

Passing on the reins of responsibility? Comparing school principals' values and practices in a 'wicked' reality

Mike Bottery and Nigel Wright

University of Hull, England

Abstract

This paper describes and discusses the responses to questionnaires about the endorsement of different educational values from principals in nine diverse European countries, as well as the US and Hong Kong. The results show that there is a spread of endorsement across all five codes, yet there is also a significantly stronger endorsement for some codes than others. In addition, there is a strong degree of agreement between these principals, and the educational values they perceive their governments to endorse. There is also a strong endorsement for environmental values, not only in theory but in practice, though the focus tends to be on pragmatic measures rather than more deep-seated, complex issues. The results suggest two overall conclusions.

First, principals and their governments seem to share a belief in the need to appreciate a variety of perspectives and approaches, and they both seem to see the school experience as one of preparing the student for future responsibilities – a task of ‘passing on the reins of responsibility’, which necessarily requires an appreciation of a complex and ‘wicked’ reality. Yet, secondly, the results from the environmental responses suggests that neither the principals nor their governments may fully recognize this complexity, nor prepare their students for it. To create sustainable schools within sustainable societies and sustainable environments, it seems that a greater recognition of such complexity, and such ‘wickedity’, and of how to deal with the challenges it presents, is then required.

Keywords: educational values, environmental values, principals, sustainability

Introduction: A principal's reality

It seems almost a truism to say that the work of school principals is complex. They must respond to a large number of different constituencies, values and interests – from the latest government legislation and ‘advice’, through to local community emphases, and then to the concerns of individual teachers, parents and children. In addition, as Bottery et al. (2008) have shown in their work with principals in England and Hong Kong, because of the complexity of the interaction between different constituency demands, the context of such demands, and the personalities of the individuals facing them, the nature of such demands will vary from time period to time period, and may well be unpredictable or even controllable. Furthermore, as Fullan (1991) has argued, even if they perceive a particular course of action as intrinsically desirable, they may still not feel capable of pursuing it at a particular moment in time because of other priorities. This incommensurability of demands and values from a complex array of stakeholders then explains why Hoyle and Wallace(2006) argue that much of the principal’s life is suffused by paradox and irony. It also highlights the importance of Bore and Wright’s (2009) argument that governments often want to define issues as ‘tame’ – as being simple

to understand and deal with. Such desire is perhaps understandable, given the kinds of pressures to produce results that political systems demand of politicians. Yet, given the complex nature of the task of dealing with a complex array of such constituencies, Bore and Wright suggest that many if not most issues are actually ‘wicked’ in character: they are not only difficult to frame, but also require something more complex than ‘tame’ strategies. Indeed, the improper adoption of tame framings and solutions is likely to lead to even more problematic outcomes. The role of the principal is then not a simple one, and understanding how they resolve such ‘wicked’ issues must be high on any attempt to accurately frame their reality.

Five educational codes

A crucial part of this reality necessarily involves the manner in which they bring to bear an array of personal educational values in their work. They could for instance value the transmission of cultural values, the encouragement of individual student interest, the discussion of creating a ‘better’ society, the care of the environment, or the greater generation of national wealth. They may indeed value all of these, but how do they balance them out? This was the framing question for this study, for whilst our initial concern was in understanding principals’ views on environmental issues, it was felt that a questionnaire which examined the perceptions of school leaders across a

range of educational values and priorities was more likely to elicit a more accurate position. The questionnaire was then based on five different educational codes, derived largely from Bottery (1990).

A first is a **Cultural Transmission Code** which values knowledge perceived as part of a country's cultural heritage. It tends to see students as passive imbibers of information, to be graded in their understanding and internalization of such knowledge. Teachers are seen as guardians and transmitters of appropriate values, and principals as hierarchical supervisors of those below them.

A second code is **Student-Centred** which sees the curriculum as being based on each student's experiences and interests, each being active constructors of their own reality. It sees education as the antithesis of transmission: teachers here are facilitators and constructors of beneficial situations, but not transmitters. Principals are similarly seen as facilitators for such student interests.

A third code is one of **Social Reconstruction**, where schools are seen as essentially concerned with pressing social issues, and where the curriculum takes a topic- or problem-based approach. Students here are active and critical, and teachers are facilitators, constructors, and selectors of relevant problems, issues and materials, but also guardians of what is to be retained from the past. Principal similarly provide a context which is a mixture of democracy and guidance.

A fourth code is a **Gross Nation-**

al Product Code which values an education promoting national economic growth. The student is trained to fit into this economic endeavour, and initiative and activity are encouraged when these dovetail with ultimate occupational destinations. Teachers therefore are trainers, constructors, and transmitters, members 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 prevailing economic demands.

A final code is one of **Environmental Sustainability (ENV)** which recognises that the individual, social and economic activities of humanity are practised within an environment, with limited resource, and a limited ability to absorb the effects of such activities. There is then a need to ensure that this environment is not depleted and damaged. The students in this code need to be critical, engaged, and future-thinking, whilst the teachers need to be selectors of relevant issues, but also the facilitators of diverse viewpoints, whilst Principals needs to perform a role of guidance and facilitation.

Constructing the questionnaire

As it was believed that these codes would only be fully operationalised when they addressed the requisite knowledge, skills and attitudes for each code, each of these were allotted three questions within the questionnaire. This resulted in 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 questionnaire.

The respondents were then asked to read each statement and provide a score for each one using a scale from 1 (strongly disagree) to 10 (strongly agree). However, it was also recognized that their answers to such statements might be influenced by at least three other factors:

- a. The extent to which these were the principals’ personally held values;
- b. The extent to which their government promoted this particular area;
- c. The extent to which a variety of

forces – including government influence and personal values – might combine to produce a ‘composite score’.

