Part I Settings

The Comparative Context

Prelude

It is 8.15 on a Monday morning. Nearly three hundred children aged 6–11 are converging on an elementary school in the affluent residential quarter of a coastal city in southern France. They are well dressed – fashionably and expensively so in many cases – well nourished and loquacious. Parents accompany many of them. At 8.28 their teachers come out of the modern two-storey building. The pupils line up in the covered part of the playground where the school is raised on pillars to provide shelter in poor weather. They follow their teachers into the classrooms, and another day starts. First is registration, then French or mathematics, today as on Fridays preceded by civic education. The pace is brisk, the teacher's manner business-like. At 11.30 most of the teachers and children go home for a protracted lunch break, returning for a second three-hour stint – science, perhaps, or history, geography, art, music or physical education – at 1.30.

The same routine, give or take minor variations, is repeated in a considerably less pristine new town some ten miles away, with a mixture of low-rise housing and low-cost tower blocks and a high level of parental unemployment, especially among the many families of North African origin. It is repeated, more or less, in the one-teacher *classe unique* school in a mountain village some thirty miles distant, whose 22 pupils, 24 hours earlier, joined their fellows from the next village in a day's skiing. This school shares a building with the *Mairie*, and its lessons are interrupted from time to time by errant phone messages for the mayor. The other has a brandnew building with hexagonal classrooms and a state-of-the-art climbing wall.

The classroom settings in which the various groups of children work are somewhat more variable than the routines which structure and punctuate the day. They are all spacious, light and well equipped, but in some the desks are arranged in rows facing the blackboard, in some the children work at tables in groups of four or six facing each other, and in others the tables are set, boardroom-style, in a hollow square. In one room the walls are covered by children's paintings, wordlists, work in progress and notices; in another the blank spaces are punctuated only by the odd

poster advertising one of last year's exhibitions or concerts. These physical arrangements reflect a similar diversity in the modes of instruction adopted by the teachers. Some lessons deviate not at inch from the formal didactic structure of *la leçon*. In others there is structural fluidity and collaboration between pupils. In some classrooms, strict social distance is maintained between teacher and taught, while in a few the younger pupils address their teachers by their first name. In every room, however, the blackboard provides the focus and constant point of reference, and it is actively used (rather than merely viewed) by the pupils as well as their teachers.

Crossing several national boundaries and time zones we find a recognizable variant on this routine taking place in a large town in southern Russia (in Britain it would be designated a city but in Russia only Moscow and St Petersburg merit this accolade) close to the Ukrainian border. Here, some fifteen hundred pupils aged 7-17 circumnavigate the street's potholes, puddles and battered lorries, make their way into the school compound past the white-painted statue of Lenin - seated for once, and with his arm round a small boy, rather than standing with coat flapping, beard jutting and arm outstretched to the revolutionary horizon, as in the town's main square - and up the steps of the large three-storey building. The corridor to the school's primary section is lined with photos of prize-winning pupils and former directors, slogans about the motherland and world peace, and - in unselfconscious juxtaposition with Lenin - 'Through our sufferings we have achieved that New Thought which is necessary if we are to bridge the gulf between political practice and the moral and ethical standards which are common to all mankind: M. S. Gorbachev'. This sentiment has survived Gorbachev's vilification, just as Lenin's statue has survived the collapse of the Soviet Union.

The children play - even more boisterously than their French peers - in one of the large spaces outside each group of classrooms which serves as an indoor playground during the long winter, but their manner changes the instant they are summoned into the classroom for the first of their 40-minute lessons. Warm coats are removed, and the crisp, clean and relatively formal attire is in marked contrast to the jeans, trainers and designer clothing we have seen in France. The children stand by their desks, sit only when instructed by their teacher to do so, quickly and efficiently arrange books, book rests and pens in a preordained pattern, and silently await their instructions. Their day, like that of the French children, starts with the native language and mathematics. Their classroom is tall, with large, curtained windows down one side, on the ledges of which are houseplants with trailing foliage. The desks are arranged in rows, facing the large blackboard with its triptych of carefully prepared panels and, to one side, the teacher's desk. Above and around the board are lists of letters and numbers, together with a picture of a child seated at its desk with ramrod-straight back, which the children emulate without prompt by the teacher. Its superfluous caption reads 'Sit leaning slightly forward. Do not touch the desk with your chest. Put your elbows on the desk. Place your feet on the floor. Lean on the lower, strengthened edge of the chair back'. The wall at the back of the room, which the teacher can see but the children cannot, is filled with an atmospheric picture of birch trees in autumn.

