

*Agenda 21 is making waves. But behind the good intentions and the educational spin-off, how deep is young people's concern about 'their world'?*

David Regis

# Saving the environment: switch off or turn-off?

New insights into young people and green issues suggest that they may care more for animals than people, or even themselves. This is one outcome of the Schools Health Education Unit's 'environmental' questionnaire.

Another is the possibility that concern about 'green' issues generally may have peaked.

The green enquiry instrument is a part of the Unit's Cross-curricular Environment Project. It is quite short, containing 22 questions, and it has been completed annually by pupils from Year 7 to Year 11 in four Devon schools during 1994-6. The aim of the questionnaire is to permit schools to plan and then evaluate their 'environmental education' programme, but the data from these four secondary schools, as they stand, form an intriguing and probably, so far, unique snapshot of these young people's attitudes to conservation and other issues in the Nineties.

The consecutive annual surveys also build in a longitudinal dimension to the data, since the views of the same cohorts can be tracked as they move up through the schools during the three years. However, we shall first of all examine a selection of the data derived from a total of 1041 young people in Years 7-10 who answered the questionnaire in 1995.

## What are the issues?

The survey examines attitudes and intentions with respect to the environment. It is not divided up into sections, but the following categories cover most of the questions.

**Pollution and destruction** (e.g. *How much do you worry about acid rain?*)

**Recycling/economy** (e.g. *Does your family take care to protect the environment by careful litter disposal?*)

**Local environment** (e.g. *How do you rate the housing in the area where you live?*)

**Personal commitment** (e.g. *Would you be prepared to spend more money for non-polluting products?*)

**Ethics** (e.g. *"It is acceptable to use animals in cosmetic research."*)

**Promoting change** (e.g. *"It is acceptable to take the following actions to support a cause you believe in."*)

Maximum values for each gender/year group are underlined; minimum are printed in *italic*.

## Pollution and destruction

Questions 5-7 recorded the young people's levels of concern about man's contamination or destruction of the environment; the extent to

Quite concerned or very concerned	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Air pollution	59	45	44	41	58	48	52	43
Acid rain	34	24	28	20	40	32	34	25
Loss of species	76	62	69	53	77	79	83	75
Greenhouse effect	56	41	45	41	48	41	54	42
The ozone hole	64	50	57	50	57	58	65	49
Use of pesticides	31	27	23	16	36	29	28	30
Wastage of materials	52	47	40	26	50	42	38	33
Water pollution	75	68	66	54	66	69	68	60
Destruction of habitats	77	66	68	56	73	73	78	68
Food safety	57	52	52	44	59	50	64	49

Table 1. Concern about the environment: question 5

Very concerned about food safety	Boys %				Girls %			
	7	8	9	10	7	8	9	10
1994	21	26	20	20	22	26	23	23
1995	34	26	19	19	28	18	33	21
1996	42	33	31	26	45	37	28	42

Table 2. Concern about food safety: question 5

Quite concerned or very concerned	
BOYS	GIRLS
1. Destruction of habitats	1. Loss of species
2. Water pollution	2. Destruction of habitats
3. Loss of species	3. Water pollution
4. The ozone hole	4. The ozone hole
5. Food safety	5. Food safety
6. Air pollution	6. Air pollution
7. Greenhouse effect	7. Greenhouse effect
8. Wastage of materials	8. Wastage of materials
9. Acid rain	9. Acid rain
10. Use of pesticides	10. Use of pesticides

Table 3. Relative levels of concern about environmental issues, all data combined: question 5

which they thought central government should take responsibility; and their approval or disapproval of different sources of energy.

### Concern about the environment

A summary of question 5, listing the percentage that said they were *quite concerned* or *very concerned* about the environment, indicates their priorities. The boys' maximum levels of concern involve *loss of species*, *water pollution*, and *destruction of habitats*, while all four girls' age groups select *loss of species* (Table 1).

It is interesting to note that *use of pesticides* (which could directly affect their health through eating fresh fruit and vegetables, for example) is accorded the lowest rating, whereas *loss of species* and *destruction of habitats*, which directly affect other living things, have high priority. A water-contamination scare, which affected the region during the year of the survey, could have something to do with the high priority afforded to *water pollution*.

