

# Education and Health

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## **Healthy Lifestyles, Changing Lives**

**Leila Harris**

## **Kirklees Healthy College Standard**

**Kate Birch**

## **6th Form and FE Healthy Colleges**

**Angela Balding and Tamsin Pascoe**

## **Differences between paper and online student surveys**

**David Regis**

## **Sexual Health Skills: A Learning Process**

**Hilary Dixon**

## **Food Education: Bridging the Gap between Theory and Practice**

**Annette Ferri**

## **Evaluation of the School Fruit and Vegetable pilot scheme**

**Gabrielle White**

PLUS

**Heathy Student News Digest**

**Recent Research: Young Children and...**

# Education and Health

## Editor

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Dan Hawkins (e-mail: admin@sheu.org.uk)

Welcome to the fourth issue for 2006. This issue has articles that span primary schools to further education colleges. Topics explore healthy settings, food and sexual health. We continue to add free downloads of E&H articles to our popular website -- [www.sheu.org.uk/publications/educationandhealth.htm](http://www.sheu.org.uk/publications/educationandhealth.htm). Please encourage others who read the journal to take out a subscription. Published four times per annum, the individual annual subscription for 2007 remains at £20 including postage and packing. You will notice a format change in 2007 as we return to the original A5 size. I look forward to your company in the next issue.

# Education and Health Vol.24

## Number 1

Moorefit – increasing physical activity in adolescent girls using the Health Promoting Schools framework  
*Yona Cass and Polly Price*

Staying Alive - a range of healthy eating and physical activity initiatives across the North of Islington  
*Natalie Russell*

Adolescent gambling: Still a cause for concern?  
*Mark Griffiths & Alison Linsey*

Coherent, Comprehensive and Continuous: Developing a curriculum for effective Sex and Relationship Education in an English primary school

*Hilary Piercy and Gillian Haynes*

From Borstal kid to author to trainer in anger management  
*Valerie Mason-John*

## Number 2

Lessons in life: Why I'm teaching happiness  
*Anthony Seldon*

The Well-Being Skills Development Course  
*Nick Baylis*

Sticky Fingers: a mobile children's cookery school  
*Alex Maggs*

Young People with health problems - their views on how schools can help  
*Catherine Gleeson*

The Active City of Liverpool, Active Schools and SportsLinx (A-CLASS) Project  
*Nicola Ridgers, Gareth Stratton, Lawrence Foweather, Jayne Henaghan, Nicola McWhannell & Mark R. Stone*

A survey of homophobic bullying in schools  
*Ruth Hunt and David Regis*

Educational Work on Problem Gambling - Using games in the classroom - Liverpool 'health mates' - Young People into 2006 - Young People's health and...

## Number 3

'Planned' teenage pregnancy: Views and experiences of young people  
*Suzanne Cater and Lester Coleman*

An innovative approach to the prevention of substance misuse, emotional problems and risky behaviour in adolescents

*Laura Sully and Patricia Conrod*

The healthy settings approach: the growing interest within colleges and universities  
*Sharon Doherty and Mark Doorsis*

It's Child's Play: Advergaming and the Online Marketing of Food to Children  
*Kaiser Family Foundation*

UK perspective

*Sonia Livingstone*

Investigating the extent of substance use by 14 - 16 year old students on the school premises in Malta  
*Alex Bonavia and Fleur-Marie Fenech*

Cyberbullying

## Number 4

Healthy Lifestyles, Changing Lives  
*Leila Harris*

Kirklees Healthy College Standard  
*Kate Birch*

6th Form and FE Healthy Colleges  
*Angela Balding and Tamsin Pascoe*

Differences between paper and online student surveys  
*David Regis*

Sexual Health Skills: A Learning Process  
*Hilary Dixon*

Food Education: Bridging the Gap between Theory and Practice  
*Annette Ferri*

Evaluation of the School Fruit and Vegetable pilot scheme  
*Gabrielle White*

## SHEU publications

'Education and Health' is published by SHEU, an independent organisation, who provide research, survey and publishing services to all those concerned with the health and social development of young people. SHEU incorporates the Schools Health Education Unit, founded in 1977 by John Balding. The Unit has carried out over 5,600 school Health Related Behaviour Questionnaires involving over 700,000 pupils aged 8-16 years of age from across the UK.

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The following titles are a selection from the website and can be ordered online:-

[www.sheu.org.uk/publications/orderpublicationsonline.htm](http://www.sheu.org.uk/publications/orderpublicationsonline.htm)

## Trends 1983-2005

A series of reports showing trends, from 1983-2005, in young people's health related behaviour. Data come from a sample of up to 448,000 young people between the ages of 12-15 from across the UK. Priced from £10-£15 including post and packaging (comb bound).

Trends: Young People's Food Choices-attitudes to healthy eating and weight control 1983-2001 (£10)

Trends: Young People and Smoking-attitudes to cigarettes 1983-2001 (£10)

Trends: Young People and Alcohol-attitudes to drinking 1983-2001 (£10)

Trends: Young People and Emotional Health and Well-Being incorporating Bullying 1983-2003 (£15)

Trends: Young People and Physical Activity-attitudes to exercise and sport 1987-2003 (£10)

Trends: Young People and Illegal Drugs-attitudes to and experience of illegal drugs 1987-2004 (£10)

Trends: Young People and Money-attitudes to earning, spending and saving money 1983-2004 (£10)

Trends: Young People and Leisure-attitudes to and experience of leisure activities 1983-2005 (£15)

## Young People into 2006 (20th in the series)

The latest edition of the annual report of lifestyles and behaviours of 37,932 young people between the ages of 10 and 15 years. £45 (discounts for schools)

## Young People in 2004 (19th in the series)

The previous edition of the annual report of lifestyles and behaviours of 40,439 young people between the ages of 10 and 15 years. £35

## Young People in 2003 (18th in the series)

The report of lifestyles and behaviours of 15,526 young people between the ages of 10 and 15 years. £25

## Young People and Illegal Drugs into 2000

This report surveys all our drugs data back to 1987 and suggests that young people's contact with drugs may have peaked in 1995-96. £8.50

## Healthy School Series

This set of five books show how health-related behaviour data can be used in primary schools. The complete series is: *Safety, Drugs Education, Emotional Health & Well Being, Physical Activity, Healthy Eating*. Each book is 48 pages and has A3 style spreads where teaching plans sit alongside the relevant worksheets. Each book can be purchased separately at £14.95 each. Complete set £74.75

Cash or official purchase order number required

Cheques should be made payable to:

**The Schools Health Education Unit**

All prices include postage and packaging

Leila Harris is a Leading Teacher for Personal, Social, Health and Emotional Education in the London Borough of Barnet.

## Leila Harris

# Healthy Lifestyles, Changing Lives

## PSHE in a London borough: Healthy Lifestyles week at an infant and nursery school.

**E**dgware Infant and Nursery School, in North West London, has a broad socio-ethnic and cultural mix reflecting the diverse nature of the local community.

I was appointed to take on the role of Personal, Social, Health and Emotional (PSHE) co-ordinator three years ago and have recently been appointed a Leading Teacher for PSHE in the borough. I believe the role of PSHE co-ordinator is a huge and crucial role as it underpins the ethos and culture of the school.

Research has shown that a child's personal, social and emotional development, has a strong correlation with his/her self-esteem and confidence, thus affecting them as learners.

The school in which I work is very enthusiastic about the Barnet Healthy Schools Scheme. The modules cover a wide range of issues and we have gained awards for a range of modules including: Emotional Health and Well-being, The Environment, Food and Nutrition, Physical Activity, Safety and most recently Substance Use and Drug Education.

### Themed Weeks

Themed weeks are high profile events in the School calendar when we don't follow a normal routine. The children enjoy becoming engrossed in work on a particular theme for which all areas of the curriculum are linked. Several visitors are invited into school.

### Healthy Lifestyles Week

We are committed to encouraging pupils to lead a healthy and active lifestyle and believe it is important to set these foundations early in children's education with the hope that they become a routine part of their lives.

As part of this work we held a Healthy Lifestyles week - during which pupils considered what contributes to a healthy lifestyle (including, getting enough sleep, drinking water, eating healthily, personal

hygiene and taking regular exercise).

During the Healthy Lifestyles week the School Nurse, a local dentist, a fitness instructor and a nutritionist worked with pupils across the School during a range of workshops.

### Parental partnership

We consider parental partnership to be a particularly important element of the work we do. Parents/carers are invited to participate in workshops which address issues they are concerned about; e.g. as the school has several children who suffer from asthma, a parental workshop was based around this issue.

Working with the local hospital and School Nurse, parents/carers were advised how to reduce asthma triggers and discussed provision for children in school; e.g. ensuring an asthma inhaler is available in school. All adults working in the school are made aware of the children with asthma as well as the place where the inhalers are stored.

### School meals

The school staff and parents/carers, along with the local authority, were also keen to improve the school meals: at Breakfast Club and for lunch. The lunch menu was consequently altered to include 'healthier options'. Parents/carers were also invited to sample the new menu with their children. Staff encouraged children to eat the new meals by eating lunch with the pupils.

In the future it is likely that healthy eating will become part of the OFSTED school inspection process, so it will be important for all schools to ensure healthy eating opportunities are promoted and become embedded into the school day.