In similar buildings and classrooms in other parts of the town, in the three-class village primary school with just 60 pupils which – unusually – occupies its own building, in the brand new school on a collective farm surrounded by the vast emptiness of the steppe, and in the Moscow gymnasium specializing in modern languages, the ambience and routines are pretty well identical.

Much further east and south, in the Indian state of Haryana, children and teachers are picking their way from one rickety stepping stone to the next along a narrow and muddy footpath wedged between two buildings. Alongside their path runs an open sewer. At one end of the ginnel is a snarling, hooting maelstrom of traffic buses, lorries, cars, auto-rickshaws, scooters, bicycles, carts drawn by oxen, and pedestrians and cows. At the other is a square of one-storey buildings grouped round a pump from which women and children are collecting water in jerrycans and used Bisleri bottles. Beyond is the school: a small, dusty courtyard with the school building - two classrooms and a veranda - on one side and a lean-to with three bays on the other. Over four hundred children share this space, divided into morning and afternoon shifts. There is a class in each of the two rooms and in each of the lean-to bays; there are two more on the veranda and in the courtyard. The chanted responses of one class merge into those of the next. Most pupils here are the children of illiterate migrant workers who live in the slums and transient shanty town surrounding the school. They are seated one behind the other on worn tat*pattis* or runners, close-packed and cross-legged, with their slates resting on their satchels that in turn rest on their laps. The teacher stands at a portable blackboard.

Some distance north, in a suburban enclave of New Delhi, 600 children aged 6–11 have assembled in a large, shady and well-brushed courtyard. Each is immaculately dressed in the school's uniform of red and blue. The school's female head teacher, who uses a public address system, leads the assembly, which combines patriotism and culture in equal measure. Around the courtyard are the classrooms: small, bare, whitewashed, devoid of furniture except a blackboard, a cupboard and the runners on which the children will sit cross-legged. Each room accommodates anything from 30 to 50 pupils. Running the length of each block is a veranda on whose walls are lists of 'humble requests' to parents about school uniform and homework, attendance and absence figures for every class, recorded daily, and assorted maxims: 'Great ideals create a great mind'... 'The way that an insects eats away at clothes is the same way that jealousy destroys a human being'... 'You will reap what you sow. You cannot expect flowers to grow where you have sown seeds of thorns'... 'At the time of judgement a human being should remain impartial.'

The assembly ends with a display of dancing and singing by a group of girls. The music and choreography are traditional, taught by a teacher whose parents, grand-parents and great-grandparents were musicians. The theme, however, is modern: through words and movement the assembled children are reminded of the importance of personal hygiene and a healthy diet.

In the neighbouring state of Uttar Pradesh, we are in a village school with mixed age (or 'multi-grade') classes. Here, too, the day has started with assembly, and here too, the classrooms are – by Western standards – small, crowded and sparsely equipped. In each, the teacher will shortly embark on an unvarying routine of rote

learning and drill. She points in turn to each letter or number on a chart or the blackboard (for here, too, the daily priorities are literacy and numeracy), asks what it represents, how it sounds or what it adds up to, and receives back the chanted unison response, usually repeating this antiphony five or six times before she moves from one written symbol to the next.

