Passing on the reins of responsibility? An international comparison of school leaders' values.

Mike Bottery, Nigel Wright.

University of Hull, England

Abstract

This study stemmed from concerns about school leaders' responses to the current global environmental situation. The issue was tackled by asking what priority they gave to environmental issues in their schools by examining their perceptions about a range of educational values and priorities, based upon five educational codes. A questionnaire was therefore designed which asked principals and headteachers to place their ratings in three different categories: (a) how they perceived governments' priority in these areas; (b) how highly they prioritised them in practice, and (c) how highly they themselves valued these. The results from England, Poland and Finland suggest that principals in these countries do value environmental issues, but that there is considerable variation in the level of approval of different environmental concerns. The results also suggest that they believe that their governments hold similar values, though in all cases these principals held these beliefs more strongly than their governments. However, and more broadly, none of the ideological codes was rejected,

though there were interesting differences in the support for different statements within each code. The overall picture that emerged was one of pragmatic individuals whose core belief was one of passing on the 'reins of responsibility' to the next generation. Finally, the results raise the question, despite a general approval of environmental values, of whether judgements were sufficiently informed to facilitate the transfer of such responsibility at a level commensurate with environmental problems currently developing.

Keywords: educational values, educational codes, environmental issues,

Introduction

This paper stemmed from a concern that humanity is currently facing an environmental situation not encountered as seriously in its entire history. This may seem alarmist, but it is difficult to miss the increasingly worried tone from research and official bodies over issues of environmental sustainability. Both Meadows et al. (2004, xiv) and the WWF (2008) have reviewed the evidence and concluded that '...

humanity is already in unsustainable territory...'. At the same time, respected commentators like Cox, (2001), Flannery (2004), and (Lynas) 2008) have suggested that humanity is close to a number of global environmental 'tipping points', such as the collapse of the Amazonian rainforest, the discharging of methane hydrates from the seas, the release of methane from the Arctic tundra, and the disintegration of the Greenland and West Antarctic ice-sheets - any or all of which could lead to irreversible It seems increasingly clear climatic change. that governments and experts worldwide now accept that temperatures will rise, and possibly or probably to dangerous levels, resulting in floods, droughts, forest fires, and water shortages. The authoritative Stern Report (2006, p.v) and the massively influential IPCC (2007, p.16) both produce charts indicating how the world is likely to change as global temperatures rise at 1° C at a time. Stern argues that to avoid a 2°C warming - which he admits (p.vi)would threaten up to 40% of all current species with extinction - the concentration of greenhouse gases need to be stabilised at no more than 450ppm (parts per million), yet advocates stabilisation at 550ppm - as if the more desirable level is no longer pos-Other highly regarded scientists like sible. Rees (2005) and Lovelock (2006, 2009) believe that we have already reached disaster levels, and that the situation may be irrecoverable.

One might have thought that this kind of information would have been the cause of concerted attempts at changes in the values, curricula and practice of schools and universities, and that an Education for Sustainable Development (ESD) would therefore have been the top of every educational agenda. Yet change has been slow, and the reaction has largely been anodyne. Shallcross and Robinson (2007, p.143) in their overview of the situation, conclude that 'official curricula rarely mandate sustainability, and teacher certification guidelines rarely mention sustainability.' They continue:

'There is also a lack of policy to support ESD, a lack of awareness of the importance of ESD; a lack of support from ministries of education, and a lack of communication of efforts between ministries of environment, education, health, agriculture and others.' (ibid)

In similar vein the UK National College for School Leadership (2007, p.43) pointed out that there is a serious mismatch '... between what schools are saying about the importance of sustainability and what they are doing.' This supports the conclusions of the English official inspection body, Ofsted (p.5), that ESD was regarded by most schools in that country as a 'peripheral issue.' In New Zealand, Chapman et al.(2009, p.135) have reported that 'the bulk of the initiatives are at primary school level and sadly do not go past the perennial projects of tree planting, litter schemes, worm farming and composting.'

These reports suggest that there may be serious differences between what is happening globally, and what schools are doing to prepare their students to face these issues in the coming years. This research looks at the views of school principals on this topic, in the belief that for such a concern to be actualised within the schools, it needs to be champi-oned by its leaders.

Research Rationale

1. Selecting an appropriate approach.

Whilst the initial research question was 'What value do school leaders place upon environmental issues?', it was thought unlikely that too many principals would say that they did not think this area was important. A more important question then might well be 'What priority do school leaders give to environmental issues in their schools?' This question acknowledges that there are many different constituencies demanding different things of principals, where the job is as much about triage, prioritisation, and dealing with ambiguous and conflicting demands, whilst keeping a personal value perspective alive. It might be the case, for instance, that whilst principals value this area highly, they may not, for a variety of reasons, be able to give it the priority and importance which research now suggests it deserves.

