Rethinking the School Curriculum

Values, Aims and Purposes

Edited by JOHN WHITE

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In 2000, the school curriculum in England was equipped with an extensive set of aims for the first time in the country's history. In this book leading experts in the teaching of school subjects examine the significance of the new aims for the reform of the curriculum.

In two general introductory chapters John White discusses the aims and how they might be realised in schools, and draws conclusions about how government policy on the curriculum should proceed. The remainder of the book focuses on subject specific areas and how these could and should be developed to produce a more relevant and enjoyable curriculum experience for pupils, including more opportunities for choice of activities.

This honest portrayal of the school curriculum today and how it could be developed in line with the new aims set by the government will be of particular interest to those studying education with a particular focus on the areas of curriculum, assessment, school management, philosophy of education and the history of education.

John White is Professor of Philosophy of Education at the Institute of Education, University of London and has written extensively on the subject of the National Curriculum.

Contributors: Peter Gill, Michael Hand, Terry Haydn, Edgar Jenkins, Richard Kimbell, David Lambert, Bethan Marshall, Dawn Penney, Charles Plummeridge, John Steers, Keith Swanwick, and Kevin Williams.

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Preface

The world over, school curricula are based on a set of familiar school subjects – often such items as mother tongue, mathematics, science, history, geography, a foreign language, art, music, physical education. In all countries, those who want their educational system to prepare children for a flourishing personal and civic life have serious reservations about the status quo, in particular, the tendency of the conventional curriculum towards compartmentalisation and atomisation and also its contribution to pupil disaffection and rejection of learning.

Since 2000 the English educational system has had a standard for measuring the success of traditional school subjects in meeting broader aims. This takes the form of an extensive new official statement on the 'Values, aims and purposes underpinning the school curriculum' – the first such statement of aims in English history. In this book leading experts in different curriculum areas apply this standard to the teaching of their own subject.

An honest picture of shortfalls is combined with imaginative proposals for a better match between their subjects and the new aims. Both tend to point in the same direction. In one way, this is not surprising, since the present authors have worked closely together for over a year, sharing ideas and collectively refining the work into an authoritative set of proposals for future policy reform. Their focus is on the English system, but since the general aims of its curriculum can be applied to most others, their diagnoses and solutions have global resonance.

1 Introduction

John White

The year 2000 was revolutionary for education in England. For the first time in the country's history all state schools were given a common framework of curricular aims. This book looks at the implications of this revolution for the school curriculum itself – not least for the subjects that make it up. Nearly all of these were part of the curriculum before 2000. At that time they were not directed by a national framework because there was no such framework. How closely have the new overall aims matched the aims of the subjects? How far should the latter now evolve so as to improve the match? How far indeed should the curriculum be planned on a subject basis at all? School subjects are, after all, only vehicles to achieve certain ends: they are not self-justifying entities. Now that we have a set of overarching aims, could these be realised by other kinds of curricular vehicle?

Further questions arise about the validity of the new aims themselves. However close the fit may be between subjects and overall aims, nothing is gained if the aims themselves are faulty. One of the topics this book covers is the adequacy of the post-2000 aims. Another, just heralded, is the extent to which subjects or other vehicles are the best way of trying to meet these aims. But its main thrust is an examination of the current school subjects, the adequacy of their objectives and *modi operandi* in the light of the new aims framework.

Although the book is about recent developments in England specifically, its theme is far from parochial. The question 'What should be the aims of school education?' is fundamental to any system. So are the questions 'By what means may aims be best realised?' and 'How good is the match between system-wide aims and the specifics of different curriculum subjects?'. Many, if not most, countries have official statements of aims. Many, if not most, also build their curriculum around a familiar set of subjects, including native language and literature, mathematics, science, history, geography, one or more foreign languages, music, art, physical education. What links are there between recommendations about general aims on the one hand and requirements in the different subjects on the other? Are the latter explicitly derived from and justified by the former? Or are the overall aims more like high sounding national mission statements which can be ignored in practice? Are the familiar subjects included because it is *taken as read* that these are what the school curriculum must consist of?

At one level the book concentrates on fundamental issues of this sort. At another, it is intended as a contribution to the next stage of curriculum reform in England. Global and national themes interconnect and illuminate each other throughout its length. England is unusual among countries due to its belated adoption of overall aims. This means that its recent and continuing experience of curriculum reform allows globally important issues to be raised in unusual starkness.

The new aims for the school curriculum

Before 1988 maintained schools in England were responsible for their own curricula and the aims underlying them. That year saw the introduction of the National Curriculum. This was based on ten foundation subjects – English, mathematics, science, technology, history, geography, a modern foreign language, music, art, physical education.

It is hard to say for certain why these were chosen, since no rationale was provided for them. Richard Aldrich has drawn attention to the very close similarity between the 1988 list and the subjects prescribed for the newly introduced state secondary (later grammar) schools in 1904 (Aldrich, 1988, p. 22). The National Curriculum gives every appearance of having been lifted from what was originally traditional grammar school practice.

Whatever its origin, it was *not* derived from a set of underlying aims. Not that it was entirely bereft of aims. After 1988 it had two:

- [to] promote the spiritual, moral, cultural, mental and physical development of pupils at the school and of society;
- [and to] prepare such pupils for the opportunities, responsibilities and experiences of adult life.

Uncharitable commentators may find these a trifle on the thin side. Certainly it is impossible to read into these bland truisms anything like a justifying rationale for the ten foundation subjects.

In the late 1990s pressure grew for the purposes of the National Curriculum to be more clearly spelt out. The discussions which the Qualifications and Curriculum Authority (QCA) had around this time with teachers, teaching organisations, local authorities and researchers showed that many believed that current statutory arrangements, including the National Curriculum, lacked a clear vision of what the parts, individually and collectively, were designed to achieve. This reinforced the QCA's view, and that of its predecessor the School Curriculum and Assessment Authority (SCAA), that there needed to be 'a much clearer statement about the aims and priorities of the school curriculum' (SCAA, 1997).