In a township on the edge of the capital of one of the Midwestern states of the USA, the school's 340 children arrive on foot, by bicycle or in a succession of yellow buses. Today they are returning after an enforced day's leave caused by a blizzard. The school is single storeyed and built round a central courtyard. The large field in which it is set is surrounded by low-density houses and the occasional shopping mall, along streets laid out on the grid pattern into which most of the state was divided when it was first settled in the 1830s, although this settlement is a much more recent overspill from the state capital a short distance away by car. The building contains not only classrooms but also two gymnasia, specialist rooms for science, music, art, and speech therapy, a newly furbished media centre housing a library, study carrels and a computer laboratory with fifteen workstations. It also has a suite of offices for clerical staff and the school's principal together with consulting rooms for the ancillary team of nurse, psychologist, social worker and counsellor.

The school's entrance foyer is liberally adorned with messages: '101 ways to praise a child'...'101 ways to love a child'...'x was a good listener during conflict negotiation meetings'...'Making reading together a family tradition'...'Peace is nurturing'... and, a triple juxtaposition which is surely without ironic intent but is the more striking for that: 'Popcorn 50c'...'No guns in our schools – Crime Stoppers of mid-Michigan will pay up to \$500 reward for information leading to arrest'... 'The new 3Rs: we are Respectful, Responsible and Ready to learn'.

The classrooms are large and every wall is covered with teaching material, notices or children's work. The furniture consists of a mixture of informally disposed tables at which the children work in groups, specialist areas for art and language, an information technology area with five computers, and a carpeted corner with easy chairs and sofas in which the class assembles for stories and other collective activities. The children enter in twos and threes, greet the teacher and each other with equal informality, exchange news, take off coats, hats and boots, fetch the journals in which they will write their latest news, settle themselves randomly on the chairs – not for these children the upright posture of their Russian peers – and begin, intermittently, to write. While they are doing this, the teacher checks the register. This done, the children stand and, hands on heart, face the national flag for the Pledge: the one unvarying ritual of this and every day.

The ritual is repeated across the state in a much larger elementary school of over 700 pupils, located in an industrial city whose main employer – the automobile industry – has fallen on hard times. Many of the parents are on the minimum wage of 4.50-5.50 an hour and over half the pupils qualify for free school lunches. All the school's pupils, the principal and about half of the teaching staff, are black. The principal himself is ubiquitous, energetic and dominant. Here, too, the entrance area and corridors have their messages, but now their burden is attending and achieving

rather than caring and sharing: 'Spiderman says good attendance is important'; lists of pupils in each class grouped under the headings of 'Perfect attendance', 'Good conduct' and 'A and B grades'; information about after-school activities; photo-graphs of pupils over the futures to which they aspire: 'Erica – teacher', 'Jonathan – attorney', 'Courtney – doctor', 'Tehquin – jazz musician', 'Sophia – ballerina', and (seated in front of the US flag) 'Lauren – president'.

To England, now, and a school in what was until 20 years ago a village but is now a sprawling dormitory of near-identical detached houses from which many parents drive into the neighbouring city each day to work. The modern, singlestorey school building stands in extensive grounds, part of which has been landscaped by the parent-teacher association as a wildlife conservation area, complete with pond. The school's entrance area is welcoming and attractive, but the building's main focal point is the large hall at the centre of the complex, in which the school's 300 pupils and 11 teachers meet daily for assembly and which also doubles as a gymnasium and refectory. Around it are the classrooms, the staff room and separate offices for the head, deputy head and school secretary. A second focal point is provided by an internal courtyard which has been laid out by the pupils as a Japanese garden and in which some of the older pupils prefer to sit and converse during the morning, lunchtime and afternoon breaks rather than submit to the supervised anarchy of the playground. Every wall of every classroom is covered with carefully labelled and mounted examples of children's work - writing, art, science investigations, activities arising from a recent school trip. The storage units below this 'display' (for that is what this use of wall space is invariably called by English primary teachers) are topped with its three-dimensional items. In addition every class has a library, a bulging storeroom and at least one computer. The children come into the classroom at any time from 8.50, chat with the teacher and each other and collect a reading book from their personalized tray in one of the storage units. Ten minutes later, the teacher checks their names in the register, deals with various items of housekeeping, then summons the children's attention to explain their tasks for the first hour or so. Once this is done, the children work in their groups from cards, worksheets or textbooks, and the teacher moves from one group to the next, quickly during the first few minutes to establish that the tasks are fully understood, then spending longer with each group and with individual children in the group as the lesson proceeds, not standing over the children but crouching down or pulling up a chair so that her head is close to theirs. Her manner is quiet and conversational; the children's, mostly, likewise.