Given this possibility, the principals were asked to rate each statement on the extent to which they perceived each item to be:

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

Results

The initial draft of the questionnaire was sent out to team leaders across Europe, the US, and Hong Kong, and were piloted in these countries. A variety of feedback was received, which led to adjustments in a number of questions. Data in this paper is then taken from the eleven countries

Table 1. Respondents per country

Country	Number of responses
Croatia	199
England	79
Finland	63
Hong Kong	89
Hungary	104
Latvia	56
Poland	156
USA	77
Iceland	47
Macedonia	43
Sweden	40
Total	953

Source: own research

which generated more than 40 responses. In total, the responses from 953 principals' are analyzed. The countries and the number of responses is shown in Table 1.

For the purposes of this paper, the top

fifteen endorsed statements across the three categories will be analyzed. We begin with the principals' personal endorsement of the statements in the questionnaire.

Table 2. Top Fifteen Personal Responses

Rank	Cro- atia	Eng- land	Fin- land	Hong Kong	Hun- gary	Lat- via	Po- land	USA	Ice- land	Mace- donia	Swe- den
1	15	3	10	20	3	11	10	9	3	10	10
2	10	9	12	10	13	13	17	3	9	11	12
3	17	37	40	17	15	41	3	8	34	20	36
4	16	36	3	26	39	3	15	37	31	37	3
5	12	5	9	9	4	8	4	18	5	8	34
6	40	25	8	39	25	12	18	4	8	12	26
7	39	8	20	37	16	25	9	2	25	16	9
8	8	50	36	25	9	1	8	12	36	36	8
9	25	1	34	13	10	15	16	1	40	15	5
10	3	40	15	16	42	10	39	5	1	23	40
11	9	10	25	3	3	23	2	23	37	1	37
12	37	16	5	50	50	36	12	36	50	9	30
13	50	17	2	41	41	45	23	46	4	18	42
14	4	46	39	36	36	9	14	50	2	17	1
15	11	31	50	40	40	29	36	25	10	4	50

CT	3	1	2	2	3	2	4	2	2	3	0
CC	1	3	3	4	2	1	1	1	3	2	3
Sr	4	7	5	4	3	4	3	7	7	4	8
GNP	2	0	1	0	0	5	4	3	0	4	1
ENV	5	4	4	5	7	3	3	2	3	2	3

Source: own research

The balance of personal endorsement between the codes

A first conclusion was that there was a surprising amount of endorsement between the five codes (see Table 2).

The responses indicate an international belief in the need to endorse the majority of the codes. In an analysis of the top fifteen responses, five sets of principals (from Croatia, England, Finland, Hong Kong, Macedonia, and Latvia) endorse statements from all five codes, whilst principals from five sets (Hungary, Poland, the USA, Iceland and Sweden) endorse statements from four codes.

There is, however, also an interesting emphasis in Fig.2 across the five codes. Thus there are 19 endorsements for GNP statements, 24 for Cultural Transmission statements, 24 for Child-Centred, 47 for Environmental Issues, and 53 for Social Reconstruction. Issues of Social Reconstruction and the Environment then are much more heavily emphasized than the similar ratings for Cultural Transmission, Child-Centred and GNP Issues.

Moreover, whilst there seems to be widespread endorsement for the codes overall, this does not mean that the codes were all endorsed to the same extent cross-nationally. Thus, principals in Sweden endorsed eight 'social reconstruction' statements, whilst principals in Poland endorsed only three in their top fifteen. Similarly, Hungarian principals endorsed seven environmental statements, whilst US principals endorsed only two.

Other kinds of observations raised questions which are not easily answered by this research. Why, for instance, do Latvian principals support four GNP sta-

tements in their top fifteen, whilst the three other ex-communist countries in this sample (Croatia, Hungary, and Poland) only muster one endorsement between them? Why does England, a country with a historically large policy emphasis upon economic growth, and Hong Kong, internationally renowned for its entrepreneurial zeal, both have no statements of endorsement for the GNP code from their principals? Why do Swedish principals not personally endorse any cultural transmission statements in their top fifteen statements?

One way of developing an understanding to some of these questions is to look at the endorsements to particular statements within the codes. Thus, in the **Cultural Transmission** code, Q.4 (on valuing the history of a country) received six endorsements, Q.15 (on valuing a country's cultural heritage) receives 5 endorsements; as did Q.17 (on respecting elders). Q.2 (on recognizing responsibilities as well as rights) received 4 endorsements, whilst q. 13 (on singing the national anthem) receive 3. These statements seem to centre largely around valuing the past. No endorsements were given to Q. 7 (that students cannot contribute much of value), Q. 19 (that they should accept the opinions of their teachers), Q.32 that schools should only teach about things of certainty, and Q. 38 (that things that are taught are matters of fact, not opinion). This suggests a cross-national view of CT as a respecting of cultural heritage, but not one of unquestioning belief to any particular view on it.

In terms of the **Child-centred Code**, principals in ten out of eleven counties supported Q.36, that schools should value the opinions of students, whilst 7 sup-

ported Q.40 that students should be encouraged to value their own opinions. Much less endorsement was given to Q.20 (3 endorsements) that students should have responsibility for running things at schools, and even less for Q. 26 (n=1) (that students should learn in their own way) and for Q. 31 (that all opinions should be valued equally). No endorsements were given for Q.22 (schools should focus on curricula determined by pupils), Q. 24 (students should concentrate on learning what they think important), Q. 27 (students should know how to chair committees) and Q.33 (students should spend their time learning about what they think is important). As with the CT code, a pattern seems to be emerging: students opinions should be listened to, and students should be empowered, but only so far. They have much to learn, and so whilst encouraging them to develop their opinions, these results suggest that principals believe that students should be in no doubt that they are at the bottom of an educational hierarchy.