That being the case, a questionnaire was designed which examined the perceptions of school leaders in a number of countries about a range of educational values and priorities. These were based upon five different educational codes, four of which were suggested by Bottery(1990), and which are briefly described below:

a. Cultural Transmission Code (CT):

this values knowledge which is perceived as part of a country's cultural heritage. It tends to see the student as essentially a passive imbiber, one of many to be graded in their understanding and internalization of such knowledge. Teachers are therefore seen as guardians and transmitters of appropriate values, and principals will similarly be transmitters, hierarchical supervisors of those below them. The core issues then are seen as the value of the past, selection by elites, and objectivist transmission.

b. The Student-Centred Code (CC):

this sees the curriculum as being based on each student's individual experiences and interests, each being active constructors of their own reality. It sees education as the antithesis of transmission, an open-minded activity in which the processes of exploration and discovery are vastly more important than the end product. The teacher then must be a facilitator and constructor of beneficial situations for the student, but in no way a transmitter, for he or she must always be ready for movement by the student from one area of interest to another. The Principal in similar ways is a facilitator for such student interests. The core issues then are seen as the student being the focus, schooling being highly democratic, and learning being highly individual.

c. The Social Reconstruction Code (SR): this sees schools as essentially concerned with pressing social issues which need to be resolved, and therefore the curriculum takes the form of topic- or problem-based issues. In this situation, students are active and critical, and gain their educational identity through interaction with others in social groups in which each is seen as a necessary contributor. The teacher in such a situation is a facilitator, constructor.

and selector of relevant problems, issues and materials, but also a guardian of what is to be retained from the past. The Principal similarly provides a context which is a mixture of democracy and guidance. The core issues then are seen as being social and cultural critique, a focus on renewal and the future, and a critical active citizenry.

d. The Gross National Product Code (GNP):

this values an education which is conducive to the furtherance of national economic growth. It sees the student as being trained to fit into this economic endeavour. Initiative and activity are encouraged when these dovetail with ultimate occupational destinations. The teacher is therefore a trainer, constructor, and transmitter, a member of a hierarchy which begins at government levels and proceeds through the Principal to the teacher and on to the student, and which is underpinned by relevance to the prevailing economic demands. The core issues then are seen as Education for a competitive economy, the teaching of economically relevant skills, and an education for employability.

e. In addition, an Environmental Sustain ability Code (ENV)

was developed. This valued an education which recognised that the individual, social and economic activities of human beings are practised within an environment with limited resources. and with a limited ability to absorb the effects of such activities, and that there is a need to ensure that this environment is not depleted and damaged. The student in this code needs to be critical, engaged, and future-thinking, whilst the teacher needs to be both selector of relevant issues, but also the facilitator of diverse viewpoints, whilst the Principal needs to perform a role of guidance and facilitation. The core issues then are seen as environmental sustainability, ecological fragility, and long-term human impact.

One further point needs to be made, as it helps to further explicate the questionnaire construction. It was believed that all of these codes would only be fully operationalised when they addressed the knowledge, skills and attitudes that students would need. This being the case, the questionnaire was constructed on the basis of the five codes, with three core issues each, and each of these having attached to them three statements representing the knowledge, skills and attitudes required for each issue. This gave 5 codes x 3 core issues x 3 statements of skills, knowledge, and attitudes = 45 statements in all. Five verification, or 'liar' statements were also added in order to identify if any participants were simply mechanically choosing statements rather than reflecting before answering purposefully. This then formed the basis of the statements in the questionnaire.

2. Separating out personal values.

By asking the respondents to read each of the statements and to provide a score for each statement using a scale 10 (strongly agree) to 1 (strongly disagree), these questions were designed to separate out views on different educational codes, purposes, and values. However, answers to such statements might be the product of at least three different influences:

a. The extent to which their government

promoted this particular area;

- b. The extent to which a variety of forces
 including government influence and per sonal values might combine to produce a 'composite score'.
- c. The extent to which these were the re spondents own personally held values.

So we asked the principals to rate each statement on the extent to which they perceived each item to be:

- a. promoted by their government
- b. emphasised in their own practice
- c. reflected in their own values.

In the questionnaire, this looked like this (Table 1).

16 countries participated in this research. The initial draft of the questionnaire was sent out to the team leaders in all these countries, and piloted there, and a variety of feedback was received, which led to adjustments of wording in a number of questions, and to a refining of the scoring system. Headteachers told us that they needed an opportunity for a more fine-grained response system than the original 5 point scale, and they were thus asked in the final version to rate items on a ten point scale. This paper

Table 1. Questionnaire

	This is emphasised by my government in its advice, guidance, and legislation	This is emphasised in my practice at the present time	This would be emphasised in my practice if it were just my decision
1. Students in my school need to learn about what constitutes a 'good society'.			
2. Schools should teach pupils how to distinguish objective fact from subjective opinion.			

Instruction:

Now please write a score (10-1) in each of the three cells for each of these statements, on a scale from: 10 =agree strongly through to 1 =disagree strongly

Source: Own elaboration

will describe, analyse and contrast the responses for England, Poland and Finland, which are seen as different in a variety of ways. England is seen as largely being representative of a neo-liberal political and economic perspective over the last 30 years, Poland as being a country reasserting its independence and identity after forty years of Soviet domination, and Finland as representative of a Nordic culture. Total responses for the three countries are shown in Table 6. Subsequent papers will provide a wider national comparison of principals' views.

An overview of the data

The analysis of the headteacher data was begun with some exploratory and descriptive statistics. Responses to all 135 variables were checked for normality of distribution using a One Sample Kolmogorov Smirnov Test. Most were, but some item responses were not, normally distributed. Subsequent paired samples comparisons were conducted using a Wilcoxon signed-rank test. Results from this enabled us to see where pairs of responses from headteachers to items were significantly different.