A few miles away, in an older two-storey block on a bleak 1960s housing estate, the visitor negotiates the locked door and security intercom to find beyond the less pristine exterior a similar internal ambience to that of the first school, although here it belies a daunting catalogue of social and behavioural problems which the head links to the area's low per-capita income, high unemployment and high crime rate. The other contrast is spiritual: everywhere are the images and words which remind one that this, a Roman Catholic school, is shaped by church as well as state, by religious imperatives as well as those of the National Curriculum, annual tests and Office for Standards in Education (OFSTED) inspections. The classrooms reveal the

familiar ecology of displays and groups, but in one, once the children have settled and the register has been taken, the teacher commands their attention with the still novel greeting 'Welcome to the Literacy Hour!'. She then embarks on her version of the formula which the government has recently prescribed for every primary child, teacher and classroom in the country – 15 minutes of whole class 'shared text work', 15 minutes of whole class 'focused word work', 20 minutes of individual work during which the teacher concentrates on just two of the class's six groups, and a final ten-minute plenary to review what has been accomplished.

Finally, to a terraced street of back-to-back red brick houses in one of the country's largest cities, once part of the industrial hub of empire, now striving to recreate itself as a centre for the service and retail sectors, education, culture and even tourism. The street – and the many others arranged in a dense grid across this part of the city – is Victorian, but the school is modern. It is a complicated, low-ceilinged, single-storey affair of 'home bases' and 'practical areas'. Children spill over from one into the other, and - since each practical area is shared by two classes - from one class into the next, and no one space seems quite large enough for its purpose. Here, too, the Literacy Hour now rules, together with its companion the Numeracy Hour – or, more correctly, a sliding scale from 45 minutes for the youngest pupils and an hour for the oldest - with a similar structure of timed lesson stages and whole class teaching and a strong emphasis on mental arithmetic. These novelties apart, the school's most striking feature is its inhabitants, for nearly half of the children are from Muslim families whose roots encompass villages in Pakistan as well as these red-brick urban streets, and the colour and formality of their traditional dress contrast with the jeans, sweatshirts and trainers worn by the white children. Here, then, the implementation of the government's Literacy Hour is complicated, for the children as well as the teachers, by the context of bilingualism and the school's corporate values, must accommodate the imperatives of a multi-ethnic and multi-faith community.

Brave New Millennium

Shortly before the end of the second millennium the UK government launched its blueprint for the beginning of the third. Dismissing both 'naive reliance on markets' and 'old-fashioned state intervention' – the doctrines of its Conservative and Labour predecessors – New Labour announced the discovery of a 'third way'¹ and nailed its colours to the mast of the 'knowledge-driven economy'. In the global economy, the government asserted:

Capital is mobile, technology spreads quickly and goods can be made in low cost countries and shipped to developed markets . . . British business therefore has to compete by exploiting capabilities which competitors find hard to imitate. The UK's distinctive capabilities are not raw materials, land or cheap labour. They must be our knowledge, skills and creativity.²

Specifically, the four capabilities most urgently required were enterprise and entrepreneurship, the exploitation of science and technology, key and managerial skills, and information and communications technology.