### 'Fruit time'

Similarly, the school has incorporated a 'fruit time' into the school timetable. Pupils used to eat their fruit from the 5 a day scheme during playtime, but the introduction of 'fruit time' has allowed children to use

playtime as an opportunity to expend their 'extra energy' and engage in games such as football, skipping etc.

### PSHE

The School's work on promoting the pupils personal, social, health and emotional development is deeply embedded in school practice. In order to motivate them to keep up this work, the children are often asked to complete tasks.

During Healthy Lifestyles week, the pupils were challenged by the gym instructor to complete 15 minutes of exercise each day over 21 days and to log this in a diary.

Some of the parents/carers were encouraged by their children to become involved with the challenge! In order to motivate and reward the children for their efforts, we organised a special certificate presentation ceremony for those who successfully completed the challenge.

One often hears the cliché that 'our children are our future', but this should not detract from the truth of these words. Schools, their staff, parents/carers and the children themselves need to be inspired to 'teach them well and let them lead the way.'

### Top Tips for practitioners:

- ♦ Try to involve parents/carers in your work
- ♦ Reward the children/parents for their hard work!
- ♦ Work with outside agencies to help raise the profile of your work: children listen to a different voice!
- ♦ There are agencies who can be approached to fund this work; e.g. sports voucher schemes run by supermarkets, British Heart Foundation
- ♦ Use the children's ideas: they will often also help you to gauge where bridges need to be built
- ♦ Build your work into other national schemes; e.g. The Travel Plan

Kate Birch is the Healthy College Co-ordinator at Huddersfield New College

## Kate Birch

# Kirklees Healthy College Standard

The Kirklees Healthy College Standard (KHCS) was produced after 2 years' work and consultation by a partnership from Huddersfield New College and the Kirklees Healthy Schools Team.

It is on similar lines to the National Healthy Schools Standard but appropriate to the 16-19 age group and was initially available in October 2003.

A National Healthy College network (now well over 200 members strong) was also set up to pilot the standard and share

good practice. This has attracted interest from both Health and Education.

The KHCS has proved a hugely successful tool for colleges to audit their approach to health and to plan ways of improving provision for students and staff. Essential features include the setting up of a cross college task group supported by senior managers and involvement of students and staff in decision making on health related issues.

The standard not only enables colleges

to address Every Child Matters outcomes but also includes other criteria such as Staff Wellbeing.

The National CAMHS Support Service and LSN have kindly supplied funding which has enabled the KHCS to be available free to all colleges (Sixth Form and Further Education).

The new 2006 version features a revised Student Wellbeing criterion with a strong focus on Emotional Wellbeing and was written by network members.

## National 'Healthy Colleges' Conference

TUESDAY 27TH FEBRUARY 2007

The Waterside Conference Centre • Wigan Investment Centre • Waterside Drive • Wigan • WN3 5BA

The first national conference's objectives are to:

- Give the background to healthy colleges work in England, understand the current situation and have an opportunity to discuss future developments
- Explore how the role of healthy colleges can be an effective vehicle for delivering national and local strategies, e.g. 'Every Child Matters' and 'Choosing Health'
- Share and develop learning from colleges and partners to deliver a 'Healthy Colleges' approach
- Develop networking and partnerships across FE and its partners

Draft programme

- 9.00 am Arrival, tea/coffee  
9.30 am Introduction  
Rona Cruickshank  
Public Health Directorate,  
Ashton, Leigh & Wigan Primary  
Care Trust
- 9.35 am Background to & overview of  
Healthy Colleges work  
Kate Birch  
Healthy Colleges, Huddersfield  
Sharon Doherty  
Healthy Settings Unit, UCLAN
- 10.00 am Snapshot of 16-18 yrs Lifestyle  
Angela Balding  
Students Health Education Unit

- 10.10 am Healthy College links to LSC  
Sustainability Strategy  
Speakers to be confirmed
- 10.30 am Delivering key strategies through  
Healthy Colleges  
Speaker to be confirmed
- 10.50 am Questions/discussion
- 11.00 am BREAK / NETWORKING
- 11.15 am \*Participatory Workshops - sharing  
good practice
- 12.30 pm LUNCH
- 1.15 pm Selling the idea  
College Vice Principal and  
students, Wigan & Leigh College
- 1.30 pm \*Participatory Workshops - sharing  
good practice
- 2.20 pm \*Participatory Workshops - sharing  
good practice  
(includes summary of key  
issues/actions)
- 3.20 pm BREAK
- 3.30 pm Plenary & key actions  
Summary comments Kate Birch
- 4.00 pm CLOSE

\*Participants will be able to attend 3 out of 6 workshops offered below:

- Getting started - How to audit needs and involve the college community
- Building partnerships - Ensuring

- sustainability and accessing funding
- Delivering 'Every Child Matters' through the Healthy Colleges
- Healthy Food in Colleges - Changing the college environment
- Smoking Issues - Working towards a smoke-free environment
- Supporting the mental health and well-being of the whole college community

Venue

The Waterside Conference Centre is situated within walking distance of Wigan town centre and the railway and bus stations. It is approximately 2 miles from the M6, with excellent parking facilities. The Centre is fully accessible and has natural daylight.

Conference Fee

The cost of the conference is £75.00 per delegate. This includes refreshments and a conference pack.

How to Book

Please contact :  
Wilf Cawthorne, (Resource Officer)  
ALWPCT, Health Development Service  
c/o Bryan House, 61 Standishgate,  
Wigan WN1 1AH  
Wilf.Cawthorne@alwpct.nhs.uk  
Tel No 01942 481736

Angela Balding is Survey Manager and Tamsin Pascoe is Project Co-ordinator at SHEU. For communication email: david.mcgeorge@sheu.org.uk

# The Editor talks to Angela Balding and Tamsin Pascoe

## 6th Form and FE Healthy Colleges

SHEU sponsor colleges to use an online survey to provide baseline data for programme planning.

In October 2006, the Students Health Education Unit (SHEU) offered to sponsor, at no cost, their online questionnaire for use in 6th Form and Further Education colleges.

The sponsorship offer ran from the beginning of October until the end of November 2006. Colleges were initially contacted through the SHEU 'Healthy Student News' monthly email.

Further contacts were made using the Kirklees Healthy College network ([www.khcs.org.uk](http://www.khcs.org.uk)), the SHEU network of people who work in related education and health settings and the PSHE email network maintained by the National Children's Bureau PSHE and Citizenship Information Service -

### Use of results

As part of the sponsorship offer, colleges were asked how they planned to use the information resulting from the survey. The following points summarise the responses from many colleges:

- Useful to examine how our self-assessment compares to an external one
- Help to move our Healthy College project forward
- The data would help to formulate our action plan and help develop and implement our Every Child Matters (ECM) strategy
- Use the findings of the survey for further evidence for the ECM section of the Strategic Area Review and to further support our contribution to the Joint Area Review
- Use the data to take into account the students as key stakeholders in the college's ECM framework and action plan
- Cross reference results to our plans and make refinements as required
- Beneficial to be able to benchmark with other organisations and the potential to share good practice

### Healthy Colleges

Unlike the National Healthy Schools Scheme there is currently no national equivalent programme for the Further

Education and Higher Education sectors.

Angela Balding, SHEU Survey Manager, comments, "For a number of years we have been collecting data from FE colleges and became part of the Kirklees Healthy College network. The development of the work by Kate Birch has led to the Kirklees Healthy College Standard which is being taken up by many colleges. Prior to this, SHEU had been involved with some FE and HE surveys which began in 1995 when we collaborated in a healthy lifestyle study of University students aged 18 and over."

"Since the late 1990s, SHEU started developing healthy lifestyle survey services for FE & 6th Form colleges. A student survey instrument, 'The Further Education Student Health and Lifestyle Survey', had been successfully piloted with colleges and student groups."

"The principal purpose of the survey is to promote debate and change in the colleges receiving reports about the behaviour and beliefs of the students they work with. The information gained also informs and to some extent provides feedback on local health campaigns. For example, with respect to sexual health, all colleges have participated in campaigns for raising awareness of emergency oral contraception and of sexually transmitted infections."

### Comparative data

Angela Balding continues, "In our survey work, with primary and secondary schools, we have slowly built an impressive databank that we think is unique. Similarly, in our work with students aged 16 years plus, we are slowly building a databank that informs college health promotion and healthy college programmes."

### 'Pyramid' data collection

One of the key features of both data sources is the capacity to provide comparative results and to combine this with 'pyramid' data. Angela has used the 'pyramid' data collection model with secondary schools and their feeder primary schools. She has found that, "surveying the health related behaviour of pupils in their

final years of primary school can be very informative when used with data taken from pupils in the first years of secondary schools. Using a similar approach with young people who are in the final years of secondary school and the first years of 6th Form and FE college, we are finding a number of important health behaviour indicators that provide colleges with vital information to inform programme planning."

### Online developments

The desire to make the survey instruments more accessible to colleges came with the development of SHEU's online survey services.

In 1999 the 'Fit to Succeed' project involved SHEU with collecting healthy lifestyle and activity data from school pupils. There was a need to provide both paper-based and online survey facilities. Angela says, "We have documented and published the development of this ongoing project."

([www.sheu.org.uk/whoweworkwith/fittosucceed.htm](http://www.sheu.org.uk/whoweworkwith/fittosucceed.htm))

"One of the outcomes was an opportunity to put some of our questionnaires online and develop our knowledge of how to offer and run a successful online service".

