waste disposal eg home, industrial
- nutrition
- personal hygiene
sex education
alcohol/drug abuse

One teacher considered that she taught stress management once a year, whereas the other did not feel that she taught it at all.

In response to question 3(b) - health education as the opportunity arises - the responses from both teachers were similar.

The following aspects were thought to be addressed once a day or once a week:

- family life
- child development
- food hygiene/preparation
- personal hygiene
- development of self confidence/esteem
- decision making skills
- safety eg home, road, classroom
- physical activity
- health related exercise

and the following issues were thought to be addressed once a term:

- environmental risks eg chemicals, radiation
- waste disposal eg home, industrial alcohol/drug abuse

Differences of opinion occurred in relation to the following issues, one teacher thought they would be
addressed once a term, the other once a year:

- illness/disease eg measles/malaria
- household maintenance
- sex education
- nutrition education

Stress management was the only issue which received widely differing responses, again one teacher felt she never addressed this issue and the other thought it occurred on an incidental basis once a term.

Neither teacher added anything to the list of other health education issues not included in 3(a) and 3(b).

Question 5 related to teaching methods and teachers were asked to rank in order the four most used methods. Both teachers agreed that 'Project Work' was the most used method. 'Group work' and 'Themes' were the next choices for both teachers although in different orders, the fourth choice for one teacher was 'Class discussion', for the other, 'Team teaching'.

Question 6 referred to resources used in the classroom. 'TV/Radio programmes' and 'videos/slides' were the only two resources which both teachers ticked. One teacher also used posters and workpacks whilst the other also used leaflets/magazines and outside speakers.
Question 7 asked about parental involvement in teaching health education. Both teachers agreed that they were not involved in planning lessons or teaching lessons, however there was a difference of opinion in the extent to which parents were informed of the content of school health education as one teacher thought parents were kept informed most of the time and the other thought they were informed only sometimes.

There was complete agreement from both teachers in response to question 8 - the importance of the hidden curriculum. Both teachers ticked 'very important' for all sections (a)-(e).

Question 9 asked about teachers' own background knowledge of health education. One teacher was trained in Biology (secondary) however she did not expand on which aspects of health education her course covered. She had been on the 'My Body' course (HEC, 1983a), a course related to disability and a number of multi-cultural courses to do with developing self esteem. She indicated that she attended such courses out of her own interest.

The other teacher's initial training course covered the health problems of the time - exercise, rest, drugs, but only in a sketchy way. She had not been on any in-service training courses related to health education since her
initial training and consequently said she felt unsure about her competency to teach health education. Both teachers agreed that health education should be covered by the school curriculum.

The last question asked about teachers' awareness of the WHO targets. Only the teacher who had had contact with the researcher stated she was aware of the targets and said that it was due to this contact.

The responses from both questionnaires indicate similar practices in relation to health education. There was general agreement about the approximate frequency with which health issues were addressed both as part of the planned scheme of work and especially as the opportunity arose. There were some differences of opinion, but this was to be expected as teachers were not likely to teach an identical curriculum or in an identical manner. Differences in training, both initial training and subsequent in-service training were highlighted in question 9 and this plus teachers' own confidence and interest in addressing health issues was probably responsible for the degree to which health education was included by each teacher in the curriculum.

Differences in interpretation of meaning would also have an effect on questionnaire results. For example, food
hygiene and preparation were ticked as being taught once a week by one teacher and once a term by the other. Although these are taught once a week, the pupils only experience such a lesson once a term, hence the possible reason for this discrepancy.

Similarly there was a difference of opinion about the degree of parental involvement which could have been due to the interpretation of the words 'most of the time' and 'sometimes'. If the word 'always' had been the first option, this would have allowed teachers to distinguish more easily between that and 'sometimes'.

Both teachers made use of a similar range of teaching methods and resources and there was exact agreement about the effects of the hidden curriculum on pupils' health education.

It must be remembered that these issues had been selected from the WHO HFA list of 38 targets, not from school health education guidelines and as teachers did not complete question 4 - are there any other aspects of health education which you teach which are not on the list above - it would suggest that the two areas were similar.

5.6 Analysis of pupils' questionnaires
There were 24 questionnaires completed. The researcher
explained how to complete the questionnaires and the class teacher was available in the room to help with pupils' queries/spellings during the administration of the questionnaires, (see appendix 4 for sample of pupils' questionnaire). The first 4 questions were designed to allow the pupils to get used to the format of the questionnaire.

Question 5 - what do you like to eat at playtime - was designed to find out what children preferred to eat, and to check the replies against the 'healthy' foods supplied by the school.

Most pupils listed more than one item. The most popular item was fruit (20), with some pupils putting specific fruits eg apples, bananas, satsumas, etc. The next most frequent answer was crisps (16), followed by chocolate (2). The high preference for fruit matched up with the actual sales of the school tuck shop and indicated that the school was not just trying to influence eating habits, but that the pupils actually preferred what was on sale. Crisps which are usually high in fat and salt also scored highly, however the school was selling the low fat variety, so at least pupils were able to buy the more healthy option.

Question 6 was also about the school tuck shop. It asked
pupils why their school was awarded the 'Healthy Eating Tuck Shop' Certificate and aimed to find out if pupils understood that some foods were more healthy than others and if so which foods. Only a few pupils were able to offer actual reasons as to why the school had been awarded the certificate eg

'Sold low fat crisps and apples, good for you' (2)
'Because we don't sell fat stuff and discos' (1)
'Don't sell sweets but do sell apples and oranges' (1)
'Healthy crisps' (2)

Ten pupils put 'tuck shop was healthy' but did not expand on the reasons why.

Question 7 asked about litter in the school. The Headteacher made a point during assemblies of reminding the pupils that litter was not to be left in the playground. Most pupils (14) put 'it will keep the playground/the world/Britain/the environment clean'. The rest of the pupils said what would happen if it was not kept clean eg 'otherwise it would be a complete mess/because it will make the world horrible/pollution/so it won't pong' etc.

Question 8 was about the use of the first aid box which pupils had been taught how to use. The following responses were given:

'Ask a person to bathe it/bathe it yourself' (14)
'Go to a teacher/medical room'; (13)
'Go to the first aid' (1)

Question 9 asked about fire safety and aimed to find out if pupils had remembered the instructions received from the fire brigade around Bonfire Night. Again most pupils did not explain their answers fully:

'go outside/to the playground/stand in lines' (11)
'do what the teacher said/stop with the teacher' (2)

Some pupils obviously did not know what to do or had not taken the question seriously:

'get the fire extinguisher and do what it said on the side' (1)
'shout fire, fire, run outside and scream' (2)
'call an ambulance' (1)

The majority of responses suggest that the pupils were aware of fire procedures in the school.

There had been three separate incidences of head lice in the first term of the school year. As stated earlier the teacher thought that it had never been eradicated properly the first time and so had returned. The teacher had spent time on each occasion explaining how head lice could be caught and reassuring pupils that it did not occur only on dirty hair. Question 10 aimed to find out if pupils had understood this, the responses were as follows:

'Special shampoo/get head lice cream/nit lotion' (18)
'Wash your hair'  
'Tell the teacher'  
'Stay away from other people'  

The next two questions asked specifically if people with clean hair or dirty hair could get head lice and aimed to find out if pupils had understood that anyone could catch it. The results to the question about clean hair were:  
'yes' (14)  
'no' (8)  
'don't know' (2)  
and for dirty hair:  
'yes' (9)  
'no' (12)  
'don't know' (3)  
It seems that pupils were confused about this issue, although 14 thought that even if your hair was clean you could still catch head lice, 12 pupils thought that if your hair was dirty you couldn't catch it.

The question about hygiene in practical cookery lessons aimed to find out if pupils understood the reasons for careful washing up. Responses included:  
'so you don't get/spread germs/so nothing gets onto food left out'  
'the next group won't want it dirty/nice for other people'  
'because the school has to be clean'  
There were a number of responses which indicated a misunderstanding of the question eg 'because it might get stolen'.

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The last 6 questions attempted to find the level of pupils' self esteem/confidence. It was thought necessary to include some questions based on this as the school made a point of developing such personal skills. The questions were purposely kept simple as it was thought pupils may find it difficult to answer this type of question. It asked - do you think your teacher/ friends listen to you when you talk to her/them. Responses included:

      teacher:          friends:
    `yes'    (16)       `yes'    (13)
    `sometimes' (6)     `sometimes' (3)
    `don't know'  (2)   `don't know'  (6)

Questions 16/17/18 attempted to find out how important pupils felt they were in three situations - at school, in their family and with friends. The results showed a marked difference. 19 pupils felt important at home, at school 14 ticked `don't know' and for friends the results were fairly even between `important', `not important' and `don't know'. Most pupils were sure of their importance as part of their family, however as far as school and their friends were concerned there was a difference of opinion.

The last question aimed to find out pupils' perceptions of themselves and their personal qualities. Pupils were asked to rate the following seven characteristics: happy,
friendly, helpful, interesting, generous, good and confident according to a frequency scale.

'Sometimes' was the box receiving the most ticks for all characteristics apart from 'generous', with 'often' being the next most ticked box. Only 1 or 2 pupils thought they were 'never' 'happy, friendly' etc, whilst the characteristics which most pupils said they 'always' felt were 'helpful, generous and confident'.

The responses to the questions about self esteem/confidence, etcetera suggest that the majority of pupils felt a high level of self esteem and confidence. Most pupils felt valued by family and teacher and that people listened to them when they had something to say, although opinion was evenly split about importance with friends. The majority of responses to question 19 fell under 'often' or 'sometimes'. This would have been expected as few people can expect to feel happy, friendly, etc all the time. There were a few pupils who showed negative perceptions of themselves, 4 actually felt 'unimportant' at home which is worrying if it is true.

Overall the results of the questionnaires indicated a high level of understanding of health issues covered during the school year. The questions about fire safety, litter prevention, tuck shop food, kitchen hygiene, and what to
do if you get head lice were answered correctly by the majority of pupils. A very high proportion of pupils preferred to eat fruit at breaktime indicating some degree of healthy eating preferences. There were a few questions which pupils gave a wide range of responses to, for example there was some confusion in understanding that head lice could affect anyone and although pupils had had instruction on how to use the first aid box, most pupils would get help if they cut themselves rather than tend to it themselves. However the responses to the questionnaire suggested that the majority of pupils revealed a high level of understanding of the health issues they had covered during the year.

5.7 Analysis of 'Draw and Write' Technique
Five topics were covered in the Draw and Write Technique: exercise, teeth, healthy foods, safe behaviour on Bonfire Night and things that make you happy at school, (see appendix 5). These topics had been discussed or taught by the class teacher during the year of observation. All questions were asked in two parts eg: ‘Draw a grown up who doesn't get enough exercise' and 'Draw a grown up who gets enough exercise'.

The responses were very similar from all pupils for all questions. For the question about exercise, pupils either drew a thin and a fat person or a strong person with
muscles and its opposite. In response to the question about teeth, all pupils drew a mouth showing black teeth or fillings and a mouth with clean, shiny teeth.

The question relating to healthy foods revealed that almost all pupils knew which foods were healthy and which were not. Under the healthy foods category responses included fruit/vegetables, fish, meat, cheese, milk, lower fat foods and under the less healthy foods they included chips, sweets, crisps, sugar, chocolate, fatty foods and eggs. There were two responses which indicated a lack of understanding, one pupil included sausages and fish fingers under the healthy category and for some reason oxo appeared under the unhealthy category. However overall the responses indicated a clear understanding by the majority of pupils as to which foods were healthy and unhealthy.

For the question relating to safety on Bonfire Night, again almost all pupils put staying away from the fire as being safe behaviour and throwing fireworks or getting near to the fire as being unsafe behaviour. This would indicate that pupils are clear about correct behaviour on Bonfire Night.

The last question asked pupils what made them happy/unhappy at school. PE, games, football came out top for nearly all pupils as things they liked at school.
Other things which made only a few pupils happy were reading, writing and maths. The main thing which pupils did not like at school was fighting, other things listed included spelling tests, writing, maths, reading, calling each other names, teacher and nothing.

The responses to this technique showed much more similarity between pupils than for the questionnaire. The pupils were observed enjoying drawing their responses and many did very detailed, and imaginative drawings. The responses indicated that pupils have clear and accurate ideas about all the topics. It would seem that the Draw and Write Technique allowed pupils of this age to express themselves easily and by making the task easier, pupils were more responsive in their answers.

The overall results show clearly that pupils were aware of the positive and negative aspects of all five issues. It then had to be determined how they had obtained this knowledge.

5.8 Interviews with pupils
As already stated, to allow the researcher to find out the source of pupils' knowledge in relation to the questionnaire issued and to attempt to obtain more exact meanings to the responses the pupils had given to the questions it was decided to interview a small sample of
pupils, (for example of responses see appendix 7).

The first question related to the School Tuck Shop Certificate. Three out of the six pupils could explain in a fair amount of detail why the school had been awarded the certificate while the other three understood that apples were good for you and crisps not so good but could not explain why. Mum and school were both mentioned as the sources of their information.

The second question asked about the use of the first aid box. Four of the pupils were sure about what to do and explained in detail. One pupil answered only in very brief words and it was hard to obtain any detail at all from him even with prompting. When pupils were asked how they knew how to use the first aid box 2 said from mum, 2 from dad and 2 from school.

The third question asked about the importance of cleaning up after cooking. Mum and teacher were mentioned equally as giving pupils such information. One pupil could not remember how he knew such information while another learned it from his grandmother.

The fourth question asked about pupils' feelings of importance at school, with family and with friends. One of the reasons one pupil did not feel as important at school
as at home, was that as there are so many people at school, he thought that made a difference. This same pupil also said he had made a mistake when he originally wrote on his questionnaire that he was not important with friends, he said he meant to put 'I don't know'. Three other pupils found it hard to answer this question and they were quite unresponsive to being questioned and answered with, 'I don't know' or 'I am not sure'. Only one pupil was able to express her reasons for the answers she had given and this pupil was able to say that she felt very important at home but no more important than anyone else when at school. The researcher felt that one of the reasons pupils found it hard to talk about this type of question is that it required abstract thought which the pupils were probably not all capable of.

The last question focussed on the drawings. Pupils were asked how they knew about dental decay. One replied from the dentist, and from school, another from grandma and mum, another from mum and dad, another pupil could not remember how he knew, and the fifth pupil learned from sister, mum, teacher and a few other people.

After question 3, one interview with one of the pupils ended. This pupil was not at all responsive to being questioned and those questions he did answer were either yes, no or don't know: he would not expand on his answers.
As he was obviously uncomfortable answering questions, the interview was stopped at that point. Pupils' level of ability affected the degree to which they were able and willing to expand on their answers. The two more able pupils were more fluent than the two of lower ability.

Most pupils mentioned home and school as being the source of their knowledge. The source of knowledge for all questions is shown in table 5.2.

<table>
<thead>
<tr>
<th>Source</th>
<th>Count (Primary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mum</td>
<td>(8)</td>
</tr>
<tr>
<td>Dad</td>
<td>(3)</td>
</tr>
<tr>
<td>Grandmother</td>
<td>(2)</td>
</tr>
<tr>
<td>Sister</td>
<td>(1)</td>
</tr>
<tr>
<td>School</td>
<td>(7)</td>
</tr>
<tr>
<td>Dentist</td>
<td>(1)</td>
</tr>
<tr>
<td>Can not remember</td>
<td>(2)</td>
</tr>
<tr>
<td><strong>total family</strong></td>
<td><strong>sources = 14</strong></td>
</tr>
</tbody>
</table>

Table 5.2: Sources of pupils' health knowledge (primary)

Due to the age of the pupils involved, it was expected that home would be of significant importance in pupils' lives. This has implications for the delivery of health messages to children of this age, (see chapter 8).
5.9 Interview with Headteacher

The Headteacher in the primary school was interviewed to determine the position and status of health education in the school and the value placed upon it.

The primary school was small in terms of pupil numbers and it was not possible to devolve roles such as co-ordinator of health education to individual members of staff. The Headteacher did have an interest in health education and took on this role alongside other roles.

When the new health education policy was written by the staff to take account of the CG5 document, a decision was made to divide health issues across the year groups, eg year 6 would cover puberty, personal hygiene, relationships and HIV/AIDS. In this way it would be possible to cover the whole range of health issues during the junior school years. The Head admitted that although this was the theory, in practice she could not say definitely that this was happening. One of the main reasons was due to the workload imposed on teachers with the introduction of the National Curriculum. She also said that everyone was human and what was planned in theory did not always work out that way in practice.

When asked about the status of health education, the Headteacher said that teachers in her school felt it was
very important, that they felt it linked in with PSE and covered all aspects of education not only 'crisis' issues such as drugs and AIDS but also learning how to live and make choices in life and be confident and make decisions about oneself. However with the pressures of the National Curriculum, she feared it would be squeezed out of the timetable. She thought that one of the reasons for the low status of health education was that the government responded only to crisis issues, for example when a problem occurred such as AIDS. She felt that the signals given by government were not positive. She thought that these were uncertain times in education and that if the government was serious about giving health education a high profile it would show this by providing money and developing initiatives.