The 1998 Competitiveness White Paper, in which this case was presented, was an initiative of the government's Department of Trade and Industry (DTI), although the requirements it placed on the education service were clear enough. In parallel, the Department for Education and Employment (DfEE) launched its own vision, that of a 'learning age... of information and global competition' requiring 'ingenuity, enterprise, design and marketing skills' and exploiting the UK's leadership in information and communications technology (ICT) and biotechnology.³ A National Skills Task Force (New Labour's pervasive use of the language of the military campaign merits a study in its own right) was recruited to draw up a National Skills Agenda. Its aim was

The establishment of a national culture of high skills and an education and training system able to deliver appropriately and at the right time. We live in an age of global competition and constant change. We must seek to achieve a high skill, high value added economy as the recipe for national competitiveness. For a truly dynamic economy, we must keep the skills of our people 'ahead of the curve'.⁴

The skills in question were set out under three headings: *generic skills* which are transferable across occupational groups and which include the 'key skills' of communication, application of number, problem-solving, team-working, ICT and the capacity to improve one's performance; the more specific *vocational skills* needed to work within a particular occupation or group of occupations; and *job-specific skills* for distinctive positions within an occupation. Formal education would concentrate on the first two categories.

Dovetailed with this were the government's requirements for basic education, spearheaded by their drive to raise standards in literacy and numeracy in the primary years. Literacy and numeracy would then form the base of a skills pyramid whose superstructure would comprise what the Qualifications and Curriculum Authority (QCA) called – in an effort to give coherence to the deluge of 'skills' recipes pouring out of think tanks and governmental departments – *basic skills* (literacy and numeracy with oracy), *key skills* (communication, application of number and ICT), *wider key skills* (working with others, problem-solving and improving one's performance), and *adult life and generic skills* (other skills required in the world of work).⁵

This response to the challenges of change begs a number of questions. How far is the received analysis of the global imperative valid and just? Are the skills which have been identified the skills which are actually needed? Is the new skills vocabulary sustainable, or is it indefensibly reductionist? (Interestingly, the UK Confederation of British Industry [CBI], which one might have expected to endorse the government line, took a more traditional, less skills-oriented approach, arguing the need for curriculum balance and a strong emphasis on personal development⁶). And is the endorsement of the old 'basics' of literacy and numeracy as the bedrock of the 'new' primary education appropriate?

This chapter considers particularly the first question, embedding it in a wider consideration of how the current English system of primary education relates to its national and international context. This will take us to the matter of how this system compares with those of other countries, to the problems and possibilities of making such comparisons, and thence to the five countries which provide the lens for this book's analysis of primary education at the levels of policy and practice.

The Ages of Primary Education

Eric Hobsbawm sees the period 1870–1914 as 'in most European countries, the age of the primary school' – an age of nation-building in which primary or elementary education became universal and compulsory, and states exploited its power to 'teach all children how to become good subjects and citizens'.⁷ For Britain, the imperatives of social cohesion were balanced with those of economic prosperity. National identity in part grew, and of course still grows, out of international comparison and economic competition. Economic warfare reinforced identities which, in Linda Colley's analysis, had been forged by the long succession of military wars during 1689–1715 and cemented by Protestantism: the enemy was both without and within.⁸ During the first 'age of the primary school' it was the industrial and economic might of Germany, and especially Prussia, which Britain most feared, although Britain was at least a world power and there was always an empire to fall back on. During the third age of the primary school – for so the period from the mid 1980s seems to be shaping up, after a second age which established primary education as a distinct phase – the picture is a good deal more complex and fragile.

Yet on balance one of the defining characteristics of English primary education as it developed during the twentieth century was not its national, still less its international consciousness, but its insularity and parochialism. Elsewhere, Hobsbawm portrays the twentieth century as 'An age of unparalleled and marvellous progress scientifically and technologically' and 'Without doubt the most murderous century of which we have record, both by the scale, frequency and length of the warfare which filled it... but also by the unparalleled scale of the human catastrophes it produced, from the greatest famines in history to systematic genocide'.⁹

How a state system for educating young children might have responded to these enormities is unclear. That it could have responded more adequately to the march of science and technology is beyond dispute. Yet for much of its history, indeed until the last decade of the twentieth century, neither featured in more than a small minority of English primary schools.