Statements from the **Social Reconstruction Code** were heavily endorsed across all eleven countries. Principals in all countries endorsed Q. 9 (that students must be empowered to feel they could make a difference), whilst 10 endorsed Q.3 (that students had responsibilities as well as rights). There were nine endorsements for Q. 8, and 7 for Q. 37, both of which were about students helping to build a better society and world. In the same kind of vein, there were six endorsements for Q.1, which suggested that students should learn about what constituted a good society. Q.5 (that curricula should be designed for discussion and debate) was given five endorsements, whilst

Q. 46 which suggested a knowledge of the past and the present was necessary to build a better future, was given three endorsements. Q.34 (that schools should help students be actively critical) received two endorsements, whilst Q.30 (that students should be critical of curricular materials) received just one. A picture seems to be appearing that principals believed that students should be empowered, but within that empowerment, should recognize their responsibilities, and empowerment and criticality had limits for junior members of an educational community.

Personal endorsements for the **GNP Code**, were muted. Seven groups of principals endorsed Q12 (on the need for a curriculum for future usefulness) in their top fifteen. Q23 (skills for employability) received four, whilst Q.11 (skills for the economy) received three, as did Q. 18 (skills for future work situations). Qs 14 (knowledge for economic development), 29 (knowledge for future employability) and 45 (appreciating the need for a healthy economy) received only one endorsement each. Finally, Q.21 (on the individual rather than the state being responsible for economic welfare) and 48 (that the main aim was to create a skilled workforce) received no endorsements. In the light of the prominence that this area is normally given in the media and in political debate, this is hardly a ringing endorsement by school principals for the centrality of this educational code.

Finally, many of the statements in the **Environmental Code** were strongly endorsed. Q.10. that students should be taught to value the lives of all creatures, received 10 endorsements, whilst Q. 25 that students needed to treat the local environ-

ment with care, and q. 50 – that students need to understand the interdependency of all life - were both endorsed by eight. Q.16 (disposing of waste products) received six endorsements, statement 39 (on the need to save energy supplies) received five endorsement. Q.41 – on global warming as a developing problem – received three endorsements, whilst q.42 – on estimating long term effects – received just one. Questions 28 – on the need to accept that we are ignorant of the effects of much of our behavior on the environment – and 35 – on the need to recognize that many actions have a long term effect received no endorsements whatsoever.

The overall impression is that, at a personal level, statements in the CT, CC, and SR codes seem to be endorsed to the extent that students are empowered to believe in their ability to change things. However, there is also a message here that these students need to be aware of their responsibilities as well as rights, and of their current junior location in an educational hierarchy. Moreover, whilst there is strong support for a number of aspects of an environmental stance, there is little apparent personal enthusiasm by these principals for the GNP code as a central aspect of education.

The degree of agreement between principals and their government

Of course, Principals' personal views is only one aspect of looking at what influences principals actual practice. There are not many countries where governmental views is not an important constituent in the mélange of influences upon a principal's actual practice, though it sho-

uld be pointed out that different countries have different degrees of involvement for their government in educational policy and values. The selection of countries for this particular piece of research demonstrates this range. Thus, until the 1980s, England was very decentralized, with a balance between school, government, and local authority, but is now a highly centralized system. Hong Kong government, though much smaller in size, has until recently, had a very 'hands-off' approach to education. Only with the return of Hong Kong to the PRC, has its government begun a re-merging of Hong Kong (and its education system) with that of the mainland. The USA has always had a state-based education system, even if national government has tended to set the wider parameters. And finally, whilst Finland has perhaps the most devolved system of all, other European countries, particularly like those in the sample who have emerged from communist rule, are faced by the twin dilemmas of wishing to use the education system to reassert a non-communist national culture once more, but are acutely aware of the dangers of education being used for authoritarian purposes.

Governmental emphasis will therefore vary from country to country, and any perceptions of principals must be contextualized by that understanding. Having said this, the development of international comparators like those used by the OECD or PISA, have intensified government involvement, as comparisons are now increasingly made not within but between systems. Once again, the 'wicked' nature of principals' work is emphasized, as they need to be aware of pressures not only from their own governments,

but beyond their national boundaries. So how do they perceive such governmental involvement? Some of the answers are provided in fig 3, where the top fifteen statements by principals of perceptions

of governmental emphasis are displayed.

A first finding of note is that as with their own values, principals' perceptions of governmental values is one of espousal across all of the five codes, even if the-

Table 3. Principals' perceptions of government emphasis

Rank	Cro- atia	Eng- land	Fin- land	Hong Kong	Hun- gary	Lat- via	Po- land	USA	Ice- land	Mace- donia	Swe- den
1	15	1	12	13	13	13	4	4	4	4	10
2	4	11	10	26	4	11	13	23	50	15	36
3	13	3	4	10	41	41	15	46	15	20	1
4	10	23	3	4	25	36	10	11	8	10	3
5	50	37	8	39	50	3	41	18	25	37	34
6	36	41	15	3	39	23	46	8	34	11	8
7	16	8	34	18	15	12	38	3	46	36	40
8	37	36	46	12	8	8	39	29	10	40	9
9	41	18	40	16	36	15	37	1	31	46	26
10	8	50	36	37	16	25	36	9	9	13	12
11	12	25	39	5	10	1	17	14	3	23	30
12	46	12	9	8	18	2	16	37	12	32	50
13	11	39	16	17	11	18	8	12	40	9	2
14	38	16	50	9	40	50	3	45	37	8	5
15	5	40	37	41	46	37	40	15	36	38	37