This statement materialised in the opening pages of the *Handbook* for teachers on the National Curriculum post-2000. This comes in two volumes, one for primary teachers, the other secondary. I shall call these HPT and HST respectively). The main section is called 'The school curriculum and the National Curriculum: values, aims and purposes'.

Values, aims and purposes

Values and purposes underpinning the school curriculum

Education influences and reflects the values of society, and the kind of society we want to be. It is important, therefore, to recognise a broad set of common values and purposes that underpin the school curriculum and the work of schools.

Foremost is a belief in education, at home and at school, as a route to the spiritual, moral, social, cultural, physical and mental development, and thus the well-

being, of the individual. Education is also a route to equality of opportunity for all, a healthy and just democracy, a productive economy, and sustainable development. Education should reflect the enduring values that contribute to these ends. These include valuing ourselves, our families and other relationships, the wider groups to which we belong, the diversity in our society and the environment in which we live. Education should also reaffirm our commitment to the virtues of truth, justice, honesty, trust and a sense of duty.

At the same time, education must enable us to respond positively to the opportunities and challenges of the rapidly changing world in which we live and work. In particular, we need to be prepared to engage as individuals, parents, workers and citizens with economic, social and cultural change, including the continued globalisation of the economy and society, with new work and leisure patterns and with the rapid expansion of communication technologies.

Aims for the school curriculum

If schools are to respond effectively to these values and purposes, they need to work in collaboration with families and the local community, including church and voluntary groups, local agencies and business, in seeking to achieve two broad aims through the curriculum. These aims provide an essential context within which schools develop their own curriculum.

Aim 1: The school curriculum should aim to provide opportunities for all pupils to learn and to achieve

The school curriculum should develop enjoyment of, and commitment to, learning as a means of encouraging and stimulating the best possible progress and the highest attainment for all pupils. It should build on pupils' strengths, interests and experiences and develop their confidence in their capacity to learn and work independently and collaboratively. It should equip them with the essential learning skills of literacy, numeracy, and information and communication technology, and promote an enquiring mind and capacity to think rationally.

The school curriculum should contribute to the development of pupils' sense of identity through knowledge and understanding of the spiritual, moral, social and cultural heritages of Britain's diverse society and of the local, national, European, Commonwealth and global dimensions of their lives. It should encourage pupils to appreciate human aspirations and achievements in aesthetic, scientific, technological and social fields, and prompt a personal response to a range of experiences and ideas.

By providing rich and varied contexts for pupils to acquire, develop and apply a broad range of knowledge, understanding and skills, the curriculum should enable pupils to think creatively and critically, to solve problems and to make a difference for the better. It should give them the opportunity to become creative, innovative, enterprising and capable of leadership to equip them for their future lives as workers and citizens. It should also develop their physical skills and encourage them to recognise the importance of pursuing a healthy lifestyle and keeping themselves and others safe.

Aim 2: The school curriculum should aim to promote pupils' spiritual, moral, social and cultural development and prepare all pupils for the opportunities, responsibilities and experiences of life

The school curriculum should promote pupils' spiritual, moral, social and cultural development and, in particular, develop principles for distinguishing between right and wrong. It should develop their knowledge, understanding and appreciation of their own and different beliefs and cultures, and how these influence individuals and societies. The school curriculum should pass on enduring values, develop pupils' integrity and autonomy and help them to be responsible and caring citizens capable of contributing to the development of a just society. It should promote equal opportunities and enable pupils to challenge discrimination and stereotyping. It should develop their awareness and understanding of, and respect for, the environments in which they live, and secure their commitment to sustainable development at a personal, local, national and global level. It should also equip pupils as consumers to make informed judgements and independent decisions and to understand their responsibilities and rights.

The school curriculum should promote pupils' self-esteem and emotional well-being and help them to form and maintain worthwhile and satisfying relationships, based on respect for themselves and for others, at home, school, work and in the community. It should develop their ability to relate to others and work for the common good. It should enable pupils to respond positively to opportunities, challenges and responsibilities, to manage risk and to cope with change and adversity. It should prepare pupils for the next steps in their education, training and employment and equip them to make informed choices at school and throughout their lives, enabling them to appreciate the relevance of their achievements to life and society outside school, including leisure, community engagement and employment.

The interdependence of the two aims

These two aims reinforce each other. The personal development of pupils, spiritually, morally, socially and culturally, plays a significant part in their ability to learn and to achieve. Development in both areas is essential to raising standards of attainment for all pupils.

(DfEE/QCA, 1999, pp. 10–12)

It should be apparent from this how much more determinate are these aims than the platitudinous ones of 1988. True, some of the 2000 aims need further precision, but overall they do present a picture of the kind of pupil that the school curriculum can ideally help to foster. They draw attention to the personal qualities pupils require, as well as intellectual equipment in the shape of knowledge and skills. Broadly speaking, the ideal pupil is an informed, caring citizen of a liberal democratic society. He or she is an enterprising, independent-minded, contributor to the well-being of the national community and all its members, respectful of differences of culture and belief, aware of transnational and global concerns and with an understanding of major human achievements in different fields.