Similarly the parallel development of SHEU's survey services to the FE sector led to colleges being offered an online and paper-based questionnaire.

### Every Child Matters

Angela sees SHEU's service developments as crucial to the survey sponsorship offer. A need for more data collection arose from the emerging 'Every Child Matters' agenda and opportunities created by colleges as they became more interested in issues that led to the Healthy College movement. Angela continues, "We had worked with some FE colleges when we carried out pyramid data collection methods in primary and secondary schools and FE colleges."

"We also noticed a growing interest in collecting data from young people aged 16 plus. This interest came from the wide range

of partnership organisations we are usually involved with in local surveys. These organisations often include Teenage Pregnancy Units, Drug Action Teams, Health Promotion Teams and of course members of local National Healthy School and PSHE teams."

### Gauging the mood

It was at this point that SHEU decided to make a sponsorship offer to some 6th Form Colleges. Angela thinks that it was the right time to gauge the mood of colleges and 'Healthy College'. "We had contacted a number of 6th Form and FE Colleges over the years since 2000 and, although gaining some interest in healthy lifestyle data collection, there was little evidence to suggest many colleges had sufficient resources to act on issues arising from the data. There were a small number of active colleges who used survey information to inform their health promotion programmes. From around 2003/4 a few colleges appointed a 'Healthy College Co-ordinator' or someone whose duties included healthy lifestyle issues. We would then see a fresh interest in data collection and further development of the Healthy College movement."

### Collect baseline data

Angela was keen to encourage colleges to collect baseline data. She has seen, in primary and secondary education, how powerful the data have been and how they can empower education and health staff to change school practices and encourage healthy lifestyles with pupils.

The decision to make a time-limited sponsorship offer to a number of colleges was due to the logistics of carrying out online surveys and the unknown reaction of the colleges. Should the offer fall flat then SHEU had not wasted too much time and money and could hopefully establish reasons for failure. If the offer was successful than it provided an opportunity to develop the survey services to reflect the needs of the colleges. Angela felt that the offer was a success if around five colleges become involved, collected data and used the results to inform or establish their programmes.

### Lots of interest

Tamsin Pascoe, Project Co-ordinator, has found a lot of interest from colleges. "At the beginning we contacted 6th Form and FE colleges via email using our own and other networks. We were never certain if we were contacting the 'right' person and in some cases we depended on the initial email being passed to the 'right' person."

The offer started on 1st October and SHEU initially emailed colleges in September. Tamsin continues, "We spent around two to three weeks sending and re-sending emails before the sponsorship offer started. The first colleges to respond were usually already involved with the Healthy College network and were at various stages of developing their healthy college strategy."

"Although we were unsure about the

'right' college contact we found the most common 'title' held, by those who contacted us, was the same or something similar to 'Student Services Manager'. Also, many potential college contacts in various college health departments were found to be part-time and/or did not respond to email on a regular basis."

### Reasons for not being involved

Tamsin explains some of the reasons colleges gave for not doing the survey. "Naturally, not everyone we contacted would be interested and a pattern emerged that showed the main reasons for not being involved. Time was clearly a problem. We talked to a number of colleges about the 'best' time for carrying out a healthy lifestyle survey. Unsurprisingly, colleges said there wasn't a good time of year as it was always busy."

"Some colleges, who were unable to take on the survey, had already allocated activities to any potential 'free' curriculum time in the sponsorship period. However, they did say that given sufficient notice the online survey would be of interest."

### 'Dummy run'

Tamsin describes the 'dummy run'. "We sent out a series of emails that briefly explained the sponsorship offer and how the online survey worked. A 'dummy run' was also provided. This gave each college an opportunity to see all the questions in the survey and also fill in a 'dummy' survey. Like most online surveys, some questions opened up further questions depending on the initial 'yes/no' response. Being able to see all the questions also meant that college staff would know exactly the sorts of issues that would be covered in the health survey."

### Too much information

"One contact, who came from a school with a sixth form, decided not to continue with the sponsorship having seen the questions. The reason given was that the questions would have provided more information than the school needed."

"Another college was undecided about carrying out the survey having seen the questions and the 'dummy run'. A very fruitful period of constructive feedback resulted and we were able to make a number of changes to the survey and adapt the process. However the college still felt unable to carry out the survey as they were concerned about the completion of the survey 'online'. They felt the students would have problems answering the questions as other students would be in the computer room at the same time. However, confidentiality issues were not expressed by any other college and we offered a paper-based survey to the college concerned about privacy."

### Time to complete

As more colleges took up the offer of the 'dummy run' one other issue was raised. Tamsin continues, "The survey had been developed over a number of years with

inputs from different colleges and students. The hardest things to achieve were agreement over the right number, content and length of each question. After the trials and developments we used the paper-based FE survey for a number of years."

"The online survey was essentially the same. It was of no surprise that when colleges saw the 'dummy run' the issue of the time to complete was raised. Most colleges have tutorial curriculum time of around 40-50 minutes. Our experience was that students took on average about 30 minutes to complete the online survey. Should a student need more time they could go re-enter the survey, and continue from where they left, at a later date from any computer with an Internet access."

"With the sponsorship survey we found only one college had an issue with the time needed to complete. We offered to provide a shorter version of the survey although some comparative data would be lost."

One of the reasons why SHEU surveys have proved popular over the years is the ability to compare your school/college results with others. This also proved to be important to colleges when talking to them about the sponsorship.

Tamsin explains, "We initially asked the colleges to complete their online surveys by the end of December. This was later extended to the end of January 2007. When each college finished their survey they see their results on screen and can print out the tables and charts."

"The reason we set a completion date was to have aggregated results from all colleges available online by February 2007. We then provide each college with a comparative, anonymous dataset. This is an invaluable tool and allows colleges to see the similarities and differences between their student results and those from other colleges."

### Success

Some colleges finished collecting their data in December 2006. Comments about the survey web site included: "...very easy and straightforward to use," and the ease of the exercise: "went very well. We originally planned to undertake 700 questionnaires online, but I had to increase the number due to the volume of willing participants".

SHEU will continue to be involved with healthy colleges. Angela explains, "We will be briefly presenting some of the results from the sponsored survey at the first national Healthy Colleges conference in February 2007."

The future funding of the Healthy College movement could depend on support given by central government. It is difficult to imagine that the enthusiasm and energy that many individuals and colleges have already devoted to this issue will die away. SHEU have been fortunate to play a part in this process. Once individuals become involved in the promotion and development of students' healthy lifestyles and their healthy college setting, changes do happen."

# Healthy Student News Digest

## A selection of items that have appeared in the monthly email.

Visit <http://www.sheu.org.uk/whoweworkwith/healthycollegearchive.htm> for weblinks

December 2006

### **Not new research...but data that I always enjoy in the run up to Christmas -**

"There is no evidence that the average calorific intake or consumption of foods rich in fat and added sugar has increased in the UK since the mid 1980s."

**"Commentators fear that British youth are on the verge of mental breakdown, at risk from antisocial behaviour, self-harm, drug and alcohol abuse."** These concerns are, to an extent, borne out in findings and other research, presented in the latest report, "Freedom's Orphans: Raising youth in a changing world", from the Institute for Public Policy Research.

**Campaigns on young people's weight are missing the point, says researcher at the University of Bath.**

**A new UK study summarises key qualitative findings that help in understanding young people's sexual behaviour and why they might have unsafe sex.** They found that the factors that influence young people's sexual behaviour are strikingly similar worldwide.

**According to a new 2006 report on the AIDS epidemic - South Africa's 15-year olds have a 56 percent chance of dying before turning 60.** In 1996 the same age group had a 29 percent chance of dying before turning 60.

November 2006

**Launch of new UK specialist library for Ethnicity & Health.**

**USA - Organized activity participation, positive youth development, and the over-scheduling hypothesis.**

**New Zealand Association for Adolescent Health and Development weekly e updates.**

**'Cannabis: a drug more dangerous than heroin' from Glasgow's 'The Herald' newspaper.**

**Even in China's most Westernized and rapidly ageing city, young people still follow the traditional family model of caring for their elderly parents.**

**USA - An evaluation of an abstinence-only sex education curriculum: An 18-month follow-up.**

October 2006

**Current illicit drug use among US youth aged 12-17 continues to decline.**

**Mission-On healthy lifestyles package for young Kiwis** Unless something changes, the current generation of young New Zealanders may very well be the first to die at a younger age than their parents."

**Many US college students may be left ill-informed about safer sex and more at risk for sexually transmitted infections** according to a new survey from Trojan® brand condoms.

**If drug prevention in UK schools is ineffectual, as the ACMD's new report suggests, what lessons can we learn?**

**California's unprecedented investment in teenage pregnancy prevention has contributed to its achievement over the last decade of the largest decline in teenage birth rates of all America's fifty states.**

September 2006

**Interventions to prevent accidental injury to young people aged 15 - 24:** Evidence briefing - Road interventions such as raising the legal drinking age from 18 to 21... have been shown to be successful.

**A survey of 1,373 16-18 year olds across England** found that many teenagers put condoms on after starting sex or take them off before it's over -- thus risking sexually transmitted diseases.

**An approach to reduce unsafe drinking and other harmful behaviours among US college students** may be similarly effective among high school students, according to research presented during the recent National Social Norms Conference, Denver, Colorado.