CT	4	0	2	3	3	3	5	2	2	5	1
CC	1	2	2	1	2	1	2	0	3	3	3
Sr	4	4	6	5	2	4	4	6	6	4	8
GNP	2	4	1	2	2	4	0	7	1	2	1
ENV	4	5	4	4	6	3	4	0	3	1	2

Source: own research

re is a greater emphasis in the very top responses of a cultural transmission code compared to principals personal responses. Overall, principals in eight countries believe that their governments support all five codes; two (England and Poland) believe they support four codes, and only one (the US) believe that they support just three. In every country but Poland, principals believe their governments would support a GNP statement; in every country but England principals believe their governments would support a cultural transmission statement. The American principals suggest that there would be no endorsements from their government in terms of either environmental or child-centred issues. However, with these reservations, the message from the principals in most countries is that they believe their governments would embrace a wide variety of codes in the way that they do.

Now whilst there is endorsement for all five codes, the numerical endorsement of statements within the codes differs, and follows a similar if not exact pattern to personal endorsements. Thus, here there were 52 endorsements for Social Reconstruction statements, 36 for Environmental, 30 for Cultural transmission, 26 for GNP, and 20 for Child-centred – suggesting that whilst there is a ringing endorsement of an interest in social reconstruction issues, there is a little less when it comes to either the environment or cultural transmission issues, which are the next most approved area. Endorsements for statements of the GNP code and the Child-centred code swap the last two places. Even so, the contrast between the widespread heavy endorsement for social reconstruction, compared to the much sli-

ghter endorsement for purely economic issues in most countries is a very interesting one. In many countries, it would seem that principals believe that national development is seen by their governments in much more than purely economic terms.

These differences are further explained in an examination of the particular statements supported within each code. In terms of **cultural transmission**, principals in eight countries believed that their governments would support Qs.4 and 15 – that students need to know their country's history, and value their country's heritage. Six sets of principals also thought the same for Q.13- that pupils needed to learn how to sing the national anthem. There were three endorsements for q. 38 - that things taught are matters of fact, whilst there were two endorsements for q. 17 - that students should be taught to respect their elders,. There was one perceived governmental endorsement for Q.2- distinguishing objective fact from opinion – and one for q. 32 - that schools should only teach materials where truth is certain. There were no endorsements for Qs. 7 and 19 – that students cannot contribute much to the curriculum, and that students should accept their teachers' opinions. The scores then seem much the same as for the personal views, with a similar valuing of culture and history, a general dislike of authoritarian approaches, even if a few principals believed that their governments believed more in an objective epistemology than they did.

In terms of the **child-centred code**, 9 sets believed their governments would endorse q. 36 – that schools should value students' opinions; 6 sets believed this for q. 40 – that students should be encoura-

ged to value their own opinion. Only two sets believed there was any government valuation of q. 26 – that students should learn in their own way. Qs.20 and 31 received one endorsement each – teaching students to take responsibility for running the school, and valuing equally the worth of all opinions. The rest of the Qs – 22, 24, 27, and 33 received no backing. These covered areas like students taking responsibility for running committees, and schools providing curricula that are of interest and importance to students. This is a good reflection of principals' own views – that empowerment and self-valuing are important, but there are limits to the role of the student in an educational hierarchy. Students have much to contribute in the future, and had the potential to do so, but according to these results, these principals believed that, like them, their governments believed they still had much more to learn from their seniors.

As far as the **social reconstruction** code went, the principals believed there was a heavy governmental endorsement here. Principals from all eleven countries believed their governments would endorse Q.8 – that pupils needed the skills to help build a better society. Ten felt the same about q.37 – building a better world. Eight thought their governments would agree with Q.3 – that students had responsibilities as well as rights, whilst 7 thought their government would endorse q.46 – the need to know about the past and present to build a better future. Then there are 4 endorsements for Qs.1 and 9 – on learning what constitutes a good society, and students feeling they could make a difference for the better. These are followed by 3 endorsements for Qs. 5 and 34

(developing a curriculum for discussion and debate, and students becoming active critical citizens). However, there is only one endorsement for q.30 – on students being critical of curricular materials. Overall, these perceptions of governmental responses align very well with principals' own views – that students empowerment should be encouraged in building a better society, but should be accompanied by a recognition of their growing responsibilities, and of its limits as junior members of an educational community.

We have already seen that principals' personal endorsement of the **GNP code** was rather less than enthusiastic. Perceptions of governmental responses are higher, but still do not provide very strong endorsement. Thus, there are 8 endorsement for Q.12 – on concentrating on curricula which will be of use in later life; there are six endorsements for Q. 11 – teaching skills contributing to a national economy, and five for q. 18 – the need for skills for future work. Then we move to 4 endorsements of q.23- skills for employability, before only one endorsement for Qs. 14, 29 and 45 – skills for a country's economic development; knowledge for a job after school, and appreciating the need for a healthy economy. There are no endorsements for qs. 21 and 48: students accepting that they are responsible for their own economic welfare, and that learning should be principally aimed at creating a skilled workforce. The results here suggest a similar governmental attitude to the personal views – that these issues are important, but are not an overriding concern.

Finally, in the **environmental code**, there is strong endorsement for q. 10 (n=8) on valuing the lives of all creatures.

