

The authors are part of the APAUSE team: a project based at the Department of Child Health, Postgraduate Medical School, University of Exeter, with the aim of improving effective sex education programmes.

Fran Phelps is an Educational Research Fellow, and a teacher of science and PSE.

Alex Mellanby is a Medical Research Fellow and family doctor.

John Tripp is Senior Lecturer in Child Health.

***Certain things are necessary for successful discussion, and these include laughing, joking, and making people feel good.***

*After teaching 168 sex education lessons in six months to year 9 pupils . . .*

Fran Phelps, Alex Mellanby, John Tripp

## So you really think you understand sex?

It is a well-known fact that some young people have misconceptions and believe 'myths' about sexual issues — but all our experience in the classroom had not prepared us for the significantly large number of year 9 pupils who came up with inaccurate or wrong ideas, to say nothing of the number who cheerfully agreed with the false statements offered on our starter sheets.

We discovered this in the first stage of a research project to improve effective sex education programmes. Fifteen schools, nine in Devon, four in Somerset and two in Norfolk, are taking part. The aim is to give pupils access to accurate and relevant information and to improve their communication skills, enabling them to make informed decisions, to resist pressure to become sexually active, and to be able to seek professional advice when relevant.

Part of this project involves a teacher and a doctor delivering a nine-week Human Sexuality module to pupils, aged 13–14 years, in two comprehensive schools. The aims of the sessions were to:

- Create/maintain a supportive atmosphere where pupils respect the values and beliefs of others and allow learning to take place;
- Assess and extend the pupils' current knowledge of puberty, anatomy, conception and its prevention, the development of relationships, and the medical problems associated with early sexual involvement;
- Provide a foundation for the second part of the module focussing on relationships, presented by teams of students aged 16–17 years.

The whole exercise is not just about sorting out muddles; it is also about getting the youngsters to use words, to rehearse forms of language and get used to the feelings they have about the language in the classroom, because they do need to use this language to communicate later on. You cannot plunge straight into group work if the pupils have no history and no experience of discussing sex and of tying up the formal vocabulary of sex with the slang they may have heard.

This article reports on our experiences over six months with a total of 465 year 9 pupils (246 boys, 219 girls) in mixed groups.

A worksheet, consisting of seven questions, was used to determine the pupils' level of awareness about the changes in puberty and to use as stimulus material for discussion, to give them the opportunity to use words and phrases (such as *sexual intercourse* and *masturbation*) both verbally and in writing, and to extend their understanding of these terms and their context. The pupils were encouraged to work individually and to ask for the team's assistance for explanation of any unfamiliar words or phrases.

### Ground rules

We had no objection to imposing ground rules, which was certainly better than the stage-management of 'agreement' which is actually controlled or led by the teacher. We do know that certain things are necessary for successful discussion, and these include laughing, joking, and making people feel good — particularly by accepting their views and questions with respect. In our opinion this is not just sensible, but *necessary*. We also made it clear that we were

**Table 1.** Content analysis of responses to *What are 'wet dreams'?*

Categories of response	All %	Male %	Female %
Sperm released	49.5	49.7	49.3
Comes/spunks up	11.4	13.2	9.5
Ejaculation	6.2	7.7	4.5
Other:			
Wets the bed	2.6	2.7	2.5
Sticky stuff	1.9	1.8	2.0
Like a period	0.2	0.0	0.5
Other	0.5	0.5	0.5
No mention of semen	27.6	24.2	31.3
No. of pupils	420	219	201

**Many pupils have startlingly inaccurate ideas of the geography of the human body.**

not going to ask them personal questions about sex. Ground rules are not discussed with respect to sex, but to something else — like normality and puberty.

We do not discuss our own experiences, and we actively discourage pupils from discussing their own. There is a strong tendency — among staff and pupils alike — to talk about one's own experiences. It is always gripping stuff, but we actively discouraged it for all sorts of reasons — it is distracting, it is a bad model, and it will alarm others (again, staff and pupils) who do not want to discuss their history but think it will be expected if we do.