The budget in this primary school operated around a three year cycle of priority areas. One example of a designated priority area was the library and the school had stocked up with books and resources. Approximately five years ago, health education was designated a priority area and due to this the school had a very wide range of related materials.

Opportunities for staff development were often linked with the identified priority areas and courses for staff were selected to fit in with these areas. However should a
member of staff wish to attend a course unrelated to the priority area, this might still be approved. All costs for all courses were met from the school budget.

Parents were involved in some lessons as seen during the research observations eg parents reading lessons in assembly and being involved in an environment project and a garden project.

The advisory service was used by the school as was necessary. The Head felt that she would still use the service if charging was introduced as the school had found the advisory service to be very helpful especially in providing in-service training. Recently the school paid the advisory service for a talk to the governors and staff about health issues.

The school meals service in Sheffield has a healthy eating policy, for example using half white and half wholemeal flour in baked products. However there have been cutbacks, eg in the past fresh vegetables were always used, but now frozen and pre-peeled vegetables are used. On the positive side, chips are restricted to being sold twice a week and each day a balance of foods is provided with salads, fruit and yoghurts always being available as well as jammy puddings.
The school had been awarded Sheffield Education Authority's 'Healthy Tuck Shop Certificate' for the range of foods the tuck shop sold at break ie apples, oranges and low fat crisps. When the low fat crisps were first sold, pupils used to ask for the ordinary variety. The Head said that this was because pupils thought there were less crisps in the low fat bags. By providing a healthy tuck shop, the school maintains the school ethos and policy relating to health.

The Head thought it very important that the ethos and atmosphere in the school should support the school's teachings and behaviour, for example as in the tuck shop policy. Also that it was important to consider other aspects such as the level of staff and pupil morale, the condition of the building, the general environment of the school and good lighting, etc.

The Headteacher in the primary school said that she supported health education in the curriculum, that to equip pupils with the skills to enable them to make healthy choices in their lives should be an integral part of all pupils' education. However she was also realistic and accepted that in practice it was not always possible to ensure that such conditions existed.

This school was selected in this research as representing
good practice in terms of its health education teaching in Sheffield. It has adopted a positive approach to health education, the organisation of the school and the school policy statements embrace the concept of the health promoting school and the responses in the questionnaires revealed that teachers thought health education was an important part of the curriculum. This was confirmed in the interview with the Headteacher and her commitment to health education was confirmed, for example in designating health education a priority area and increasing the school's health resources. Responses to pupils' questionnaires and interviews revealed a high level of understanding of the health issues taught during the year.

Most health education was observed to be occurring through the planned schemes of work, although some health education also occurred due to the teacher taking advantage of opportunities arising in day to day teaching. The health education experiences of pupils have been linked to the WHO targets (see appendix 13) to show those which were being addressed through the curriculum.
CHAPTER SIX

HEALTH EDUCATION IN THE SECONDARY SCHOOL
CHAPTER 6 - HEALTH EDUCATION IN THE SECONDARY SCHOOL

After observing selected subject areas in the secondary school over one academic year, it has been possible to quantify the health education experiences of this particular group of pupils in relation to the selected subject areas over this timescale and compare these experiences with the WHO targets.

6.1 Description/organisation of secondary school
The school was an urban school in a working class area of the city. It had a staff of 52 teachers and 895 children on roll with 199 pupils in year 9. The school received its intake of pupils from six local feeder schools in the area including the primary case study school.

Pupils were taught in classes of mixed ability, although setting occurred for some subject areas eg maths. The National Curriculum was being introduced and teachers were beginning to integrate the cross curricular themes. Registration and tutorials were conducted by the form teacher, who also had pastoral responsibility for his/her class. Pupils were taught by specialist teachers for all subjects and specialist rooms were available for certain subjects eg home economics, CDT, science.

Parents were involved to a certain extent in some aspects
of their children's health education; for example a Year 9 Parents' Evening devoted to health education was held. By involving parents in this aspect of their child's education, the school hoped to gain parents' support in tackling any health problem such as drugs which may occur in the school, (the evening was not well attended with only approximately 15-20 parents).

The organisational structure and atmosphere of the school was conducive to that of the Health Promoting School (see chapter 2.1) and is reflected in the school health policy (see chapter 6.2). However the secondary school was not successful in co-ordinating the health experiences in the school with families and the local community. The deputy with responsibility for health education recognised that this was one area where the school could make improvements (see chapter 6.8).

6.2 School policy statements
The school operated under a Whole School Curriculum Statement with separate statements specifically for Health Education and Sex Education.

The Whole School Curriculum Statement said that the school would operate under the requirements of the National Curriculum. The school aimed to equip pupils for life after school, cater for pupils of all ability levels and
allow the development of individual talents. The school believed in equal opportunities and tried to promote this wherever possible in day to day school life. The school also aimed to raise awareness and focus attention on racism and on a multicultural society. Out of school and extra-curricular experiences were also valued for pupils' development, (Secondary school whole school curriculum statement, undated).

The school had developed separate policies for health education and for sex education, (Secondary school health education statement, 1990 and secondary school sex education statement, undated). Health education in the school was based on a whole school approach where all staff had the responsibility to promote a healthy lifestyle both through curriculum areas and as a result of the ethos and atmosphere within the school. The school ethos aimed to promote respect for the individual, develop self confidence and self esteem, encourage concern for others, promote self discipline and a sense of responsibility and encourage good relationships between pupils and between staff and pupils.

The school sought to achieve these aims through a system of praise, encouragement and recognition of abilities, through providing opportunities to be involved in extra-curricular activities and by demanding acceptable
standards of personal and social behaviour. The school aimed to promote healthy eating and safety awareness.

Although the school recognised that all subject departments had a part to play in the health education programme, some subject areas had been identified as being more appropriate in ensuring pupils had the specified knowledge and understanding and in providing the opportunity to develop skills and attitudes necessary for a healthy lifestyle. Science, technology, home economics, physical education, humanities, religious education and English were the subjects where the school thought there was a key role to be played in delivering the CG5 9 areas of health education (NCC, 1990). In addition the Skills for Adolescence Course for pupils in years 1-3 and the personal and social education course for pupils in years 4-5 were thought to have a key role, (see section on active tutorial).

Sex education in the school had been placed within the science National Curriculum. Attainment Target 3 - 'Processes of Life' (levels 2-8) was identified in the school statement as the vehicle for delivering sex education.

All three statements supported health education in the curriculum. All staff are thought to be responsible for
its promotion. Health education was viewed in the wider context of developing personal qualities eg self esteem, not simply as a range of issues to be covered eg drugs education. The importance of staff-pupil relationships was recognised as was open communication between pupils and staff. Sex education was timetabled to be taught only in science and PSE lessons, often with the assistance of outside agencies. Recognition was given in the Whole School Curriculum Statement to the importance of extra-curricular activities and the school provided a range of such facilities for its pupils along with a community programme and work experience opportunities to allow the development of character and personality.

6.3 Schemes of work for selected subject areas 1991/92
The subject teachers for the year 9 group of pupils under observation provided schemes of work for the whole of that year. This was an outline of intended teaching themes from which it was possible to select specific lessons when health related education was planned to take place. As explained earlier, the observation schedule was planned to coincide with these specific health education related lessons; (for full timetable see appendix 14). The modules of work for each subject area identified as appropriate for observation were as follows:
Biology: Growing up
Circulatory/respiratory systems
Home Economics Healthy eating
Religious Education Islam - women/family lifestyles
Geography Environment - patterns of health/disease
PE (girls and boys) Health related fitness
Active Tutorial Drugs education: alcohol/tobacco

In a similar way to the primary school, the majority of health education in the secondary school occurred as a planned part of the curriculum. Due to the organisation in a secondary school which has to take account of specific slots on a timetable allocated to each subject area, there is not the degree of flexibility that is available in a primary school to take advantage of incidents which may occur during the school day and which lend themselves to addressing health issues as they occur. This is not to say that health education on an incidental basis does not occur in a secondary school, but that the opportunities for it doing so are not so widely available.

6.4 Analysis of health education experiences
Health education in the secondary school was observed to occur only on a planned basis ie as part of the scheme of work for each subject area. The following is a summary of the health education components of the schemes of work for
the selected subject areas. Each lesson was one hour ten minutes unless stated otherwise. Appendix 15 lists all the types of health education observed during visits or reported as having taken place by the subject teachers during the academic year. It identifies the health education component of each lesson in terms of the 9 components of health education (NCC, 1990) and the WHO target each addresses. Table 6.1 below shows the WHO targets which were addressed at secondary level and the total amount of time spent on each target over the whole year.

Biology:
The class of pupils under observation were taught Biology in two separate groups - a mixed ability group and a low ability group, each by a different biology teacher. Both groups followed a similar curriculum with some modifications for the low ability group to suit their needs. The scheme of work for biology in Year 9 was organised into three modules - Living Things, The Human Body and The Flowering Plant. Of these, the Human Body contained material relevant to health education and covered the skeleton, the nervous system, the blood system, the digestive system, growing up and variation in genes in relation to sex determination.
<table>
<thead>
<tr>
<th>WHO target number</th>
<th>Teaching occasions</th>
<th>Total time spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Adding years to life</td>
<td>3</td>
<td>2hrs 56mins</td>
</tr>
<tr>
<td>4-Reducing chronic disease</td>
<td>4</td>
<td>4hrs 29mins</td>
</tr>
<tr>
<td>9-Combatting diseases of the circulation</td>
<td>4</td>
<td>4hrs 56mins</td>
</tr>
<tr>
<td>10-Combatting cancer</td>
<td>4</td>
<td>11hrs 56mins</td>
</tr>
<tr>
<td>11-Accidents</td>
<td>2</td>
<td>3hrs 41mins</td>
</tr>
<tr>
<td>15-Knowledge and motivation for healthy behaviour</td>
<td>6</td>
<td>17hrs</td>
</tr>
<tr>
<td>16-Healthy living</td>
<td>3</td>
<td>2hrs 44mins</td>
</tr>
<tr>
<td>17-Decreasing health-damaging behaviour</td>
<td>1</td>
<td>1hr</td>
</tr>
<tr>
<td>22-Food quality and safety</td>
<td>1</td>
<td>1hr 45mins</td>
</tr>
</tbody>
</table>

Table 6.1: Frequency with which WHO targets were addressed at secondary level in the case study schools

Two lessons were observed with the low ability group, one was on the respiratory system and the other on the circulatory system. The extent and depth of coverage was not great, however pupils were taught simple information
about each system, they learned some biological terminology, they learned about the diseases which are associated with each system and how these could be avoided, for example effects of alcohol and cigarette smoke on the lungs and heart. The smoking experiment was very effective in showing nicotine stains on a piece of cotton wool from one cigarette, as was using a real sheep's heart and lungs to show blood clots and blocked arteries, etc.

The mixed ability group spent three weeks on the topic of 'Growing Up'. Pupils discussed physical changes to the body, they watched two videos which covered changes such as hormones, the need for care in personal hygiene, need for exercise, healthy foods, the reproductive organs for males and females and the loving side of a relationship. Emphasis was placed by the teacher on the importance of emotional ability of boys and girls to be parents and that physical ability did not equate with the emotional maturity required to look after a child. Pregnancy and birth were the topics for the last of the three lessons. Abortion was discussed briefly and once again emphasis was placed on the moral aspects of pregnancy and abortion.

Due to the limited amount of time available for these topics, the extent of learning was not great, however the teacher did not simply relate factual information as he
used the opportunity to address moral issues relating to reproduction and pregnancy and tried to encourage an adult attitude in discussions. This contributed to psychological aspects of health education as well as sex education and family life education.

Home economics:
Technology had been introduced for year 7 and year 10 pupils but had not yet worked through to year 9. Home economics and textiles were taught to year 9 pupils, with half the school year for each. During the half year spent in home economics pupils followed a course entitled 'Food and Nutrition' part of which included a nine week Healthy Eating module which aimed to make pupils aware of the need to think carefully about the food they chose to eat. The other part was called 'Tools of the Trade' and looked at modern technological equipment available to the consumer.

The 9 weeks spent on the healthy eating module involved the pupils in group work. They worked in groups of 3 or 4 on one of the following four recommendations of the NACNE Report (National Advisory Committee for Nutritional Education) regarding fat, fibre, salt, sugar (HEC, 1983b). One week was spent on theory related work, the next on practical related work. Each week all groups were working on a different aspect of the NACNE recommendations, so that at the end of the eight weeks they had completed all
four areas.

Pupils worked from a booklet which contained questions and activities for each weekly lesson and resources were available for pupils' use. There was little teacher instruction apart from the first week when the teacher began the topic with a discussion and a video on healthy eating. Pupils were required to use the resources to find information and then answer questions based on what they had read. A lot of detailed information was included in this module involving quite difficult concepts, for example the benefits of polyunsaturated fats over saturated fats in the diet and it was hard to judge the amount of knowledge gained from this type of teaching method.

Practical lessons included adapting recipes to reduce sugar and increase fibre or cooking different types of beefburgers eg low fat or vegeburgers then conducting sensory evaluation on the cooked products. Pupils learned some practical food preparation skills, a certain amount of food and kitchen hygiene, nutrition and some safety aspects of using the equipment.

'Tools of the Trade' was also a nine week consumer education module organised on a similar basis to the Healthy Eating module. Pupils followed a booklet which led
them through the course involving both practical and theoretical work. The health aspects of this course were to do with safety in terms of use, care and purchase of appliances for example kite marks, cut out devices, double insulation and types of accidents which could occur when using appliances eg sharp blades in washing up bowls.

Again little instruction was given from the teacher about the use of the appliances. During the first lesson of the module, the teacher had displayed and discussed the appliances with the pupils but there was no further instruction when they came to use the appliances in their groups and quite a few pupils were experiencing difficulty. For example the group using the sandwich toaster did not know how long it should warm up, they put too much cheese filling in and it all spilled out. Pupils were supposed to understand how to use the appliance from the previous theory lesson, but this required pupils to learn from a booklet without any teacher input and pupils were experiencing problems. No reminders were given at the beginning of the lesson about safety or hygiene.

Religious education:

Pupils in year 9 received 70 minutes per week for half the year for religious education (RE). During this time the pupils studied the religions of Hinduism and Islam, 18 hours were available for the topic of Islam and
observations took place over three lessons.

The health aspects of this module were related to psychological health education, for example encouraging pupils to develop positive attitudes and tolerance of other religions and understand the reasons for practices in other religions. To achieve this pupils were learning the reasons behind practices in Islam such as rights and responsibilities towards women which were then compared with western women, the laws relating to alcohol, drugs and tobacco, the requirement to eat halal meat, to pray regularly and the requirements of Ramadan. The intention was that once pupils were aware of these reasons they would not hold stereotyped views which are often detrimental.

Pupils were encouraged to think how schools, employers and hospitals cater for Muslims in this country, if at all, eg by providing places for prayer or providing halal meat. Pupils had to produce an article to help people in the community understand Muslims better. In asking the pupils to do this they had to put forward the positive side of Muslim practices and in doing so show understanding in their thinking and writing.

The health education aspects of the RE module related to psychological health education, substance use and misuse
and family life education in terms of understanding family values and practices and the different roles of family members. The other half of the timetable allocated to RE was spent on the religion of Hinduism which followed a similar pattern to the module on Islam, i.e., the central aim being to promote understanding and tolerance of religions other than the pupils' own.

Geography:
The year 9 geography syllabus was called 'Earth environment, human activities (reactions and effects) in a world contrast context'. Three lessons were observed which were part of the module, Environment - People: Patterns of Health and Disease.

The first lesson aimed to raise awareness of influences on health which could be attributed to the natural environment and those attributed to man, in relation to disease, housing and water supplies. In the following two lessons, pupils began producing a booklet about malaria. They had to know where in the world it occurs, what causes it, how it can be reduced, associated problems for the population and how it is transmitted. Resources were available for pupils to find the information. However, by the end of the two weeks most pupils had not progressed far beyond doing the front cover.
Environmental aspects of health education were the main themes of this series of lessons, eg patterns of health and disease in different countries, immunisation and child health, the need for clean water supplies, better nutrition and diet. There was some learning about personal hygiene in relation to disease prevention as well as some learning about food and nutrition in relation to maintaining good health. One of the worksheets used was about the WHO HFA 2000 initiative; it explained the initiative and gave examples of two low-cost appropriate technologies for health for use in poor countries. The rest of the year 9 syllabus concentrated on environmental geography and touched upon environmental health in relation to living conditions (food, housing, climate etc) in a variety of countries.

PE:
In year 9 both boys and girls cover a range of sports eg gymnastics, netball, hockey, badminton, basketball, tennis and health related fitness. All involve developing fitness, strength, speed, suppleness, stamina, skill, safe practices, as well as knowledge about each game. Emphasis is also placed on personal health, hygiene and dress, developing self discipline, self confidence and co-operation within a community.

It was recommended that observations should take place in
the health related fitness module for both boys and girls. Health related fitness occurred as part of a spiral curriculum and in year 9, five weeks were allocated to it. The syllabi for boys and girls were slightly different.