Q. 50 - on knowing that all life is interdependent - gets 7 endorsements. Qs 16 and 41 get six endorsements each – on disposing of waste products, and understanding global warming is a developing problem. Q39, -on saving energy supplies – gets five endorsements, whilst there are 4 endorsements for q. 25 (treating the local environment with care). No endorsements are given for qs. 28, 35 and 42 (that we can be ignorant of the effects of our actions, that some of these actions take a long time to have an effect, and that schools should help students estimate these long term effects.) Whilst there is a reasonably similar endorsement then on the importance of environmental issues between principals and their governments, the very low rating that principals believe their governments give to consideration of the long-term consequences of human actions should give pause for thought. If principals' views in this area seem characterized by a short-termism, it is even more pronounced in their perceptions of their governments' views. .

From these results, it seems reasonable to conclude that these principals believe that there is a fairly strong agreement between them and their governments on the need for a wide espousal of different educational codes and values. But of course beliefs are one thing: practice is quite another. So what do these principals say that they do in practice?

Top fifteen practice responses

This section then considers what values and educational codes these principals say they actually implement in practice. Table 4 provides evidence of this. Once

again, the top fifteen ranked statements by the principals in the eleven counties suggest an attempt to implement the majority of the educational codes. Principals in six countries (Croatia, England, Finland, Hong Kong, Macedonia and Latvia) say they attempt to implement all five codes, whilst principals in Hungary, Poland Iceland, Sweden, and the USA say they attempt to implement four of the five. Once again, it seems fair to conclude that there is an embrace of the majority of codes in the practice of principalship. Such belief once again points to the conclusion that because of the need for selection and balance, their work is likely to be complex and 'wicked' in nature.

Having already looked at the balance of endorsed statements across the codes in personal and governmental terms, it is useful to compare these with the practice endorsements. These are seen in Fig. 5

It is clear from Fig.5 that the Social Reconstruction and the Environmental codes remain the two most endorsed by some distance, whilst the cultural transmission code reflects in practice what has been said in the 'personal' and 'governmental' columns – that the practice of this area reflects a strong commitment, somewhere between personal and governmental endorsement. The child-centred code seems in practice to reflect more the strength of personal endorsement than governmental endorsement, but still does not seem to be a central issue. It is interesting that the GNP code in practice received similar endorsements to what the Principals said was its importance to them, but rather less than they thought it mattered to government.

However, one needs to be careful in

Table 4. Top Ten Practice Responses

Rank	Cro- atia	Eng- land	Fin- land	Hong Kong	Hun- gary	Lat- via	Po- land	USA	Ice- land	Mace- donia	Swe- den
1	15	3	3	10	13	13	10	4	3	20	10
2	10	1	10	20	4	11	4	9	9	3	12
3	17	9	40	17	15	41	3	8	25	15	36
4	16	36	12	13	3	3	17	3	31	36	8
5	13	25	36	9	25	36	15	23	8	10	3
6	4	8	15	3	39	1	13	37	50	11	34
7	25	37	20	39	10	8	36	18	34	37	9
8	50	40	8	26	16	12	8	1	36	8	26
9	40	17	9	16	17	25	9	12	4	18	5
10	3	50	25	41	50	15	2	29	1	9	40
11	39	10	34	50	41	23	16	46	5	12	42
12	41	31	31	37	9	10	39	2	10	17	1
13	37	16	39	25	8	20	46	17	15	23	37
14	12	5	41	8	42	2	20	36	37	40	18
15	8	23	37	12	46	14	25	31	40	16	50
CT	4	1	1	2	4	3	5	3	2	2	0
CC	1	3	4	2	0	2	2	2	3	3	3
Sr	3	6	5	4	4	3	4	6	7	4	7
GNP	1	1	1	1	0	4	0	4	0	4	2
ENV	6	4	4	6	7	3	4	0	3	2	3

Source: own research

Table 5. Balance of statements endorsements across the five codes

	Personal Endorsements	Perceptions of Governmental Endorsement	Practise Endorsement
Cultural Transmission	24	30	27
Child-Centred	24	20	24
Social Reconstruction	53	52	53
GNP	19	26	18
Environmental	47	36	42

Source: own research

assuming that these are the only issues that matter – despite these general trends, there are marked variations between countries, and this suggests that other factors like local, cultural or ethnic concerns may be influencing practice in addition to personal and governmental influences. Even though this questionnaire did not cover these issues, it also seems highly unlikely that a questionnaire could capture the full range of actual influences, as one would need to figure in the nature of national, regional, local and personal influences to comprehensively understand the basis for which a principal made decisions about school practice. This reiterates the point made earlier about the ‘wicked’ nature of the reality that principals deal with.

Further understanding of these figures is however derived from an examination of the endorsement of particular statements in Fig. 4. In terms of the **cultural transmission code**, there are seven endorsements for Qs. 15 (valuing cultural heritage and) 17 (showing respect for elders), and five apiece for Qs. 13 (singing the national anthem, and valuing cultural heritage) and Q. 4 (on knowing the coun-

try’s history), whilst Q. 2 – distinguishing objective fact from opinion - gets three endorsements. There are no endorsements for Qs. 7 (student cannot contribute much to curricula), 19 (accepting the opinions of teachers), 32 (learning only the ‘truth’), and 38 (things taught are fact not opinion). These results strongly replicate the personal and governmental responses.

The **child-centred code** had similar endorsement in practice. Q.36 (on valuing students’ opinions) had seven endorsements, whilst Q. 40 (that students should value their own opinions). Q. 20 (students taking responsibility for running some things in school) received five endorsements. Q. 31 (that all opinions need to be valued equally) received four endorsements, whilst q. 26 – that students should learn in their own way – received just one. Some statements received no endorsements at all. These were 22 (curricula should focus on students’ interests), 24(students should focus on learning what interests them), 27(children should learn to chair committees), and 33(students learning what was important to them). Once again, the practice

responses mirror the personal responses, and are only slightly higher than perceived government levels of approval.