We often use anecdotes, but these are always anonymous, third-person, bare-bones-only cases which illustrate and make concrete particular situations and issues.

**Back to basics**

We discovered that young people are aware of current issues, and know much of the essentially technical vocabulary — but their understanding is often poor. Therefore, although we started off with a very carefully-planned series

**Table 2.** References to dreams or fantasy in responses to *What are 'wet dreams'?*

Categories of response	All %	Male %	Female %
Dreams of girls	18.1	14.6	21.9
Dream/fantasy	16.2	21.0	10.9
Dreams of . . .			
Sex	14.0	15.1	12.9
Girls and sex	5.0	4.1	6.0
Something dirty/naughty	1.4	0.9	2.0
Other	0.5	0.5	0.5
No mention of dream	44.8	43.9	45.8
No. of pupils	420	219	201

of lessons, we soon discovered that we needed to be very flexible — one small group of girls clearly didn't have a clue where menstrual blood was coming from even though they had 'done' it before, so we had to go back and get the basics sorted out before we could get on to what we saw as the main issues.

Many pupils have startlingly inaccurate ideas of the geography of the human body — about their own and about those of the opposite sex. This is trotted out occasionally on

the Generation Game. We have been asked "so what?"; but if they think the womb is up in the chest, whatever size do they think it is? And how long is the vagina?

**Even jokes are serious**

We treat every question a pupil asks as serious — even if jokey, and even if they might be trying to embarrass or test us. Perhaps even especially if they are jokey — the things people laugh about are likely to be the most important. It is often only the class clown who will have the bravado to ask what everyone else is thinking about.

One of the things we hope to be able to achieve is to make people more comfortable about not knowing things — while making it possible for them to find out.

The next part of this article outlines and discusses pupils' individual responses to two questions from one of the worksheets.

**'Wet dreams'**

*What are 'wet dreams'?*

This was an open-ended question, and we performed a content analysis on the responses from 420 pupils (219 boys and 201 girls).

*Seminal fluid.* 28% of pupils made no reference to fluid release in their responses. 71% of boys and 63% of girls referred to sperm, semen or ejaculation. For 35% of all pupils, this was their only comment about 'wet dreams'.

Table 1 details the pupils' responses related to seminal fluid, and less specific comments.

*Dream or fantasy.* 18% referred

**Table 3.** References to eggs or ova in responses to *What is menstruation?*

References to eggs/ova	All %	Male %	Female %
Eggs/ova	23.6	17.8	29.9
Unfertilised egg/ovum	18.6	13.7	23.9
Dead/old/useless eggs	11.7	13.7	9.5
Exploding eggs	1.0	0.9	1.0
No reference	45.2	53.9	35.8
No. of pupils	420	219	201

only to a 'dream' or 'fantasy' in their responses; 45% made no reference to either. Table 2 details pupils' responses related to 'dreams'.

*Conclusion.* Two-thirds of the sample referred to release of seminal fluid, and about a half to a dream/fantasy. About a third referred to both and a tenth referred to neither. One twentieth of the pupils gave no answer at all.

Some boys, therefore, seem to have little idea about nocturnal emissions, and are surely poorly prepared for such an occurrence. One written response and several in discussion likened them to periods — are they expecting them to be regular, essential to 'becoming a man'? We emphasise to them that the 'dream' element may be absent, or forgotten by morning, and also that you can still be developing normally without having had a wet dream.

The idea of sperm build-up recurred elsewhere — particularly in connection with vasectomy.

**Menstruation**

*What is menstruation (a girl's period)?*

In all classes, the pupils were asked by the team to write down everything they knew about 'periods', what they were, why they happened, how often they occurred, and any other descrip-

**Table 4.** References to menstrual flow in responses to *What is menstruation?*

Reference to menstrual flow	All %	Male %	Female %
Blood exiting vagina	23.1	29.7	15.9
Blood from uterus lining	18.3	14.2	22.9
Blood	15.2	16.4	13.9
Blood from [exploding] eggs	3.3	4.1	2.5
Waste/clearing out	2.4	2.7	2.0
I don't know	1.9	2.3	1.5
Other	1.2	0.9	1.5
No reference to blood	36.4	32.0	41.3
No. of pupils	420	219	201

tive factor. Again, a content analysis was performed.