The course for girls began by them being weighed and comparing this to their height. A discussion followed on girls' fears related to being overweight and how to reduce weight if necessary. The teacher spent quite a long time at the beginning of each lesson talking to the girls about their attitudes towards fitness, exercise, pulse rates and smoking. Quite a number of pupils admitted to smoking and the teacher used this to encourage girls to think of their lifestyles and how to improve their overall health. She discussed the need for effective exercise to get the full benefit for the body. Along with improving fitness by exercising, pupils learned the importance of personal hygiene after exercising, the need for correct footwear and the teacher tried to develop self confidence by encouraging the girls not to place so much emphasis on their appearance.

Pupils warmed up before exercising and at intervals during the aerobics session they took their pulse. The aim was to increase the pulse rate whilst exercising. In other lessons, pupils did step-ups and exercises designed to strengthen leg muscles.
The module for the boys began in a similar way ie a discussion of what fitness meant, why it was important, measurement of pulse rates, importance of warm up exercises etc. Three lessons were based on shuttle runs - running from one end of the gym to the other at ever increasing speeds until they had to drop out. Pulse rates were measured before and after running. The two other lessons involved circuit training with each boy trying to do as many circuits as possible during the time available. Pulse rates were measured at intervals.

The boys also learned the importance of regular exercise and of warming up and down when exercising but correct footwear and smoking were not discussed in the boys' group. The development of self esteem and confidence occurred not through a discussion led by the teacher, as for the girls, but by achieving a high number of circuits or by running for longer than the other boys and then recording scores. This competitive method of developing self esteem used with the boys meant that there were losers as well as winners and consequently could result in a negative effect on self esteem.

Active tutorial:
The active tutorial (AT) course was timetabled for 35 minutes per week and was based around a publication called
Year 9 were following a unit entitled 'Developing Critical Thinking Skills for Decision Making' which was based on drugs education. Prior to this module of work pupils had spent a term on selecting options for their GCSE courses and during term 3 the module of work on drugs would be completed along with any outstanding work. The rest of term 3 would be devoted to SAT's (Standard Assessment Tasks) which are part of the new arrangements for assessment.

The module began with a discussion of drugs in general including those which are beneficial as well as harmful to the body, recognising that some cultures allow the use of drugs and thinking about the reasons people take drugs. Videos were shown in weeks two and three which covered the effects of a number of drugs on the body including alcohol, aerosol cans, smoking and the use of drugs in religion eg cannabis for Rastafarians and wine in communion.

During the fourth lesson, pupils completed a questionnaire issued by the University of Reading. This was part of a two year road safety project using pupils in Sheffield schools. The year before, the University had issued a questionnaire to selected pupils and teachers about road safety and one year later they were following this up. The
questionnaire was very detailed and took the whole lesson to complete.

The rationale behind the Skills for Adolescence course is to reach young people in the critical early adolescent years and to prevent some of the problems which may develop eg drug abuse. It aims to help young people cope with the challenges in society by developing coping skills. However in practice the teacher imparted knowledge about a range of drugs, for example their effects on the body, by giving information and showing two video programmes. There was very limited discussion about the reasons for taking drugs and therefore the opportunities for pupils to practise decision making skills and coping skills were lost.

The degree to which the health education experiences observed during the year relate to the WHO targets is discussed in chapter 8. A few teachers were aware of the targets, (see chapter 6.5), but the only evidence of the aims of the WHO initiative being included specifically in a lesson was in geography in the form of an information sheet. However in a similar way to the primary curriculum, there was an overlap of content between some of the targets and the health education observed.
6.5 Analysis of teachers' questionnaires

Of the 34 staff who taught year 9 pupils, 27 completed the questionnaire, (see appendix 3 for sample of questionnaire). This represented a high response rate of 79% of all teachers who taught year 9.

Tables 6.2 and 6.3 show the frequency with which each issue for question 3(a) and (b) was addressed as part of the planned scheme of work and as the opportunity arose.

Question (3a) revealed that most issues formed only a small part of the planned scheme of work for most subject departments (the box for 'never' received by far the most ticks), but that for issues which were taught as the opportunity arose, (3b), the ticks were spread fairly evenly over each timescale.

Subject departments showed differences in the range and frequency of addressing health issues. The mathematics teachers ticked 'never' for almost every box relating to the planned curriculum and as the opportunity arose. The responses were similar for teachers of modern languages and English. Teachers of humanities subjects (history, geography, RE) ticked those issues which formed part of a wider topic eg the history teacher taught the topic of 19th century Industrial Revolution and within that addressed health issues of that time eg illness/disease,
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Table 6.2: Frequency of teaching health issues as part of the planned scheme of work (secondary)
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Table 6.3: Frequency of teaching health issues as the opportunity arose (secondary)
waste disposal, environmental risks, family life, decision making skills. Other humanities teachers taught health issues appropriate to their topics eg Developing World Studies.

There were a few additional aspects of health education which teachers taught which were added to the list:
- first aid
- food storage
- differences and similarities between rich and poor countries
- how to get medical/emergency help when abroad

These were the only additions to the list for 3(a) and (b) which suggests that all other aspects of health education had been included and therefore that the 'Health for All' targets and the health education being taught in the curriculum were similar.

Differences were revealed between subject departments, with some departments addressing a wide range of health issues on a regular basis eg home economics and PE, whilst other departments eg mathematics and modern foreign languages hardly addressing any. These results contrast with the CG5 document which states that all subject areas have a contribution to make to health education. In practice teachers of maths and languages did not agree. Other subjects eg humanities, addressed health issues
mainly as they arose within topic work eg health within the history topic of the Industrial Revolution.

Teaching methods used for health education were varied. Class discussion (23) and group work (20) were the most used methods. Two other methods were added to the list — case studies and experiential learning. This wide range of methods and use of the more informal teaching methods reflects the recommendations made by David and Williams, (David & Williams, 1987).

Similarly the range of resources used to teach health education was varied. Text books (13), videos/slides (13), workpacks/sheets (13) and leaflets/magazines (12) were the most commonly used resources. Two other resources were added to the list — teacher as a resource and tapes. It would be expected that a wide range of resources would be used to teach the varied range of health topics across a variety of subject areas.

There was almost 100% agreement that parents were not involved in planning (21) or teaching (22) health education lessons, but that they were kept informed by the school of the content of health education lessons (14). 5 teachers did not know whether parents were involved at all and 5 teachers thought that parents were not informed at all about health education in the school. Parental
involvement should be encouraged and is desirable according to Williams (1987), who states that for health education to be truly effective, parents must be involved in their children's education and continue the health messages in the home.

Teachers were asked about their perceptions of the importance of the hidden curriculum in developing positive attitudes towards health. Williams (1987) believes that messages given by the hidden curriculum to pupils can greatly affect their health behaviour. The teachers in this school agreed with this and ticked all five aspects of the hidden curriculum as being either 'very important' or 'important'. Only two teachers indicated that points (b)-(e) were 'not important'.

Teachers' own background knowledge and experience of health education will influence their willingness and ability to teach health issues (Williams, 1987). This in turn will affect the degree to which health education is included in the curriculum. Of the 27 replies, 12 teachers indicated that they had received some health education on their initial training course, while 12 teachers received no health education on their initial course. 12 teachers had been on one or more in-service course and these courses included: St John's Ambulance course (1), STD (2), safety (1), counselling (1), skills for adolescence (2),
dental health (1), first aid (2), AIDS (3), health and safety (1), drugs (4), TVEI (1) and courses run by the advisory service (3). 13 teachers had not been on any in-service course related to health education. All teachers ticked that it should be included in the school curriculum.

The teachers who had received some health education as part of their initial course were mainly from a home economics or PE background. A wide range of in-service courses had been attended by approximately half the teachers in the school, although quite a few teachers still felt the need for further training. 15 teachers felt competent to teach health education, 7 did not, and 3 were unsure. Reasons given included not having enough knowledge/training and not having been on any in-service course.

The last question asked about teachers' awareness of the WHO targets. 7 teachers knew about the targets, 19 did not. Of the 7 who were aware of the targets, their sources of information were press/media (7), school health education officer/department (2), geography text books (1), UN/WHO/international journals (1) and all thought the targets were 'very relevant' to school education. However perceptions of the aims of the initiative indicated only a general understanding -
- to increase the nation's health, reduce incidence of
  smoking and related illnesses, obesity and heart
disease
- better environment and health
- preventative medicine
- raise standards through awareness
- healthy lifestyles
- to take responsibility for own health
- shared responsibility between individual and
government

The responses to the questionnaires indicate that health
education forms part of the syllabus for a number of
subject areas eg PE and not at all for others eg Maths, as
such it becomes part of the planned curriculum in relation
to certain subjects. There is definite interest from
teachers to include health education in their teaching as
demonstrated through the number of in-service courses
attended and the belief all teachers hold that health
education should be a part of the curriculum. The hidden
curriculum is acknowledged as being influential of the
success of health education in the school and the teaching
methods and resources used are varied and appropriate to
health education as recommended in NCC, 1990.

However, one area could be improved upon, that is the
degree of parental involvement in the school's health
education programme. The deputy is aware of this (see chapter 6.8) but also recognises the difficulties attached (see chapter 2.1).

This secondary school, like the primary school, was selected as representing good practice in terms of health education in the city of Sheffield. It can be said therefore that these observations of teachers' levels of knowledge and commitment to health education represent good practice in Sheffield.

6.6 Analysis of pupils' questionnaires
There were 19 questionnaires completed. The first four questions were designed to allow the pupils to get used to the format of the questionnaire. The questionnaire was divided into subject areas - questions 5-10 were based on the home economics lessons, questions 11-19 were based on PE lessons, questions 20-21 were based on RE lessons, 23-28 were based on biology lessons and questions 29-30 were based on AT lessons, (see appendix 6) for sample of pupils' questionnaire). No geography questions were included as the questionnaire was designed before the observations of the geography lessons occurred. All questions were designed to determine the extent of pupils' knowledge about the health issues they had been taught during the year. Appendix 16 gives the results of the questionnaires in full.
Table 6.4 categorises the responses into those which were thought to be accurate (a full and detailed answer), acceptable (a correct answer but one which did not cover all points), and unacceptable (which were completely wrong). Although 19 questionnaires were completed, some questions asked for one or more answers in which case the responses recorded total more than 19. Responses have been recorded for questions 5-30 as the first few questions were designed to allow pupils to get used to the format of the questionnaire. Question 21 asked pupils to express attitudes to a range of statements which do not have right or wrong answers, therefore this question has been omitted. Question 22 has not been omitted; the questions were numbered incorrectly so there was no question 22.

One of the questions which many pupils experienced difficulty with was question 7, 'What do safety symbols on kitchen appliances tell you'. Only 2 responses were accurate, with most responses indicating no understanding at all. It is unlikely that the question was badly worded as no problems occurred during piloting. It is more likely that the lack of understanding is due to the method of teaching employed in these lessons, ie pupils were left to find information for themselves from the worksheets, and although they may have understood the main points, they could have missed some of the necessary information.
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Table 6.4: Responses to pupils' questionnaires (secondary)
Three of the PE related questions showed a lack of pupils' understanding. For Question 12 - the length of time required to exercise efficiently - only 7 pupils responded correctly. For question 14 - the reason for taking your pulse when exercising - only 3 pupils responded correctly, and for question 18 - the need for warming down after exercising - only 3 pupils put the correct response. In this case however, the fault may have been due to the design of the question as a narrow timescale was used i.e. 15 minutes, 20 minutes and 25 minutes. The graduations in the scale were perhaps not wide enough for pupils to differentiate between answers and in opting for anything other than the correct answer of 20 minutes, pupils were still nearly accurate in their response.

One of the RE questions, question 20, asked why drugs were forbidden for Muslims and 12 pupils knew that it was against their religion but only 4 knew the reasons why. Question 21 aimed to determine whether pupils held positive or negative attitudes to people of faiths/religions different to their own. Responses to statements for parts (a-e) indicated that the majority of pupils held positive attitudes; however the responses to part (f) revealed that the majority of pupils held negative attitudes. The first five parts (a-e) did not have a direct effect on the pupils themselves eg (b) 'school rules should apply to everyone whatever their
religion', however most pupils disagreed with statement (f) 'Britain is a better place because people of many religions and races live here'. Interviews subsequently revealed that pupils felt this could have a direct effect on them (see chapter 6.7) and many expressed negative attitudes to this issue.

Overall the results of the questionnaires indicated a high level of understanding of the health issues covered during the school year with most of the questions being answered either accurately or acceptably. This would indicate that pupils were learning specific aspects of health education from school and that cross curricular teaching of health education was being implemented in the curriculum successfully.

6.7 Interviews with pupils

Interviews were carried out with a number of pupils in a similar way and with similar aims to the interviews with primary pupils, (for full responses see appendix 16). Pupils were asked to expand on their answers if necessary and then asked what their sources of knowledge were, ie how they knew the information.

The first question related to the effects of too much fat/salt/sugar and too little fibre in the diet. Five pupils said they learned the information from school, from
the home economics/technology lesson, but the other pupil said he learned the information from TV programmes. When pupils were prompted for other sources of their information, one pupil said home, two others said posters/leaflets at supermarkets.

The second question asked about safety symbols (this was one of the questions which was not answered very well in the questionnaire). Three pupils said they learned the information from school (home economics/technology lessons), two pupils said from stickers on appliances and one pupil said from home. When prompted for other sources of the information, one pupil added school to the list, two added home and two said they had not learned it from school.

The third question was about the frequency of exercising and again was one of the questions which only a few pupils answered correctly. Five pupils said they learned this from school, but one said she guessed. Three pupils also did a lot of sport outside school and had learned the information there.

The fourth question was about the use of drugs in the Islamic faith. Five pupils said they had learned this from their RE lesson. One pupil had not answered the question; he said that although they had 'done Muslims' in RE, they
had not covered the use of drugs.

The fifth question asked about two of the statements made about Muslims. It was not possible to ask where they had learned this information as the question asked them to express an attitude. So the pupils were asked to expand on their statement and explain what they meant.

Part (d) asked about fasting during Ramadan. Four pupils agreed that as it was part of their religion, they should be allowed to fast and one pupil disagreed on the grounds that 'fasting was not good for you, that you should eat the right things'. The other pupil was not sure but thought you should let them do what they wanted.

For part (f), half the pupils disagreed and the rest either agreed or were not sure. Only one pupil agreed that Britain was a better place and the reason was that 'they stay together so it's not a problem' which could be said to be a negative reason. Of the three that disagreed, two said the reasons were 'the violence and racism which were a result of a mixed race country', the other said he was 'not keen on Muslims and Buddhism', although he did not know any people of these religions, however he did not mind coloured people. Two pupils were 'not sure' about statement (f), one thought that 'if they were born here it was ok'; but as there is a homeless problem in this
country, it was 'not fair when they got homes straight away'. The other pupil thought there was a problem with racism.

The sixth question was about disease associated with the heart and lungs. Two pupils said they knew from biology, one from cooking, one from TV, one from his grandad who had had a stroke and one from general knowledge.

The final question asked about drugs being harmful. All pupils said that they knew this from general knowledge.

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| Table 6.5: Sources of pupils' health knowledge |
| (secondary) |

The results in table 6.5 show that school is the major
source of pupils' knowledge for the questions asked in the questionnaire. Although home features as a source of information, it is not relevant to the extent it was for primary pupil. The school has been successful in putting over its health education messages and is the recommended target area to improve health knowledge of this age range of pupils (see chapter 8).

6.8 Interview with Deputy Headteacher

The Deputy Headteacher in the secondary school was interviewed to determine the position of health education in the school from a senior member of staff with responsibility for its co-ordination and to determine her opinions and attitudes towards health education.

The deputy initially took responsibility for health education in the school out of her own interest and a desire to see its promotion within the curriculum. Over time the position of co-ordinator came to be part of her job description and now if she was not to hold responsibility, the post would be filled by someone else, i.e. it is now a recognised post of responsibility within the school.

A number of years ago, again out of interest, the Deputy undertook a survey of all departments in the school to identify which aspects of health education were being
covered in the school and in which year groups. One of the findings was that some topics eg pollution were being taught by most departments resulting in a great deal of overlap of content, whilst other topics eg dealing with bereavement, were not being covered anywhere in the curriculum. The deputy produced a report outlining recommendations to remedy these gaps and repetitions in provision. Some departments stopped doing 'pollution' and topics such as 'bereavement' were brought into the open eg during assemblies and parents were informed of the fact that the school was attempting to deal with this difficult issue.

The deputy recently intended to conduct another similar review of the curriculum. However the National Curriculum was introduced along with the cross curricular themes so the Deputy thought it wise to wait. It is now the intention to defer any evaluation of the curriculum in relation to health education until the National Curriculum is fully operating.

The deputy was asked about the current degree of liaison between departments in relation to health education to ensure that gaps and repetition within content areas did not occur. She thought that any liaison that did occur was incidental rather than by design and that the only way to ensure effective co-ordination was by way of an official
The deputy perceived problems in implementing fully and effectively all five cross curricular themes. She said that the programmes of study for the National Curriculum were defined and prescriptive to such an extent that teachers would stick only to their own subject area, teaching what was required of them by the National Curriculum and omitting any other issues. She felt that given the prescriptive nature of the National Curriculum and the amount of work it required, that teachers could not be asked to include other material which was not part of the Statutory Orders and that topics such as health education would have to rely more and more on teacher interest and being taught through subjects such as AT and PSE.