**Data from the China national surveys** showed that the prevalence of overweight and obesity in children aged 7-18 years increased 28 times and obesity increased four times between 1985 and 2000 a trend that was particularly marked in boys.

Dr David Regis is the Research Manager at SHEU. For communication email: david.regis@sheu.org.uk

## David Regis

# Differences between paper and online student surveys

There are lots of potential benefits for schools and colleges completing a survey online:

- Greater student access: All students in a year group can take part, not just a sample
- Instant access to results at the end of the survey period
- Facilities for instant printing of results in different formats for presentations. e.g. graphs
- Own school and college figures can be compared with the group of other similar institutions who complete online
- It is an intelligent questionnaire, so that students only see questions relevant to them
- Graphics are more friendly
- Option for personal health feedback for students
- Website links for students who finish early

There are also costs:

- Training tutors and talking with students about how to log on and use the online survey
- Booking IT suites and organising classes to use them is less straightforward than handing out booklets
- Technical problems and system crashes are easier to solve when using pen and paper

This all assumes that the answers will come out pretty well the same, regardless of whether classes fill in a paper or a web-based survey. We have looked at this in some detail over the last few years, and this assumption is well-supported. We have had many thousands of students complete parallel versions, and printed off a list of significantly different items.

Most differences that we found initially are thought to be due to differences in the design of questions. It's very tempting when designing a school form for the web to use this format:

### 1: Who would you like to talk to you about drugs?

*Please choose all that apply*

- |  |                          |
|--|--------------------------|
| Parents/carers                         | <input type="checkbox"/> |
| Teachers, in school lessons            | <input type="checkbox"/> |
| Visitors or speakers in school lessons | <input type="checkbox"/> |
| School Nurse                           | <input type="checkbox"/> |
| Doctor                                 | <input type="checkbox"/> |

On paper, we usually adopt the following format, which typically leads to higher numbers responding to each option.

### 2: Who would you like to talk to you about drugs?

*Please circle ONE answer on each line*

- |  |            |           |
|--|------------|-----------|
| Parents/carers                         | <b>Yes</b> | <b>No</b> |
| Teachers, in school lessons            | <b>Yes</b> | <b>No</b> |
| Visitors or speakers in school lessons | <b>Yes</b> | <b>No</b> |
| School Nurse                           | <b>Yes</b> | <b>No</b> |
| Doctor                                 | <b>Yes</b> | <b>No</b> |

A design for a web-based form that is more parallel, and which we find yields more similar results, is:

### 3: Who would you like to talk to you about drugs?

*Please choose one answer for each item*

- |  | <b>Yes</b>            | <b>No</b>             |
|--|-----------------------|-----------------------|
| Parents/carers                         | <input type="radio"/> | <input type="radio"/> |
| Teachers, in school lessons            | <input type="radio"/> | <input type="radio"/> |
| Visitors or speakers in school lessons | <input type="radio"/> | <input type="radio"/> |
| School Nurse                           | <input type="radio"/> | <input type="radio"/> |
| Doctor                                 | <input type="radio"/> | <input type="radio"/> |

Other differences that we have found over the years have included the influence of graphics; a picture of a cute mother elephant and calf seemed to have a marked influence on how pupils replied to a question about their own mother.

There is one other class of question that is influenced by the medium: questions concerning surveys! Items like the following often show marked differences, depending on whether the question was answered on

paper or online:

**Do you think students will be more honest if a survey is done on paper or online?**

Paper    Online

**How would you like to be consulted about your views and opinions?**

- |                                      |            |           |
|--------------------------------------|------------|-----------|
| a Paper questionnaire                | <b>Yes</b> | <b>No</b> |
| b Questionnaire on the Internet      | <b>Yes</b> | <b>No</b> |
| c A special event, e.g. a conference | <b>Yes</b> | <b>No</b> |
| d Discussion group in school         | <b>Yes</b> | <b>No</b> |

In each case, answering online produced responses favouring online completion, and answering paper yielded more pro-paper responses. However, for the overwhelming majority of questions, where questions are asked in the same way on paper and online, pupils seems to respond equally honestly and figures from each medium seem very similar.

One last source of difference is in pupil's propensity to use open-ended text boxes: on paper, a question might look like this:

### 4: What did you eat or drink before lessons this morning?

*Please circle an answer on each line*

- |                                  |            |           |
|----------------------------------|------------|-----------|
| Nothing to eat or drink          | <b>Yes</b> | <b>No</b> |
| A drink                          | <b>Yes</b> | <b>No</b> |
| Cereal e.g. Ready Brek, Weetabix | <b>Yes</b> | <b>No</b> |
| Toast or bread                   | <b>Yes</b> | <b>No</b> |
| Cooked breakfast                 | <b>Yes</b> | <b>No</b> |
| Other (please write below)       | <b>Yes</b> | <b>No</b> |

Online, it seems some pupils enjoy the experience of typing into text boxes so much that they may rush past the options given and start answering the question by typing. So, we might find "Ready Brek" neatly entered in full, when they might more easily have used the 'yes' button for 'Cereal'. If our staff do not review pupils' open-ended responses and 'correct' such answers, the tables of figures may be more complicated to use.



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## Hilary Dixon

# Sexual Health Skills: A Learning Process

It is often said that everyone should identify ten things to do before they die. One of mine was to write down and publish what I have been teaching for most of my adult life.

### Sex education lessons

In 1972, three years into a teaching career, I found myself head of social studies in a girls' comprehensive school in Hackney. The headteacher was very concerned about the number of pupils who were getting pregnant, and she suggested that I should include sex education lessons in the social studies curriculum.

Apart from being married (and, remember, in those days that was the context in which many of us learnt about sex) and the product of fairly enlightened parents who were willing to talk about sexual matters, I had no training in how to undertake such a task, no support or guidance and very few resources.

So it was that I began my career as a sex educator. I remember the day a biology inspector sat in on my lesson about contraception - he lasted about five minutes, then made his excuses and left.

I also remember the lesson where a fairly mature young woman pulled a scrappy piece of paper out of her bag and said 'Miss, I've been reading this book with lots of long words that I don't understand. Will you tell me what they mean? Cunnilingus, fellatio.....' Instantly, I realised how much I didn't know, and instinctively said 'Come and see me at the end of the lesson and I will see what I can do.' I went home that night to the dictionary and some sex education of my own, and the next lesson told the girl what the words meant.

Gradually resources were produced and one in particular was a highly successful serialised 'soap' about a teenage girl who got pregnant. After the first episode girls would be queuing at the door to get into the classroom for the next episode and the discussion which followed.

### Family Planning Association

A few years later, as a result of a chance contact with the Family Planning Association (fpa), I was offered a job as Training and Development Officer. I had always assumed that once a teacher, always a teacher and almost turned the job down because I couldn't imagine myself working 48 weeks a year in an office in central London

whilst being the single parent of a five-year-old.

The move to the fpa was a significant one. Not only did I receive high-quality training which enabled me to move on from a failed marriage, I joined an exciting and supportive team, discovered that I loved working with adults and was learning fast. During my first course as an assistant trainer to an experienced colleague, I sided with participants in a difficult discussion. Afterwards my mentor left me in no doubt that my loyalty should always be to my co-trainer. This was the first of a series of lessons well learnt.

I remember too a very challenging training-for-trainers course where, again, I was an assistant. The participants rebelled - or, in the jargon of training, 'stormed'. I was scared witless, having no idea how to deal with such anger and distress. Then, over the next couple of hours I observed how the course leaders analysed what was going on, listened calmly and respectfully to participants' views and challenged constructively. Slowly the group rebuilt itself, stronger and more confident. I learnt to train teachers to deliver sex education; I learnt to work with staff in the learning disability field, helping them to acknowledge and support their clients' sexual and relationship needs; and I learnt to run my own training-for-trainers courses.

### AIDS Education

When HIV and AIDS became a major issue in the late 1980s, I moved on to manage the AIDS Education Unit in Cambridge. The challenges of management fascinated me and I quickly recognised the links between sexual health and relationships training and people-management training. And so I found myself not only managing a broad spectrum of sexual health and relationships courses, but also running management courses focusing on processes such as team-building, managing change and handling difficult situations. Many of my training 'highs' include the intensive summer schools and certificated courses I ran for the Faculty of Education in Cambridge.

### Freelance

By the early 1990s the NHS was starting the now familiar cycle of review, reorganise, bureaucratised and make cuts, and I was finding less and less joy in the job. This was

the opportunity to launch a freelance career. I gradually built up an extensive toolkit of activities, theories and models that worked for me and my participants over the years. Many activities were my own; some of the models were other people's used in their original form; and others were modified to suit my needs.

There is one very well-known groupwork model developed over time by Jones (1973)<sup>1</sup>, Tuckman (1965)<sup>2</sup>, and Tuckman and Jensen (1977)<sup>3</sup>. It describes the stages of group life in terms of forming, storming, norming, performing and mourning, but I have reinvented it in a new form because it does not match my experience of groups.

### Training Manual

I have selected from my toolkit and produced a training manual for a new generation of sexual health and relationships trainers. The manual includes guidance for trainers on negotiating and planning training, creating a safe environment, managing groups effectively and how to end a course. There are also forty practical activities on getting started, sexual health information, exploring values and attitudes, skills for sexual health, groupwork, sex and relationships education and endings. The manual is on CD so that activities can be printed as needed and the material shared easily within an organisation.