*Ova or eggs.* Table 3 details the pupils' responses.

From the sample of 420, 55% of the pupils referred to eggs or ova in their response to this question: 18% used the term 'unfertilised' and 13% described the eggs/ova as "dead", "old", "useless" or, more surprisingly, as "ex-

ploding"; some used phrases such as *a good clean out of the eggs or dead egg cells that collect up each month. Then they disperse out of the vagina* (the complete answers given by two girls). Just under half of the pupils, 45%, made no reference to ova/eggs.

Where on earth does the idea of 'exploding eggs' come from? We wondered about a piece of footage often used, which shows the moment of ovulation — which is very dramatic, and fills the whole TV screen with no idea of scale. But it may have fuelled an idea of exploding eggs, and fragments scraping down the womb and vagina producing bleeding.

*Menstrual fluid.* Table 4 details the pupils' responses. Just over a third, 35%, made no reference to menstrual fluid in their responses.

31% of the responses described blood as coming from the uterus lining in responses such as *the blood is a thickened lining of the womb coming off* (male) or *when the egg and the womb walls burst out of the vagina* (female). Others included explanations such as ova or [exploding!] eggs as the source of the blood, or *when a girl produces an egg and, is let out through the vagina every month* (female).

*Tampons.* When, on one occasion, this topic raised the question of 'how big is a tampon?' from a small group, one of us (Fran) quite spontaneously picked up a fountain pen and a 'tampon-size' rubber, and asked the boys: "Simple choice — no calling out — which is closest to the size of a tampon?". The unanimous verdict was for the fountain pen.

Some girls were highly amused by this, but we then went on to ask the girls: "Well, why might somebody think that?" This led to many comments about the length of the applicator, the size of the

box, and so on.

We used this play each time: it helped illustrate the difficulties in finding the right answers, particularly if we are concerned about being wrong! Some pupils' outsize views of the length of the vagina made a lot of sense in connection with stories about tampons 'getting lost'. We discussed the length and softness of the vagina, its elasticity in relation to the size of a baby, the relative sizes of the vagina and penis, and so on.

*Swimming.* Lots of pupils of both sexes believe that girls can't go swimming while menstruating. Why? "Because the water will turn red", says the classroom wise guy, if nobody else does. Of course it doesn't, but why? Then we can deal with images and language of 'flooding'.

*Other factors.* Less than half of all pupils, 41%, referred to the cyclical nature of menstruation. For 12.4% of these pupils, this was their only response to the question. A small percentage of pupils, 1.4%, described the menstrual cycle as "weekly" or "every couple of days".

About a fifth of all pupils referred to some other factor when defining menstruation. Nearly a third of these, almost twice as many girls as boys, referred to pregnancy, either that once a girl menstruates she could become pregnant, or if she is pregnant, then menstruation ceases; another quarter commented that menstruation started during puberty.

There were no significant differences in the responses from the schools; for example, answers which included "exploding eggs" or "blood from exploding eggs" were common to both schools. Whilst significantly more girls than boys alluded to 'eggs', there was no significant difference in their answers relating to menstrual flow.

*Conclusion.* Responses to open-ended questions are notorious for failing to prove or disprove knowledge. It was still surprising to find the numbers of pupils, aged 13-14 years, who made no mention of 'eggs' (43%), or 'blood' (35%), in connection with this topic.

Experienced teachers may question the focus on menstruation for year 9. For us, it was an 'easy' subject to start open discussions in small groups. In discussion, many of the pupils said that it was normally difficult or embarrassing to talk freely. Previously, some may not have talked about menstruation; we wanted to create an atmosphere where both boys and girls could discuss such issues openly and ask questions of each other and of us.