Table 2. Responses received

CountryRespondentsEngland79Finland63Poland156Total responses298

Source: Own work

Table 3. Overview of item comparison results

Country	Number of significantly different pairs of items (total number of pairs 135) p< 0.05
England	118
Finland	85
Poland	131
Total responses	298

Source: Own work

More detailed analysis involved factor analysis as a standard tool in data reduction to enhance clarity. The full data set from the three countries was analysed as one set so that components extracted could be used for valid comparison between the countries. Such analyses were performed based upon the following assumptions and principles. First on the assumption that our headteachers had been asked to indicate their responses to each item in three categories, factor analysis was constrained initially to extract three components. Because we were aware of the potential for overlap between these categories as was explained above, an Oblimin rotation was employed as we could not justifiably expect the three sources of influence impacting upon their understanding of each item to be perceived in an entirely orthogonal manner. Finally, we conducted the analyses on a code by code basis since we had external validity for these and were interested to see how item responses from each of the three response categories were presented.

Alpha scores in table 8 are at an acceptable level. In the factor analysis, 13 items were removed from the total of 135. The remaining

Table 4. Educational Codes and constituent components

able 4. Educational Codes and constituent components			
Educational Code	Components	Component labels 'Headteachers' perceptions of:'	Alpha value
	ENV1 [39c,& b, 41c & b, 25 b &c, 16b &c, 28 b & c, 10b &c, 42c]	Personal and practice views on understanding and appreciation of environmental issues	0.843
ENV	ENV2 [50a, b, c]	Personal and government views of ecological appreciation	0.945
	ENV3 [42a,&b, 35a & b, 39a, 10a, 41a, 16a]	Government views on understanding and appreciation of environmental issues	0.879
	GNP1 [14c & b, 23c,29 c 7 b, 45 c & b, 18c,,11c, 21c & b]	Personal & practice views of skills, knowledge and appreciation of economic and employment issues	0.921
GNP	GNP2 [11a, 23a, 18a, 12a, 29a, 14a, 21a]	Government views of skills, knowledge and appreciation of economic and employment issues	0.884
	GNP3 [48a, b, c]	Personal, practice and government views on the primacy of economic issues	0.873
	SR1 [34c & b, 46c & b, 37c,& b, 30c & b, 5c, 8c, 9c]	Personal & practice views on students critical empowerment for building a better society	0.851
SR	SR2 [8a, 9a, 3a, 5a, 34a, 37a, 46a, 1a]	Government views of student critical empowerment for building a better future	0.884
	SR3 [1b & c, 3b & c, 8b, 9b]	Personal & practice views on student empowerment for building a better society	0.822
	CC1 [31b & c, 40b & c, 36b, & c, 26b & c, 27b & c, 20b & c]	Personal and practice views on valuing opinions and the level of students current empowerment	0.870
CC	CC2 [33a, b,& c, 24b & c, 22b & c]	Personal and practice views on promoting students personal interests	0.864
	CC3 [36a, 26a, 40a, 20a, 31a, 22a, 24a, 27a]	Government views on valuing student opinion and their current level of empowerment	0.881
	CT1 [32b, c & a, 38 a, b & c, 7b & c	Government, personal and practice views on the primacy of accepted knowledge	0.880
СТ	CT2 [4a, 15a, 17a, 2a & b]	Government views on the value of wisdom and experience	0.782
	CT3 [17c & b, 4b & c, 15c, 19c & b]	Personal and practice views on the value of wisdom and experience	0.783

items were employed to form the basis for the subsequent analysis of the remaining valid items

An initial pass at these data led us to rank those valid items and to explore those rated most highly (the 'top ten') and those rated least highly (the 'bottom ten'). What the graphical presentations of these data show is that there is no predominance of any one code either in the 'top tens' or in the 'bottom tens'.

It is clear from this that whilst principals believed that GNP statements and values were important for government, this emphasis is not reflected in either their own personal beliefs, or in what they said they actually did in practice. All three columns however, showed a representation for environmental concerns, child-centred issues and for issues of social reconstruction, with just one endorsement of a cultural transmission issue in the 'practice' column. So whilst there are some continuities between the three columns – and a support all the way through these for environmental issues - there were some real differences in emphasis.

For Poland as Table 6 illustrates, the result was interestingly different from the English

Table 5. England 'top' items. (Educational codes are shown by colour: pink= SR; red= GNP; green= ENV; blue = CT; yellow = CC)

	England				
		top ten			
rank	col a items	col b items	col c items		
1	1	3	3		
2	11	1	9		
3	3	9	37		
4	23	36	36		
5	37	25	5		
6	41	8	25		
7	8	37	8		
8	36	40	50		
9	18	17	1		
10	50	50	40		

Source: Own work

Table 6. Poland 'top' items. (Educational codes are shown by colour: as above)

	Poland				
		top ten			
rank	col a items	col b items	col c items		
1	4	10	10		
2	15	4	17		
3	10	3	3		
4	41	17	15		
5	46	36	4		
6	38	8	18		
7	39	9	9		
8	37	2	8		
9	36	16	16		
10	17	39	39		

data.

In all three columns the preponderance of choices rests within the cultural transmission, environmental, and social reconstruction codes. As will be demonstrated in subsequent papers, results from other ex-Soviet countries suggest a trend where countries coming out from under the Soviet yoke re-emphasise their cultural history, by facilitating changes in their society from a centralised economy and polity to a more free-market and democratic one, and by remedying the environmental neglect seen under the Soviets.

The Finnish overview is equally interesting as shown in table 11. Any preconception that a Nordic country would have a pronounced emphasis on environmental issues is not borne out by these data. Whilst environmental concerns appear in all three columns, there is a preponderance of both social reconstruction and child-centred concerns, and GNP and cultural transmission items are also apparent.