The **social reconstruction code** responses included endorsements from all eleven countries for Q.3 (that students had both responsibilities and rights) and Q. 8 (the need to learn skills to build a better society). Q.9 (that students need to feel they can make a difference) received 8 endorsements, as did Q. 37(that they should help to build a better world). Q 1 (learning what constitutes a good society) had five endorsements, whilst Q. 46 (knowing about the past and present to understand the future) and 34 (students becoming active and critical) received 3 endorsements each. Q.5 (inviting discussion and debate) received 2 endorsements; Only Q.30 (on students needing to be critical of curricular materials) received none. The overall endorsement reflected the strong and very close agreement with the personal and governmental columns – whilst there was endorsement for all codes, this clearly was the preeminent area of emphasis.

In terms of **GDP** responses, Q.12 (the need for curricula useful for later life) received 7 responses; Q.23 (teaching skills for employability) received 4 endorsements, whilst q.18 (skills for future work situations received three. Q. 11(learning to help the national economy) received 2, whilst qs. 14(help their country economically), and 29(things to help them get a job) only received one response each. Qs 21(that students not the state are responsible for their economic welfare), 45(to appreciate the importance of a healthy economy) and 48 (learning's main aim is to create a skilled workforce) received none at all in the top fifteen endorsements, ma-

king it very clear that these principals' practice mirrored their personal views – education was seen as much more than for economic utilitarian purposes.

Finally, in terms of the **environmental code**, Qs 10 (valuing the lives of all creatures) received ten endorsements; q. 25 (treating the local environment with care) received eight endorsements; Qs 16 (disposing of waste products) and q. 50 (the interdependency of life) received six endorsements each, whilst q. 39 (saving energy supplies), and 41 (global warming as a developing problem) received 5 endorsements each. Q.42 (estimating the long term effects of actions) received two endorsements, but Qs 28 (learning about our ignorance of our impact) and 35 (that many actions take a long time to have an impact) received no endorsements in the top fifteen responses. Once again, this final column replicates much of what has been seen in the personal and governmental columns.

Looking at principals' views on environmental issues.

Whilst this paper examines the balance of views that principals in a number of countries have about different educational values, it initially began from concerns on environmental sustainability expressed in both research and official bodies of literature (e.g Cox, 2001, Meadows et al. 2004; Flannery, 2004; Stern, 2006; IPCC, 2007; Lynas, 2008; WWF, 2008). One might have thought that an Education for Sustainable Development (ESD) would be top of most educational agendas. Yet literature in this area (e.g. Shallcross and Robinson, 2007; NCSL, 2007; Chapman et

al, 2009) strongly suggest that educational responses have been slow. As academics interested in educational leadership, this research was therefore prompted by the belief that such environmental concerns, in order to be actualized within schools, needed to be championed by school leaders. This paper therefore provides a focus specifically on how principals responding to Environmental Issues.

In terms of the five codes, environmental concerns are ranked the second most important area. Figure 6 shows how the statements are distributed across the three areas and the countries, and it clearly indicates considerable variability.

There are a number of ways such data can be viewed. This paper will point up two key findings.

The first uses an examination of how individual environmental statements are ranked within the top fifteen statements. Fig. 7 demonstrates how often environmental issues were recorded. As a particular statement could have been selected three times in the top fifteen for eleven countries, a potential total response could have been 33 'hits' (i.e. in all three columns for all eleven countries).

Fig 7 clearly indicates that q. 1 – the valuing of all lives - is highly rated across most countries. Indeed, when one adds to this the second most highly rated statement – that all life is interdependent – it seems possible to argue that many of these principals have a clear philosophical stance on environmental issues. The following three statements – on caring for the local environment, dealing with waste, and being careful with energy – all indicate a pragmatic endorsement of things that can be relatively easily implemented

by a school community. The next issue – of global warming – has been given such prominence in the media in the last decade that an acknowledgement of its importance is not perhaps that surprising. What is surprising is the lack of enthusiasm for the last three statements. Two of these – on our ignorance of impacts, and the long-term effects of actions – receive no hits from any country in the top 15 endorsements in the sample, and the third-bottom – estimating the long term effects of actions, receives only one. This is a troubling finding, as it does seem to indicate a lack of interest or knowledge in the long-term complex effects within and upon environments. Whilst this paper has already described the work of principals in schools as 'complex' and 'wicked', it is possible to argue that this has strong resemblance to the manner in which ecosystems functions. If this is the case, then it seems to be a perspective – both in school and environmental ecosystems that principals are unaware of, or which they discount.

A second way of looking at the data is to investigate the support by individual countries for this area. Fig 8 does this by asking how often, in the top fifteen statements, environmental statements are rated across the three columns. If all educational codes were supported equally, one would expect scores of 3 for each of the five codes.

Once again, there are strong similarities between personal views, practice, and perceptions of governmental emphasis within individual national scores, but there are clearly strong variations between nations, with the US respondents giving a very limited endorsement for this area, either by themselves or their government.

Table 6. Distribution of the statements across the three areas and the countries.