***In discussion, many of the pupils said that it was normally difficult or embarrassing to talk freely.***

***The commonest topic of free questions — any age, any group — was oral sex.***

## Other issues

*Natural orifices.* Verbal questions and responses in class gave further clues to misunderstandings; for example, one girl referred to menstrual flow and urine "coming from the same hole" and more than one group of pupils (boys and girls) said that they did not know from where a girl urinated.

In this connection, pupils have very muddled ideas about how many natural orifices people have (girls three, boys two) — and muddled feelings about urination and sex, so that 'dirtiness' is connected in some way emotionally too.

*Oral sex.* The commonest topic of free questions — any age, any group — was oral sex. What is it, what is a 'blow job', and "can you get pregnant from oral sex?". We noticed that oral sex was overwhelmingly more often seen as something a girl did to a boy — not the other way round. We tend to deal with oral sex mostly from a relationship point of view — that sex is something that happens between people, together — not the language of doing *to*, but doing *with*. Not *using* people at all.

*Sexually transmitted diseases.* 99% of young people have heard of HIV and AIDS, but after that? Well, they may have heard of herpes, but far fewer — about 30%. Many people believe also that HIV is the commonest sexual infection — which sits uncomfortably when we hear that they also believe that "there's no AIDS round here" or otherwise deny that they are at risk from HIV. If people believe HIV is the most important infection, but also believe that HIV isn't important enough for them to worry about, this may explain why we are looking at an epidemic rise in warts and genital herpes.

"*It just happened.*" The most important things we want to get across about sex are that it's normal, natural, something you agree to, something that you need to communicate about and plan about — not something that "just happens". The commonest comment from young pregnant women under 16 about sex is that "it just happened". This is not the sort of language you use about crossing a road — "well, I was knocked down because I just crossed the road; I didn't plan to cross the road, it just sort of happened". And yet this is how they describe having sex.

*Promoting understanding.* Anonymous feedback showed that 88% of the pupils considered the lessons a positive learning experi-

ence. These pupils will have more sessions in year 10; it will be of value to assess their knowledge and understanding at this point, not only as part of the continued evaluation of the project but also as a basis for the year 10 sessions.

There is an assumption by many adults that today's young people know more of sexual issues, for example oral sex, than their parents did at their age. It is our perception that these young people may be more familiar with words and phrases than perhaps their parents were; but, for many, there is a lack of real understanding of their own bodies and of sexual issues. Perhaps an illustration of this point is the repeated question "can you get pregnant from oral sex?"

### A lot to do . . .

One of our initial aims was to *reinforce and extend the knowledge of the changes in puberty*, based on the understanding that sex education starts in the home, continues through primary and secondary school, and is provided outside the home and school by friends, other adults, books and the media (1).

There would, inevitably, be differences in the provision from different homes, different primary schools, and indeed different teachers within any school, and the pupils themselves would be at different levels of maturation; we therefore expected a wide range of levels of understanding and perceived needs in the pupils.

Nevertheless, we were unprepared for the results of our evaluation questionnaire, where *only 7% of the pupils remarked that they already knew some or most of what we had covered in our five sessions.*

To put this in perspective, *Curriculum Guidance 5: Health Education* suggests that being able to name the reproductive organs is appropriate for pupils aged 5-7, whilst knowing the 'basic biology of human reproduction' is pertinent for those aged 7-11 (2).

If knowledge is power, then most of these young people lack the power to communicate effectively about their own sexuality and to make informed decisions that will inevitably affect their individual happiness, health and subsequent relationships.

### References

1. Massey, D., *School Sex Education: Why, what and how?* Family Planning Association, 1991.
2. *Curriculum Guidance 5: Health Education in Schools.* NCC, 1990.

***If knowledge is power, then most of these young people lack the power to communicate effectively about their own sexuality.***

Fran Phelps, the principal author, may be contacted at the Department of Child Health, University of Exeter Postgraduate Medical School, Church Lane, Exeter EX2 5SQ (0392 403146).