Some 60 per cent of the specific aims mentioned are about the pupil's personal qualities, as distinct from skills or types of knowledge or understanding. The detailed items in these three categories are:

personal qualities: valuing ourselves, our families and other relationships, the wider groups to which we belong, the diversity in our society and the environment in which we live; the virtues of truth, justice, honesty, trust and a sense of duty; enjoyment of and commitment to learning; confidence in one's capacity to learn; an enquiring mind; capacity to think rationally; sense of identity; appreciation of human aspirations and achievements; thinking creatively and critically; being innovative and enterprising; integrity and autonomy; responsible and caring citizens; challenging discrimination; respect for the environment; commitment to sustainable development; making informed judgements as consumers; self-esteem; emotional well-being; respect for oneself; respect for others; being able to relate to others; being able to manage risk, cope with change and adversity; making informed choices at school and throughout pupils' lives; having the will to achieve; curiosity about themselves and their place in the world; attitudes needed to foster the inner life; willingness to participate, work with others for the common good; financial capability; qualities associated with enterprise education (confidence, self-reliance, learning from mistakes); entrepreneurial characteristics of tenacity, independence.

skills: essential learning skills of literacy, numeracy and ICT; physical skills; six key skills; five thinking skills.

knowledge and understanding: knowledge and understanding of the spiritual, moral, social and cultural heritages of Britain's diverse society and of the local, national, European, Commonwealth and global dimensions of pupils' lives; acquiring a broad range of knowledge and understanding (so as to enable pupils to think creatively and critically); knowledge and understanding of pupils' own beliefs and cultures; recognising the importance of pursuing a healthy lifestyle; understanding the environments within which one lives; self-understanding; understanding necessary to making moral judgements; understanding relevant to making financial decisions, running mini-enterprises, sustainable development.

It should not be surprising that personal qualities are so prominent in this scheme. Since the view of education in the document is about promoting a certain kind of society, it is understandable that it should concentrate on cultivating citizens of an appropriate sort. This means delineating the type of people these citizens will be.

The skills, knowledge and understanding these citizens will need is a further matter. To some extent these can be derived from the personal qualities themselves. One example in the document is the claim that developing a sense of identity requires one to have knowledge and understanding of diverse cultural heritages. Another, not explicitly mentioned in the document, but in line with it, is that autonomy, which has to do with making informed choices about important goals in one's life, requires knowledge and understanding of the various options among which one is to choose.

One further preliminary point: the section on 'Values, aims and purposes' at the beginning of the *Handbook* is not the only place in it where overall aims are mentioned. They also appear a few pages further on in the section called 'Learning across the National Curriculum' (DfEE/QCA, 1999, pp. 19–23 (HPT), 21–25 (HST)). This consists of a heterogeneous collection of general objectives which the different curriculum subjects are intended to serve. Here is an indication in note form of the aims covered in these four pages:

> growth of a sense of self; curiosity about oneself and one's place in the world; fostering the inner life; concern for others; making responsible moral decisions; responsibilities and rights of being members of families and communities; making an active contribution to the democratic process; understanding and respecting cultural traditions, one's own and others; appreciating and responding to a variety of aesthetic experiences; acquiring 'key skills' of communication, application of number, information technology, working with others, improving own learning and performance, problem solving; acquiring 'thinking skills' of information-processing, reasoning, enquiry, creative thinking, evaluation; learning to make sensible choices about managing money; in the context of enterprise education, developing confidence, self-reliance and willingness to embrace change; acquiring the understanding, skills and attitudes required to participate in decisions to do with sustainable development.

A fuller discussion of the overall aims comes in Chapter 2. As has been made clear, the aims are set out in lists of items. No rationale for these is given. In the next chapter we explore how well the items hang together in a coherent pattern and whether any adequate justification can be provided for them. For the moment they will be taken as read. This is not a wholly arbitrary decision. Intuitively at least, they appear to be on the right lines, at least if one is working within a broad liberal democratic compass. Although we have to go beyond intuitions into more rigorous assessment, the aims as stated will be taken as baseline for the rest of this chapter.

From aims to curriculum

Having discussed the aims themselves, I now turn to how schools are to realise them. Here it is crucial to hold on to the fact that the aims are for the whole school curriculum, not just the National Curriculum. The *Handbook* states that 'the school curriculum comprises all learning and other experiences that each school plans for its pupils' (DfEE/QCA, 1999, p. 10). As far as school subjects are concerned, this covers work in religious education as well as in the National Curriculum areas (religious education has been a compulsory subject in state schools since 1944). The *Handbook* definition also transcends the timetabled curriculum. It can cover what a school plans through the way it structures its 'ethos': its encouragement, for instance, of respect for others in the classroom and in the playground. In sum we can distinguish between general aims and the school curriculum (in this wide sense) as the vehicle intended to realise them.

Curriculum planning cannot sensibly start with the curriculum. Given that the curriculum is a vehicle, or collection of vehicles, intended to reach a certain set of destinations, we have to begin with the destinations themselves. Once we have these, we have at some point to work out what kind of vehicles are best to help us attain them in particular circumstances.

Suppose, as suggested, we take as read the overall aims. How is it best to try to realise them? Can we go straight to the curriculum in its broad sense? The curriculum consists of *experiences*, the planned pupil experiences intended to realise the aims. Possible examples of these – generated both via timetabled activities and via whole school processes (school ethos) – are as follows:

Pupils are encouraged to:

- listen to things (stories, instructions, others' views);

- look at things (diagrams in books, writing on the board, videos);
- reason things out (how to solve a problem in maths);
- how to create more interest in the School Council;
- imagine things (what it is like to be in someone else's shoes);
- contemplate things (poems, paintings, aesthetic features of the school environment);
- feel various emotions (compassion, suspense, delight, imagination-mediated fear);
- try to remember things (past feelings, geographical facts);
- exercise their bodies.

These and other types of experience constitute the school curriculum as the *Handbook* defines it. What connection is there between things like these and the overall aims? Well, why do we want students to look at things, think about things, feel things and so on? Sometimes these have a partly intrinsic justification: the delight that young children feel in listening to a story is an end in itself. But teachers also have intentions for their pupils which go beyond immediate experience. They are interested in more long-lasting mental states: they want the children to come to believe, know and understand things; to acquire mental or physical skills, like reasoning historically or climbing ropes; to acquire or deepen dispositions or habitual ways of behaving, like controlling fears or resentments, being cautious in their thinking, having an appropriate kind of confidence or self-esteem.