Rank	Croatia			England			Finland			Hong Kong			Hungary			Latvia			Poland			USA			Iceland			Macedonia			Sweden					
	C	b	a	c	b	a	c	b	a	c	b	a	c	b	a	c	b	a	c	b	a	c	b	a	c	b	a	c	b	a	c	b	a			
1	15	15	15	3	3	1	10	3	12	20	10	13	3	13	13	11	13	13	10	10	4	4	4	4	9	4	4	3	3	4	10	20	4	10	10	10
2	10	10	4	9	1	11	10	10	10	20	26	13	4	4	13	11	11	17	4	13	3	9	23	9	3	9	23	9	9	50	11	3	15	12	12	36
3	17	17	13	37	9	3	40	40	4	17	17	10	15	15	41	41	41	3	3	15	8	8	46	34	25	15	20	15	20	15	20	15	20	36	36	1
4	16	16	10	36	36	23	3	12	3	26	13	4	39	3	25	3	3	36	15	17	10	37	3	11	31	31	8	37	36	10	3	3	8	3	3	3
5	12	13	50	5	25	37	9	36	8	9	9	39	4	25	50	8	36	3	4	15	41	18	23	18	5	8	25	8	10	37	34	3	34	3	34	3
6	40	4	36	25	8	41	8	15	15	39	3	3	25	39	39	12	1	23	18	13	46	4	37	8	8	50	34	12	11	11	26	34	8	8	8	8
7	39	25	16	8	37	8	20	20	34	37	39	18	16	10	15	25	8	12	9	36	38	2	18	3	25	34	46	16	37	36	9	9	40	9	40	9
8	8	50	37	50	40	36	36	8	46	25	26	12	9	16	8	1	12	8	8	8	39	12	1	29	36	36	10	36	8	40	8	26	9	9	9	9
9	25	40	41	1	17	18	34	9	40	13	16	16	10	17	36	15	25	15	16	9	37	1	12	1	40	4	31	15	18	46	5	5	26	5	26	5
10	3	3	8	40	50	50	15	25	36	16	41	37	42	50	16	10	15	25	39	2	36	5	29	9	1	1	9	23	9	13	40	40	12	12	12	12
11	9	39	12	10	10	10	25	34	39	3	50	5	3	41	10	23	23	1	2	16	17	23	46	14	37	5	3	1	12	23	37	42	30	30	30	30
12	37	41	46	16	31	12	5	31	9	50	37	8	50	9	18	36	10	2	12	39	16	36	2	37	50	10	12	9	17	32	30	1	50	1	50	1
13	50	37	11	17	16	39	2	39	16	41	25	17	41	8	11	45	20	18	23	46	8	46	17	12	4	15	40	18	23	9	42	37	2	2	2	2
14	4	12	38	46	5	16	39	41	50	36	8	9	36	42	40	9	2	50	14	20	3	50	36	45	2	37	37	17	40	8	1	18	5	5	5	5
15	11	8	5	31	23	40	50	37	37	40	12	41	40	46	46	29	14	37	36	25	40	25	31	15	10	40	36	4	16	38	50	50	37	37	37	37

Source: own research

Table 7. Ratings of individual environmental statements

Ranking	Q. and statement	No. of 'hits'
1	Q.10 – Students should be taught to value the lives of all creatures.	28/33
2	Q. 50 – Students need to know that all life on the planet is interdependent	21/33
3	Q. 25 – Schools need to teach their pupils how to treat their local environment with care	20/33
4	Q.16 – Schools need to teach students how best to dispose of waste products.	16/33
5	Q.39 – Schools should teach pupils how to save energy supplies.	15/33
6	Q.41 – Students need to know that global warming is a developing problem	12/33
7	Q. 42 – schools should teach pupils how to estimate the long term effects of their actions	1/33
8=	Q. 28 – Students need to accept that we are ignorant of the impact of much of our behavior on the environment	0/33
8=	q. 35 – Students need to know that many actions take a long time to have an appreciable effect.	0/33

Source: own research

Conclusions - pragmatism, practice, personal and governmental scores.

This paper will conclude by discussing five issues of note.

First, the results indicate a wide spread of endorsement for all codes. Fig 9 shows the perceptions of personal, governmental, and practice endorsements for all 11 countries.

Only the USA is perceived as endorsing only 3 codes: the other ten countries between them endorse either four or five of the codes. This general widespread en-

dorsement for the codes is perhaps best explained by the belief that a student entering the world after school needs a wide spread of understanding rather than a focus on selected codes. Principals and governments then might in virtually all countries be seen as attempting to pass on the reins of responsibility to the next generation by equipping them with a wide range of skills rather than ones within a narrow ideological band.

Secondly, within such endorsements, the largest endorsement in all three sections (personal, governmental, practice) was for the social reconstruction code; the

Table 8. Endorsements of environmental statements by country

Ranking	Country	Personal	Governmental	Practice
1	Hungary	6	7	7
2	Croatia	4	5	6
3	Hong Kong	4	5	6
4=	Finland	4	4	4
4=	England	4	4	4
6	Poland	4	3	4
7=	Latvia	3	3	3
7=	Iceland	3	3	3
9	Sweden	2	3	3
10	Macedonia	1	2	2
11	USA	0	2	0

Source: own research

Table 9. Educational Code endorsement by country

Personal			Governmental			Practice		
5 codes	4 codes	3 codes	5 codes	4 codes	3 codes	5 codes	4 codes	3 codes
Croatia	Hungary		Croatia	England	USA	Croatia	Hungary	
England	Poland		Finland	Poland		England	Poland	
Finland	USA		Hong Kong	USA		Finland	USA	
Hong Kong	Iceland		Macedonia			Hong Kong	Iceland	
Macedonia	Sweden		Latvia			Macedonia	Sweden	
Latvia			Hungary			Latvia		
			Iceland					
			Sweden					

Source: own research

most muted endorsement was for the GNP codes. An initial reaction might be one of apparent contradiction here: in a quickly changing and globalizing world, one might expect that both would be endorsed. Yet whilst the social reconstruction code is universally supported, even principals' perceptions of government endorsement has this code ranked as no more than the second lowest. The answer may lie in the fact that Social Reconstruction code statements didn't specify skills, attitudes and knowledges in any particular area, but rather recommended an openness and flexibility to a changing world, and of the need to give students a feeling of empowerment in this world. Perhaps this expression of a stance towards an unpredictable world is seen as more valuable than the rather more precise equipping with particular economic skills knowledges and attitudes which may rapidly date.