It is natural that our levels of concern are affected by what we learn through the media. For example, a disturbing television documentary on the subject of pesticides the evening before the survey might push the *use of pesticides* figures up a bit! Bearing in mind the 1996 panic over BSE, the 1994-6 figures, which show only the percentage that are very concerned about *food safety*, are suggestive (Table 2), although the prompt 'e.g. salmonella, BSE' was not used in 1994.

Table 3 shows the environmental 'priorities' for the boys and girls in these secondary schools by deriving average percentages and listing them in descending order.

### Energy sources

Table 4, expressing approval of a range of energy-producing sources, shows that nuclear power has a bad image with these young people as well as many adult 'voters'. The *viability* of the very popular solar, water, and wind power choices is not taken into account.

### Recycling and economy

Questions 8 and 9 asked the young people about their family's use and disposal of consumables, and about local recycling facilities.

Table 5 summarises the responses to question 8.

Conscientious attention to litter disposal seems to be the most practical way families

Approval for source of energy	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Coal	42	32	46	40	37	37	34	34
Gas	41	48	54	47	42	42	36	51
Nuclear power	20	30	27	25	23	16	13	19
Oil	34	30	43	26	20	16	18	22
Solar	83	83	84	82	61	64	72	80
Water	86	83	83	81	71	69	78	87
Wind	85	78	84	81	68	68	79	86

Table 4. Approval for energy sources: question 7

Quite a lot or a lot of family commitment	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Careful litter disposal	53	49	38	48	67	62	52	46
Careful use of fuel	45	41	32	35	41	44	36	37
Water saving	50	40	30	39	53	50	41	33
Recycling paper	35	38	29	36	42	39	40	35
Recycling glass	41	42	38	44	46	38	40	41
Recycling cans	34	40	30	33	33	28	31	30

Table 5. How the family helps to conserve resources: question 8

School rating with respect to litter	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Very poor	17	25	15	22	13	10	11	21
Poor	28	30	29	28	34	28	22	29
Adequate	25	20	33	31	26	30	36	31
Good	16	16	18	13	19	24	26	14
Very good	14	10	5	6	8	8	4	5

Table 6. Rating of school with respect to litter: question 12

I can do something about the environment	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Strongly disagree	6	7	2	7	2	1	1	0
Disagree	4	8	8	6	5	4	12	7
Not sure	31	34	35	31	37	38	26	28
Agree	42	39	40	45	40	51	48	50
Strongly agree	16	12	15	11	15	6	13	15

Table 7. The power to do something about the environment: question 3

protect the environment. The 'recycling' group of options may well be linked to local facilities, examined in question 9 (*Which of the following can be recycled near you?*), the combined responses for all pupils being:

Paper 79%  
Glass 84%  
Aluminium 81%

These figures suggest that lack of use of these facilities is not related to convenience, although the definition of 'near' will be subject to different interpretations. Some local authorities are abandoning community recycling centres in favour of direct collection along with household waste.

Of the items in the list, *careful use of fuel* and possibly *water saving* also have direct relevance to the family budget!

### Local environment

Questions 11 and 12 are similar to ones that appear in the Health Related Behaviour Questionnaire. Question 11 examines local amenities and asks how safe they feel when going out during the day and after dark. An amendment that may be of particular interest appears in question 12: *How do you rate your school with regard to litter?* (Table 6)

The median values show a slight trend with age from *poor* to *adequate*. Does this reflect a growing tolerance of litter, or different standards in the lower and upper school? Three of the project schools had split sites, and therefore, possibly, different problems and policies with respect to litter and its disposal.

### Personal commitment

This aspect is covered by questions 3, 4, 10, and 21.

### The power to change things

Question 3 asks for responses to the statement *As an individual I can do something about the environment*. Table 7 shows that over half of all the age/gender groups feel that they can do something, and in most cases the girls are slightly more positive than the boys. Only a very small percentage disagree or strongly disagree with the statement.