This brings out the fact that there are two importantly different kinds of ingredient in the mental life of the child (or, indeed, of anyone) (see also White, 2002, Chapter 1). On the one hand there are conscious occurrences (experiences of listening, thinking, moving one's limbs); and on the other continuing mental states (understanding, knowing how to swim, being kind). The continuing mental states exist even when there are no present conscious occurrences. A child can understand fractions without having anything to do with fractions at the moment. She still understands them when she is having her tea, perhaps even when she is asleep. The same goes for skills and for personal qualities. A child can know how to dive without actually diving; and is still a kind person when she is on her own and there is no one around to be kind to.

The experiences – the conscious occurrences – which constitute the school curriculum are vehicles intended to bring about continuing mental states such as knowledge and understanding, skills and dispositions (personal qualities). These are the curriculum's aims. Indeed, as we have already seen, the overall aims in the *Handbook* fall under these headings. General aims take more and more determinate forms the closer one gets to the pupil's experience. At the experiential end they are maximally determinate. Take the class of young children delightedly listening to a story. What does their teacher plan that they learn, over and above, that is, intending them to have an experience enjoyable in itself? One of the things she wants is for them to enjoy experiences *of this sort*, that is to get into the habit of wanting to hear simple stories like this. We can call this an 'immediate' aim – the aim a teacher (or whole school) has in engaging learners in a particular activity. Behind the immediate aim lie aims of increasing generality. She wants them to enjoy simple stories of this sort not only through hearing them, but also through reading them. She wants them to enjoy literature in general. She wants them to develop a deeper understanding of human nature or a more refined aesthetic sense. Of course she is also likely to have other aims in reading the story – to do, for instance, with sharing enjoyable experiences with others or introducing more advanced vocabulary.

These aims also fit in a range from immediate to very general. In addition, all the aims mentioned interconnect and are inextricable from each other in practice.

At the more general end of the continuum we reach the kind of overall aim that we find in the *Handbook* or similar documents. In between the highly general aims and the teacher's immediate aims are aims of varying levels of generality or specificity. Curriculum planning consists in mapping out, and relating to each other, aims across the whole range, from the most general to the most immediate. At the immediate end, the teacher's, it also includes working out experiences – specific forms of listening, looking, thinking and so on – designed to realise these aims.

Curriculum planning, therefore, is a collaborative enterprise at different levels. As is often the case, not least in post-1988 England, governments lay down overall aims (e.g. developing self-understanding). They also lay down aims at the next levels of specificity, aims for and within particular curriculum areas (e.g. understanding aspects of one's own society's history which help one to understand oneself; more specifically again, understanding the significance of the rapid rise in the population since the late eighteenth century). Teachers specify these further at the level of the school and the classroom.

In Chapter 2 I will be saying more about curriculum planning, both in general and in relation to developments in England. As well as looking more closely at the justification of overall aims, I will go further into ways in which they may be realised, concentrating especially on what can and should be done via whole school processes and, within timetabled activities, what can be done without using school subjects as a framework.

Matching school subjects to overall aims

I now narrow the focus on to the curriculum subjects themselves, specifically the subjects of the English National Curriculum plus religious education (RE).

The *Handbook* on the National Curriculum, separate booklets on all the National Curriculum subjects (which cover most of the same ground as the *Handbook*), and a booklet on the RE curriculum are constructed on a subject basis. As we have seen, the overall aims at the beginning of the *Handbook* in principle cover non-subject-based learning. In actuality, however, virtually the whole of the government documentation just mentioned is about the aims of the different *subjects*, their programmes of study, their contribution to learning across the curriculum and their attainment targets.

The explanation for this is obvious enough. When the *Handbook* appeared in 1999, nearly all the curriculum subjects with which it deals (with the exception of personal, social and health education (PSHE) and citizenship) had already been compulsory elements since 1988. The government had to work with what was already in place.

This is understandable, but it does give rise to a question. The *Handbook* introduced a set of overall curricular aims. Presumably some coherence is intended between these new aims and the documentation on the aims, programmes and attainment targets of the various subjects. Presumably these latter features are seen as ways in which the overall aims are to be made more determinate in the way described in Section 3. The question is whether these presumptions are justified. To what extent do we find a good match between the overall aims and the specific requirements laid down for the different subjects?

I explored this question in detail in a project, so far unpublished, undertaken in 2001 for a national educational agency. I took all thirteen current subjects, including RE and the two newcomers PSHE and citizenship, looked at their aims, programmes of study,

Table 1 Compulsory subjects of the English school curriculum, including the National Curriculum, from 2003

Age	*Key Stage 1* *5–7*	*Key Stage 2* *7–11*	*Key Stage 3* *11–14*	*Key Stage 4* *14–16*
Year groups	*1–2*	*3–6*	*7–9*	*10–11*
National Curriculum subjects				
Core subjects				
English	•	•	•	•
Mathematics	•	•	•	•
Science	•	•	•	•
Other subjects				
Design and technology	•	•	•	
Information and communication technology	•	•	•	•
History	•	•	•	
Geography	•	•	•	
Modern foreign languages			•	
Art and design	•	•	•	
Music	•	•	•	
Physical education	•	•	•	•
Citizenship			•	•
Religious education	•	•	•	•

attainment targets and contribution to learning across the curriculum and tried to establish how far there is a match or mismatch between these specific items and the overall aims. To what extent are the subjects, as officially conceived, suitable instruments for realising the general aims?

The short answer is that the results are patchy. Very broadly speaking, the best match tends to be found in subjects only recently introduced into the curriculum: design and technology, ICT, citizenship and PSHE. Many longer established subjects tend to be problematic in various ways. These include art and design, English, geography, history, mathematics, modern foreign languages, music, physical education, RE, science.