At present, AT is taught as a single period in years 7, 8 and 9 and as PSE in a double period in years 10 and 11. These subjects pick up the gaps in health education which are not covered by the National Curriculum programmes of study. The Deputy was concerned that in future with increased National Curriculum demands on timetable space, AT and PSE time could become squeezed out of the curriculum. The Deputy intended to maintain these areas at all costs as she believed in their value. However she recognised that teaching health education in discrete
modules in this way could lead to it becoming more fragmented and less integrated. Integration into the whole curriculum is recommended in CG5 (NCC, 1990). However as the alternative is that it may not be taught at all, this compartmentalisation of health education was thought to be the preferred alternative.

The deputy was asked about the degree of parental involvement in school health education. She recognised that this was important and admitted that she would like more involvement with parents but that it just did not happen very often. Evenings were occasionally held for parents eg the Drugs Evening for Year 9 pupils' parents and a similar evening had been held for Year 10 parents when these pupils were looking at drugs in their PSE lesson. An outline of the health education policy was given to parents and parents were informed of the policy on healthy eating in the school.

There is involvement from the PTA and one of their responsibilities is to plan how to use the money received from the tuck shop. There has been some discussion about the content of the tuck shop amongst the PTA and the need was recognised to provide healthy alternatives. Two pupils from a local special school used to help run the tuck shop and provided fruit and nuts which were very popular, but these pupils were abused by the other pupils in the school.
and eventually the system stopped operating. The PTA decided against installing a drinks machine in the school on health grounds however the deputy said she encountered some difficulties with other members of staff as the tuck shop brought money into the school which could then be used for other things and so there was resistance from some teachers who favoured selling what the pupils wanted in order to raise money for the school.

The deputy had thought about informing parents about the new Sex Education guidelines issued by the LEA, but this had not yet been undertaken (Shaw, 1992).

When asked about teacher training opportunities and development the deputy said that in the past there had been many opportunities for development with some areas being targetted and receiving government support grants eg AIDS awareness courses. There had been a one day training session for all staff in the school for the 'Skills for Adolescence' course when the school first decided to teach it, followed by in-service training in school. However the deputy thought that the school budget for staff development would in future be devoted to National Curriculum subject areas. This could result in less health education being taught in lessons as staff are not likely to consider such subjects when they are not included in their programmes of study.
There is a school budget devoted specifically to PSE which includes health education. This operates in a similar way to any subject budget and is separate to the staff development budget.

The deputy thought the status of health education in her school was high. The reasons she gave for this were that she values health education, is responsible for its promotion in school and promotes it wherever possible. The headteacher has supported health education at all times and there has been a great deal of staff support in the past in terms of interest in attending courses, etc and the deputy always encouraged staff to attend courses whenever they were available. Health education is taught during the AT and PSE slots on the timetable and now as part of the National Curriculum.

The deputy thought that the LEA advisory service had been very useful to the school in the past. Whenever help was required in setting up in-service courses, the advisors would be available to lead training courses, etc. The deputy thought that in future the advisory service would continue to be of use to the school.

Sheffield authority has a no smoking policy in operation in all its schools. A smoking room has to be provided for
staff in the school. School meals are prepared by outside caterers, they provide a healthy option on the menu but as other foods are also provided, the pupils tend to choose the less healthy alternatives.

Overall the deputy thought health education to be very important; she recognised that unless staff were given the opportunities to develop their interests in health education by way of training days, etc, that such interest would be wasted. She emphasised the importance of the school ethos in promoting health in school.

6.9 Interview with LEA Health Education Advisor

Sheffield has long been recognised as an education authority which values health education and represents good practice in this area. The advisor quoted the following examples which justify this claim:

(i) the advisor had recently been chosen by the Department for Education to attend a Health and Safety conference in the Netherlands which was attended by EC educationalists and health and safety workers. During the conference, the delegates were involved in writing resolutions for all 12 Member States on Health and Safety.

(ii) Sheffield Authority employed a person with responsibility for AIDS long before the government
educational support grant scheme paid for such as post and before any other education authority. Sheffield continues to fund this post from its own budget even though government funding has now been withdrawn. Within the youth service, a health education advisor and two other workers were employed though the worker posts have been withdrawn now.

(iii) there are a number of advisory teachers posts for various aspects of health education eg PE/sport, nutrition, sex education and drugs, which the authority continues to fund despite cutbacks. Health education is the only one of the cross curricular themes which has a representative in the advisory service. The other four themes do not, although the geography advisor does oversee the environmental theme.

(iv) Sheffield was chosen by the then HEC as a base for the 'My Body Project' when it was started in 1975. This was because of Sheffield's reputation for its health education. The current advisory teacher was in post at that time and was selected and funded to travel to the USA to look at similar projects there and on her return she assisted in writing the 'My Body' project based on her observations in the USA (HEC, 1983a). In Sheffield she managed the project and supervised teams of workers who ran courses in schools for teachers.
(v) Reading University chose Sheffield and Hertfordshire to set up a study into Road Traffic Safety (this was observed in the secondary school), again due to the reputation for good practice in health education.

The advisor for health education in Sheffield is also the advisor for science education. Her role within the authority is to co-ordinate the work of a team of advisors covering primary and secondary health education on a range of topics eg drugs education.

The advisor said that prior to the changes introduced by the National Curriculum and changes such as schools being responsible for their own budgets, the advisory service was more powerful, it had more 'teeth' and was able to go into schools and have an influence on what was being taught in subject departments. The Authority produced guidelines for its schools which the schools would have to consult, but now schools may decide to ignore the guidelines if they wish. The role of the advisory teachers has now changed and they are only able to monitor and make recommendations which it is then up to the headteacher to follow if he/she so wishes.

In the summer of 1993, the service in Sheffield will move to one of inspectors and advisory teachers. Apart from
cases where the Statutory Orders are not being followed, the inspectors will only be able to make recommendations to Headteachers and the days are gone whereby the Authority ruled and could expect its orders to be taken seriously.

The advisor thought that due to these changes and the introduction of the National Curriculum, the place of health education within schools and the authority could be squeezed. The profile of health education in Sheffield schools is not as high as it was three or four years ago. However, as an authority, they would do all they could to maintain its position especially as Sheffield has always fought for a place for health education in the curriculum. The authority is trying to make sure that health education maintains its place in the curriculum, for example they bid for any grants that are available. Sheffield has successfully bid for sponsorship from the Department of Health for someone to work in health education in schools and a separate post for someone in the youth service with special responsibility for health education.

Sheffield Authority's health education policy has not been re-written because of the changes related to the National Curriculum. It is doubtful whether another policy would be produced, especially given that schools no longer have to take any notice of it. The authority has however recently
produced guidelines for sex education and these are based on the Science Statutory Orders and plan to deliver sex education from 5-16 (Shaw, 1992).

The Advisor was aware of the WHO targets and explained that the initial list of targets developed by the Sheffield Health Promotion Centre were adapted from the original WHO list and made appropriate to Sheffield and that these had subsequently been replaced by the 'Our City Our Health' initiative (Healthy Sheffield, 1991). She was involved at that stage of development and has continued to work with the organisation as appropriate. In Sheffield, the education authority and the Health Promotion Centre continue to liaise and work closely together.

The advisor said that the primary and secondary schools which had been the focus for this research were a reasonable representation of the overall picture of health education in Sheffield schools.

The secondary school held a positive approach to health education as was revealed in the school policy, the responses from teachers in the questionnaires and the interview with the deputy. Pupils revealed a high level of understanding of the health issues taught during the year as was shown in the questionnaire responses and school was shown to be the major source of that health knowledge.
Health education was observed to occur through the statutory curriculum in relation to certain subject areas eg PE and biology. However its place in the non-statutory curriculum was threatened by the National Curriculum as was stressed by the deputy and the LEA advisor. The health education experiences of pupils have been linked to the WHO targets (see appendix 15) to show those which were being addressed through the curriculum.
CHAPTER SEVEN

FACTORS INFLUENCING THE EFFECTIVENESS OF HEALTH EDUCATION IN THE CASE STUDY SCHOOLS
CHAPTER 7 - FACTORS INFLUENCING THE EFFECTIVENESS OF
HEALTH EDUCATION IN THE CASE STUDY SCHOOLS

A number of factors were observed which it was thought influenced the effectiveness of health education in the curriculum of the case study schools. Some of these factors were observed in the primary school, some in the secondary school and some factors were applicable to both schools. Some were thought to have a positive effect and some a negative effect on the success of health education in the curriculum.

7.1 School policy/ethos

Both the primary and secondary schools had a written health education policy; the secondary school had a co-ordinator for health education who was in a senior position in the management team and who had a personal interest in health education due to her initial training. The Headteacher in the primary school was also keen to see health education delivered through the curriculum and following the publication of the CG5 (NCC, 1990) document, had begun to produce, along with the staff, a new school policy.

The health education policies for both primary and secondary schools stated that health education should pervade the aims and objectives of the school, that it
should not be a subject separate from the rest of the curriculum and that these objectives should be set in the context of the 'healthy school' environment based on a whole school approach whereby staff would promote health education both through curriculum areas and as a result of the ethos and atmosphere of the school. (see chapters 5.2 and 6.2). The ethos, policies and general aims and objectives of both schools were conducive to the promotion of health education and were congruent with the model of effective health education defined by Williams (1987) and the National Curriculum Council (1990). It was thought that the policies, ethos and interest from senior teachers of both schools represented a positive influence on the effectiveness of health education.

7.2 Health education as a cross curricular theme

As health education is not a statutory part of the curriculum, but a cross curricular theme, its implementation in the curriculum and consequent success depends on other factors eg the degree of planning and co-ordination across different subject departments in the secondary school and the extent to which primary teachers plan to include health education in their curricula and individual teachers' own interests. In the primary school, observations revealed that the teacher took opportunities available to her to include health education where possible. However the interview with the Headteacher
revealed that coverage of health education was not always as thorough as it could be (see chapter 5.9). Within the secondary school, although the interest level of teachers appeared to be high and health education was observed in all lessons seen, there were few signs of liaison between departments to plan health education and ensure that gaps and repetition did not occur (see chapter 7.3). Such liaison is essential to prevent situations arising as was revealed by the survey carried out by the deputy headteacher in the secondary school (see chapter 6.8).

7.3 Liaison between departments
Liaison between subject departments is necessary if any cross curricular theme is to be effective (NCC, 1990). Within the secondary school, little or no liaison appeared to occur between the biology and the AT department as pupils, during interview, reported having covered the issue of 'drugs' in both lessons. Within the secondary school, each department planned the curriculum and it was left to the co-ordinator to ensure gaps and repetition did not occur. This did not appear to be working effectively. The deputy said that if liaison did occur between departments it was more by chance than design and that co-ordination only occurred by way of her in her role as health education co-ordinator. Her survey of departments had been undertaken some years previously and the school was due to undergo another similar review once the
National Curriculum was more firmly in place.

7.4 Teacher interests/training

It has already been stated that the teacher's own training and interests will influence the degree to which health education is included in teachers' schemes of work, especially in an area like health education which is not a statutory part of the curriculum.

Of the two primary teachers who responded to the questionnaire, one had attended a number of health related training courses out of choice. Her background was in biology which included a certain amount of health education and due to her interest she took opportunities available to her to further her knowledge of health education and to include health education in her teaching wherever possible. The other primary teacher said that her initial course had included only very basic health information relevant to when she had trained and that she had not attended any in-service courses related to health education. Not all teachers' interests will centre around health education and teachers will have attended other courses relevant to their own interests. Half of the secondary teachers who responded to the questionnaire had attended one or more in-service course related to health education, 50% of teachers attending such courses is a large number and would suggest a high level of interest in
the secondary school which presumably would be reflected in their teaching. All teachers surveyed, both primary and secondary, ticked that health education should be included in the curriculum.

With half the teachers having attended in-service courses on health education, expressing interest in health issues and with all the teachers surveyed believing that the school curriculum should address health issues, it would suggest that in these schools, these factors would influence the effectiveness of health education in a positive way.

7.5 Methods of teaching

Williams (1987) states that the use of a wide range of teaching methods and the use of informal teaching methods are appropriate to health education. Both of these factors were observed in the primary and the secondary school. Primary teaching in general is more project based (NCC, 1989) and therefore lends itself well to using a range of informal teaching methods. Group work and discussion were the methods observed most frequently in relation to health education.

Teaching methods in the secondary school were also observed to be varied, with the more informal methods eg discussion and group work being used the most. Biology,
home economics and AT lessons were mainly based on video, discussion and group work. Within PE pupils were engaged in discussion about fitness as well as being engaged in physical activity. More traditional methods were used in the geography lesson, though some discussion did occur. Within RE, methods were used to match the aims of the lessons which were to encourage pupils to develop an understanding of different religions. Within home economics, there was some evidence (the results of the pupils' questionnaires) that by using worksheets to find information, pupils had not understood all the information. In the practical lessons, some pupils experienced difficulties using appliances eg the sandwich toaster, because they lacked any formal instruction from the teacher.

However the majority of teaching methods observed or reported as being used in the teachers' questionnaire (primary and secondary) suggested that they were appropriate to the teaching of health education.

7.6 Use of resources
During any lesson, whatever the subject area, appropriate and effective use of resources can enhance pupils' learning (NCC, 1990). Examples of effective use of resources were observed generally across primary and secondary lessons. The teacher of biology (low ability)
used a wide range of resources to teach about lung disease. For example she had a sheep's lungs for the pupils to observe disease and she also demonstrated a smoking experiment which involved using a smoking machine. There were some examples of ineffective use of resources. In the biology (mixed ability) class, during one lesson of 1 hour 10 minutes, two videos were shown lasting approximately half an hour each. This required the pupils to sit and listen for a long period and led to some disruptive behaviour. A lack of planning caused the problem as one of the videos was due to be shown the week before but the video player had not been booked in time. In the primary school on one occasion, a video was shown about the need to look after feet. The video was outdated (being from the 1970's) and the researcher thought the teacher would have been more effective by talking to the pupils about healthy feet. In most cases the use of resources was wide and appropriate for the subject area in both schools.

7.7 Classroom management

Another barrier observed to affect the effectiveness of health education was related to classroom management. In the biology and RE lessons in particular, there was a great deal of misbehaving and the teachers had trouble controlling some of the more disruptive pupils. This led to a lot of time being spent in each lesson trying to
control the pupils and maintain an atmosphere conducive to work. This of course would affect any lesson not only a health education lesson.

7.8 Teaching by unqualified staff

In the primary school, the person who taught cookery to the pupils was not the class teacher, but the school's general assistant. She was not qualified to teach and had no training in health education or food related studies. There were occasions when opportunities could have been taken to teach health issues in the practical cookery lessons but in fact these were not taken. For example, in one lesson the pupils were using knives and it would have been appropriate to discuss the safe handling of knives. Pupils should also have been told the reasons behind the importance of safety and hygiene in the kitchen, rather than only been given instructions. A teacher who is qualified, is aware of the school's ethos/policy and/or who had an interest in health education would probably have taken such opportunities to teach relevant health issues.

7.9 School management and external influences

The commitment to health education shown by Headteachers, those who hold responsibility for its implementation in the school and the local education authorities must be one of the most influential factors upon which its success
depends (NCC, 1990). Both Headteachers actively supported health education and those responsible for its implementation showed enthusiasm and a desire to see it promoted in the curriculum. The health education advisor and Sheffield education authority were equally keen to maintain its place in schools, (see chapter 6.9). This commitment must therefore have a positive influence on the effectiveness of health education in these two schools.

Overall, health education in both primary and secondary schools was observed to be effectively included in the curriculum. The positive aspects included a high degree of teacher interest with a high percentage of teachers taking advantage of health related in-service training. Methods of teaching and resources used in both schools complied with recommendations for effective health education (see chapters 5.5 and 6.5). Both schools had a written policy statement, the ethos in both schools was conducive to health education, and senior members of staff held responsibility for health education in both schools.

There were areas where improvements could have been made eg increased liaison between secondary departments to prevent gaps and repetition occurring with some issues, the use of only qualified staff for all taught aspects of the curriculum and in some cases more effective classroom management. But the overall picture of health education in
these schools is one of a thriving, valued, integrated part of the curriculum, which might be hoped for in schools selected to represent good practice.

Given the low status of a non-statutory subject such as health education, the recent introduction of the National Curriculum at the time of observations with its demands on teacher time and new arrangements for testing pupils, the degree to which health education was being included in the curriculum was high and very positive.
CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS
CHAPTER 8 - CONCLUSIONS AND RECOMMENDATIONS

This study aimed to show the relationship between the WHO targets 'Health for All by the Year 2000' and the school curriculum in two schools in Sheffield. It aimed to examine the national, local and school health education policies to define the background against which decisions relating to the curriculum were made and using a case study approach to examine how these decisions were implemented in the schools.