However, a study of the way these positive responses have changed over the three years of the study shows, in most cases, a lessening of belief that they can do something useful (Table

Agree/strongly agree can do something	Boys %				Girls %			
	7	8	9	10	7	8	9	10
1994	54	57	55	64	62	65	69	70
1995	58	51	55	56	55	57	61	66
1996	67	52	51	45	48	64	49	54

Table 8. Levels of belief in the power to do something about the environment, 1994-1996: question 3

Prepared to pay more for these products	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Non-polluting products	50	34	44	30	47	50	53	57
Cruelty-free products	70	50	56	40	76	84	82	77
Organic food	35	22	30	23	32	32	30	33
Developing world products	29	14	20	14	20	17	15	26
Recyclable products	51	40	47	34	43	45	50	53

Table 9. Willingness to pay more for environmental benefit: question 10

Disapprove or strongly disapprove	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Fishing for food	20	17	18	13	35	29	26	20
Angling (fish not killed)	17	14	18	19	26	26	28	28
Gassing badgers	74	69	59	60	78	75	78	72
Culling, e.g. deer	79	66	56	56	86	91	83	76
Stag hunting	79	74	75	64	86	92	87	84
Fox hunting	84	76	75	66	85	92	87	86

Table 10. Disapproval of the 'use and abuse' of animals: question 14

Disagree/strongly disagree with use of animals	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Cosmetic research	81	83	84	77	91	94	92	93
Toiletries	79	78	84	73	86	93	93	95
AIDS research	53	42	46	38	62	48	57	39
Allergies, e.g. hay fever	54	53	58	51	65	55	67	56
Arthritis	58	44	53	44	61	49	59	47
Cancer & leukaemia	43	39	42	42	50	41	47	33
Diabetes	47	40	46	42	52	47	47	37
Heart disease	38	37	42	40	50	42	47	37
Diseases of animals	38	26	36	32	42	37	44	29

Table 11. Disapproval of the purpose for which animals may be used in laboratory experiments: question 15

5). If confirmed, this trend is disheartening. What could be behind it?

*Paying for change*

It is when they have to be translated into pounds and pence that declared good intentions may falter. Question 10 (Table 9) asks *Would you be prepared to pay more money for the following products?*

Like the earlier 'pollution and destruction' Table 1, these figures show how much more powerfully these young people seem to be affected by the welfare of animals than of people. A consistent and decisive majority say that they would pay extra for cruelty-free products. By far the smallest percentage would support developing nations.

The one-third that would pay extra for 'organic' food may seem high, although the figures do match the numbers concerned about the use of pesticides in Table 1. However, not many young people do the family food shopping! We wonder how many family providers go looking for, and buy, more expensive organic food when they can get it?

*'Animal' ethics*

Is it acceptable to cause animals distress, either in research or for sport?

Questions 14-16 were introduced to cover this aspect as a result of trials using the first version of the questionnaire.

*Animal use and abuse*

Question 14 (Table 10) records levels of approval or disapproval for the exploitation or control of animals in the UK. We discover higher levels of disapproval from the girls for all categories, but the pattern is the same for both genders. Fishing for food and angling are tolerated by most; fox hunting arouses the most antipathy. There is a tendency for levels of disapproval to fall with increasing age.

*Animals in research*

As with the previous table, Table 11 shows that the girls tend to register higher levels of disapproval than the boys, and these levels reduce with age.

Research into cosmetics and toiletries attracts the greatest disapproval; cures for human disorders are looked upon more favourably, particularly heart disease and cancer.

However, the greatest approval is for re-

Agree with the laboratory use of these creatures	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Dogs	8	8	9	9	2	2	3	4
Fish	12	17	18	26	10	13	7	14
Frogs	14	23	20	31	5	15	7	12
Insects	32	38	32	43	16	36	27	31
Mice	14	24	28	32	7	23	13	24
Monkeys	10	12	9	12	2	2	1	3
Rabbits	8	11	20	19	2	4	1	9
Rats	26	35	38	48	16	29	24	28
None of these	59	48	48	36	73	58	63	61

Table 12. Approval of the laboratory use of animals and insects: question 16

Agree/strongly agree to be acceptable	Boys %				Girls %			
	7	8	9	10	7	8	9	10
Writing letters, voting	51	56	60	56	50	65	73	75
Signing petitions	53	62	62	66	48	73	76	79
<i>Forms of protest</i>								
Marching	46	45	47	34	42	45	42	50
Non-violent (e.g. trespass)	37	42	42	32	39	39	35	46
Damaging property	26	21	21	22	12	16	12	12
<i>Disruption</i>								
Fox hunting	58	48	53	52	51	54	49	56
Fishing competitions	37	24	21	26	36	26	30	27
Animal exports	64	45	57	40	51	47	59	58

Table 13. Approval of different methods of protest: questions 18 and 19



**The 'environment' questionnaire**

We developed our new 'green' questionnaire in conjunction with teaching staff and interested professional organisations. In addition to the topics described in this article, it has questions about...