There is not space to run through all the results, but below are some examples. In citizenship there is a good match. Its aims are stated as follows:

> **Citizenship** gives pupils the knowledge, skills and understanding to play an effective role in society at local, national and international levels. It helps them to become informed, thoughtful and responsible citizens who are aware of their duties and rights. It promotes their spiritual, moral, social and cultural development, making them more self-confident and responsible both in and beyond the classroom. It encourages pupils to play a helpful part in the life of their schools, neighbourhoods and communities and the wider world. It also teaches them about our economy and democratic institutions and values; encourages respect for different national, religious and ethnic identities; and develops pupils' ability to reflect on issues and take part in discussions.
>
> (DfEE/QCA, 1999, HST p. 183)

If we compare these with the overall aims, we see close links between them. There is the same concern with personal qualities like self-confidence, responsiveness to others' needs, civic involvement, respect for cultural differences, reflectiveness, as well as with the knowledge and skills needed to sustain them. The programme of study for citizenship is also in sync. It is not difficult to see how the overall aims map on to such randomly selected items as learning about the criminal justice system or the significance of the media in society, learning to 'negotiate, decide and take part responsibly in both school and community-based activities' (KS 3 *Handbook* for Secondary Teachers (HST) pp. 184–185). The whole tone of the citizenship documentation is pupil-centred, in that, like the overall aims, it keeps firmly in mind the ideal of a certain kind of person and the skills and understanding which such a person must have.

The same is true of design and technology. As with citizenship its own aims look outwards, beyond its own confines, towards wider personal and social horizons picked out in the overall aims:

> **Design and technology** prepares pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and members of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past design and technology, its uses and effects. Through design and technology, all pupils can become discriminating and informed users of products, and become innovators.
>
> (DfEE/QCA, 1999, HPT p. 90, HST p. 134)

Further specification is given to these aims in the programme of study. This includes such items as learning 'to generate ideas for products after thinking about who will use them and what they will be used for' (KS 2 HPT p. 94); learning 'to select appropriate tools and techniques for making their product' (KS 2 HPT p. 94), learning 'to identify and use criteria to judge the quality of other people's products' (KS 3 HST pp. 136–137).

Gaps in matching

With most of the longer-established subjects, there is much less room for confidence about a good match with the overall aims. Subjects where the match is – to different degrees – problematic include art and design, English, geography, history, mathematics, modern foreign languages, music, physical education, RE, science. These problems are discussed below.

Art and design

Similar points, *mutatis mutandis*, could be made about art and design, except that there is more weight here on pupils' making works of art (the musical equivalent being composition). The justification of both subjects in terms of larger aims is unclear both from the documentation and more generally. Both subjects have appeared in curricula for

maintained schools since the late nineteenth century. Music grew out of 'singing' and art and design out of 'drawing', the latter included originally for 'the great mass of our working population' as 'likely to be useful to them in their future occupations as workmen and artisans' (Selleck, 1968, p. 121). Today they are both multi-faceted, sophisticated subjects, assured of a place in the curriculum, but unclear as to their overarching purposes.

English

One of the overall aims states that the school curriculum: 'should encourage pupils to appreciate human aspirations and achievements in aesthetic, and . . . social fields, and prompt a personal response to a range of experiences and ideas' (DfEE/QCA, 1999, p. 11). This would suggest, among other things, acquaintance with literature on a human scale, not necessarily literature written in English. There is no need to dwell on the extraordinary richness of world literature, which nearly all of us access only in translation. It is not only absorbing for its own sake, but affords us the best insights we often have into other cultures and countries.

Yet because the school subject responsible for literature is called 'English', it has traditionally been taken as read that the texts it studies are those written originally in English. This tradition has come through to the 2000 curriculum, with its long statutory and non-statutory lists of works to be read at Key Stages 3 and 4. All these are texts written originally in English.

If, as seems sensible, we need to create room for world literature in schools, how should this be done? Should we stretch the label 'English' to cover it? Or should the title of the subject be changed to 'language and literature'?

Film is among the most important forms of dramatic art of the twentieth century. There is no clear place for it in the school curriculum, although it is mentioned in odd places under English. It is a visual art, but not included with other visual arts under art and design. All this may reflect the fact that the categories under which education in the arts is delivered – art and design, English, and music – date back to the nineteenth century and so do not well reflect twentieth century developments.

Geography

Unlike some other subjects, most of geography's aims closely match overall aims statements, for instance, geography:

> prepares pupils for adult life and employment. It is a focus within the curriculum for understanding and resolving issues about the environment and sustainable development. It links the natural and social sciences. Through geography pupils encounter different societies and cultures. This helps them realise how nations rely on each other. Geography can inspire them to think about their own place in the world, their values, rights and responsibilities to others and the environment.
>
> (DfEE/QCA, 1999, HPT p. 108, HST p. 154)

But with the exception of work on the environment and sustainable development, the programmes of study and attainment targets tend to focus largely on intra-subject material to do with geographical enquiry and skills. There is less than might have been

expected about cultural matters; but much about repeatable features found across different countries, in other words, about subject matter approached scientifically and in abstraction from the child's own perspective.

History

So many of the overall aims are about pupils' roles as national and global citizens in rapidly changing cultural, political economic, technological and social conditions. This requires a background of understanding of recent and contemporary history. Yet the history curriculum contains very little work on the twentieth century.

Mathematics

The first reason given for mathematics' importance is that it equips pupils with powerful tools of logical reasoning and problem-solving (DfEE/QCA, 1999, HPT p. 60, HST p. 57). This is an ancient argument for the subject, and it assumes the existence of general thinking skills. However, there are problems about this – akin to problems raised, incidentally, more than a hundred years ago when faculty psychology provided a rationalising theory for the elementary school curriculum (Selleck, 1968, pp. 45–58). For instance, the reasoning and enquiring acquired in history classes seems very different from the reasoning and enquiring involved in planning a family holiday. There *may* be general skills which cover widely diverse fields, but it should not be assumed that they exist before evidence – at present non-existent – is provided for this.

Statutory requirements in mathematics are laid down in great detail. Fourteen pages are devoted to its programmes of study, as compared with an average of four pages for all subjects. From the standpoint of the overall aims, just how important are all these statutorily required items? Students at Key Stage 3 have to recall the essential properties of quadrilaterals like the trapezium and rhombus. When was the last occasion that any reader of this book made use of these notions?