8.1 Threats to validity

There are a number of factors which could have affected the validity of the results of this research.

The primary school teacher who had agreed to allow the researcher into her classroom to carry out the observations did not appear very comfortable with the situation and it took some time before a relationship was established between teacher and researcher. This is not unusual in this type of situation.

There was some evidence of the Hawthorne effect in the primary school when health education material appeared to be introduced into lessons because the researcher was present. As the observation period continued, this effect appeared to disappear. No reluctance was observed from any
of the teachers in the secondary school. They were all willing for the researcher to go into their lessons, were helpful in providing schemes of work and answering questions and the researcher did not feel at any stage that health education was being added into the curriculum purposely.

Another factor which could influence the results is false or exaggerated reporting of information from teachers to the researcher. In an attempt to make the school/themselves appear more effective/efficient it is possible that teachers could emphasise the positive aspects and play down any negative aspects of classroom/school practice. Another factor is that the researcher was only in the schools observing for a relatively short period of time. Given the numerous activities and events which take place in a school, some important aspects of health education could have been missed from observations or simply not have been reported by teachers to the researcher. However no evidence of either of these threats to validity were found.

The subjects and specific lessons for observation in the secondary school were selected as being those most likely to reveal the required information. However as health education is taking place throughout the school as and when appropriate, there may have been other aspects which
have gone unreported.

Other threats to validity relate to the methodology used by the researcher. Case studies were chosen as being the most appropriate method by which the required information would be obtained. However, by using a small sample of schools, generalising this information to provide a picture of health education in other schools is not easy. A different selection of schools could have given rise to a different set of results. However, the choice of schools was to observe good practice and generalisation to other Sheffield schools is not really appropriate as a result.

The design of the questionnaires for teachers and pupils can affect the type of information revealed. Answers are given to the questions asked which could mean that respondents have other things to say but do not include them because they have not been asked to do so. However, opportunities were provided in all questionnaires for respondents to add additional comments should they so wish.

Interview techniques used with the headteacher, deputy head and LEA advisor could also have failed to gain a true picture of events. These people are all senior in their organisations and will probably want to be seen to be effective in their roles. Therefore, each could paint a
rosier picture of health education in the schools/authority than is actually the case.

A further threat to validity is that as the observations represent the observer's own perceptions of each lesson and school situation, such perceptions may not be the same as the perceptions gained by someone else carrying out the research. The researcher attempted to ensure observations were as accurate as possible by using a number of other methods of collecting information. For example issuing questionnaires to pupils and teachers to allow them to give their opinions and views on health education, following this up with interviews with pupils and senior teachers in each school and interviewing the LEA advisor.

8.2 Conclusions

The findings suggest that what is being taught in schools matches some of the WHO targets although the targets do not form part of the health education guidelines. Very few of the targets are appropriate to school education as many demand action at government level eg targets 26-31. However where the targets are appropriate to school education they are being addressed at secondary level and to a lesser extent at primary level (see chapters 5.4 and 6.4). This is occurring despite the fact that most teachers in the case study schools are not aware of the targets and have had no information from either central
government or the LEA about their implementation. The teachers based their health education teaching on the CG5 document and although this is not in any way planned around the WHO targets the content of the two documents do overlap and therefore some implementation of the targets occurs.

The WHO defined the 38 targets as a means of improving the health of people living in Europe by and beyond the year 2000. If these targets were to be achieved, the initiative would need to be disseminated as widely as possible and as many organisations and groups as possible would need to get involved and develop the initiative, (see chapter 3.1).

The education system would appear to be a prime target in terms of the opportunities it presents to reach a large number of people. Most young people in their most formative years can be reached through the school system at a time when they are developing lifestyles which may continue throughout their lives. It would follow that WHO should target the school system and so reach a wide audience to promote the 'Health for All' initiative.

The results from this research suggest that although many of the targets can be taught through the education system to pupils at both primary and secondary level, the fact
that they are being taught in some schools is more by chance than by design, and therefore opportunities for promoting health are being lost. Interviews during this research with teachers and analysis of selected health education material and guidelines revealed that the targets were not the basis for their teaching, (see chapters 5.3 and 6.3). Significantly in the case study secondary school, only 7 teachers had heard of the targets and 19 had not (see chapter 6.5), whilst in the primary school of the two teachers who completed the questionnaire neither had any prior knowledge of the initiative (see chapter 5.5). Analysis of government and LEA guidelines for the teaching of health education revealed no mention of the WHO targets, which indicated that guidelines were not based on the targets or that the targets were not taken into account during planning of the guidelines (see chapters 2.1 and 2.2).

The current health education guidelines (NCC, 1990) are produced by the National Curriculum Council for the Department for Education (DFE) and it is these guidelines which teachers are using to plan their health teaching (see chapter 2.2). In order to reach teachers and so the school population, it would have been prudent for WHO either to have an input in the production of this document or at least to have disseminated information through the DFE but unfortunately this has not been the case. In fact
the sources of inspiration for health education in this document are (i) the Education Reform Act (1988) in that it places a statutory responsibility upon schools to provide a broad and balanced curriculum, (ii) the HMI Series 6 document (1986), and (iii) the awareness that if pupils develop a healthy lifestyle in their early years, lifestyle-related illness and diseases may be prevented later in life, (NCC, 1990).

In Sheffield, the Health Promotion Centre works closely with the LEA health education advisor and meetings are frequently held between the two services to plan health developments. The advisor explained that her knowledge and information regarding the WHO initiative had come from this liaison (see chapter 6.9). She had been involved in 1987 in the planning of Sheffield's own health targets based on the WHO targets, and kept abreast and involved in community health developments in the city. It appears that the source of information for the health education advisor regarding the WHO initiative has been via the Health Promotion Centre which in turn came from the Health Education Authority and the Department of Health (see chapter 6.9).

This would suggest that WHO has disseminated information regarding 'Health for All' only via the health service. Indeed the WHO declaration states that 'it recognises that
governments, health service managers, health professionals and researchers will all contribute to the successful pursuit of its aims' (see chapter 3.1). There is no mention of other sectors eg education, thus leaving a gap in communication at the structural level between WHO and central government.

The Health of the Nation, the government's strategy for improving health of people living in the UK was produced by the Department of Health (DOH, 1992). There is one paragraph in the document referring to schools which states the government's intention of establishing a pilot UK network of health promoting schools of approximately 30 schools. No strategy has been formed relating to curriculum development which would be needed if schools were to take on the challenge of HFA (see chapter 3.2).

Table 8.1 outlines the cascading system of responsibility and dissemination of information from the international level of WHO to the local level.

Information does not appear to be transmitted from the international level of the WHO to the national level of the DFE. Instead, at this level, it is being transmitted to the Department of Health. Consequently information is not being passed down the chain from the DFE to the LEA to the advisory service, the school, the teacher and so to
the pupils. In Sheffield however, due to a successful working relationship between the health education advisor and the health promotion centre, information has successfully reached the health education advisor. However

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| World Health Organisation | |
| Department for Education | Department of Health |
| Health Education | Health Education Authority |
| guidelines (CG5) | |
| Local Education Authority | Local Health |
| | Promotion Centre |
| Health Education Advisor | Community |
| School | Parents/Individuals |
| Teacher | |
| Pupil | |

---

| Key: ↓ = linkages |
| Table 8.1: Cascading system of information: |
| WHO and national links |

the information has still not reached the teachers as most report no knowledge of the targets (see teachers' questionnaire results) and of the seven secondary teachers in this survey who were aware of the targets, only 2 quote the LEA advisor as the source of their knowledge (see
Sheffield is regarded as a key city in terms of health education in the UK and it has a national reputation (see chapter 6.9). It has developed strong links between the education and health services. If the only information source within Sheffield has been via the health service, it would follow that other cities where links are not so strong, are likely to be unaware of the WHO initiative and therefore less likely to have the opportunity to implement it in their schools. To remedy this situation, WHO would need to promote their initiative not only through the health service but also via the education service and where appropriate, other sectors eg industry and commerce.

One of the aims of interviewing pupils (primary and secondary) in this research was to learn their sources of health knowledge ie to provide information from the pupils' perspective about how they had learned about health issues. Interviews with primary pupils revealed that their main source of health information was the home (see table 5.1). This would suggest that to reach younger pupils, it would be more effective to target the home and local communities to introduce health messages than the school system. At secondary level pupils stated school as being the main source of information (see table 6.4). For this age range, WHO would be advised to target the school
system to spread health messages. The results from the case study questionnaires for both primary and secondary pupils showed a high level of understanding of the health issues they had been taught during the year. Where opportunities were available for pupils to adopt healthier practices, for example buying fruit in the primary school tuck shop, pupils have taken up these opportunities.

Within the case study schools, it has been shown that health education was observed to occur via the planned curriculum (ie statutory requirements or teachers' schemes of work based on the programmes of study) and via the incidental curriculum (ie whereby the teacher capitalises on unplanned events in the classroom to address health issues). The primary teacher was observed to take advantage more than secondary teachers of situations which arose in the classroom which lent themselves to addressing health issues (see chapter 5.4). By using opportunities which occurred throughout the school day the primary teacher was observed to promote health education as part of everyday teaching wherever possible.

However the statutory curriculum would be the recommended area for WHO to target to ensure health messages are delivered. It would appear from interviewing the deputy in the secondary school, the Headteacher in the primary school and the LEA advisor that targeting the National
Curriculum rather than the non-compulsory health education guidelines, would be more effective in ensuring health education had a permanent place on the curriculum (see chapters 5.9, 6.8 & 6.9). Their perceptions were that teachers would rely more and more on the programmes of study associated with their own subject areas and less on cross-curricular themes like health education which could eventually lead to the cross-curricular themes being squeezed out of the curriculum.

Therefore, although at present health education was being planned into the curriculum areas of subjects such as biology and geography (see chapter 6.3), the health education being taught there still formed a part of that particular subject area and as such could be replaced by another topic area or dropped altogether from the curriculum at a later date. This leaves health education very vulnerable as it relies on the curriculum for other subject areas e.g. biology, for its delivery. Health education in the curriculum is therefore at risk if it remains a cross-curricular theme and at risk if it remains only a part of a statutory subject like biology. Whilst it currently forms part of the programmes of study for biology and other subject areas and is therefore guaranteed a place in the curriculum, this may not always be the case as the content of these other curricular areas could, at a later date, change. For health education to
survive on the curriculum, it must have its own statutory entitlement. However given the history of the development of school health education, this would seem unlikely (see chapter 2.1).

Despite the lack of communication from WHO to the education system in the UK, some of the targets were being addressed through the two case study schools' health education programmes.

Within both primary and secondary schools most of the targets which could be addressed through the school curriculum were being addressed, although not all of them, (see table 3.1). However the extent to which these were addressed at primary level was much less than that which occurred at secondary level (see appendices 13 and 15).

Table 8.2 shows which WHO targets were addressed and the frequency at primary and secondary level with which they were addressed.

The secondary school addressed a wider range of targets than the primary school and the range of targets being addressed at primary level varies between those addressed via the incidental and the planned curriculum (see appendix 13).
<table>
<thead>
<tr>
<th>WHO target number</th>
<th>Primary Teaching occasions</th>
<th>Total time spent</th>
<th>Secondary Teaching occasions</th>
<th>Total time spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Adding years to life</td>
<td>-</td>
<td>3</td>
<td>2hrs 56mins</td>
<td></td>
</tr>
<tr>
<td>4-Reducing chronic disease</td>
<td>-</td>
<td>4</td>
<td>4hrs 29mins</td>
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<tr>
<td>5-Eliminating measles etc</td>
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<td>-</td>
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<tr>
<td>6-Increase life expectation</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
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<tr>
<td>7-Reduce infant mortality</td>
<td>-</td>
<td>-</td>
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<td></td>
</tr>
<tr>
<td>8-Reduce maternal mortality</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-Combat disease of circulation</td>
<td>-</td>
<td>4</td>
<td>4hrs 56mins</td>
<td></td>
</tr>
<tr>
<td>10-Combat cancer</td>
<td>-</td>
<td>4</td>
<td>11hrs 56mins</td>
<td></td>
</tr>
<tr>
<td>11-Accidents</td>
<td>5</td>
<td>5hrs 20 mins</td>
<td>2</td>
<td>3hrs 41mins</td>
</tr>
<tr>
<td>12-Stop increase in suicide</td>
<td>1</td>
<td>19 mins</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15-Knowledge &amp; motivation for healthy behaviour</td>
<td>12</td>
<td>4hrs 5 mins</td>
<td>6</td>
<td>17hrs</td>
</tr>
<tr>
<td>16-Healthy living</td>
<td>4</td>
<td>2hrs 57 mins</td>
<td>3</td>
<td>2hrs 44mins</td>
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<tr>
<td>17-Dec. health damaging behaviour</td>
<td>2</td>
<td>3hrs 10 mins</td>
<td>1</td>
<td>1hr</td>
</tr>
<tr>
<td>22-Food quality and safety</td>
<td>1</td>
<td>5 mins</td>
<td>1</td>
<td>1hr 45mins</td>
</tr>
<tr>
<td>25-Work-related health risks</td>
<td>-</td>
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</tbody>
</table>

Table 8.2: Frequency with which WHO targets were addressed at primary and secondary level in the case study schools
The gaps in attainment of the targets represent areas where targets could have been included in the curriculum were teachers aware of them. For example during the biology (mixed ability) lessons, teachers could have developed the lesson to include information relevant to reducing infant and maternal mortality and increasing life expectation at birth eg the need for a healthy diet during pregnancy and the need for immunisation of children.

Chapter 2.1 showed that many factors contribute to successful health education, for example developing a school ethos conducive to health promotion. The research has shown that both schools were aware of the positive and negative influences such factors could exert and in most cases ensured they were used in a positive way (see chapters 5 and 6).

The informal or hidden curriculum and the pastoral aspects of health education were stated as being influential as well as the formal or academic curriculum (David & Williams, 1987; DES, 1986). Both schools were aware that a subject such as health education must be considered at both levels and cannot simply be addressed through the formal curriculum. This was revealed during interviews with the headteacher and deputy and from the results of the teachers' questionnaires. Observations also revealed the importance placed by both schools on these factors.
The CG5 (NCC, 1990) document emphasised the importance of using appropriate teaching methods and resources, developing a school ethos which supports and is conducive to promoting health and being aware of the effects of the school environment on health education. Both schools showed evidence of adopting practices which supported these. Encouraging outside visitors and links with the community and parents are important (NCC, 1990 and David & Williams, 1987). These factors were more in evidence and occurred more frequently at the primary school than at the secondary (see chapters 5 and 6). Food sold at the tuck shop at the primary school was 'healthy'; however at secondary level this was not the case.

The Schools Council (1976) recommended that a health education co-ordinator be appointed. Although the secondary school had done this, the system did not appear to operate as it was intended, for example only one review of the curriculum had been carried out some years prior to this research and reviewing the curriculum on a regular basis did not occur. In the primary school the head actively took on the role of co-ordinator, however in practice all staff worked together to plan the curriculum and took responsibility to include health education, hence the headteacher did not have to conduct regular reviews of
A spiral curriculum is thought to be an effective way of avoiding repetition and gaps in the health curriculum and ensuring co-ordination and continuity of learning, (David & Williams, 1987 and NCC, 1990). At the primary level, the health curriculum had been divided into topics which would be taught during each year group and so avoiding gaps and repetition. However no attempt was made to ensure revisiting of subjects occurred as pupils progressed through the primary school. Instead pupils were taught specified health topics depending on their year group and so were not able to benefit from the advantages of a spiral curriculum. At the secondary level some attempt had been made over a number of years to ensure repetition and gaps did not occur. More recently this had not occurred and it now appeared that the school intended to rely on the National Curriculum programmes of study to deliver health education with the AT and PSE slots picking up the gaps. Like the primary school this would mean a move away from a spiral curriculum and its recognised benefits and would diminish the place of health education at both primary and secondary level.

The concept of the health promoting school was discussed in chapter 2.1 and emphasised the importance of links between school, community and family. There was some
evidence of links with the community and family at primary level, but at secondary level there were fewer signs of links with parents and no links were observed with the local community. Although the primary school was slightly more successful in forming links with parents and the local community, neither school had shown much commitment to this aspect of the health promoting school, consequently it can be assumed that this would have a detrimental effect on the schools' health education programmes.

The majority of these factors had a positive influence on the teaching of health education, for example both schools operated around a school policy which promoted health, it was recognised that health education is a cross curricular theme which cannot be addressed only by the formal curriculum and a wide range of resources and teaching methods were used. However a few factors could have been more positive, for example health education was not seen to be co-ordinated as efficiently as it could have been at both primary and secondary level, liaison between departments at secondary level was minimal, a spiral curriculum for health education was not in place at either school and links with parents and community could have been improved.
8.3 Recommendations

Health education has moved from its beginnings of teaching personal hygiene, cookery, infant feeding and of achieving the purposes of public health to a broader concept which aims to develop decision making skills in pupils to enable them to make appropriate choices during their lives. To ensure that it maintains its place in an overcrowded curriculum and to ensure that the WHO targets are strengthened within the health education curriculum, the following recommendations are made -

(i) information must be transmitted not only via the health service but also via education and other government departments as appropriate. WHO cannot afford to rely solely on the 'health' line of information given that the targets cover all aspects of health and as such should involve all government departments, industry, commerce, education, etc.