### Workshops

I will also be leading a series of practical two-day workshops to launch the manual. These will provide an opportunity for participants (from health, education, social services, youth services and the voluntary sector) to familiarise themselves with the content and processes of quality training in sexual health and sex and relationships education. A copy of the manual will be provided free of charge to all participants.

### References

- 1 Jones, J.E. (1973). *Model of Group Development. The 1973 Annual Handbook for Group Facilitators*. University Associates, La Jolla, California, pp 127-129.
- 2 Tuckman, B. (1965). Development Sequences in Small Groups. *Psychological Bulletin*, Vol 63, pp384-399.
- 3 Tuckman, B. and Jensen, N. (1977). Stages of Small Group Development Re-Visited. *Group and Organizational Studies*, Vol 2, pp 419-427.

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## Annette Ferri

# Food education: Bridging the gap between theory and practice

The quality of food provision in Scottish schools has improved but obesity and other diet-related illnesses are still on the increase. This paper describes some of the existing barriers that prevent food education becoming part of the core curriculum and looks at possible solutions.

It has been assumed that youth is the healthiest period in the life-course (HEBS, 2003). However, statistics show that young people in Britain are anything but healthy. Studies consistently show that health factors such as overweight and obesity in children can have long-term personal and societal consequences (Bullen, 2004) resulting in low self-esteem, which in turn can have a negative effect on learning (Taitz, 1983), (Korsch, 1986).

Good eating habits affect not only how pupils feel, but also how they learn and achieve ('Hungry for Success', Scottish Executive, 2002). Poor eating habits in Scotland are conducive to poor health records which can lead to coronary heart disease, obesity and premature death.

An over-reliance on expensive, precooked convenience food has taken the place of home-cooked food using fresh ingredients. These convenience foods are often high in fat, sugar and salt and can include additives and preservatives, which could affect immediate and long-term health.

### Scottish diet

An examination of data on the Scottish diet (Blades, 2004) highlighted actions to improve information about diet and availability of "healthy choices" in over 300 initiatives across Scotland. These have failed to drastically improve this important area of concern regarding the eating habits of young people. Considerable differences were noted in the study concerning the diet of Scots compared to the rest of Britain: namely the percentage of meals eaten outside the home in fast food outlets and the tendency to use frying as a method of cooking (Blades, 2004).

Obesity is now considered to be a global epidemic. International data suggests that obesity already manifested in early life (BNF, 2004) is likely to track into adulthood. Many

studies argue that diet and physical activity patterns are two modifiable lifestyles that need to be influenced as soon as possible, targeting all and not just those who are already overweight.

### Confusion

It has also been stated that confusion exists among local professionals over the best way to tackle child obesity (Cole, 2006) while the government's plan to tackle the problem was "very complex and ambitious".

According to James (1998) the medical establishment finds it hard to believe that food and nutrition have much to do with public health. He states that one cannot generate a coherent strategy on health without including nutrition.

Food education in UK schools from an early age could be the key to tackling these increasing problems thus playing a more proactive role than they do at present (James, 1998).

The World Health Organisation recognises the introduction of Health Promoting Schools by 2007 will have a positive impact on the population as a whole.

### Complex and challenging

All of this appears to be very favourable with regard to the acknowledgement of the importance of these initiatives. However, the way in which this actually happens is a complex and challenging process (Backett-Milburn, Platt and Watson, 1998).

If the many initiatives, already in place, to improve the health of young people are to be truly successful, the gap between theory and practice must be bridged.

### Nutrition attainment and health

There has been increasing awareness of the important link between what children eat and how they learn.

Pre-natally a mother's diet and nutritional balance during pregnancy can have long-term effects on her child. Rizzio et al., (1997), found strong evidence that neuropsychological development is extremely sensitive to nutrition during early pregnancy. In particular, they found correlations between levels of fatty acids and glucose in the mother during pregnancy and their children's intellectual performance at seven and eleven years of age.

Many studies have looked at the effect of diet and nutrition on cognitive development. Dani, Burrill and Demming-Adams (2005), argue that nutrition has potent effects on brain function. This study concluded that nutrients such as protein, iron, iodine and breakfast consumption, all had an impact on a child's learning capability and behaviour. It appears that to develop optimal potential, it is vital that children are provided with nutritionally sound diets.

### Food education

There is therefore a need for food education at every stage in the curriculum to help raise an awareness of the type of food, which should be eaten pre-natally, and beyond.

Schools are witnessing a steep rise in the numbers of pupils diagnosed with dyslexia, dyspraxia and attention deficit hyperactivity disorder. Researchers now believe that this could be attributed to poor nutrition from conception onwards. Richardson (2006) claims that up to a quarter of the school age population had some sort of learning impairment that is probably caused by the lack of 'Omega 3' fatty acids in the diets of their parents and grandparents.

Many would argue that meeting dietary and nutritional requirements throughout childhood is essential for health, behaviour and full intellectual development. An inadequate diet may compromise learning

ability and affect behaviour (Dani, Burrill and Demming-Adams, 2005).

What is clear is the importance of food education at every stage of development to ensure good mental and physical health.

### Current position

The current position of initiatives designed to improve eating habits shows the Scottish Executive introducing a range of measures to improve children's health. Some mirror developments in the UK, others are unique to Scotland.

In an attempt to combat the rising rates of coronary heart disease and other diet related illnesses in Scotland, yet another major healthy eating campaign was launched in 2003 challenging Scots to change their diet, change their lives and help change Scotland.

The main aim of this particular initiative was to provide funding to inform, educate and inspire people by giving them the necessary information to make changes.

In a previous health initiative, 'Hungry for Success' (Scottish Executive, 2002), significant progress has been made to improve the health of schoolchildren across Scotland.

Some recent studies show that, although knowledge of nutrition among schoolchildren appears to be generally sound, there is little evidence that the principles of healthy eating are being applied in practice (Seaman, Woods, and Gosset 1997).

### Making the connection

To ensure that food education is truly effective, the Executive must acknowledge that children need to make the connection between having a healthy diet and knowledge of food - where it comes from and how to prepare it.

Education Minister, Alan Johnston, (DfES, 2006) recently announced a new multi-million pound package to improve school food in England. These measures are designed to improve the nutritional standard of school food, and the cooking skills of the catering staff. The package also includes an entitlement to learn to cook, where every young person who wants to can learn basic cooking skills.

This measure is not far reaching enough, as it would provide food preparation skills to a limited number of pupils.

### Food education on the curriculum

In the UK, the House of Commons Health Select Committee (2004), identified education as a key factor in the development of good eating habits in children. It was seen as a way forward in the drive to tackle obesity and improve long term health (Bullen, 2004).

At present most schools in Scotland include Home Economics on the curriculum in the first two years of secondary schooling.

Pupils are taught Food and Nutrition as part of a wide reaching Technological mode. After second year the majority of schools offer this as an option at Standard Grade only.

In secondary schools in England and Wales food education is taught within Design and Technology. Food also forms part of the science and personal and social health curriculum. In food technology students study wider contexts, which includes industrial and commercial themes, related to food preparation.

As a result of these measures to improve school food the Government has asked the Qualifications and Curriculum Authority in England and Wales to consider how to put a greater emphasis on teaching pupils practical cooking skills in secondary schools for 11-14 year olds.

A new initiative about to be introduced into the Scottish Education System, "A Curriculum for Excellence" (Scottish Executive, 2006) is designed to streamline the curriculum and offer a structure for development and learning from 3-18 years. The focus is on enriching the learning experience for all pupils and incorporates a variety of purposes, values and principals. At the core of this initiative is the statement,

"Our aspiration for all children and for every young person is that they should be successful learners, confident individuals, responsible citizens and effective contributors to society and work"

("Curriculum for Excellence", Scottish Executive, 2006).

With this aim in mind, opportunities exist within this educational policy to change attitudes to health by offering essential food education within the core curriculum.

### "Fat time bomb"

The First Minister for Scotland, in an audience with young people in Edinburgh, commented on the growing rise in obesity figures. The Minister said that the "fat time bomb" could be defused by older people passing on home cooking skills to young people instead of relying on fast food (Gill, 2005). In the same newspaper article, Professor Hastings was of the opinion that obesity was caused by a variety of factors including a marked fall in cooking skills, the increase in parents working hours and the vast growth in the availability of cheap convenience foods (Gill, 2005).

However, the use of untrained personnel to teach food education would not address this important issue. Critics have argued that this approach could generate an ambiguity over where the responsibility lies for teaching food skills (Stitt, 1996). The use of untrained personnel could encourage pupils to perceive that food knowledge is to be found outside school instead of being part of the curriculum. Where do children get the opportunity to practice food preparation

skills within an educational background? If not in the home and not in school - then where?

### A global perspective

Information from many countries, (WHO - Health behaviour in school-aged children, 2004), shows how young people's behaviour and life circumstances influence their health.

Local Authorities run most schools in Sweden and Finland and today most school lunches are supplied free of charge at all levels in the school system. In an international perspective, Sweden, together with Finland, are unique in providing free school meals to all pupils. This has been the case since 1973.

Food education forms part of the core curriculum in most Swedish and Finnish schools. The role of Home Economics in schools in Sweden is clearly identified as having a significant part to play in improving health and food education within the school curriculum.