Modern foreign languages

The importance of MFL is said to lie in helping pupils to understand and appreciate different cultures and countries; and to think of themselves as citizens of the world (DfEE/QCA, 1999, HST p. 162). These are goals wholly in line with the overall aims. Yet virtually all the material in the attainment targets and programmes of study has to do with learning linguistic skills. No attempt is made to show why the latter should be thought an especially good means of attaining the goals just mentioned. If promoting the understanding of other cultures is what one is after, other vehicles look much better bets for the non-specialist: accounts of them in English, literature in translation, foreign films with subtitles or dubbing.

Music

The attainment targets and programmes of study are inward-looking. They provide structured progression in acquiring the various sub-skills and forms of understanding and appreciation found within the subject – i.e. as performers, composers, listeners and

judges. Pupils are thus led into the foothills of various related specialisms, yet the overall point of this for those children who will not become specialist musicians is not clear.

Physical education

For most people good physical health is a basic need for whatever activities they wish to undertake. The overall aims acknowledge this in their reference to encouraging pupils to 'recognise the importance of pursuing a healthy lifestyle'. Sub-aims covered by this may be taken to refer to understanding how the body works, diet, sensible habits of eating and drinking, work on body image, the need for adequate exercise, care in avoiding damage to one's body, drugs education and aspects of sex education. School dinner policy can play a part in this, along with timetabled classes in various areas.

In addition some children have a more specialised interest in developing their physical skills in some more particular direction – through dance, gymnastics, games, swimming, athletics. Physical education as a curriculum subject is almost totally orientated towards such specialisms. Its contribution to more general health aims is not well worked out.

Religious education

This subject presents a quite different matching problem. No problem here of links between the aims of RE and overarching aims. The RE material is full of statements such as: 'Pupils learn about religious and ethical teaching, enabling them to make reasoned and informed judgements on religious, moral and social issues' (QCA, 2000, inside front cover).

The most natural way of taking such comments is that RE deals with ethical and moral issues as part of children's general moral education. This is in line with the tradition of religious education in this country. There was a tight link between religious instruction and moral instruction in the elementary schools of the late nineteenth century (Selleck, 1968, p. 59). Closer to home, the introduction of RE as the only compulsory subject in maintained schools after 1944 had much to do with the belief that Britain needed to 'revive the spiritual and personal values in our society and in our national tradition' (Niblett, 1966, p. 15).

The civic significance of RE may well have dwindled between 1944 and 2000, but the more general association between religious and moral education has persisted more tenaciously. Until 2000 RE was seen in many quarters as *the* locus for moral education in the curriculum. In 2000 PSHE and citizenship were added to the National Curriculum subjects. In addition to these two new subjects in the ethical/moral/civic field, *every* subject has now to declare – in its *Learning across the National Curriculum* statement – how it contributes to learning in this area.

There are thus two sources of ethical and moral education now flowing into the new curriculum, one associated with religion, the other not. How far may this lead to a confusion in pupils' minds at odds with the insistence on clear, rational thinking prominent among the new overall aims? Recent statistics suggest that Britain is now a country where organised religions play little or no part in the great majority (perhaps 80 per cent) of people's lives. If present trends continue, this majority can be expected to increase (HMSO, 2000, 13.19, 13.20).

The points just made suggest that the whole area of how ethical/moral/civic aims are to be delivered calls out for review. In particular, it needs to be asked if this area of learning should now fall outside RE's remit altogether.

Science

The documentation on this rightly makes much of such aims as understanding the impact of science on industry and the quality of life; and discussing science-based issues that may affect the future of the world. But these are not reflected in the attainment targets. Virtually all the level statements here are about mastering specific areas of knowledge and techniques of enquiry within science.

Jenner, Lavoisier and Darwin are the only names of scientists mentioned, and their theories appear only as non-statutory examples to illustrate more general points. There is next to no work on the great turning points in the history of science, e.g. the impact of Copernicus and Galileo, the scientific revolution and the enlightenment, the impact of geology and evolution theory on views about man's place in the universe, the harnessing of science in the last two hundred plus years to industrial production, military affairs, medicine, social improvement etc. There is nothing about the impact of science on religion over the past five hundred years. There is no reference to any of the human sciences.

Inward-looking tendencies

Judging by the documentation, all the subjects we have considered, with the partial exception of English and RE, have an intra-subject orientation. In other words, their main preoccupation is with helping pupils to acquire knowledge, understanding and skills in their specialised area. Thus history aims at equipping pupils with a degree of historical knowledge and understanding, as well as reasoning and enquiry skills pertinent to the discipline. The same is true, *mutatis mutandum*, for other intellectual subjects, i.e. mathematics, geography and science. In MFL, art, music and PE the emphasis is more on skills of performance and production informed by relevant knowledge and understanding.

Learning in these subjects has to do with inducting novices into their *modi operandi*. The model at work seems to be something like apprenticeship in acquiring the rudiments of competence as a geographer, historian, mathematician, scientist, musician, visual artist, linguist.

It would be quite unfair to say that these subjects profess no links with overall aims. Geography, for instance, mentions its contribution to understanding other societies and sustainable development; mathematics its application to everyday life; science its role in understanding technological aspects of industrial and social life. Despite this, the attainment targets, programmes of study, and aims statements show a marked intra-subject emphasis.

Does this matter? It may seem odd to upbraid these subjects for concentrating on their own special ways of thinking, their own special skills and facts. What could be wrong with that? In another context – specialist courses at university, perhaps – this might be unremarkable. But in the new school curriculum, overall aims come first, subjects second. Schools' first duty is not in the preparation of specialists, but with providing a sound general education in line with subject-transcending aims.