If the period 1870–1914 was the (first) age of the primary school, it was also the age of a minimalist conception of what primary schooling should attempt to achieve: 'The duty of a state in public education is . . . to obtain the greatest possible quantity of reading, writing and arithmetic for the greatest number'.¹⁰

This view, from the 1861 Newcastle Commission Report on elementary education, dominated the discourse of English primary education not just for the remainder of the nineteenth century but also, arguably, into the twenty-first. The only real alternative was that offered by the progressive movement and endorsed by the Hadow and Plowden reports of 1931 and 1967, respectively.¹¹ But this alternative looked not outward to society, still less to the world beyond Dover. Its values were bounded by a preoccupation with the child, the family and the community. The Plowden Report, which brought into the mainstream of primary education ideas about children's development and needs which had hitherto informed only the minority progressive counter-culture, found that it could say nothing about society other than to be vaguely 'hopeful and fearful' about its future and commend that schools respond by promoting 'flexibility' and 'adaptability'.¹² But these, as I noted in 1984, are at best extremely difficult objectives to achieve in any operable sense and, at worst (since the words are frequently invoked but rarely explicated), are a device for dodging serious social analysis.¹³

Plowden, therefore, effectively washed its hands of the vital question of the relationship between education and society. Others at this time – only a few others, it has to be said – voiced similar reservations to mine. White, for example, noted that the English primary teacher 'of all members of the teaching profession, has traditionally been the least aware. Her typical milieu has been the world of art and crafts, of movement and drama, of learning to read and count. It has typically been a cosy, inward-looking world, quite cut off from the complexities of politics'.¹⁴

This is not the place to rehearse the reasons for this professional introversion. They had to do partly with the character of primary schools as institutions, partly with the now long-defunct system of teacher training which isolated future primary teachers from the mainstream of higher education in training colleges whose ethos, in Taylor's often-quoted words, was one of 'social and literary romanticism ... suspicion of the intellect and the intellectual; a lack of interest in political and structural change; a stress upon the intuitive and the intengible, upon spontaneity and creativity ... a hunger for the satisfactions of interpersonal life within the community and the small group, and a flight from rationality.¹⁵

The isolation and inwardness, then, were as much ideological as situational. In fact, for much of the postwar period English primary education kept in uneasy equilibrium a dual legacy – of nineteenth-century elementary education and of the progressive counterculture. The one sought to produce a workforce which was functionally literate and numerate but socially conformist and politically docile, while the other celebrated individual fulfilment, although not social empowerment.

This hybrid¹⁶ held good throughout the 1970s and into the 1980s. It remained untouched by the growing but intensely pessimistic global consciousness of a period which was dominated by the Cold War, Vietnam, the threat of nuclear catastrophe, post-colonial instability, war and famine in Africa, the growth of militant fundamentalism, and the alternative Armageddon of an imploding 'spaceship earth' overwhelmed by the multiple crisis of overpopulation, resource depletion and environmental degradation;¹⁷ a period when Hobsbawm's 'Golden Age' of postwar growth and social reconstruction (1945–75) gave way to an era of 'decomposition, uncertainty and crisis'.¹⁸ English primary education remained immune to all this. It also remained immune to the UK's economic crises of the mid and late 1970s which produced the inevitable backlash of blame heaped upon education in general, and

on the values of progressive primary education and egalitarian comprehensive education in particular.¹⁹ It began to emerge from its cocoon only with the dramatic change from educational *laissez-faire* to direct government control which was initiated by Margaret Thatcher's government from 1987 onwards, and accelerated by the Blair administration a decade later.

Even then, although the government's agenda for primary education was by the early 1990s unambiguously societal and economic rather than individualist, the overall scope and balance of the English primary curriculum had changed relatively little. The old 'basics' of reading, writing and number were consolidated, and the arts and humanities, although increasingly squeezed by the new arrivals of science, IT, design and technology, retained a place which – local pockets of purist progressivism apart – had in truth never been much more than marginal.

It was the encroachment of the particular kind of international consciousness denoted by the word 'globalization' which looked most likely to produce radical change to a model of primary education which had displayed remarkable continuity in its fundamentals for over a century. One symptom was the growing obsession with – and panic over – international league tables of educational attainment. Another was the insistence that nothing, and certainly not anything as *passé* and elitist as the notion of a rounded education, should get in the way of literacy and numeracy. A third was the language of targets and standards. Yet another was the reduction of all school learning to batteries of workplace-oriented 'skills' – as pointed up at the beginning of this chapter. It is time to look in more detail at the phenomenon that fuelled the new educational instrumentalism.