The aim of Home Economics curriculum in schools in Scotland is to teach pupils to apply the knowledge and understanding they gain about diet and healthy eating to practical food-preparation (Robertson, 1995). Since this statement was made Home Economics has become a technological subject with more emphasis being placed on commercial food production rather than basic food preparation skills (Stitt, 1996).

The proposed introduction of a "Curriculum for Excellence" (Scottish Executive, 2006), in schools in Scotland and a recent analysis of the school curriculum in Scotland showed that there will be a gap in food knowledge at secondary level.

### Potential barriers to including food education on the curriculum

School meal provision has improved to include healthy food and healthy eating messages ('Hungry for Success', Scottish Executive, 2003). This needs to be taken a step further by teaching children how to cook and prepare nutritious meals at home. The lack of these skills has resulted in a generation who lack the most basic of cooking skills (Winterman, 2006).

The inclusion of food education, which incorporates practical food preparation skills on the curriculum at every stage of a young person's education, has a political dimension. Politicians, not academics, decide priorities for education and the former may also be less receptive to including another subject on the curriculum if a great deal of funding is required to make the initiative work.

Another barrier could be failure on the part of experts to recognise that attitudes and behavioural changes must start with education. However, such forward planning, given the potential NHS savings

resulting from it, would be a cost effective means of preventing diet related illness. Education is the key to changing attitudes and behaviour in children.

Politicians will be less receptive to these changes since funding will have to be diverted from other initiatives.

### How do Scandinavian counties bridge the food education gap?

A comparative study into the eating habits of pupils in a school in Sweden and one in Scotland gives an insight into what children eat on a daily basis in both countries (Ferri, 2004). It was clear from the results that young people in the school in Scotland had a tendency to snack throughout the day on crisps, sweets and fizzy drinks high in fat, sugar and salt.

The secondary curriculum in both schools in Sweden and Scotland was also evaluated to establish whether or not it provided the knowledge and practical experience to enable pupils to make healthy food choices. The Swedish school included food education as part of the core curriculum for all year groups. Practical food preparation was seen as a life skill and therefore an essential part of a pupil's education.

In contrast, the school in Scotland included food preparation skills as a small part of Home Economics in the first two years of secondary education.

### Nordic lessons for Scotland to follow

#### Sweden

In most schools in Sweden, pupils are taught a curriculum, which includes lessons in core, subjects e.g. English, Maths and Science. Commendably another compulsory subject taught to all year groups are Domestic Subjects (Home Economics).

It was evident that a high level of commitment exists at all levels in the pursuit of good health (Ferri, 2004). This commitment is reflected in the welfare of the nation where health and well being are a top priority. This commitment to health has now become part of the culture of the country. Swedes expect good health care and good quality food.

In contrast, Scotland's poor health record has not improved significantly over the years in spite of the costly and varied initiatives introduced to improve health targets.

#### Iceland/Finland

In Iceland and Finland, as in Sweden, food skills and home economics are high-status subjects in the National Curriculum and in most schools are taught from the age of six onwards (Stitt, 1996).

Studies into eating habits of Finnish adolescents stated that the community, personal nutrition health attitudes,

knowledge and skills also shaped eating habits (Raiha, Tossavainen, and Turunen, 2005).

The Finnish/Swedish system of free school lunches and the integration of nutrition, health and education policies are a unique example of promoting healthy eating messages as part of the school experience (Dixey et al., 1999).

In contrast although the quality of food provision in Scottish schools appears to have improved, the take-up varies greatly within Scotland. Research (Garvie, 2002) highlighted the length of queues in school cafeterias, and the availability of local take away food as being a contributory factor. Thus many young people are eating food, which is often of poor nutritional value, and are high in fat, sugar and salt.

There are many reasons why the national diet is better in Nordic countries. One outstanding difference noted is that pupils throughout secondary education, are taught how to plan, cook and appreciation the aesthetic value of food as well as acquiring the necessary skills to be able prepare it (Ferri, 2004).

### Can these barriers be overcome in Scotland?

Making life changes necessary to improve the health of young people in Scotland is a challenge. Time is the biggest challenge of all in translating policy into practice in our schools.

The research has been done.

It is now time to link policy and practice by ensuring consistency in the approach to food and nutrition messages. It is not enough to provide good nutritious food in schools if pupils do not know how to cook and prepare it at home. A holistic approach to health, which incorporates these basic food preparation skills, must be part of the core curriculum in every school in Scotland. These practices must be embedded into an educational setting so that it becomes a natural part of life training for young people.

Food education, in its widest sense, must transcend healthy eating messages, provision of healthy food in schools and teaching theoretical nutrition. It must link these important messages to practical food preparation skills as part of the curriculum for every young person at every stage of their secondary school experience. Only by embedding these life-skills in an educational setting can politicians ensure that they become a natural part of the life of every young person irrespective of socio-economic status.

If the initiatives designed to improve the health of young people, which are already in place, are to be truly successful, the gap between theory and practice must be bridged. This is the sine qua non.

### Conclusions

The key objective of this paper is the

inclusion of food education nutrition and food preparation skills on the core-curriculum at every stage of secondary school education.

Highlighting how Nordic countries with good health records deliver food education in schools can only strengthen the case for a more realistic approach to developing these important life skills within an educational setting.

The evidence presented and the provision of a workable solution to the rise in diet-related illness in young people in Scotland must encourage the Scottish Executive to provide more funding to put these measures into practice in schools.

The way forward is to adopt a holistic or comprehensive approach to health, similar to Swedish schools, which incorporates basic food preparation skills, as part of the core curriculum in every school in Scotland (Ferri, 2004). These practices should be embedded into an educational setting so that it becomes a natural part of life training for young people.

The key to changing the attitudes and behaviour of children so that they can make informed decisions about the foods they eat is to expand Home Economics so that it becomes part of the core curriculum wherein extra time is devoted to food preparation skills for every year group in the secondary sector.

The prevention of diet-related illnesses allied to long-term economic benefits accruing from savings on the National Health Service are surely a convincing arguments for all would be politicians.

#### References

- Backett-Milburn, K., Platt, S. and Watson, J. (1998). Understanding the commissioning process: The background to effective health promotion research and practice. *Health Education Journal*, 57: 174-183.
- Blades. (2004). An examination of data on the Scottish diet. *Nutrition and Food Science*, 34 (6): 246-252.
- British Nutrition Foundation (2004). *Diet Through Life: Healthy Eating Guidelines for Schoolchildren*. Available from: <http://www.nutrition.org.uk>. (accessed 2/11/2006).
- Bullen, K. (2004). Changing Children's Food and Health Concepts: A Challenge for Nutrition Education. *Education and Health*, 22 (4): 51-55.
- Cole, A. (2006). UK Government likely to miss its target to reduce childhood obesity. *British Medical Journal*, 332: 505.
- Dani, J., Burrill, C. and Demming-Adams, B. (2005). The Remarkable role of nutrition in learning and behaviour. *Nutrition and Food Science*, 35 (4): 258-263.
- DfES (2006). *Setting the standard for school food*. Education Secretary Alan Johnson Press statement. May 19th. [www.dfes.gov.uk/pns](http://www.dfes.gov.uk/pns) (accessed 02.11.06).
- Dixey, R., Heindl, I., Perez-Rodrigo, C., Snel, J. and Warnking, P. (1999). *Healthy eating for young people in Europe. A school-based nutrition guide*. The International Planning Committee of European Network of Health Promoting Schools. <http://www.euro.who.int/document/e69846.pdf> (accessed February 2005)
- Ferri, A. (2004). *An Investigation into the Eating Habits of Groups of Schoolchildren in Scotland and Sweden: A*

*Comparative Study*. University of Strathclyde.

Garvie, F. (2002). *Even the tatties have batter*. Publication: Free nutritious meals for all children in Scotland. Child Poverty Action Group, Glasgow.

Gill, K. (2005). Use gran's home cooking to cut teenage obesity. *Daily Express Newspaper interview*. Thursday 22nd September 2005.

Health Education Board for Scotland (HEBS). *The Health of Young People in Scotland: Quantitative dimensions*. Available from: [www.hebs.scot.nhs.uk/services/pubs/pubfulltext](http://www.hebs.scot.nhs.uk/services/pubs/pubfulltext) (Last accessed 5/12/2003).

James, P. (1998). Food is a public health issue. *British Medical Journal*. 332: 505.

Korsch, B. (1986). Childhood Obesity. *Jnl. Pediatrics*. 109: 299-300.

NHS Health Scotland (1996-2005). *Scottish Diet Action Plan Review*. Points 25, 26, 27.

O'Neil, M. (2006). *Making a meal of health*. Teaching Scotland pp.17. G.T.C. Scotland Edinburgh.

Raiha, T., Tossavainen, K. and Turunen, H. (2006). Adolescents' nutrition health issues: opinions of Finnish seventh-graders. *Health Education*. 106(2): 114-132.

Richardson, A., Puri, B. (2006). *Diet Behaviour and the Junk Food Generation: Lessons for Education*. Course notes. Edinburgh.

Rizzio, T., Metzger, B., Dooley, S. and Cho, N. (1997). Early Malnutrition and Child Neurobehavioral Development: insights from the study of children of diabetic mothers. *Child Development*. 68 (1): 26-38.