Comparing Column scores

This overview was developed further by studying the actual statements made, in terms of the ten most highly scored and the ten least scored statements in all three countries. This finer-grained examination produced findings which result in a deepened understanding of this overall picture.

a. Items with an upward scoring trend.

A first observation from comparing the three scores was that on the vast majority of statements in England(40/45), Poland(45/45), and Finland (43/45), the movement in scores from column to column shows an upward trend from government to personal scores, and that there were statistically significant differences between these. In other words, the principals in all three countries gave higher personal scores to statements about educational values than they believed their governments would, regardless of which educational code they were being asked about. In England, interestingly, this also included GNP statements. This does not appear in Table 9 because whilst headteachers gave higher personal scores to GNP issues than to their perception of governmental views, they ranked even more highly issues from other codes, and therefore the GNP issues did not appear as highly in their 'personal' rankings.

The overall finding from this upward trend in scores suggests that these individuals believe that they hold stronger commitment to a wide variety of beliefs than they perceive their governments do. It is not clear entirely why this is the case, but may be in part due to the fact that governments have other concerns which are not

Table 7. Finland 'top' items. (Educational codes are shown by colour: pink= SR; red= GNP; green= ENV; blue = CT; yellow = CC)

Finland			
		top ten	
rank	col a items	col b items	col c items
1	12	3	10
2	10	10	12
3	4	40	40
4	3	36	3
5	8	20	9
6	15	8	8
7	34	9	20
8	46	25	36
9	10	34	34
10	36	31	15

as strongly shared by principals, such as targets, inspection, funding arrangements, or the re-development of the system. With such different concerns, it may be that governments, by their lack of discussion of code values and issues in circulars and official literature, may tacitly send out a message that such value issues are presently not a central concern. Whilst this clearly needs further research, the overall message is clear: the results strongly suggest that school leaders in this sample didn't believe that their governments gave the same importance to many educational issues as they personally did.

b. Items with a downward scoring trend.

In England and Finland there were a relatively small number of 'downward scorings', though there were none in the Polish scores. These are scores where individuals assigned greater scores to their perception of what governments value than to either the applied or the personal columns. In England these were for statements which expressed the view that (a) students should contribute little to their school (b) that students should accept teachers' opinions (c) two statements supporting an absolutist epistemology (d) and that the main aim of school should be in creating a economically skilled workforce. On all these, whilst the respondents believed that governments would give them low scores, these principals gave them even lower scores. In other words, they disagreed more strongly with these statements than they felt their government did - which suggests again that when principals value things, they think their government values them less, and when they disapprove of things, they think that their governments do not disapprove quite as much. In Finland there was only one downward scoring, which expressed the view that students need to accept our ignorance about the impact of much of our behaviour on the environment. There are no downward scorings in the Polish data. Whilst these downward scorings don't contradict the overwhelming trend in scores, they do suggest that there is more difference between the views of English principals and their government, than in either Poland or Finland.

c. Evidence of mediation?

Finally, in both England and Poland, there

are no instances where column b is not an intermediate score between those for columns a and c. This is interesting because it seems highly plausible to interpret such a pattern as these individuals 'mediating' government beliefs in order for school practice to be more in line with what they believe needs to be done. One needs to be careful here, however, for it cannot be assumed that the scores in the 'practice' column are the result of a simple interaction between 'government' and 'personal' columns. Thus, in Finland, whilst 33 statements have upward movements in scores from 'government' to 'applied' to 'personal values', 12 statements have scores where the applied score is lower than the government score, and two applied scores which are higher than either government or personal scores. This suggests that it would be inappropriate to assume that the only things acting upon the applied scores are government pressures and personal values. In countries with more devolved systems like Finland, local educational and political pressure may be significant factors in influencing the scoring of items in the 'practice' column. There may therefore be a number of other factors influencing scoring items in the application column besides those of government and personal philosophy. Again, this is an area for further research.

Comparing the top ten and bottom ten statements

In this section, the top and bottom ten statements for the three countries are discussed. Personal responses (col c items) will be dealt with first, then headteachers perceptions of government emphases (col a items) and finally their perceptions of their current practice (col b items).

a. Top Ten Personal responses.

These choices (Table 7) seem to reflect personal support for student responsibility and student empowerment, the need for students to contribute to building a better world, a need for developing students' criticality, and of needing to care for the environment.

This table (Table 8) demonstrates that whilst, as in the English scores, there was a similar mixture of ecological values, student responsibility and empowerment, there was also a much

clearer reference to the country's cultural heritage and work values.

Here, whilst the highest ranked personal statement concerns the valuing of all life (as it is in the Polish items), the other statements are concerned with students valuing their heritage, the need for students to take responsibility in helping build a better society, and of developing student empowerment and criticality.

Despite variations in the three countries' responses, there does seem to be an overall pattern of these school leaders viewing their principal job as one of passing on the reins of responsibility to their students, and that to do

this students need to be provided with sense of empowerment, and to believe in the mission of building a better world. These will necessitate an appreciation of the state of the world they will inherit, including an appreciation of environmental issues. In England and Finland, this is further endorsed by a belief that students need to develop critical awareness: this is not replicated in the Polish items.