(ii) links need to be developed with families and communities via schools and/or community and health centres, etc. As well as reaching children through the school system, WHO should also target the community network. If parents and the local community were targetted, health messages would be delivered to children via their family as well as via the education system.
(iii) the WHO need to ensure its targets are addressed through the 'statutory' curriculum. The 'statutory' curriculum offers opportunities to ensure that health messages are delivered.

(iv) the WHO in implementing (i) above need to ensure that information about the targets and their aims reaches teachers. This will require liaison with local authorities and school governors and the provision of in-service courses.

(v) links must be strengthened between sectors, eg education and health so that where areas applicable to both sectors overlap eg school health education, more efficient use of resources and information could be made.

The HEA has been active in school education since its inception in 1968 as the Health Education Council and today still provides many resources for teachers' use. Teachers use the resources but the liaison stops there and teachers remain unaware of community health education programmes. A strengthening of links between sectors would allow for improved co-ordination of resources and dissemination of information and allow WHO to implement recommendation (v) above.

The research aimed to look at the extent to which the WHO
targets were being addressed in two schools in Sheffield. This was carried out with two year groups and the research has revealed the degree to which teachers address the targets in their classrooms of the case study schools. The research has also shown that the good practice of 1991-92 in Sheffield is potentially at risk in the future. If health education has been shown to be at risk in Sheffield, it follows that in other parts of the country health education could be even more at risk of maintaining a place in the new National Curriculum.

8.4 Future research
As to the future, to provide a more detailed picture of the pupils' experiences of school health education in relation to the WHO targets, studies could be extended to look at the curriculum for each year group within the case study schools or to include more schools in the city. It would then be possible to study all aspects of health education which pupils would experience through the school curriculum from 5-16 and this would provide a fuller picture of the extent of pupils' health education during their school years.

Schools do not operate in isolation from the family and community. To provide an even more complete picture of the extent to which WHO targets were being addressed, additional research could look at the delivery of WHO
targets within the community via the health and community service. This, combined with further study in the school system would provide details of health education in relation to the WHO targets for the people of Sheffield.
Home and Health in the European Community project

In 1991, the All Saints Educational Trust awarded the United Kingdom Home Economics Federation £99,000 to fund a three year research project, 'Home and Health in the European Community'. The aim of the research was defined as follows:

'To investigate the extent to which the education systems (5-16) within the European Community address two of the World Health Organisation's (European Region) targets 'Health for All by the Year 2000'

The two WHO targets selected for the study were:
- Target 11 - Accidents
- Target 22 - Food Quality and Safety

An extensive literature search was undertaken and during the first two years of the research a series of Working Papers relating to European school health education were produced. It was possible from the literature search to compile data on the education systems, and on school health education in all 12 Member States of the EC.

To determine how and to what extent the two WHO targets were being addressed in schools, a questionnaire was devised and issued to a sample of schools (4 primary and 4 secondary) in all 12 Member States. The questionnaire was translated into the language of each Member State and asked teachers how and to what extent 'Accidents' and 'Food Quality and Safety' were being addressed by the formal and informal school curriculum. The questionnaire also aimed to identify which subject areas in the curriculum were addressing these targets. Following analysis of the questionnaires, the results were set in the context of the information relating to education and health education already obtained by literature review and recorded in Working Papers 4 and 5.

Using this information, 2 countries were selected for further study during the final year of the research (Italy and Denmark). Study visits were organised to these countries to visit the schools which took part in the questionnaire and to interview teachers with responsibility for health education in each school. This allowed a clearer picture to emerge to show in what ways the sample of schools in the EC address the two targets.

The information gained from the observational visits plus the analysis of the questionnaires and information from the working papers was documented in a final report. The final report discussed the differences and similarities of school health education in each Member State. It reported on the relationship between the school curricula and the two WHO targets. It highlighted those practices and conditions which are suitable for effective health education and made recommendations on how the two targets could be promoted within the EC school curricula.
FOCUS OF TARGETS FOR HEALTH FOR ALL BY THE YEAR 2000 (EUROPEAN REGION)

Targets 1-12: Health for All
1. Equity in health
2. Adding years to life
3. Better opportunities for the disabled
4. Reducing chronic disease
5. Eliminating measles, polio, neonatal tetanus, congenital rubella, diphtheria, congenital syphilis and indigenous malaria
6. Increased life expectation at birth
7. Reduced infant mortality
8. Reduced maternal mortality
9. Combatting disease of the circulation
10. Combatting cancer
11. Accidents
12. Stopping the increase in suicide

Targets 13-17: Lifestyles Conducive to Health for All
13. Developing healthy public policies
14. Settings for health promotion
15. Improving knowledge and motivation for healthy behaviour
16. Healthy living
17. Decreasing health-damaging behaviour

Targets 18-25: Producing Healthy Environments
18. Policies for healthy environments
19. Monitoring, assessment and control of environmental risks
20. Controlling water pollution
21. Protecting against air pollution
22. Food quality and safety
23. Protecting against hazardous wastes
24. Human ecology and settlements
25. Protecting against work-related health risks

Targets 26-31: Providing Appropriate Care
26. A health care system based on primary health care
27. Distribution of resources according to need
28. Re-orientating primary medical care
29. Developing teamwork
30. Co-ordinating services
31. Ensuring quality of services

Targets 31-38: Support for Health Development
32. Developing a research base for health for all
33. Implementing policies for health for all
34. Management and delivery of resources
35. Health information systems
36. Training and deployment of staff
37. Education of people in non-health sectors
38. Assessment of health technologies
Teachers' questionnaire

QUESTIONNAIRE

SCHOOL HEALTH EDUCATION

This questionnaire asks you about health education taught in schools. It forms part of a research project being carried out at Sheffield City Polytechnic, which is investigating school health education within the European Community.

I should be very grateful if you would take the time to complete the questionnaire in as much detail as possible. It will take approximately 10 minutes of your time.

ALL REPLIES WILL BE TREATED IN THE STRICTEST OF CONFIDENCE

If anyone is interested in the research and would like further details, please contact:

Michelle Ludlow
Research Assistant
Sheffield City Polytechnic
School of Leisure and Food Management
Totley Hall Lane
Sheffield
S17 4AB

Tel: 0742 532838
SCHOOL HEALTH EDUCATION

1. Please answer for either Primary or Secondary as appropriate

Primary school teachers

(a) What is the age range of the pupils you have taught this academic year?

(b) Do you teach all subject areas to your pupils?

   Please tick

   Yes □   No □

   If you answered No, please explain

Secondary school teachers

(a) What is the age range of the pupils you have taught this academic year?

(b) What are the main subject areas you teach?

2. SCHOOL

(a) Approximately how many pupils are there in your school?

   Please tick

   under 200 □   201-400 □   401-750 □   751-1000 □   1000+ □

(b) How would you describe the location of the school in which you teach?

   Please tick

   urban □   rural □   other □

   please explain
3. This question is in two parts. The first part (a) asks you about the health issues you teach as part of your PLANNED SCHEMES OF WORK. The second part (b) asks you about the health issues you teach IF THE OPPORTUNITY ARISES.

(a) Please tick to show the approximate frequency of those areas which you consider you teach as part of your PLANNED SCHEME OF WORK

<table>
<thead>
<tr>
<th>Topic</th>
<th>Once a day</th>
<th>Once a Week</th>
<th>Once a Term</th>
<th>Once a Year</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>air/water pollution</td>
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<tr>
<td>environmental risks</td>
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<tr>
<td>eg chemicals, radiation</td>
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<td>illness/disease</td>
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<td>eg measles, malaria</td>
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<td>waste disposal</td>
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<td>eg home, industrial</td>
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<td>household maintenance</td>
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<td>child development</td>
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<td>food hygiene/preparation</td>
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<td>nutrition</td>
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<td>alcohol/drug abuse</td>
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<td>confidence/esteem</td>
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<td>decision making skills</td>
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<td>safety eg home, road, classroom</td>
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<td>health related exercise</td>
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</tbody>
</table>
(b) Please tick to show the approximate frequency of those areas which you consider you teach IF THE OPPORTUNITY ARISES (ie opportunities which occur to address health issues which are not part of the lesson plan)

<table>
<thead>
<tr>
<th>Area</th>
<th>Once a day</th>
<th>Once a week</th>
<th>Once a term</th>
<th>Once a year</th>
<th>Never</th>
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</thead>
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<tr>
<td>air/water pollution</td>
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<td>environmental risks</td>
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<td>eg chemicals, radiation</td>
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<td>illness/disease</td>
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<td>eg measles, malaria</td>
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<td>health related exercise</td>
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4 Are there any other aspects of Health Education which you teach which are not in the list above? If so, please explain:

____________________________________________________________________________________________________

5 Below is a list of TEACHING METHODS. Please rank the 4 methods you use the most when teaching Health Education. (1 = the most used method)

- Project work
- Themes
- Group work
- Class discussion
- Problem solving
- Role playing
- Note taking/dictation
- Team teaching
- Others (please specify)

6 Below is a list of TEACHING/LEARNING RESOURCES. Please rank the 4 methods you use the most when teaching Health Education. (1 = the most used method)

- Text books
- Videos/slides
- Posters
- Television/Radio programmes
- Workpacks/worksheets
- Overhead acetates
- Leaflets/magazines
- Games
- Outside speakers eg Health visitor/parent
- School visits
- Others (please specify)
7 When teaching Health Education issues, are PARENTS:

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<th>Most of the time</th>
<th>Some times</th>
<th>No</th>
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<td>(a) involved in planning lessons</td>
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<td>(b) involved in teaching lessons</td>
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<td>(c) informed by the school of the content of health education lessons, eg parents evenings, school brochure</td>
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8 How important are the following in developing a POSITIVE ATTITUDE in pupils towards Health?

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<th>very important</th>
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<th>not important</th>
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<td>(a) quality/safety of school environment eg classroom, playground, buildings</td>
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<td>(b) school rules, eg no running on corridors, hair tied back in practicals</td>
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<td>(c) school policies, eg equal opportunities</td>
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<td>(d) type of food on sale eg tuck shop, school lunches</td>
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<td>(e) teachers as role models</td>
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Please answer these questions about your BACKGROUND KNOWLEDGE of health by ticking the appropriate boxes.

### (a) Did your initial teacher training course include any aspects of Health Education?

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If yes, please explain __________

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### (b) Have you been on any in-service training courses which covered aspects of Health Education?

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If yes, please explain __________

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### (c) Do you feel competent to teach Health Education?

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### (d) Do you think Health Education should be covered by the school curriculum?

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10 (a) Are you aware of the World Health Organisation's targets 'Health for All by the Year 2000'? 

Please tick  

Yes □  
No □

If you answered Yes, please complete (b), (c), (d)

(b) Please state how you became aware of the targets

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(c) Please explain what you understand to be the purpose of these targets

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(d) How relevant do you think these targets are to the school curriculum?

very relevant □  relevant □  not relevant □  unsure □

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE
Appendix 4

Pupils' questionnaire (primary)

WELCOME TO THE QUESTIONNAIRE!

1. Today is .... Mon Tues Wed Thurs Fri
2. Are you a boy or a girl? Boy Girl
3. How old are you? Years
4. Which year group are you in? Your teacher will tell you
5. What do you like to eat at playtime?

6. Last year your school was awarded the 'Healthy Eating Tuck Shop' Certificate. Why do you think that was?

7. Why should you put wrappers from sweets, crisps etc into a litter bin?

8. If you cut yourself in school, what should you do?

9. What would you do if there was a fire in the school building?

10. If a child has Head Lice, what should he/she do?

11. Do people with clean hair get head lice?
    Yes No Don't know

12. Do people with dirty hair get head lice?
    Yes No Don't know

13. Why is it important to clean up carefully when you have been cooking at school?
14 Do you think your teacher listens to you when you talk to her?

   Yes   No   Don't know

15 Do you think your friends listen to you when you talk to them?

   Yes   No   Don't know

16 How important do you feel you are at school

   I am important   I am not important   I don't know

17 How important do you feel you are in your family

   I am important   I am not important   I don't know

18 How important do you feel you are with your friends?

   I am important   I am not important   I don't know

19 How would you describe yourself?

   Please circle

   Happy      Always   Often   Sometimes   Never
   Friendly   Always   Often   Sometimes   Never
   Helpful    Always   Often   Sometimes   Never
   Interesting Always   Often   Sometimes   Never
   Generous   Always   Often   Sometimes   Never
   Good       Always   Often   Sometimes   Never
   Confident  Always   Often   Sometimes   Never

THANK YOU
'Draw and Write' Technique

DRAW AND WRITE

(Divide group in half)

Make your drawing show me how the grown up looks.
Write how the grown up looks.
If you can't write, ask me for help with spellings.

1a Draw a grown up who doesn't get enough exercise.
1b Draw a grown up who gets enough exercise.

2a Draw a grown up who does not look after her teeth, who doesn't brush her teeth regularly.
2b Draw a grown up who does looks after her teeth, who does brush her teeth regularly.

3a Draw some foods that can help to make you healthy.
3b Draw some foods that you think are not as healthy for you.

4a Draw children who are doing safe things, behaving sensibly on Bonfire Night.
4b Draw children who are doing dangerous things on Bonfire Night.

5a Draw some things that make you happy at school.
5b Draw some things that make you unhappy at school.
Pupils' questionnaire (secondary)

WELCOME TO THE QUESTIONNAIRE!

1. What day of the week is it today?
   Mon   Tues   Wed   Thurs   Fri

2. Are you male or female?
   Male   Female

3. Which school year are you in?

4. How old are you?

5. (a) What are the effects of too much fat in the diet?

      ____________________________________________

(b) What are the effects of too much sugar in the diet?

      ____________________________________________

(c) What are the effects of too much salt in the diet?

      ____________________________________________

(d) What are the effects of too little fibre in the diet?

      ____________________________________________

6. What advice would you give someone who wanted to:
   (a) cut down the amount of fat in the diet

      ____________________________________________

   (b) cut down the amount of sugar in the diet

      ____________________________________________

   (c) cut down the amount of salt in the diet

      ____________________________________________

   (d) increase the amount of fibre in the diet

      ____________________________________________
What do 'safety symbols' on kitchen appliances tell you? eg a food processor

Why should you turn pan handles in when in use on a cooker?

Name one accident that could occur when using each of these kitchen appliances:
microwave oven ______________________________
food processor ______________________________
sandwich toaster ____________________________
food mixer ________________________________

How can knives which have been left in a washing up bowl be dangerous?

How many times a week do you need to exercise to be fit?
every day three times a week
twice a week once a week

What is the minimum amount of time you should exercise for to be fit?
10 minutes 15 minutes
20 minutes 25 minutes
30 minutes

Name two places on your body where it is possible to feel your pulse?
(a) ________________________________
(b) ________________________________

Why do you take your pulse when exercising?

Why should you wear special protective shoes when doing aerobics?
16 Why should you change your shoes after doing PE or exercises? ________________________________________________________________________________

17 What do you think 'being fit' means? ________________________________________________________________________________

18 Why is it important that before and after exercise you:

   (a) warm up ______________________________________________

   (b) warm down ___________________________________________

19 Where in your body would you find these muscles

   (a) hamstrings ________________________________

   (b) biceps _______________________________________

20 Why are drugs, alcohol and tobacco forbidden for Muslims? ________________________________________________________________________________

21 Please respond to the following statements. Tick to show whether you Agree, Disagree or are Not Sure

   A D Not Sure

   (a) Muslim girls should be allowed to cover their bodies during PE

   (b) School rules should apply to everyone whatever their religion

   (c) Women are treated well by Muslim men

   (d) We should show consideration to Muslims who are fasting during Ramadan

   (e) School canteens should provide food which is suitable for Muslims (eg halal meat)

   (f) Britain is a better place because people of many religions and races live here
23 Name one physical and one emotional change that happens to a body when growing up.
   (a) physical change ___________________________
   (b) emotional change __________________________

24 What causes these changes to take place?
   ____________________________________________

25 How is a baby fed during pregnancy?
   ____________________________________________

26 (a) Which organ pumps blood around the body?
      __________________________________________

   (b) Which organ in your body is mainly concerned with breathing?
      __________________________________________

27 (a) Name one disease associated with the heart
      __________________________________________

   (b) How can you help to prevent this disease?
      __________________________________________

28 (a) Name one disease associated with the lungs
      __________________________________________

   (b) How can you help to prevent this disease?
      __________________________________________

29 What are some of the reasons a person may take drugs?
   (a) __________________________________________
   (b) __________________________________________
   (c) __________________________________________

30 Are all drugs harmful?
   Yes No
   Please explain your answer ____________________

THANK YOU
Appendix 7

Example of transcript from interview (primary pupil)

Ruth

Q6 - LAST YEAR YOUR SCHOOL WAS AWARDED THE 'HEALTHY EATING TUCK SHOP CERTIFICATE'. WHY DO YOU THINK THAT WAS?