- The perceived role of government in green issues
- The state of the young person's neighbourhood
- School facilities and their possible improvement
- Dietary choices
- Membership of environmental groups

We are looking forward to extending its use on a wider basis, and welcome enquiries from schools wishing to make use of it. Please contact John Balding (01392 264722) if you wish to explore further.

search into diseases of other animals.

There is clearly a strong moral dimension to the answers to these questions. The distress caused to laboratory animals is balanced against the perceived value of the outcome.

In question 16 (Table 12) the young people are invited to register their approval or disapproval of the use of different animals in laboratory research. In all cases approval is below 50%, and the percentages are lower for the girls than for the boys. With the exception of dogs and monkeys the level of approval increases noticeably with age, although the type of research that the respondents might have in mind is not known.

Insects and rats find fewest supporters, and a comparison of the rats and mice percentages shows that not all rodents are the same.

This question recorded only 'Yes' responses, and the bottom line of the table indicates the percentage that might have responded 'Don't know' or 'No'.

*Promoting change*

My article in *Education and Health* Vol. 14 No. 2 discussed the implications of one of the components within question 18, which asked if it was acceptable to damage property to support a cause you believe in. The combined results of questions 18 and 19 are presented in Table 13.

It is interesting that a substantial minority do not agree that the 'constitutional' means of protest (writing letters, voting, signing petitions) are acceptable, although fewer than 10% actually disagree. Do they mean that these methods are ineffective? The older girls' increasing support for constitutional ways of achieving change is also noticeable.

Support for breaking the law is lower, but a good third of the young people find trespass acceptable, and a fifth of the boys would agree with damaging property to support a cause they believed in. This result caused some concern in the schools involved, but agreeing in principle is not the same thing as saying that they would do it themselves!

Comparing these data with those in Table 10, we discover that about twice as many boys approve of disrupting fishing competitions as disapprove of angling. Is this because they believe few fish are likely to be returned to the water alive, or because they disapprove of fishing competitions?

## Trends, 1994-6

The involvement of the same group of schools over three consecutive years gave us a rare opportunity of monitoring changes *within the same group of pupils*.

'Cohort' studies are usually difficult to set up and require long-term planning. We were delighted to have the chance of tracking these groups as they progressed through Years 8, 9 and 10. The numbers involved were as follows:

	Boys %			Girls %		
	8	9	10	8	9	10
1994	149	142	153	130	143	126
1995	161	128	129	135	116	138
1996	135	152	82	132	115	71

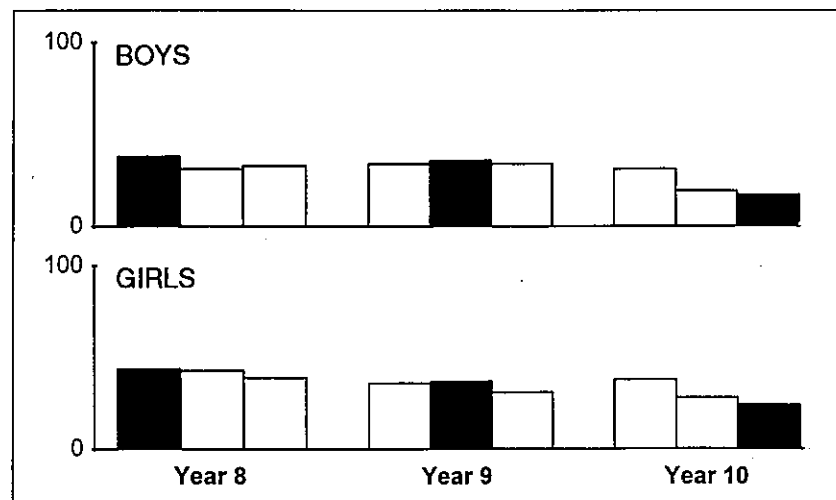


Fig. 1. The percentage that had learned 'a lot' from green action groups (1994-96 cohorts within each year group)