Table 8. England personal top items

	England Headteacher top personal statements		
rank	Item number	Item statement	
1	3	Students need to understand that they have responsibilities to society as well as rights from it	
2	9	Students must be given the feeling that they can make a difference for the better	
3	37	Students need to understand that they should contribute towards building a better world	
4	36	Teachers need to value the opinions of their pupils	
5	5	Schools must create curricula which invite discussion and debate	
6	25	Schools need to teach their pupils how to treat their local environment with care	
7	8	Schools should teach their pupils the skills they will need in building a better society	
8	50	Students need to know that all life on the planet is interdependent	
9	1	Students in my school need to learn about what constitutes a 'good society'	
10	40	Students should be encouraged to value their own opinions	

Source: Own work

Table 9. Poland personal top items

	Poland Headteacher top personal statements			
rank	Item number	Item statement		
1	10	Students should be taught to value the lives of all creatures		
2	17	Schools should teach their pupils how to show respect for their elders		
3	3	Students need to understand that they have responsibilities to society as well as rights from it		
4	15	Students need to value their cultural heritage		
5	4	Students need to know about the history of their country		
6	18	Schools need to teach their pupils the skills they will need in future work situations		
7	9	Students must be given the feeling that they can make a difference for the better		
8	8	Schools should teach their pupils the skills they will need in building a better society		
9	16	Schools need to teach students how best to dispose of waste products		
10	39	Schools should teach pupils how to save energy supplies		

Table 10. Finland personal top items

	Finland Headteacher top personal statements		
rank	Item number	Item statement	
1	10	Students should be taught to value the lives of all creatures	
2	12	Schools must concentrate on teaching curricula which will be useful to students in later life	
3	40	Students should be encouraged to value their own opinions	
4	3	Students need to understand that they have responsibilities to society as well as rights from it	
5	9	Students must be given the feeling that they can make a difference for the better	
6	8	Schools should teach their pupils the skills they will need in building a better society	
7	20	Schools should teach children how to take responsibility for running things at school	
8	36	Teachers need to value the opinions of their pupils	
9	34	Schools should be structured in ways which help their students become active critical citizens	
10	15	Students need to value their cultural heritage	

Source: Own work b. Bottom Ten Personal Issues.

The rating of many of these statements reflects the top personal responses presented above; namely, a rejection of epistemological absolutism, authoritarianism, and student disempowerment. The rejection of an over- em-

phasis on student-chosen learning is explicable within a framework of an empowerment for responsibility. There also remains a continuing concern over the prioritisation of economic productivity as the major school focus.

This is another interesting list in that whilst there is concern about students' disempower-

Table 11. England personal top items

	England Headteacher top personal statements		
rank	Item number	Item statement	
10	14	Students should know about things which will help their country develop economically	
9	24	Students should concentrate on learning how to do things that are important to them	
8	27	Students should know how to chair committees	
7	28	Students need to accept that we are ignorant of the impact of much of our behaviour on the environment	
6	33	Students should spend most of their time learning about things that they think are important	
5	19	Students in my school should be taught to accept the opinions of their teachers	
4	48	Students need to understand that the main aim of learning is to create a skilled national workforce	
3	38	Students need to understand that the things they are taught are not matters of opinion but of fact	
2	32	Schools must teach only those curricula materials where there is certainty about their truth	
1	7	Students in my school need to know that they cannot contribute much to curricula content	

ment, and about an authoritarian approach to schooling, there is also a concern not to empower students too much, and to not encourage too much criticality. Similarly, whilst the top personal statements suggest that some environmental issues are espoused, this list suggests that there are clear limits as to how far (or how deep) such endorsement should go.

Table 12. Poland personal top items

	Poland Headteacher top personal statements		
rank	Item number	Item statement	
10	32	Schools must teach only those curricula materials where there is certainty about their truth	
9	19	Students in my school should be taught to accept the opinions of their teachers	
8	28	Students need to accept that we are ignorant of the impact of much of our behaviour on the environment	
7	50	Students need to know that all life on the planet is interdependent	
6	26	Students should learn in their own way	
5	30	Students should learn to be critical of curricular materials, rather than just to accept them	
4	33	Students should spend most of their time learning about things that they think are important	
3	7	Students in my school need to know that they cannot contribute much to curricula content	
2	27	Students should know how to chair committees	
1	48	Students need to understand that the main aim of learning is to create a skilled national workforce	

Source: Own work

Table 13. Finland personal top items

	Finland Headteacher top personal statements		
rank	Item number	Item statement	
10	38	Students need to understand that the things they are taught are not matters of opinion but of fact	
9	45	Students need to appreciate how important a healthy economy is	
8	24	Students should concentrate on learning how to do things that are important to them	
7	27	Students should know how to chair committees	
6	22	Schools should concentrate on providing curricula in areas of interest to the student	
5	19	Students in my school should be taught to accept the opinions of their teachers	
4	48	Students need to understand that the main aim of learning is to create a skilled national workforce	
3	7	Students in my school need to know that they cannot contribute much to curricula content	
2	33	Students should spend most of their time learning about things that they think are important	
1	28	Students need to accept that we are ignorant of the impact of much of our behav-iour on the environment	

This list suggests that there is a rejection of student passivity without pandering too much to students' wishes; that there are limits to environmental concerns; that a balance is needed between helping to create a workforce without making this a school's overriding aim; and the rejection of the idea that valid knowledge only comes from those in authority.

All in all, then, whilst there are national variations, the pattern pointed out above – of facilitating the students in taking on the reins of responsibility – is a strong theme for all three countries' school leaders.

c. The top ten scores for perceptions of government emphasis The perceptions reflect many of the principals' own emphases, particularly in terms of building a better world, and of environment concerns, and there is also a clear perception that pupil's opinions should be respected by teachers and not, as some might imagine, a governmental belief that students are simply there to be passive imbibers of curricula delivered by teachers. However, there is also a perceived governmental emphasis on economic issues not seen in the principals' personal responses.