Robertson, M. (1995). *Home Economics News*. H.M.I Scottish Office, Edinburgh.

Seaman, C., Woods, M. and Grosset, E. (1997). Attitudes to healthy eating among Scottish school children. *Health Education* 97 (1): 9-15.

Scottish Executive (2002). *Hungry for Success*, Edinburgh, HMSO.

Scottish Executive (2006). *Curriculum for Excellence*, Edinburgh, HMSO.

Stitt, S. (1996). An International perspective on food and cooking skills in education. *British Food Journal* 98 (10): 27-34.

Taitz, L. (1983). *The Obese Child*. Blackwell Scientific Publications, Oxford, Mass., pp 21-232, 121-126, 243-244.

The House of Commons Health Select Committee (2004). *Obesity*. Third Report of Session 2003-2004. London: The Stationary Office.

Winterman, D. (2006). *Please sir, we want more*. BBC News Magazine. <http://news.bbc.co.uk/1/hi/magazine/4812968.stm> (accessed 02.11.06).

World Health Organisation (2004). Health behaviour in school-aged children (HBSC) study. <http://www.hbsc.org> (accessed 02.11.06).

## Recent Research: Young Children and... physical activity, obesity, the BMI, central fat mass, the Activitystat Hypothesis, diet and gym membership.

Research by Professor Reilly and colleagues<sup>1</sup> was published in October 2006. The study tested the hypothesis that a physical activity intervention would reduce body mass index. Over 500 children, with a mean age of 4.2 years, in 36 nursery schools in Glasgow took part over a 12 month period. The research design included an intervention and control group.

### The intervention group

The intervention group were involved in an enhanced physical activity programme in nursery school. This consisted of three 30 minute sessions a week over 24 weeks. The group also received home based health education aimed at increasing physical activity through play and reducing sedentary behaviours. Earlier research showed that pre-school children in Glasgow typically spend around 80% of their waking time sedentary, ie with no trunk movement, and less than 30 minutes per day in moderate-vigorous physical activity.<sup>2</sup>

### Conclusion

In relation to the October research, Professor Reilly and colleagues concluded that "physical activity can significantly improve motor skills but did not reduce body mass index in young children in this trial."

### Responses to the research

The study has generated a great deal of interest and concern about the body mass index (BMI) measurements used at six and twelve month intervals. The BMI is a simple measure using height and weight which is often used to assess a person's physique

based on that height and weight. However, while appearing simple, it can be misleading and, following publication, many words have been written.

Professors Green and Cable state,

"Exercise studies in groups such as children, in whom somatic growth patterns are dynamic and variable in any case, require careful attention to changes in body composition, rather than simplistic measures of body weight or BMI. The point was illustrated to us in our own studies of supervised exercise training in obese children and adolescents. Like Reilly et al., we observed no differences in body weight or BMI between the exercise training and inactive control conditions. However, dual energy x-ray absorptiometry (DEXA) scans revealed significant decreases in central fat mass, which were not apparent in terms of change in body mass or BMI because of increases in lean body mass in the lower limbs across the training period."<sup>3</sup>

Professor Reilly then responded and supported his reasons for using the BMI, as an outcome measure, referring to the need to use BMI with children relative to reference data<sup>3</sup>

Professor Parker joined the debate and stated that, "... BMI does not measure fatness. BMI is a composite measure of weight for height which includes muscle as well as fat mass. It is entirely possible that the exercising children gained muscle mass and lost fat - ie became leaner and less obese, without any change in BMI...To determine whether an intervention is effective against obesity it is important to measure body fat. Using BMI as a surrogate measure of fat mass

can easily lead to the wrong conclusions."<sup>3</sup>

Professor Wilkin and colleagues suggested that it was important to consider the 'Activitystat Hypothesis' (activity of children follows a set-point that is individual to the child), "Reilly and colleagues hypothesised that an intervention of three thirty-minute sessions per week of enhanced physical activity would raise total activity. It did not, and the authors conclude that their intervention may not have been sufficiently intense. However, there is an alternative, possibly more compelling, explanation - that the physical activity of children is regulated internally by an 'activitystat', and not externally by opportunity."<sup>3</sup>

Dr Bossano stated that he was, "...grappling with the activitystat concept. It seems to me that children's activity levels must be distributed (normally) around a population mean (by definition)."<sup>3</sup>

Among other responses was one from Consultant Ian Rodd, "I commend the authors of this paper on their strategy - namely to try and look at an individual piece of the jigsaw that is obesity in a well constructed and conducted trial. Sadly, as everyone who has bought gym membership as a single intervention to lose weight would have told them, they were always on a losing wicket."

### References

1. Reilly JJ, Kelly LA, Montgomery C et al. Physical activity to prevent obesity in young children: cluster randomised controlled trial. *Br Med J* (online 6th Oct. 2006) <http://www.bmj.com/cgi/rapidpdf/bmj.38979.623773.55v1.pdf>
2. Reilly JJ, Jackson DM, Montgomery C et al. Total energy expenditure and physical activity in young Scottish children. *Lancet* 2004; 363: 211- 212.
3. <http://www.bmj.com/cgi/eletters/bmj.38979.623773.55v1?ehom>

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## Gabrielle White

# Evaluation of the School Fruit and Vegetable pilot scheme

The research found that the pilot scheme increased children's awareness of fruit, by enabling them to try previously unfamiliar items, and also significantly improved children's consumption of fruit but appeared not to have any wider impact on diet.

A key component of the Department of Health's plan to 'improve health and reduce inequality' in the UK population is to improve diet and nutrition. The Parliamentary Select Committee report on Obesity (HoC. Health Committee, 2004)<sup>1</sup> and Ofsted's report 'Starting Early' (Ofsted 2004)<sup>2</sup> have both highlighted issues relating to children's diet and ways in which these might be addressed.

The Government's '5 A DAY' programme forms part of the strategy to raise awareness of the health benefits of fruit and vegetable consumption, and to improve access to fruit and vegetables.

### School Fruit and Vegetable Scheme

The School Fruit and Vegetable Scheme (SFVS) is one aspect of the programme and provides a free piece of fruit or a vegetable to children aged four to six years, each school day. The scheme was originally piloted in more than 500 schools throughout England in 2000 and 2001, to examine the practicalities of the scheme before rolling it out nationally. It was expanded region by region with funding from the Big Lottery Fund, and since April 2004 the Department of Health has been funding the SFVS, which is now operating throughout England.

The National Foundation for Educational Research (NFER), in partnership with nutritionists from the University of Leeds, was commissioned by the Big Lottery Fund to carry out an evaluation of the impact of the SFVS (Schagen et al., 2005)<sup>3</sup>.

### About the study

The central aim of the research was to investigate the impact of the SFVS on children and the impact on schools. The research aimed to identify changes over time, resulting from the introduction of the

scheme, relating to:

- children's consumption of fruit and vegetables
- children's overall dietary patterns
- children's nutrient intake
- children's knowledge, awareness and attitudes relating to the benefits of increased fruit and vegetable consumption

### The impact of the scheme

With reference to all of these objectives the research aimed to investigate the impact of the SFVS on different subgroups of children, to see whether the impact differed according to age or gender, or school-level factors such as Key Stage 1 attainment, percentage of children with special educational needs (SEN), or percentage of pupils known to be eligible for free school meals (FSM).

The impact of the scheme on schools was explored in terms of:

- any changes in school practice introduced in connection with the SFVS
- whether the introduction of the SFVS inspired more classroom teaching on healthy eating
- any difficulties encountered in implementing the SFVS

### The number of schools

The number of schools to be included in the evaluation needed to be determined so as to provide a large enough sample to measure any SFVS effect, taking into account background variables (such as the percentage of pupils known to be eligible for FSM) and to provide findings that were generalisable to the regions in which the evaluation has been conducted. In order to address this the research team selected a stratified random sample of 55 schools in the North East (where the scheme was introduced soon after the evaluation had begun and a baseline assessment had been completed), and a comparison group of 45

schools in Yorkshire and the Humber (where the scheme was not introduced until after the last data collection had taken place).

### CADET

Measuring the food intake of a population of children is a challenging task. Young children have a limited ability to record information about the type and quantity of food consumed due to their limited literacy and food recognition skills. To overcome this issue the evaluation employed the Child and Diet Evaluation Tool (CADET), a food diary developed and validated by nutritionists at the University of Leeds.

The CADET is a tick box food diary that was intended to be used by non-specialists, to evaluate the diets of young children in the UK. CADET was designed to capture the food intake of young children over a 24-hour period and has been used successfully for rapid collection of food and nutrient information from children aged 3-7 years from diverse social and ethnic backgrounds. The CADET food diary was used to record the total dietary intake of a sample of pupils in Reception, Year 1 and Year 2 in all of the schools in the sample over 24 hours.

### Pictorial questionnaire

A simple pictorial pupil questionnaire was also used with the pupils in Year 2 to explore children's attitudes, knowledge and awareness of the benefits of eating fruit and vegetables. Year 2 pupils were chosen because they were the oldest children involved in the SFVS, and therefore the most able to cope with the task. Administering a questionnaire enabled the research team to gather data from a large sample of pupils from schools in the North East and those in the comparison area on more than one occasion, and if changes were identified, to distinguish the impact of the SFVS. The

questionnaire contained questions designed to assess pupils' attitudes and further 'test' questions which were designed to assess pupils' knowledge and awareness of healthy eating and the 5 A DAY message.