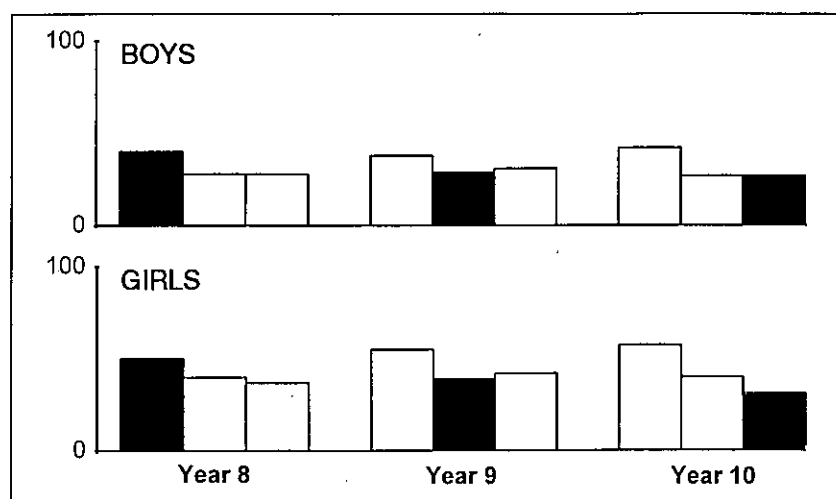


Fig. 2. The percentage that expected to do more than their parents to protect the environment (1994-96 cohorts within each year group)

Year 7 data were not included in this analysis, as the Year 8/9/10 tracking across the three calendar years was felt to be the most useful selection.

The data in this section are represented as histograms. Each cluster of three columns represents the responses by the same year group in 1994, 1995 and 1996. The tracked cohort results (i.e. Year 8 in 1994, Year 9 in 1995, and Year 10 in 1996) are shown in black. In many cases, the same individuals completed the questionnaire in these three year groups.

### The environment — sources of facts

Question 2 (Fig. 1) presented the respondents with a checklist, which included television, radio, newspapers, school lessons, and information in shops. The percentages responding *green action groups* are presented here. Notice that there is a tendency for the percentages to descend with age. The boys' and girls' cohorts also exhibit this trend. Therefore many of the young people that in 1994 remembered learning useful facts from green action groups had apparently forgotten their old sources of information by 1996, and new ones had not replaced them.

### More conscientious than their parents?

Question 4 (Fig. 2) asked the young people if they personally expected to do more or less than their parents were doing to protect the environment.

In all cases the majority say that they expect to do 'the same'. However there is a downward trend in anticipation, not only within the cohorts but also across the calendar years. This could reflect a 'switch-off' — are they wearied by environmental issues? Or are they discovering that their parents are doing more than they thought? Or are their parents *really* doing more?

### Paying for the environment

In question 10 the young people were asked if they would pay more for products with 'environmental' implications. These included cruelty-free products, environmentally-friendly products, goods from developing countries, etc. Figs. 3 and 4 present responses to two of these.

Both sets of histograms suggest a decrease across the calendar years and within the cohorts, although the effect is not as strong as in the first two figures. A weak trend, or no trend at all, is sometimes considered less 'interesting'. Surely the important point is that the data represent the

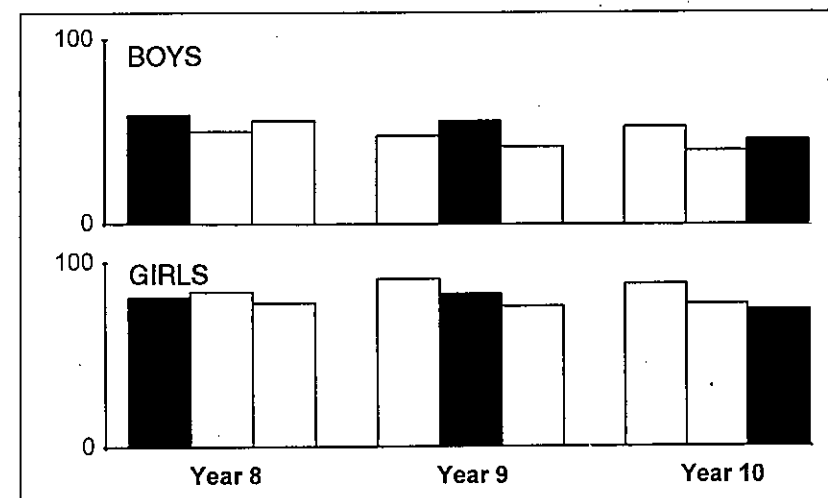


Fig. 3. The percentage that would pay more for cruelty-free products (1994-96 cohorts within each year group)