These scores suggest that Polish principals think their government gives a heavier emphasis than do English principals of their government to national and ecological issues, with

Table 14. English headteachers' perceptions of the top ten government scores

England Headteacher top personal statements					
rank	Item number	Item statement			
1	1	Students in my school need to learn about what constitutes a 'good society'			
2	11	Schools need to teach skills which enable pupils to contribute to their national economy			
3	3	Students need to understand that they have responsibilities to society as well as rights from it			
4	23	Schools need to teach pupils the skills to make them employable			
5	37	Students need to understand that they should contribute towards building a better world			
6	41	Students need to know that global warming is a developing problem			
7	8	Schools should teach their pupils the skills they will need in building a better society			
8	36	Teachers need to value the opinions of their pupils			
9	18	Schools need to teach their pupils the skills they will need in future work situations			
10	50	Students need to know that all life on the planet is interdependent			

some concern for valuing a variety of opinions. However, neither they nor their government make economic concerns a top ten issue. There seems to be an emphasis about how issues of national culture and patriotism are expressed, and may be a reflection of Poland's reassertion of such values after Soviet rule.

This table suggests perceptions of a governmental mixture of valuing the past and the country's heritage, in part to help build a better society, as well as the valuing of all life, with students needing the skills and a sense of responsibility to do this; but students also being encouraged to express their own views.

d. The bottom ten scores for perceptions of government emphasis

These results suggest that English headteachers believe that their government has a dislike of epistemological absolutism and authoritarianism, and a rejection of the idea that

Table 15. Polish headteachers' perceptions of the top ten government scores

Poland Headteacher top personal statements					
rank	Item number	Item statement			
1	4	Students need to know about the history of their country			
2	15	Students need to value their cultural heritage			
3	10	Students should be taught to value the lives of all creatures			
4	41	Students need to know that global warming is a developing problem			
5	46	Students need to know about the past and the present in order to build a better future			
6	38	Students need to understand that the things they are taught are not matters of opinion but of fact			
7	39	Schools should teach pupils how to save energy supplies			
8	37	Students need to understand that they should contribute towards building a better world			
9	36	Teachers need to value the opinions of their pupils			
10	17	Schools should teach their pupils how to show respect for their elders			

Source: Own work

Table 16. Finnish headteachers' perceptions of the top ten government scores

Finland Headteacher top personal statements						
rank	Item number	Item statement				
1	1	Schools must concentrate on teaching curricula which will be useful to students in later life				
2	11	Students should be taught to value the lives of all creatures				
3	3	Students need to know about the history of their country				
4	23	Students need to understand that they have responsibilities to society as well as rights from it				
5	37	Schools should teach their pupils the skills they will need in building a better society				
6	41	Students need to value their cultural heritage				
7	8	Schools should be structured in ways which help their students become active critical citizens				
8	36	Students need to know about the past and the present in order to build a better future				
9	18	Students should be encouraged to value their own opinions				
10	50	Teachers need to value the opinions of their pupils				

humanity lacks a knowledge of its effects on the environment. It is also interesting to note that two GNP statements are included in this figure – that the main aim of education is to create a skilled workforce and that students should be fully responsible for their own economic welfare: which does not agree with caricatures by critics. Whilst these individuals indicate that they feel more strongly about nearly all the issues than they feel their government does, there is no indication here of their seeing their government as uncaring, dictatorial or repressive. Indeed, the results suggest that they believe they share many values.

If limits to student empowerment are endorsed in the other two national samples, they are particularly pronounced here, with eight different cautions against student activism, criticality and debate, and against a learning focused upon student interests; only with respect to students uncritically accepting teachers opinions is there a more liberal attitude. There are individual cautions about schools' roles in creating a national workforce, and critical views

on some environmental statements. These statements overall suggest a heavy emphasis on a conservative role for students which prioritises their responsibilities to society over personal choice.

The Finnish governmental perceptions are, like the English data in this section, rather more varied and liberal than the Polish perceptions. Whilst there is a similar rejection of too much concentration on what students want to do, and a caution of economic concerns being too dominant. Finally, whilst there is a rejection of an authoritarian epistemology, there is also an (anomalous?) rejection of a limited understanding of human effects upon the environment.

Discussion

a. A balanced view of educational codes?

In the light of the results and comments so far made, it is worth repeating that in England, Poland and Finland, the top ratings for columns a, b, and c, all help in identifying what these

Table 17. English headteachers' perceptions of the top ten government scores

England Headteacher top personal statements					
rank	Item number	Item statement			
10	48	Students need to understand that the main aim of learning is to create a skilled national workforce			
9	21	Students need to understand that they, not the state, should be responsible for their economic welfare			
8	22	Schools should concentrate on providing curricula in areas of interest to the student			
7	35	Students need to know that many actions take a long time to have an appreciable effect			
6	24	Students should concentrate on learning how to do things that are important to them			
5	27	Students should know how to chair committees			
4	28	Students need to accept that we are ignorant of the impact of much of our behaviour on the environment			
3	38	Students need to understand that the things they are taught are not matters of opinion but of fact			
2	32	Schools must teach only those curricula materials where there is certainty about their truth			
1	33	Students should spend most of their time learning about things that they think are important			