The data was collected using the CADET food diary and the questionnaire on three separate occasions to allow for the research team to detect any change over time, within and between the schools in each area, and thereby assess possible SFVS-related impacts. Analysis was undertaken using sophisticated statistical techniques, based on about 3,000 completed CADET diaries and about 2,000 completed pupil questionnaires.

In addition to the quantitative data collection, visits were made to ten of the schools in the North East which were involved in the SFVS, where interviews with staff and pupils were conducted. The findings from these interviews were used to explore and interpret the survey findings and to further assess the impact of the SFVS on schools. The visits included 29 group interviews involving 98 pupils (usually in groups of three), and interviews with 42 members of staff.

### Children's fruit and vegetable intake

At baseline the findings from the CADET food diary showed that:

- ♦ overall, pupils consumed an average of 3.36 portions of fruit and vegetables a day, with only 27 per cent achieving the recommended intake of 5 A DAY
- ♦ girls ate more fruit than boys, and were more likely to achieve the 5 A DAY target
- ♦ girls also ate fewer snacks and desserts (a classification referring to food items such as cakes, crisps, sweets and puddings, not to the time of day at which they were consumed)
- ♦ pupils in schools with high proportions of pupils eligible for FSM ate less fruit and vegetables, more snacks and desserts; they were less likely to achieve the 5 A DAY target
- ♦ pupils in schools with high proportions of pupils with English as an additional language (EAL) ate more fruit and fewer snacks and desserts
- ♦ generally, fruit consumption decreased between Reception and Year 2, and older pupils were less likely to achieve the 5 A DAY target.

Three months after the SFVS had been introduced, pupils in the North East schools were eating significantly more fruit (0.37 portions) than at baseline, in the context of a general decline in fruit-eating, probably linked with age (pupils from the comparison group were eating 0.11 portions less than at baseline). The final survey (seven months after introduction of the scheme) indicated a further general decrease in consumption of fruit, and a decline in the consumption of snacks and desserts.

In order to assess the impact of the SFVS,

it was necessary at that stage to distinguish between the oldest children (who were now in Year 3 and no longer receiving free fruit) and the two younger cohorts who were still involved in the scheme. Among the oldest children, consumption of fruit and vegetables had dropped to below baseline levels, i.e. they were eating less fruit and vegetables than before the SFVS was introduced in their schools. For the younger children in the North East schools, there was a reduction in fruit consumption between the second and third data collection points, but it remained significantly higher than at baseline and significantly higher than in the comparison group; they were now one and a third times as likely to achieve the 5 A DAY target.

### Analysis of the complete data

Analysis of the complete survey data also indicated that:

- ♦ the combined fruit and vegetable consumption of children eating school dinners was greater than those who had packed lunches
- ♦ consumption of snacks and desserts amongst pupils who had packed lunches was much higher than those who had school dinners
- ♦ living in areas of high deprivation was associated with lower fruit and vegetable intake and higher consumption of snacks and desserts
- ♦ girls (but not boys) in the North East schools ate slightly more vegetables after the introduction of the SFVS
- ♦ over the lifespan of the evaluation, fruit and vegetable consumption of children in the North East schools declined at home and increased in school

There was some evidence to suggest that children from minority ethnic groups ate more fruit than white UK pupils, but this was not confirmed by further analysis, possibly due to the small number of minority ethnic children included in the survey.

### Children's nutrient intake

The findings from the CADET food diary were analysed in order to obtain nutritional information. At baseline, pupils were eating a nutritionally adequate diet which met their requirements for growth and health, but with high levels of salt. Seven months after the introduction of the SFVS, the findings showed that:

- ♦ for the oldest cohort only, the intervention was associated with a significant decrease in energy intake, probably related to a reduction in sugar intake; this decrease coupled with a slight increase in fat intake increased the percentage of energy derived from fat in their diet
- ♦ while younger pupils in the North East schools were eating more fruit and vegetables, their intake of dietary fibre appeared to have been unaffected
- ♦ a small increase in carotene intake was recorded for the two younger cohorts, and a

decrease was observed in those now in Year 3

- ♦ salt intakes remained universally high following the intervention

The nutritional intake of children still participating in the SFVS showed some changes that might be associated with increased intake of fruit and vegetables, for example, small changes in carotene, folates and Vitamin C.

### Children's attitude and the '5 A DAY' message

Children's attitude, awareness and knowledge of healthy eating and the '5 A Day' message were explored and tested by the pupil questionnaire. These findings were supplemented by interviews with pupils and school staff.

Baseline results from the pupil questionnaire showed that:

- ♦ girls reported trying more fruits and vegetables and liking more fruits than boys; they achieved higher scores on three of the six questions designed to test knowledge of healthy eating
- ♦ children in the comparison schools reported liking more vegetables than children in the North East schools
- ♦ pupils from schools with high proportions of children with special educational needs (SEN) or eligible for FSM achieved lower test scores, while pupils from high-achieving schools obtained higher scores
- ♦ pupils from schools with high proportions of children with EAL reported liking more items of fruit and were more likely to know the 5 A DAY message
- ♦ overall, only a third of children were aware of the 5 A DAY recommendation, although another third thought they should eat more than 5 A DAY
- ♦ children in the North East schools were much more aware of the 5 A DAY message (even before involvement in the scheme)

In the later surveys, pupils' scores in relation to the 'test' questions increased, as would be expected due to maturation and possibly also to familiarity with the questionnaire. Children also generally reported trying and liking more fruit and vegetables. In addition, however, there was some evidence of a positive SFVS-related impact on the attitudes, knowledge and awareness of pupils in the North East schools. For instance:

- ♦ There were positive trends for the 'test' questions; pupils in the North East schools were more likely to identify the healthiest options from a choice of snacks, and had increased their score on this question more over time than comparison group pupils
- ♦ The increase in the number of fruits tried and liked was greater for pupils in the North East schools than for the comparison group at the second data collection point, though this difference was not sustained. (This may be because the children had already sampled all

of the SFVS-provided fruits in the first three months of the scheme.)

- ♦ In the North East schools, children living in areas of high deprivation increased their scores on two of the pupil questionnaire items more than expected, suggesting that the impact of the SFVS on these children was higher than for others

### Impact of the SFVS on schools

The interviews showed that the SFVS was enthusiastically received by pupils and welcomed by staff, with very few of the staff's initial concerns about possible burdens and school disruption realised. This was mainly because staff felt they could implement the scheme flexibly, meeting their school's needs in their own particular context. Overall, children's reactions to the SFVS were overwhelmingly positive.

More than half of the children interviewed had been given the opportunity to try fruit and vegetables that they had never tasted before, and staff were surprised at their willingness to try new things:

“Initially I was concerned about the logistics of it. But I have to say it hasn't posed any problems”.  
Year 1 class teacher

“The children think it is great. The ones that didn't like particular fruits have learnt to try them and think it [the fruit scheme] is wonderful”.  
Reception class teacher

However, the SFVS did not seem to have

had much of an impact on food provided in schools (either as snacks or for meals at lunch time). Furthermore, rather than stimulate additional teaching on healthy eating, the scheme was thought to raise the profile and reinforce what schools already taught. Staff did not feel that the scheme brought anything new in this regard, as most felt that they were already addressing the matter satisfactorily:

“I couldn't say the fruit scheme has particularly stimulated any teaching on healthy eating, as it was there already as part of science and PSHE [personal social and health education]”.  
Year 2 class teacher

“The scheme has probably helped to reinforce what we were already doing in relation to getting the healthy eating message across”.  
Year 2 class teacher

### Conclusions

The SFVS increased children's awareness of fruit by enabling them to try previously unfamiliar items. The scheme also significantly improved children's consumption of fruit, but appeared not to have any wider impact on diet. Increased consumption of fruit was not sustained when children's participation in the scheme came to an end. However, there was some evidence of increased knowledge of healthy eating, particularly in children from deprived areas.

It may be that the SFVS will have a

longer-term impact on children who are exposed to the scheme for a greater period of time. Further, the potential of the SFVS to positively impact on children's overall diet might well be enhanced, if implemented in the context of a whole-school policy designed to promote healthy eating.

NFER has recently been commissioned by the Department of Health to undertake a follow-up study. The main aim of the project is to establish the longer-term impacts of the SFVS, now that it has been implemented throughout the country and has been operating in English schools for at least 20 months. The data collected will add to that gathered in the earlier evaluation, and make it possible to compare findings over a longer period of time.

### References

1. House of Commons. Health Committee (2004). *Obesity: Third Report of Session 2003-04 Vol I: Report, Together with Formal Minutes (HC 23-I)*. London: The Stationery Office.
2. Office for Standards in Education (2004). *Starting Early: Food and Nutrition Education of Young Children (HMI 2292)*. London: OFSTED.
3. Schagen, S., Blenkinsop, S., Schagen, I., Scott, E., Teeman, D., White, G., Ransley, J., Cade, J. and Greenwood, D. (2005). *Evaluation of the School Fruit and Vegetable Pilot Scheme: Final Report*. London: Big Lottery Fund.

Further details about the research detailed here and the follow-up study can be found on the health education page of the NFER website:  
<http://www.nfer.ac.uk/research-areas/health-education>