A third point which comes out strongly is the closeness of personal, governmental and practice scores: there does seem to be fairly close agreement between most principals and their governments on what needs to be addressed – and this seems to be a perception that this requires the ability to 'spin a number of plates', rather than just concentrate on perfecting the skills with one or two. If this is the case, then these scores may reflect a real difference in focus between the pragmatic concerns of principals and governments on the one hand, and the more theoretical and more focused concerns of academics, as well, perhaps, as the more unitary gaze of the subject specialist class teacher. Just as it is part of the academic role to analyze particular issues and concerns in a manner which develops abstract cate-

gories, so it is the concern of the subject class teacher to be able to drill down into the 'deep structure' of particular subject matter. Yet such particular focus may not match well with the reality beyond either the school classroom or the University campus: principals and their governments may then well understand conceptual separation and individual subject valuation, but nevertheless believe that the complex *mélange* of values and purposes underpinning all of these codes needs to be played out in the practice of schools, as they attempt to produce a 'rounded' individual who has the qualities to cope with the world of the future. Such speculation clearly requires further research.

Fourth, the environmental responses suggest that many of the principals who responded to this questionnaire had coherent views about education and the environment, centering around the value and interdependence of all life. Many also seemed engaged in applying such views to pragmatic activities like saving energy and recycling waste. They also seem to have taken on board debates about global warming. However, there seemed little recognition by them or their governments of the need to appreciate the longer-term effects of human activity on the environment, or that we may simply not understand or recognize the impact our activity has. This we believe is an important finding that needs further urgent investigation.

Finally, the fact that on some codes, practice endorsements were not always midway between personal or governmental endorsements, suggests that Principals practice did not always act as an intermediate or mediating score between personal and governmental perceptions.

In other words, there are certainly other influences besides these three categories used in this investigation which affect principals' practice. These are highly likely to include, as argued above, national differences, school contexts, and individual personal factors, not only of the principals but of the people with whom they deal. The overall conclusion from this paper then are twofold. First, principals and their governments across a variety of different countries do seem to have quite a lot in common. They do seem in this global picture to share the belief in the need to spin many plates, and of seeing the school experience as one of preparing the student for future responsibilities. This understanding, one might assume, would necessarily require an appreciation of the wicked and complex reality they both face. Yet the lack of endorsements by either of statements suggesting the need to take a longer and 'wicked' view of their realities suggests that perhaps neither the principals nor their governments fully recognize this complexity. To create sustainable schools within a sustainable society, as well as a sustainable environment, a greater recognition of such complexity, of such 'wickedity' and of how to deal with it, may then be seen as an urgent area for further investigation.

References

- Bore, A., and Wright, N., (2009), *The Wicked and the Complex in Education: Developing a Transdisciplinary Perspective for Policy Formulation, Implementation and Professional Practice*, in: Journal of Education for Teaching, Vol. 35, no. 3, pp. 241-256
- Bottery, M., (1990), *The Morality of the School*, Cassell, London
- Bottery, et al., (2008), Chapman, D., Flaws, M. and Le Heron, R. (2009), *A due diligence report on New Zealand's educational contribution to the UN decade of education or sustainable development*, in: Chalkley, B., Haigh, M., and Higgitt, D., (eds), *Education for Sustainable Development*, pp. 129-140
- Cox, P. et al. (2000) *Acceleration of global warming due to carbon cycle feedbacks in a coupled climate model*, in: Nature, 408, pp. 184-187
- Flannery, T., (2005), *The Weather Makers*, Grove Press, New York
- Fullan, M., (1991), *The New Meaning of Educational Change*, Cassell, London
- Hamilton, C., (2004), *Growth Fetish*, Pluto Press, London
- Hoyle, E., and Wallace, M., (2005), *Educational Leadership: Ambiguity, Professionals, and Managerialism*, Sage, London
- Lovelock, J., (2006), *The Revenge of Gaia*, Penguin, London
- Lovelock, J., (2009), *The Vanishing Face of Gaia*, Allen Lane, London
- Lynas, M., (2008), *Six Degrees*, Harper Perennial, London
- McKibben, B., (2008), *Deep Economy*, Holt, New York
- Meadows, D., Randers, J., and Meadows, D., (2004), *Limits to Growth: the 30 year update*, Chelsea Green Publishing Co., Vermont
- NCSL, (2007), *Leading Sustainable Schools*, NCSL, Nottingham
- Rees, M., (2005), *Our Final Century*, Penguin, London
- Shallcross, A., and Robinson, J., (2007),

Is a Decade of Teacher Education for Sustainable Development Essential for Survival?, in: *Journal of Education for Teaching*, Vol., 33, no. 2, pp. 137-148

Speth, G., (2008), *The Bridge at the End of the World*, New York, Caravan

Stern, N., (2006), *The Stern Review Executive Summary*, accessed at http://www.hm-treasury.gov.uk/media/9/9/CLOSED_SHORT_executive_summary.pdf 7th August 2008

World Wildlife Fund, (2008), *Living Planet Report*