Table 18. Polish headteachers' perceptions of the top ten government scores

Poland Headteacher top personal statements						
rank	Item number	Item statement				
10	50	Students need to know that all life on the planet is interdependent				
9	19	Students in my school should be taught to accept the opinions of their teachers				
8	28	Students need to accept that we are ignorant of the impact of much of our behaviour on the environment				
7	5	Schools must create curricula which invite discussion and debate				
6	22	Schools should concentrate on providing curricula in areas of interest to the student				
5	24	Students should concentrate on learning how to do things that are important to them				
4	33	Students should spend most of their time learning about things that they think are important				
3	48	Students need to understand that the main aim of learning is to create a skilled national workforce				
2	26	Students should learn in their own way				
1	27	Students should know how to chair committees				

Source: Own work

Table 19. Finnish headteachers' perceptions of the top ten government scores

Finland Headteacher top personal statements						
rank	Item number	Item statement				
10	14	Students should know about things which will help their country develop economically				
9	38	Students need to understand that the things they are taught are not matters of opinion but of fact				
8	21	Students need to understand that they, not the state, should be responsible for their economic welfare				
7	24	Students should concentrate on learning how to do things that are important to them				
6	48	Students need to understand that the main aim of learning is to create a skilled national workforce				
5	27	Students should know how to chair committees				
4	22	Schools should concentrate on providing curricula in areas of interest to the student				
3	19	Students in my school should be taught to accept the opinions of their teachers				
2	28	Students need to accept that we are ignorant of the impact of much of our behav-iour on the environment				
1	33	Students should spend most of their time learning about things that they think are important				

principals saw as the positive aims they had for their schools, and the extent to which they differed from their governments on these, and how in England and Poland at least, they appear to be mediating these governmental emphases. The bottom ratings for a, b, and c, unsurprisingly, seem largely the reverse. Thus as all three leadership groups believed that a degree of student empowerment was important, they tended to reject statements which denied students any empowerment - and they believed their governments felt the same way, a view they suggested was reflected in their practice. However this does not seem to be an issue of empowerment vs. no empowerment, because the scores suggest that these individuals believed that students could be empowered too much (such as having the power to run committees) or could be empowered for the wrong reasons (such as to choose what they wanted to study). kind of positioning on an empowerment spectrum was evident in all three columns across all three national samples.

It is also important to note that any statement rejections appear to be rejections of the particular issues focused upon in those statements, and do not seem to be a rejection of the educational code which that a statement represented. Thus in England a cultural transmission statement only appears once in the 'top ten' of all three columns. However, it is clear from the scoring of other cultural transmission statements that the code is not rejected as such. It seems that the idea of singing the national anthem can be rejected without the idea of valuing one's cultural heritage also being rejected – and both are possible elements of a cultural transmission ideology. This variation of scores within an educational code may be due to variations in what is seen as the best expression or practice of this code. For example Polish responses to singing the national anthem are very supportive - with a mean ranking score of 4.66. In Finland, it received a more relaxed mean ranking score of 28.66. In England, it received a ranking of 44.33. What this strongly suggests is that whilst there are national variations in the valuing of particular expressions of a code, no educational code is totally disvalued in any of the three countries. This is perhaps unsurprising, as all the codes have something important to say about universals in human societies, even if they are expressed differently: all societies need

to be concerned about passing on their cultural heritage, about adjusting to changes, about preparing their children for work, about caring for the environment in which they live, and appreciating the individual nature of learning. However, societies will have differential emphases upon codes, depending upon the geographical, historical, political, economic and cultural issues at any particular moment in time. This is highly likely to reflect the messy reality of practice rather than the neatness of abstract theorising, and is likelier to be closer to the reality that educational systems and their leaders face.

b. Pragmatic application v. Academic specificity.

These scores may then reflect a real difference in focus between academics and principals (and probably governments). It is clearly a part of the academic role to analyse issues and concerns in a manner such that abstract categories can be developed from them, and that these categories help to provide the information from which theories and explanations of underlying causation and functioning may be derived. Yet reality and practice may in fact be much more blurred, and whilst academics may abstract a number of different educational codes, and argue that for a variety of reasons and values, one educational code is 'better' than another, individuals concerned in dealing with the pragmatism of practice, such as principals/principals and governments, may well understand such conceptual separation and valuing, but nevertheless believe that the values and purposes underpinning all of these codes should have some part to play in the practice of schools as they attempt to produce a 'rounded' individual who has the qualities needed to cope with the world of the future. This may then explain why no codes are specifically rejected in any of the three countries, even if individual statements within them are.

c. A consonance of headteacher/principal and government views?

When looking at the results across the five different educational codes reviewed, there are strong indications that these principals believed that their governments held similar values, though in most cases these principals held these beliefs more strongly than their government. In England and Poland there was a statistically significant difference in a large majority of the scores provided between their own ratings and those ratings they assigned to government, suggests that there may be an issue of morale here. In Finland, the differences were not as marked, and suggest a greater correspondence between the views of principals and their government.

However, it should be stressed that the overall picture is one where principals and government seem to share a similar attitude to the core mission of schools – to empower students in order to help them take on the reins of responsibility for running their country in future decades. Taking on such reins, it would seem, means that a number of different issues need to be addressed – including the requisite attitudes, knowledge and skills to deal with the social, political, economic and environmental issues which will confront these students in the future

- and which are largely reflected in the general support for all of the five codes addressed in this questionnaire.

d. Views and Values on Environmental Issues.