That does not necessarily mean that an intra-subject orientation is wholly to be ruled

out. Among the new overall aims we find 'developing ... pupils' autonomy' and 'equipping them to make informed choices at school and throughout their lives'. There is a powerful argument that in order to choose options which include science-based or music-based careers, or indeed science or music pursued as ends in themselves, pupils have to have an appropriate understanding of the nature of science or music. The knotty question then becomes: what counts as *appropriate* understanding? How much acquaintance with science or music does one need as a basis for choice, and of what kind? Is the apprenticeship model adequate for this, or should one look for one with wider horizons? This kind of justification in terms of equipment for choice is scarcely, if at all, found in the new *Handbook*.

The most striking finding from the survey I carried out was the intra-subject orientation of so many curriculum subjects. However, in the light of the history of school subjects this is perhaps not so surprising. The intra-orientated subjects have been statutory elements in the National Curriculum since 1988, that is more than a decade before the new aims appeared on the scene. As noted earlier, the list of subjects included in 1988 is remarkably similar to the list included in the secondary regulations of 1904. In those eighty-four years the internal strength of these subjects increased and was consolidated via their statutory – and later non-statutory but by then entrenched – place in the school curriculum, via their subject-associations, and via their links with higher education. Most of them originated as school subjects in the late nineteenth century and were not then taught in universities. Promoters of these subjects sought to enhance their status by emphasising their academic rigour. This process developed further in the twentieth century via links between secondary school teachers, university teachers, subject associations and examining boards (Goodson and Marsh, 1996: an overview drawing on subject-specific works by Ball, S., Jenkins, E., Layton, D. and others). Over the years subjects which had a lowly place or no place in the 1904 curriculum joined the others on the escalator of respectability and professionalism: as mentioned already, 'drawing' was elevated into 'art and design', while music, absent in 1904 but common in elementary schools as 'singing', grew into the sophisticated, many-sided subject we know today. Achieving the status of a 'foundation' or 'core' subject in 1988 strengthened still further the power of these subjects and of their institutional links.

In 1993 Duncan Graham, the first Chairman and Chief Executive of the National Curriculum Council which preceded QCA, wrote: 'Do subjects exist to enable learning or as a vehicle for vested interests, lobbies, and departmental baronies?' (Graham and Tytler, 1993, p. 120).

The inward-looking nature of many of the subjects, their attachment to the apprenticeship model and the demands of specialisation raise questions about how far they should be allowed to continue in their present form. The arrival of the new overall aims has given us a touchstone, previously lacking, for assessing their suitability, as presently constituted, for delivering the pupil- and civic-centred education now required.

The structure of the book

Most of this book is a subject-by-subject discussion of issues raised in previous sections. Among other things Chapters 3 to 13 can be seen as putting to the test the conclusions of the project conducted for the national agency. They cover all the pre-1988 subjects now contained in the National Curriculum, as well as religious education. A chapter on

design and technology has also been included in the light of the comments made about it above. The post-2000 entrants to the National Curriculum, PSHE and citizenship have not been selected and neither has ICT. The chapters on subjects are preceded, in Chapter 2, by a discussion of some key questions in general curriculum planning.

Chapter 3 looks at *Art and Design*. With notable dispassion, John Steers sees the subject as marked by a 'prevailing orthodoxy' of approach. He interprets its historical development since the eighteenth century as a process of adding elements thought to reflect 'good practice' at different times, and so generating the less than coherent and fragmented curriculum we have today. Positively, he would like to see art and design recognise the shortcomings of 'school art', which has largely lost touch with wider contemporary developments in the professional field, in favour of more flexible arrangements which bring home to both teachers and pupils that art and design 'can actually *matter* in their lives'. This involves re-addressing the balance within the subject – moving 'fine art' from its privileged position and offering older students more opportunities for choice of working in a range of media and technologies, in design and craft activities as well as in fine art. It also demands more authentic forms of assessment that go far beyond the monitoring of orthodoxy.

Richard Kimbell's discussion of *Design and Technology* in Chapter 4 is distinctly upbeat. The only curriculum newcomer in 1988 (under the title technology), it grew out of former craft subjects (e.g. woodwork and needlework) and areas of technology (e.g. electronics), drawn together and given focus through processes of designing. As an area encompassing both art and science, D&T is by its nature interdisciplinary. Despite continuing problems in the spread of good practice in the teaching of the subject, it makes procedures of values-sensitive planning and making rather than knowledge content central to its activity. This means that it conforms more closely than most other subjects to the new generic aims of the curriculum. Unlike other subjects, its attainment target is expressed wholly procedurally, in terms of how tasks are tackled. Kimbell agrees with David Hargeaves that D&T 'is moving from the periphery of the school curriculum to its heart'.

Bethan Marshall shows in Chapter 5 how current debates about the content and purpose of *English* cannot be understood without tracing the historical lineage of competing positions. The view that locates the subject among the liberal arts originated with Matthew Arnold and was developed further by Leavis. The conception of English as a vehicle of critical dissent has even older, religious, roots, but has now become secularised; while contemporary conservatives, influenced by Eliot, often associate the subject with the preservation of English culture and hold that only via adhering to a canon of national literature can its decline be prevented. Marshall goes on to link the 'Gradgrindian' nature of current policy with the anti-utilitarian critiques of Arnold and others. She favours a position which does justice both to the aesthetic aspects of the liberal arts position and to elements of the tradition of dissent, dissociating herself to a large extent from the fashionable tendency in English teaching circles to see print literacy as giving way to a more multi-modal future.

In Chapter 6 David Lambert gives a frank account of the 'identity crisis' that besets *Geography* and of its proponents' keenness to defend the 'place in the sun' which it won in the 1988 settlement against incursions from competitors in curriculum 'turf wars'. He regrets the way National Curriculum requirements have steered teachers towards conformity, noting the role of widely-used textbooks in this process. He would like there to be much more thought about the *purposes* of teaching geography so that the

subject can recover a sense of direction. Potentially, geography has a huge amount to contribute to the realisation of the new overall aims of the curriculum, not least because of its interdisciplinary nature. Its future should lie in a greater responsiveness to children's needs as independent thinkers and as citizens; and in a willingness to subordinate the integrity of the subject, where appropriate, to new forms of cooperation and intermingling with other curriculum areas.