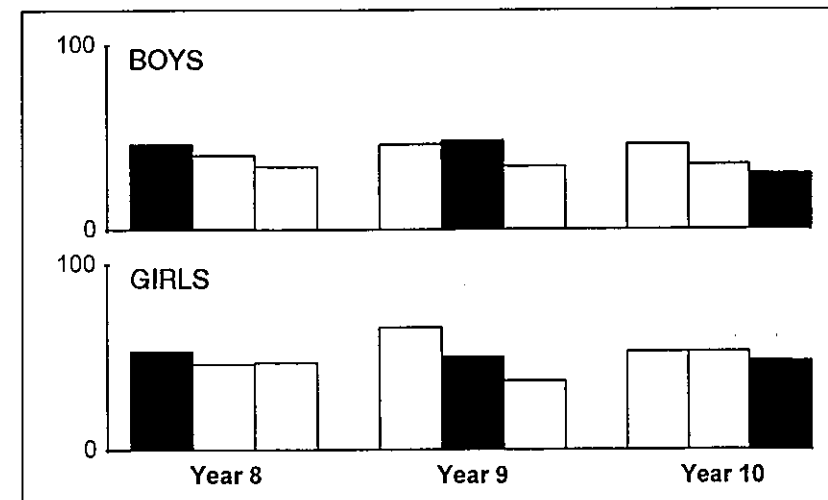


Fig. 4. The percentage that would pay more for recyclable products (1994-96 cohorts within each year group)

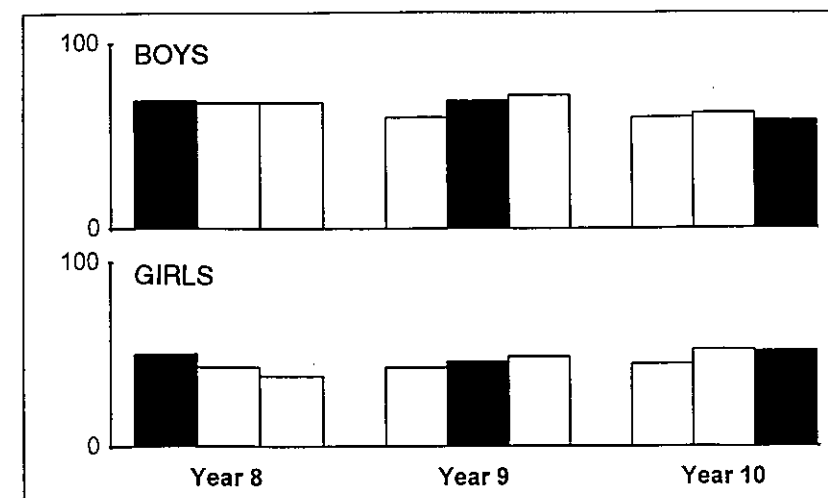


Fig. 5. The percentage that agree or strongly agree that zoos should remain open (1994-96 cohorts within each year group)

responses of the young people within these particular schools on the day of the survey.

### Should zoos remain open?

This is the subject of question 15 (Fig. 5). Compared with the previous results, no consistent 'trend' is noticeable either within the cohorts or across the calendar years. During these years the topic of zoos does not seem to have emerged as an 'issue'.

### Conclusion

I quote from Chapter 25 of the report of the United Nations Conference on Environment and Development (Agenda 21).

#### Children and youth in sustainable development

25.2 It is imperative that youth from all parts of the world participates actively in all levels of decision-making processes, because these affect their lives today and have implications for their future.

The pronouncements of world leaders often invoke young people's importance to the future, and the key role they should play. How does this study portray them?

They are concerned about many issues, particularly *species diversity* (and the associated issue of habitat loss). They are aware of *recycling* and the issue of renewable *sources of energy*, and are concerned, but not absolutist, about the *welfare of animals*.

Perhaps the most striking finding is that over the last few years young people's *optimism* that they can do something about the environment has declined, as has their determination to do more than their parents. This may be due to decreased expectation about possible *courses of political action*.

Of course, any study raises questions as well as answering them, and must leave many topics unexamined. Perhaps the most interesting of these is how young people see the views and actions of adults. Do they welcome the concerns for young people that world leaders may express? Or do they see them as an attempt to shift some of the responsibility from adults to themselves?

See page 77 for two county responses to Agenda 21 issues and schools.

If your own school is active in this area, we should like to hear about it! — Ed.