Because we sold low fat crisps and apples and they are good for you.

What do you mean by good for you?

Well, healthy and if the crisps have got less fat in them then its good for your heart.

And how do you know this?

Well, my mummy tells me not to eat too many crisps cause they are bad for your heart.

And what about fruit, how do you know that is good for you?

Well, I don't know really.

Has your mum told you that as well?

Yes, but I know that they are good for you.

What about school, have you learned anything about this from school?

Well, Mrs Anderson said once in assembly about low fat crisps which are better for you.

What do you like to eat, you have put that you like to eat fruit. What about at home, if you wanted a snack, what sort of thing might you eat?

Well, biscuit or some fruit or a kit kat.

Would you go for low fat crisps if you were offered a choice?

Well it depends which kind they are because some don't taste very nice.

Q8 IF YOU CUT YOURSELF IN SCHOOL, WHAT SHOULD YOU DO?

You put you should tell a teacher and go and bathe it, now what about at home what would you do then?

Well, I'd probably go and tell my mum or go and get the medical kit.

What would you do with the medical kit?
Well get some cotton wool and some TCP and get a bowl with some water in and a little bit of TCP and dab it, then get a plaster.

So if you were in school, you would tell a teacher and go and bathe it, what about the medical kit you have got here, would you use that?

Yes, I'd take somebody with me.

Right and do you know how to use it, would you be confident in using it?

Yes, then you would have to use plastic gloves for it.

Do you know why?

Well so that you don't get germs onto other peoples hands.

Good right

Q13 WHY IS IT IMPORTANT TO CLEAN UP CAREFULLY WHEN YOU HAVE BEEN COOKING AT SCHOOL?

You put, because if you don't it won't be nice for other people. Can you think of any other reasons?

Well, it's not healthy if you leave it and it's dirty.

What wouldn't be?

The next people, if it's got grease and food on it it wouldn't be healthy because it would have all germs all over it if it was left too long it would go mouldy.

And are you talking about the food now or the kitchen or both.

Both and what is left on the stuff and if you don’t clean it off.

Like your equipment you mean if you left bits of food on your equipment.

Yes

So what about germs, are they not good for you?

No because they can make you ill.

If what?

If you tried to bake and then you ate it the germs would get into you.
What about at home, do you do anything at home, like preparing food?

Yes, yesterday I made some chocolate crispies.

Did you do them on your own or with some help?

Well I did them on my own.

And did you clean up as well?

Yes

Were you careful when cleaning up?

Yes but I didn’t have to wash up, my mum did that.

Q16/17/18 HOW IMPORTANT DO YOU FEEL YOU ARE AT SCHOOL/FAMILY/FRIENDS?

You have put don’t know at school, important with family and don’t know with friends. Why are these answers different.

Because my family I think I am very important with them, cause they love me but at school there are lots of other people, so you have got to have all the same.

So you have got to be all the same at school is that what you are saying but in your family you’re special. What about other children do you think they are special with their families?

Yes

So when you get to school you are all the same and are treated in the same way.

Yes

Would you say that you don’t feel important though.

I do think I am important but not like more important than the others.

So you do feel important at school but not in the same way as at home. What about your friends why aren’t you sure about that?

Because sometimes I have got lots of friends and sometimes when you play together you don’t like well sort of not sure but like when I fall out and when we all play together we have got to have the same importance.

So its to do with like being equal is it that you are thinking?

But have you got a lot of friends, you don’t feel that you are not friendly with anybody, it is not that.
Right let's finish with the drawing.

TEETH - WE HAVE GOT SOMEBODY WITH BAD TEETH AND SOMEBODY WITH GOOD TEETH NOW WHAT IS THE DIFFERENCE THERE?

Well they have got black teeth and they have lost some.

Why?

Because they haven't cleaned their teeth and all the acid has got holes in.

And how does that acid get there then?

Out of sugar.

And what else? What sorts of foods?

Apples and cakes.

Right, so this is what happens to you, how did you know that?

Cause I have seen pictures in the dentist

What about at home, anybody said anything at home about looking after your teeth?

No but we have to brush them

How often do you brush them?

Every morning and every night.

What about at school, have you done anything at school about caring for your teeth?

Yes we have had somebody in to tell us about it, a dentist.

What did they say?

Well he said that we should always brush our teeth and taught us how to.
Example of transcript from interview. (secondary pupil)

Alan

Q5 WHAT ARE THE EFFECTS OF TOO MUCH FAT/SUGAR/SALT AND TOO LITTLE FIBRE IN THE DIET?
Where have you got that information from?
I have been told and like heard it on programmes
On where?
Television
Where else?
I have heard it off school and things like that
Which lesson at school would you have done that sort of work?
Cooking and textiles
And you say from home as well
Yes
Do your family talk about cutting down on fat and sugar
Yes me mum has got high cholesterol level, she has got this little thing in her eye, we had to have blood tests to see if we have got it
And have you?
I don’t know yet
I have cut down on milk and things

Q7 WHAT DO SAFETY SYMBOLS ON KITCHEN APPLIANCES TELL YOU EG A FOOD PROCESSOR?
You have put don’t overload, don’t get wet, or wash carefully, and don’t let children near, how do you know all this?
Don’t overload it because otherwise it will get like, I can’t really say but it will mess the machine up
But how do you know all of this
I have seen it on the safety thing
On the equipment?
Yes
What about at school, have you done anything to do with safety symbols?
Yes we have had a lesson about just before Christmas
Which subject?
Cooking
Have you talked about safety symbols on appliances?
Yes

Q11-12 How many times a week do you need to exercise to be fit?
What is the maximum amount of time you should exercise for to be fit?
You have put 3 times a week for 20 minutes. How do you know this?
Because when we are doing bleep tests at school, he said you should exercise for about 20 minutes and I used to go running before.
What in your own time?
Yes for the Travellers (a club), we used to go three times a week
And how long did you run for?
Don't know about an hour
Do you do that now then?
No, I used to go about 8 or 9 and then I left when I were 11 cause I had too many other things
Is fitness important to you
Yes I wanna keep fit, I don't want to just be lazy

Q 17 What do you think being fit means?
You put being able to do so many exercises and being able to run distances, if somebody wanted advice on how to improve fitness what would you tell them to do?
Start off slowly with exercises, then as they get fitter start doing more and more and try other things like instead of jogging round start running faster around courses and fitness clubs or go weight training
Q20 WHY ARE DRUGS, ALCOHOL AND TOBACCO FORBIDDEN FOR MUSLIMS?
You put because they think it is bad for you, have you done this in school
RE
So you have actually learned about this
Yes I think its forbidden with I think their God said its forbidden so they don’t do it

Q21 RESPONDING TO STATEMENTS
(d) WE SHOULD SHOW CONSIDERATION TO MUSLIMS WHO ARE FASTING DURING RAMADAN
You have put I am not sure, why have you put that?
Because some people do but other people say its stupid
So what do you think you should do?
I think you should let them do what they want. If they want to fast you should let them.

(f) BRITAIN IS A BETTER PLACE BECAUSE PEOPLE OF MANY RELIGIONS AND RACES LIVE HERE
You put you are not sure, what do you mean?
Some people think its bad, other people think its good but er I say that because I’m not really sure, there are some people who like different races who live here are born here, so I agree with that, but you get all these people we have got people on the streets who haven’t got homes, but we have got all people who come to live over here and they just get a home straight away.
So is it all the problems it can cause?
Yes

Q 27/28 NAME ONE DISEASE ASSOCIATED WITH THE HEART/LUNGS
You put heart attack, and asthma, how do you know about these problems?
Well me grandad had a stroke and that’s like a heart attack really and he had to cut down on foods because its like that level in cholesterol and when that closes together it doesn’t flow through and you get heart attacks and strokes
What about asthma, do you know someone who has got asthma, I know someone who has got it really bad and he can't run very far distances because they start wheezing.

So you have not had any lessons at school where you have talked about asthma, its because you know someone?

Yes

Q30 ARE ALL DRUGS HARMFUL?

You have put no because some drugs help you, what do you mean by that?

Some drugs help you to recover, like paracetamol for headache

What other drugs, you have put some drugs help you

They don't really help you they get you addicted, you are not really addicted but you want more and more.
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<td>SKILLS</td>
<td>research and mapping skills, scientific skills</td>
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<td>MATHS</td>
<td>estimating, using a ruler, number/place value</td>
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<td>ENGLISH</td>
<td>begin joined script, sentence structure, alphabetical order, story telling</td>
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<td>ART</td>
<td>use of crayons, painting techniques, collage, cutting</td>
</tr>
<tr>
<td>TECHNOLOGY</td>
<td>clay work, measuring and cutting wood, joinery techniques</td>
</tr>
<tr>
<td>HISTORY</td>
<td>study of the Vikings, homes, way of life</td>
</tr>
<tr>
<td>GEOGRAPHY</td>
<td>mapping, rainforests, climate, forest areas</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>parts of flowering plants, identification of leaves, carbon cycle</td>
</tr>
<tr>
<td>PE</td>
<td>drama and role play</td>
</tr>
<tr>
<td>MUSIC</td>
<td>wooden instruments, play and listen to examples of music</td>
</tr>
<tr>
<td>RE</td>
<td>sacred books, stories from different legends</td>
</tr>
<tr>
<td>HEALTH EDUCATION</td>
<td>measuring body - similarities and differences, hands and feet, keeping clean and healthy, food</td>
</tr>
</tbody>
</table>
## Scheme of work (primary) - Spring Term

### TOPIC
Water

### CONCEPTS
change, world view

### SKILLS
mapping, investigating, planning own work, problem solving, measuring

<table>
<thead>
<tr>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATHS</td>
<td>capacity, appreciate need for standard measurement, litres</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>story of Noah's ark, poems about fog, rain, ice, water, write own</td>
</tr>
<tr>
<td>ART</td>
<td>cutting, glueing, drawing, collage skills</td>
</tr>
<tr>
<td>HISTORY</td>
<td>canals, barges, locks, ships through the ages</td>
</tr>
<tr>
<td>GEOGRAPHY</td>
<td>names of places, water cycle, river system around Sheffield, keeping weather records</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>water in its various forms, condensation, freezing, melting, filtering, use of a thermometer</td>
</tr>
<tr>
<td>PE</td>
<td>movement to mood, Handels water music</td>
</tr>
<tr>
<td>MUSIC</td>
<td>sea shanties, use water to make sounds</td>
</tr>
<tr>
<td>RE</td>
<td>water symbols in different religions - Islam, Christian, Hindu</td>
</tr>
<tr>
<td>HEALTH EDUCATION</td>
<td>skin, need for washing hands, bodies, hair, water borne parasites, need for purification of water, sewage disposal, water safety</td>
</tr>
</tbody>
</table>
## Scheme of work (primary) - Summer Term

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>Greece and the Olympic Games</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONCEPTS</td>
<td>-</td>
</tr>
<tr>
<td>SKILLS</td>
<td>-</td>
</tr>
<tr>
<td><strong>MATHS</strong></td>
<td>link with own sporting</td>
</tr>
<tr>
<td></td>
<td>achievements - sprint, long</td>
</tr>
<tr>
<td></td>
<td>distance, jumps</td>
</tr>
<tr>
<td><strong>ENGLISH</strong></td>
<td>Greek alphabet, use of atlases,</td>
</tr>
<tr>
<td></td>
<td>tales of Europe</td>
</tr>
<tr>
<td><strong>ART</strong></td>
<td>masks, vases</td>
</tr>
<tr>
<td><strong>HISTORY</strong></td>
<td>evidence of pottery, artefacts,</td>
</tr>
<tr>
<td></td>
<td>drawing conclusions, way of life</td>
</tr>
<tr>
<td></td>
<td>in ancient Greece - costumes,</td>
</tr>
<tr>
<td></td>
<td>homes, religions, Greek myths</td>
</tr>
<tr>
<td><strong>GEOGRAPHY</strong></td>
<td>locate countries sending teams,</td>
</tr>
<tr>
<td></td>
<td>flags, mapping skills, climate</td>
</tr>
<tr>
<td></td>
<td>of Mediterranean</td>
</tr>
<tr>
<td><strong>CELEBRATIONS</strong></td>
<td>birthdays, birthrites, weddings</td>
</tr>
<tr>
<td></td>
<td>(wedding at Cana)</td>
</tr>
</tbody>
</table>
### Timetable (Y3/4 W)

**Jan 92**

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00</td>
<td>Reading</td>
<td>Reading</td>
<td>Reading</td>
<td>Reading</td>
<td>Reading</td>
</tr>
<tr>
<td>9.30</td>
<td>Maths Topic</td>
<td>Sewing B.W.</td>
<td>Maths</td>
<td>T.V.P.E.</td>
<td>T.V.P.E.</td>
</tr>
<tr>
<td>10.00</td>
<td>Music</td>
<td>Maths</td>
<td>Assembly</td>
<td>Assembly</td>
<td>Art and Craft</td>
</tr>
<tr>
<td>10.45</td>
<td>Time</td>
<td>Drama</td>
<td>M.P.</td>
<td>Reading</td>
<td>(Baking and B.W.)</td>
</tr>
<tr>
<td>12.00</td>
<td>P.E.</td>
<td>English</td>
<td>Games</td>
<td>Follow Up</td>
<td>P.E.</td>
</tr>
<tr>
<td>1.00</td>
<td>English</td>
<td>Art and Craft (Sewing, B.W.)</td>
<td>Topic</td>
<td>Work</td>
<td>English</td>
</tr>
<tr>
<td>1.30</td>
<td>Art and Craft (Sewing, B.W.)</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>R.E. or Topic</td>
</tr>
<tr>
<td>2.00</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
</tr>
<tr>
<td>2.30</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Sharing</td>
</tr>
<tr>
<td>3.00</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Assembly</td>
</tr>
<tr>
<td>3.30</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
<td>Finish Off</td>
</tr>
</tbody>
</table>

*Vertical divisions represent 10 mins.*

**Appendix 12**
Health education experiences (primary school)

Health education as part of the planned curriculum

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>HEALTH ED COMPONENT</th>
<th>APPROXIMATE TIME SPENT</th>
<th>WHO TARGETS ADDRESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIENCE: use of thermometers - instruction not to allow to roll off desks and not to put in mouths</td>
<td>SAFETY</td>
<td>1 minute</td>
<td>11 17</td>
</tr>
<tr>
<td>SCIENCE: use of hand lenses - looking at hands, nails and skin before and after washing, plus discussion on importance of hand washing</td>
<td>PERSONAL HYGIENE</td>
<td>20 minutes</td>
<td>16</td>
</tr>
<tr>
<td>PE: use of equipment/apparatus - at beginning of each lesson</td>
<td>SAFETY</td>
<td>3 minutes per week (total of 1hr 54m)</td>
<td>11</td>
</tr>
<tr>
<td>PE: warm up exercises to prevent muscle injury</td>
<td>SAFETY</td>
<td>10 minutes per week (total of 6hrs 20m)</td>
<td>11 17</td>
</tr>
<tr>
<td>PE: games/sports eg rounders - making decisions eg when to move onto next base</td>
<td>DECISION MAKING SKILLS</td>
<td>5 minutes per week (total of 3hrs 10m)</td>
<td>15</td>
</tr>
<tr>
<td>TOPIC WORK: video on feet, importance of not squashing feet into fashion footwear. Avoidance of foot diseases - verrucas, athlete's foot, corns</td>
<td>PERSONAL HYGIENE</td>
<td>20 minutes</td>
<td>15</td>
</tr>
<tr>
<td>SHARING TIME: pupil discussions of things important to them</td>
<td>SELF CONFIDENCE ESTEEM</td>
<td>2 minutes per fortnight (total of 38m)</td>
<td>12 15 note (i)</td>
</tr>
</tbody>
</table>
### Practical Food Lesson:
- Importance of washing up after food preparation, use of oven gloves when using oven, not to lick spoons

### Subject Health Ed Approximate Who

<table>
<thead>
<tr>
<th>Subject</th>
<th>Component</th>
<th>Time Spent</th>
<th>Targets Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art/Craft: designing and making artwork, working with fabrics</td>
<td>Relaxation</td>
<td>2 minutes</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Self</td>
<td>per week</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expression</td>
<td>(total of 1hr 16m)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>note (iii)</td>
<td></td>
</tr>
<tr>
<td>Music: listening to a piece of music, composing and playing music</td>
<td>Relaxation</td>
<td>2 minutes</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Self</td>
<td>per week</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expression</td>
<td>(total of 1hr 16m)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>note (iii)</td>
<td></td>
</tr>
</tbody>
</table>

**Total approximate time for year:** 23 hours

**Notes**

- It has been estimated that there were approximately 38 teaching weeks in the school year.

(i) Sharing time occurred 4 times a week for 10 minutes ie 40 minute per week. However some of this time was taken up with teacher discussions and not every pupils had a chance to speak every week. The time has therefore been estimated to allow approximately 2 minutes speaking time per pupil per fortnight.

(ii) each pupil only had a practical lesson once per term, even though the lessons occurred weekly. 5 minutes represents the approximate time given in instructions about food hygiene etc.