This brings us to Terry Haydn's Chapter 7 on *History*. This echoes the theme in the geography chapter about a current lack of consensus on why the subject is important. Traditionally, its purpose has been moral and civic, with a focus on the lives of great men and women. More recently, others have argued for it as a logically distinct form of knowledge. These aims have been held in uneasy tension since 1988, with political pressures in subsequent years towards the former. The current history curriculum fails to appeal to many ordinary children, is too intent on 'coverage', makes too few connections with contemporary affairs, and invites teaching to the test. The way forward lies in reversing these tendencies, and in putting more weight on differences in interpretation and revitalising the history teaching community. The gap between the generic aims and current arrangements is wide and will only be reduced once more freedom is granted to teachers.

Peter Gill begins his Chapter 8 on *Mathematics* with a dismissal of three of the most prominent arguments for the subject's being so extensively taught – its utility (beyond basic numeracy), its role in training thinking skills, and its intrinsic interest. His examination of how well it fits the overall aims also reaches largely negative conclusions. As with history, there has historically been a tension between ways of conceiving the subject, in the case of mathematics between those who see it as preparation for further work in higher education and those for whom it is a part of a child's personal development, the former being more influential. Once again, assessment arrangements come under fire as inadequate vehicles for revealing depth of understanding. Peter Gill suggests a radical overhaul of practices and regulations within the field, advocating that those who have not progressed well in the subject by the end of Key Stage 3 should be allowed to opt out.

Chapter 9 is on *Modern Foreign Languages*. Kevin Williams begins, like Gill, with a rejection of familiar vocational and other utilitarian arguments for compulsory provision. He then focuses on several valid arguments for learning a foreign language which are *not* uppermost in official justifications of the subject but which *are* closely in line with generic aims of the whole curriculum. Arguments of an experiential kind are: to provide pleasure, to form a basis for further learning, and to engender cultural decentring. Arguments connected with ethical development have to do with promoting openness to others at an individual level and, in a symbolic way, at the national. Williams holds that these arguments together justify giving all students the opportunity to learn a foreign language, perhaps more intensively and at an earlier age than usual, but that, seeing that not all students have an interest in or aptitude for the subject, they do not justify compulsory provision for more than one year.

Music is a prominent ingredient of contemporary culture. Yet, as Charles Plummeridge and Keith Swanwick argue in Chapter 10, its vitality and many-sidedness is not well reflected in school music. The National Curriculum has reinforced the traditional dominance of class teaching (which has its origins in choral singing in church), with a lesser role for instrumental tuition and extracurricular activities. Training in musicianship has been and still is the central rationale for the subject rather than a more

general induction into the discourse of music. The music curriculum needs to be more closely linked with the wider musical world and to build on contemporary local initiatives based on outreach programmes and other activities. This calls for a much more flexible music curriculum reflecting the multiplicity of forms of musical experience and offering more options to secondary students. The changes would bring musical provision much closer to the new overall aims.

In *Physical Education*, too, according to Dawn Penney's analysis in Chapter 11, the National Curriculum has given further legitimation to long-standing practice. Traditionally the subject has been conceived as a collection of discrete forms of activity, most often connected with sport. This conception originated in élite public (i.e. independent) schools in the nineteenth century, élitist connotations continuing in the privileging of preparation for high-order sporting performance among the aims of the subject as practised. The original National Curriculum order for PE had wider purposes than performance, but political involvement in the early 1990s narrowed these in the direction of the tradition. The curriculum is now built firmly around performance in dance, games, gymnastics, athletics, outdoor and adventure activities, and swimming. Dawn Penney questions the rationale for this structure and favours a radical refocus on a more flexible, interconnected and inclusive curriculum geared to children's current and future lives and with greater opportunities for choice given to schools and pupils.

Religious Education is not a part of the National Curriculum but has been compulsory since 1944. In Chapter 12 Michael Hand begins by looking at the original rationale for RE at that time. He locates this in the wartime desire, given totalitarian threats, to found British democracy on firm ethical foundations, Christian-based RE being the vehicle. After the war, with the decline of confessional RE and the coming of a multicultural society, this purpose gradually gave way to two other roles for the subject – moral education of a non-confessional sort and the promotion of understanding and respect for a variety of faiths (although after 1988 Christianity regained something of its traditional privileged status). Hand argues that neither of these current rationales is strong enough to justify compulsory RE for all. But there is a *third* and more defensible rationale, yet not prominent in the documentation: pupils should be equipped to make informed judgements on the truth or falsity of religious beliefs.

Like many other subjects, *Science* is still imprisoned by its past. Edgar Jenkins shows in Chapter 13 the class-divided nature of the subject for most of the twentieth century. Science was first taught in nineteenth century public schools and then in secondary grammar schools. Courses were based on the fundamentals of chemistry and physics and, later, biology, and on extensive practical work in specialised laboratories. The legacy is that most children did little or no science until more recent times; only in 1989 did it become an established part of the standard primary curriculum. In addition, since that date, the élite tradition, with its specialist, university-oriented outlook and ritualised emphasis on laboratory activity has become further entrenched at the secondary level, leaving school science increasingly divorced from the role that science has come to play in the modern world. However, he cautions that framers of a more inclusive science curriculum should look warily on demands for science to be taught through its technological and civic applications and argues that attention should be given to developing the pedagogical and other strategies needed to introduce students to the key features of how scientists currently understand the world.

As will be apparent from this résumé of the chapters, there are many parallels across the subjects in historical development, the tenacity of custom, the focus on specialist

training, social class differences in provision, disagreements about aims, the impact of the National Curriculum, the constraints of its assessment system, a desire for a reshaped curriculum which is more inclusive and in tune with the new overall aims. Chapter 14 picks out a number of these common themes and discusses lessons that can be learnt from them which may be used to formulate more adequate National Curriculum policies.

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