This figure may be viewed in three different ways. First, one can compare scores between the three countries. When viewed this way, there are clearly some statements whose ranking across all three countries are largely shared. Questions 16, 28, 35, 39, 42 all share reasonably similar values (highest rank minus lowest rank <11) across the three countries, even if their approval ratings vary strongly between the questions. There are however clear national differences for questions 10, 25, and 50. Thus whilst Polish and Finnish ranks suggest very strong support for valuing the lives of all creatures, the English ranking is much lower. There is also a considerable spread of support across all three countries for caring for the local envi-

Table 20. Mean positional rankings for environmental statements across all three columns. Where differences in rankings are pronounced, details of government, personal and practice co lumns are given in brackets below the mean number.

Statement	England mean ranking	Poland mean ranking	Finland mean ranking
10. Students should be taught to value the lives of all creatures	19.66 (27, 11,11)	2	1.66
16. Schools need to teach students how best to dispose of waste products	13	11	18.66
25. Schools to need to tech their pupils how to treat their local environment with care	7.33	21	14.33
28. Students need to accept that we are ignorant of the impact of much of our behaviour on the environment	41.66	37.0	46.0
35. Students need to know that many actions take a long time to have an appreciable effect	33.66	23.0	26.66
39. Schools should teach pupils how to save energy supplies.	18.33	10.33	12.66
41. Students need to know that global warming is a developing problem	13.33 (6,17,17	15.0 (5,24,16)	17.33
42. Schools should teach pupils how to estimate the long term effects of their actions.	25.33	30.0	22.33
50. Students need to know that all life on the plan-et is interdependent.	9.33	37.66	17.66

ronment; and finally whilst perceptions of the need to understand the interdependence of all life are largely supported in England and Finland, it receives poor support in Poland.

This variation of support within particular codes applies to Environmental Issues as well. Table 18 shows that there is considerable variability, not only between countries, but in the rankings between the three columns.

A second way of viewing this data is to ask how favourably different statements were viewed. Looked at in this way, statement 10 on valuing all life is viewed very positively in Poland and Finland, but much less so in England. Statements 16 (disposing of waste products) and 39 (saving energy) – both essentially practical activities may be seen as 'good' ratings, whilst statements 35 and 42 - both concerned with understanding long-term consequences could only be judged as fair. Statement 25 on caring for the local environment has fair scores, but as noted the variation between countries is marked, with Poland giving the poorest mark, a score replicated on statement 50, on the interdependence of all life, where the Polish value is markedly divergent from the two other national scores. The very low rating across all three countries for statement 28, on our lack of understanding of our environmental impact, is concerning, as historically humanity has been either ignorant or unconcerned about its effects upon the environment, and this attitude persists in some quarters today.

Finally, simply providing the mean positional score for statements 10 and 41, on - valuing all life, and appreciating the development of global warming - doesn't do justice to the large variation in government, personal and practice column scores. Thus whilst the Polish and Finnish scores suggest very strong support for valuing the lives of all creatures, the English scores is not only much lower overall, but suggests a considerable divide between perceptions of governmental ratings of this issue, and personal and practice ratings. Responses on students needing to know about global warming are fairly homogeneous in Finland, but show considerable variation between perceived high government approval for this in England and Poland, but much less support from principals themselves, and in terms of their practice. These statements clearly need further investigation, but the responses to the global warming issue suggest that these individuals do not take this issue as seriously as their governments do, and if this is replicated in the other countries' responses, then it would be something for environmentalists to be concerned about. This will be dealt with in a further paper.

All in all, these scores suggest that whilst there are some national commonalities, there are also marked differences between them, and a small number of differences between the columns in particular national scores. Finally, there are some statements which achieve a comparatively good positional score, but there are others which do rather poorly, and with respect to responses to the view that our ignorance of the impact of much of our behaviour on the environment, worryingly so. Indeed, if the driving force behind many of the principals' views on this questionnaire was the passing on of social responsibility, it raises questions as to whether these educational leaders are sufficiently informed not only about environmental sustainability, but also about its links with social and economic sustainability, to be in a position to really effect such transition. The depth of principals' views in this area is a largely unexplored topic, and these results suggest is an urgent area for further investigation.

Conclusion: Environmental values and the reins of responsibility.

This study began with a specific concern in determining the level of interest which principals have with issues of environmental sustainability. With respect to this concern, the evidence from this study suggests that principals value some elements in this area quite highly, but the results also suggest that there is considerable variation in the rating of different statements on this issue, and of whether these individuals possess sufficient depth of understanding to lead in developing an area which is impacted by social and economic factors. Those who come to the notion of Sustainable Development, and a corresponding Education for Sustainable Development (ESD) for the first time could be forgiven for believing that it is primarily concerned with environmental sustainability, yet a principal reason for environmental concerns increasingly lies in the unsustainable demands of modern societies for energy and the extraction of resources, caused by a culture of consumption, which in its turn is driven by an economic model underpinned by the need for growth (Speth, 2008; McKibben, 2007; Hamilton, 2004). Many of the current threats to environmental sustainability may then be created by unsustainable societal practices and an unsustainable economic philosophy. Such survivability, however, is not dependent solely upon the nurturing of a benign natural environment and of more sustainable social practices. It will also depend upon how the current resources are distributed, how the richer nations help the poorer to attain a reasonable standard of living, and how the less fortunate are helped to deal with the consequences of climatic change. An Education for Sustainable Development then needs to recognise the interrelationships between these three areas of sustainability, and leaders of schools need to understand these complexities and their implications if they are to pass on the reins of responsibility in a timely, appropriate and informed manner. This seems an important area for future research.

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