(iii) although art, craft and music can be said to offer the chance for pupils to relax and develop self expression, it is difficult to say whether this actually occurs for all pupils.
### Health education which occurred on an incidental basis

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>HEALTH ED COMPONENT</th>
<th>APPROXIMATE TIME SPENT</th>
<th>WHO TARGETS ADDRESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEETH: pupils were issued a booklet, they received a sticker if they brushed their teeth morning and night each day for a week</td>
<td>DENTAL HEALTH</td>
<td>5 minutes per day (total of 25m)</td>
<td>15</td>
</tr>
<tr>
<td>BONFIRE NIGHT: the fire brigade held a fire drill in the school, they also discussed safe behaviour on bonfire night</td>
<td>FIRE/ BONFIRE SAFETY</td>
<td>20 minutes</td>
<td>11, 15</td>
</tr>
<tr>
<td>HANDS/FEET/USE OF FIRST AID BOX: pupils had three separate lessons on this</td>
<td>FIRST AID PERSONAL HYGIENE</td>
<td>90 minutes</td>
<td>15</td>
</tr>
<tr>
<td>HEAD LICE: three separate incidences of head lice occurred in the first term, the teacher explained how it was caught, how to try to prevent it and emphasised that it affected clean hair as well as dirty hair</td>
<td>PERSONAL HYGIENE</td>
<td>30 minutes</td>
<td>15</td>
</tr>
<tr>
<td>TUCK SHOP: the 'Tuck Shop Working Party' issued a certificate for the healthy range of foods sold in the tuck shop</td>
<td>HEALTHY EATING</td>
<td>10 minutes</td>
<td>15</td>
</tr>
<tr>
<td>LITTER: discussions in assemblies about effects of litter and importance of tidy, clean playgrounds</td>
<td>ENVIRONMENTAL HEALTH</td>
<td>10 minutes</td>
<td>15</td>
</tr>
<tr>
<td>ASSEMBLIES: celebration of religious festivals eg Jewish</td>
<td>TOLERANCE</td>
<td>10 minutes</td>
<td>15</td>
</tr>
<tr>
<td>ASSEMBLIES: house cup awarded to house with most points</td>
<td>SELF ESTEEM</td>
<td>5 minutes per term (total of 15 mins)</td>
<td>15</td>
</tr>
<tr>
<td>SUBJECT</td>
<td>HEALTH ED</td>
<td>APPROXIMATE</td>
<td>WHO</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>-------------</td>
<td>-----</td>
</tr>
<tr>
<td>GENERAL SCHOOL RULES: moving around the building, handling equipment</td>
<td>SAFE</td>
<td>6 minutes</td>
<td>15</td>
</tr>
<tr>
<td>BEHAVIOUR note (iii)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**APPROXIMATE TOTAL** 3.5 hours **TIME SPENT**

Notes

It has been estimated that there were approximately 38 teaching weeks in the school year

(i) approx time for brushing teeth twice a day for one week and sticking sticker in booklet

(ii) half an hour over three weeks was spent on hands, feet and the use of the first aid box

(iii) a reminder was given at the beginning of each term, 2 minutes has been allowed per term
## Appendix 14

### Timetable (Secondary Pupils)

<table>
<thead>
<tr>
<th>Day</th>
<th>Subject</th>
<th>Teacher</th>
<th>Room</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Art</td>
<td>Mrs A</td>
<td>202</td>
<td>9.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.20</td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td></td>
<td>206</td>
<td>10.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.15</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>Mr W</td>
<td>107</td>
<td>11.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.00</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td></td>
<td>101</td>
<td>1.30</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Options</td>
<td>Mr T</td>
<td>104</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.20</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>3.00</td>
</tr>
<tr>
<td>Wednesday</td>
<td>E.P.</td>
<td>Mr B</td>
<td>204</td>
<td>9.15</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>9.30</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>Mr W</td>
<td>204</td>
<td>10.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.15</td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td>Mrs M</td>
<td>104</td>
<td>11.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.00</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>Mr T</td>
<td>204</td>
<td>1.30</td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td>2.00</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.00</td>
</tr>
<tr>
<td>Friday</td>
<td>Science</td>
<td>Mr T</td>
<td>204</td>
<td>9.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.30</td>
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<tr>
<td></td>
<td>E.P.</td>
<td>Mr B</td>
<td>204</td>
<td>10.20</td>
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<td>5.20</td>
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</tbody>
</table>

*Note: Lunch is not specified in the timetable.*
## Health education experiences (secondary school)

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>HEALTH ED COMPONENT</th>
<th>APPRX TIME SPENT</th>
<th>WHO</th>
<th>TARGETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY (low ability):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) circulatory system - including how blood is pumped around the body, associated diseases eg blood clots, effects of alcohol, cigarette smoke and salt, blocked arteries, thrombosis. Dissection of sheep's heart to show its components</td>
<td>Substance use and misuse</td>
<td>1 hour 10 mins</td>
<td>Nutrition</td>
<td>2 4 9 10 15 16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) respiratory system including disease eg smoking &amp; lung disease, bronchitis and laryngitis. Smoking experiment, how to cut down on smoking. Lamb's lung and heart used to illustrate respiratory system</td>
<td>Substance use and misuse</td>
<td>1 hour 10 mins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOLOGY (mixed ability):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) growing up-physical &amp; emotional changes during adolescence</td>
<td>Sex education</td>
<td>1 hour</td>
<td>Psychological aspects of health ed</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 mins</td>
</tr>
<tr>
<td>(ii) physical changes during puberty (skin, height, hormones) degree of physical and emotional ability to father a child, video of reproduction also emphasising caring side of relationship</td>
<td>Sex education</td>
<td>1 hour</td>
<td>Psychological aspects of Family life education</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 mins</td>
</tr>
<tr>
<td>(iii) pregnancy, function of umbilical cord, abortion including moral issues, contraception</td>
<td>Sex education</td>
<td>1 hour</td>
<td>Psychological aspects of health ed Family life education</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 mins</td>
</tr>
<tr>
<td>HOME ECONOMICS:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Nacne recommendations (fat, fibre, salt, sugar in the diet) why each is necessary, problems associated with too much/little, how to reduce in the diet, foods with high/low contents of these nutrients, quantities required per day, saturated, unsaturated and polyunsaturated fats, cholesterol in the diet</td>
<td>Food and Nutrition</td>
<td>Total of 10 hours 30 mins</td>
<td></td>
<td>2 4 9 10 11 22</td>
</tr>
</tbody>
</table>
(ii) Factors associated with certain diseases and blood cholesterol eg coronary heart disease, hypertension

(iii) Food preparation skills involving food/ kitchen hygiene, understanding of nutrition

(iv) Safety symbols to help when purchasing appliances

(v) Using appliances safely - types of accidents which can occur using selected appliances (microwave, food processor, food mixer, sandwich toaster), washing up safely, turning pan handles in when in use on hob

Total of 10 hours 30 mins

RELIGIOUS EDUCATION:
(i) Islam religion - encourage pupils to have positive attitudes to other religions by understanding the different practices (laws relating to alcohol, drugs, tobacco, women and their rights and responsibilities, food laws, fasting, Ramadan)

Psychological aspects of health ed 10

Family life education 15

Substance use and misuse 18

GEOGRAPHY:
(i) Diet and health, income levels and health in Western and third world countries, the relationship between the natural and human environment and health.

(ii) Malaria - where in the world it occurs, what causes it, how to reduce it, problems associated for the population, how it is transmitted

Food and Nutrition Total 4

Personal hygiene 15

Environmental aspects of health ed 16
<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>HEALTH ED COMPONENT</th>
<th>APPROX TIME SPENT</th>
<th>WHO TARGETS SPENT</th>
<th>ADDRESSED</th>
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</thead>
<tbody>
<tr>
<td>PE (boys and girls)</td>
<td></td>
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<tr>
<td>(i) importance of regular exercise, frequency, how to take pulse rates, warming up and down, what it means to be fit, enjoyment of exercise, protective clothing</td>
<td>Health related exercise</td>
<td>Total 9</td>
<td>11</td>
<td></td>
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<tr>
<td>(ii) muscles - groups, circuit training</td>
<td>Health related exercise</td>
<td></td>
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<td>(iii) hygiene - shoes, personal hygiene</td>
<td>Personal hygiene</td>
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<td>(iv) importance of weight control - development of confidence, not to be over concerned about others' opinions</td>
<td>Psychological aspects of health ed</td>
<td></td>
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<tr>
<td>ACTIVE TUTORIAL:</td>
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<tr>
<td>(i) drugs - alcohol, tobacco and other drugs, why people use them, addiction, harmful effects on the body, physical and emotional effects, drugs and culture</td>
<td>Substance use and misuse</td>
<td>Total 2 4</td>
<td>9 10</td>
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<tr>
<td>(ii) decision making in relation to choosing options for GCSE's</td>
<td>Psychological aspects of health ed</td>
<td></td>
<td></td>
<td>17</td>
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</tbody>
</table>

TOTAL APPROXIMATE TIME FOR YEAR: 62 hours
Responses to pupils' questionnaire (secondary)

Question 5(a-d) asked about the Nacne recommendations for healthy eating in relation to fat, sugar, fibre and salt. Responses indicated an overall understanding of the effects on the body of too much fat, sugar and too little fibre -

**FAT:**
- 'you become overweight, get fat' (11)
- 'high cholesterol level, which can cause a heart attack' (8)

**SUGAR:**
- 'rots your teeth' (17)

**FIBRE:**
- 'constipation' (9)
- 'affects bowels and digestive system' (3)
- 'lack of energy' (5)

but only a few pupils showed understanding of the effects of too much salt -

**SALT:**
- 'causes high blood pressure' (4)

there was a number of other responses which indicated a lower level of understanding -
- 'heart attack' (5)
- 'dries up the blood' (1)
- 'liver or kidney will rot' (1)

Question 6(a-d) asked how to reduce the amount of fat, sugar and salt in the diet and increase the amount of fibre. The responses indicated a high level of understanding -

**FAT:**
- 'cut down on fat/eat less fatty foods' (8)
- 'don't cook in fat/microwave/grill/don't fry' (5)

**SUGAR:**
- 'cut down on sweets, puddings chocolate' (12)
- 'don't put sugar in tea/coffee' (3)

**SALT:**
- 'don't put salt on food' (13)
- 'don't add salt when cooking' (5)

**FIBRE:**
- 'eat Kellogs All Bran/Weetabix/cereals' (12)
- 'eat more fruit and vegetables' (7)

Question 7 asked about safety symbols on kitchen appliances. There was a wide range of answers, only three were specific -
- 'meets British safety standards, its safe provided you treat it correctly' (2)
- 'that the item has been checked and inspected by a qualified inspector' (1)

other answers indicated that pupils understood some information but not all -
- 'what to do and what not to do' (1)
- 'if any part of the appliance is dangerous' (1)

other responses suggested no knowledge -
- 'don't let children near' (1)
- 'don't put your fingers in certain places' (2)
Question 8 asked about safety for pan handles, all pupils except one responded -
'so you don't knock the handle/burn yourself' (19)
the other pupil responded -
'so they don't get hot from the heat of the cooker' (1)
which is a valid answer.

Question 9 asked about accidents related to kitchen appliances and indicated a high level of understanding -
MICROWAVE:
'could cause a fire if you put metal in it' (5)
'burn yourself-steam' (5)
FOOD PROCESSOR:
'cut yourself/fingers on the blade' (14)
SANDWICH TOASTER:
'burn yourself/fingers' (13)
'get fingers trapped' (2)
FOOD MIXER:
'hands/fingers caught in blender/mixer' (8)
'chopping fingers off' (3)

Question 10 asked about knives left in washing up bowls and all pupils were aware of the safety considerations -
'might cut self in water when washing up' (18)
one pupil however had not understood the reasons -
'the hot water can cause the handle to wear away' (1)

Question 11 asked about frequency of exercise, to maintain fitness and most pupils responded correctly -
'3 times a week' (14)
'every day' (4)

Question 12 asked about the length of time which should be spent when exercising. 7 pupils put the correct answer of 20 minutes, 5 thought 15 minutes, 3 thought 10 minutes, 2 thought 25 minutes and 2 thought 30 minutes.

Question 13 asked about pulse points on the body -
'neck' (17)
'wrist' (16)
'temples' (4)
'thumb' (3)
Six pupils put heart beat which is not one of the pulse points.

Question 14 asked why you should take your pulse when exercising and three responses indicated an understanding -
'to check that you are making your heart work hard enough' (1)
'to see if you are doing enough to get into the target zone' (2)
the other responses indicated some level of understanding -
'to see how hard you have worked/exercised' (5)
'so you can see whether you are getting fitter or if there is something wrong' (1)
Question 15 asked about protective footwear during exercise -
'so you don't hurt your feet/twist ankle' (8)
the rest of the pupils put a response which showed some understanding -
'so you have a good landing' (1)
'you could slip and hurt yourself in normal shoes' (4)

Question 16 was about the need for hygiene following exercise
and one person was specific in their response -
'perspiration and heat cause bacteria to spread and
your feet begin to smell' (1)
the other responses indicated a general understanding -
'your feet could be sweaty/smelly' (17)
'because they are muddy' (2)

Question 17 asked about the meaning of being fit and most
responses indicated a high level of understanding -
'can do exercises easily and feel fit in yourself' (7)
'your body being healthy, enjoy life more and live longer' (1)
'active, healthy, alert and physically aware' (1)
5 responses showed a lower level of understanding -
'not being fat' (5)

Question 18(a) and (b) asked about the importance of warming up
and down when exercising. Pupils understood the need for
warming up -
'so you don’t pull muscles when you are cold' (11)
'to get you ready for exercise' (3)
but were not so sure about warming down -
'cool/calm down' (5)
'so your heart knows to go back to its normal rate' (2)
two responses indicated a closer understanding -
'so your muscles become relaxed again' (1)
'you could get cramps' (1)

Question 19 asked where in the body the hamstrings and the
biceps could be found -
HAMSTRINGS:
'legs' (13)
BICEPS:
'arms' (11)
other responses showed a lack of understanding -
'stomach' (2)

Question 20 asked why drugs were forbidden to Muslims but only a
few were specific in their response -
'because they are poisoning a possession of God's, they
ruin people's lives' (4)
others replied in more general terms -
'against their religion' (10)
'bad for them' (2)
Question 21 aimed to determine the attitudes pupils held towards Muslims. Part of the purpose of the topic on Islam was to encourage positive attitudes to that religion. This question was a series of statements and pupils had to say whether they agreed with the statement, disagreed or were not sure. Most pupils agreed with the following statements which showed positive attitudes -

- 'Muslim girls should be allowed to cover their bodies during PE'
  agree (14) disagree (4) not sure (1)
- 'We should show consideration to Muslims during Ramadan'
  agree (15) disagree (1) not sure (3)
- 'School canteens should provide foods suitable for Muslims'
  agree (11) disagree (4) not sure (4)

Pupils were not so definite about their attitudes to the following -

- 'School rules should apply to everyone whatever their religion'
  agree (9) disagree (8) not sure (2)
- 'Women are treated well by Muslim men'
  agree (8) disagree (4) not sure (7)

Positive attitudes were not as prevalent for the final question -

- 'Britain is a better place because people of many religions and races live here'
  agree (5) disagree (9) not sure (5)

Question 23(a) and (b) asked about emotional and physical changes which occur during adolescence, all pupils put a response which was correct -

**PHYSICAL:**
- 'get taller/bigger/body changes' (6)
- 'sexual organs develop' (6)

**EMOTIONAL:**
- 'attracted to opposite sex' (6)
- 'more mature' (2)

Question 24 asked about the causes of these changes and some responses were accurate -

- 'hormones' (9)
- 'your bodily functions' (3)
- 'growing up' (3)

Question 25 asked how a baby was fed during pregnancy and most responses were accurate -

- 'through the umbilical cord' (18)
- 'through the food the mother eats' (3)

Question 26 (a) and (b) asked for names of organs associated with pumping blood round the body and breathing respectively and all pupils put the correct responses -

- 'heart' (18)
- 'lungs' (18)
Question 27 (a) asked for a disease associated with the heart and all responses were correct -
'heart attack' (11)
'cancer' (6)
'hole in the heart' (1)
Part (b) asked how to prevent this disease -
'cut down on fat' (6)
'do exercise' (3)
'not smoking' (2)
'eat the proper/healthy foods' (2)

Question 28 (a) asked for a disease associated with the lungs and all responses were correct -
'lung cancer' (15)
'asthma' (1)
'bronchitis' (1)
Part (b) asked how to prevent this disease -
'don't smoke' (14)
'you can't' (asthma) (1)

Question 29 asked for the reasons a person may take drugs and responses included a range of reasons, covering many situations -
'to get a high feeling' (12)
'to act big/tough' (9)
'fed up/depressed' (5)
'make them better - medication' (5)
'because their friends do/peer pressure' (6)

Question 30 asked are all drugs harmful -
'Yes' (4)
'No' (13)
Respondents were then asked to explain their answers -
'some drugs are for making people better/stop illness' (14)
'ok if used properly/excess can be harmful' (7)
'tea and coffee doesn't harm you, neither does a reasonable amount of alcohol' (2)
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