Globalization

Giddens rehearses the arguments in favour of the proposition that globalization marks a quantum leap in the world's economic and social relations, especially where the developed Western and Pacific Rim economies are concerned. He sees it as a combination of processes: the expanded role of world financial markets, turning over more than 'a trillion dollars a day . . . in currency exchange transactions . . . the communications revolution and the spread of information technology . . . the transformation of time and space in our lives' in which 'distant events, whether economic or not, affect us more directly and immediately than ever before . . . [and] decisions we take as individuals are often global in their implications.' It is also a process which subjects nations and states to acute dilemmas of identity and which threatens to undercut social solidarity and replace it by 'institutionalized individualism'.²⁰

Giddens' account, however, is relatively cautious, and balances prediction with social concern in equal measure. Far more gung-ho and morally agnostic is the 1998 report from the Royal Society of Arts (RSA). In this, according to my sampled word count, the most frequent adjective is 'new', the most frequent verb is 'will' (rather than the more prudent 'may' or 'might') and the most pervasive phrase is 'in the new world'. No distinction is drawn between the trends that are desirable and those that are undesirable: all are simply bracketed together as inevitable.

Globalization is an unstoppable juggernaut. With a gleam in its corporate eye the RSA report welcomes

A world where there are few fixed boundaries between public, private and voluntary; we will no longer make assumptions about what belongs to a sector or a place. Most people will be working, but fewer will have jobs; the days of the 'job-shaped' job and the job-based career are numbered . . . Technology will make the skilled globally mobile. More and more organisations . . . will be virtual organisations . . . Much of this change has begun. It will not stop . . . Managing uncertainty will be the name of the game . . . Information and communications technology will transform the face of education . . . Flexible working will breed a new kind of employee . . . The new skills will be in managing the virtual workforce.

And, of particular note in the context of this book:

In the new world, the education system will be built around information and communications technology . . . will use a new, IT-based pedagogy . . . developed by education specialists, psychologists and technologists as well as business . . . will [have] a competence-based curriculum.

Unfortunately, having said all this, the report pulls the rug out from under its (virtual) feet with:

In the new world of our vision, the only thing anyone can be certain about is the constancy of change.²¹

Reduced to their essentials, the common elements in this and similar analyses are two: global economic interdependence and competitiveness; and the limitless potential of information and communications technology. The common omission is any acknowledgement of the human and social downside of these developments, especially for those – individuals, groups, nations, states, continents even – who will be neither beneficiaries nor participants, including (in Nelson Mandela's telling estimate) the two-thirds of the world's population who have never used a telephone, let alone e-mail or the Internet. (The extent to which Internet use in 1998 was dominated by the mere 19 per cent of the world's population who live in OECD countries, especially the United States, is shown in the United Nations' *Human Development Report* 1999.²²)

This apart for the present, there are two kinds of critique or counter-prediction to the above with which, in an educational context, we need to engage (the third is to dismiss globalization as a chimera, or at best a continuation of a process which started a century ago, but that is probably not an option). One critique accepts the broad definition of globalization as 'the interconnectedness of capital, production, ideas and cultures at an increasing pace'²³ but sees it as, in its own terms, fraught with danger and risk as well as opportunity. The other views a definition of globalization that focuses only on its economic and informational aspects as seriously deficient and in need of extension.

Thus, Kennedy warns of the danger of globalization running out of control, disadvantaging those unable to compete and leading to nationalism and protectionism. He points to the massive and growing income disparity between workers in the United States and Europe and those in the successful Pacific Rim economies. He sees a potential Third World workforce of about 1.2 billion people poised to enter global production and labour markets, most earning less than US\$3 per day (as compared with the *per diem* average of \$85 for workers in the United States and Europe). As a consequence of these trends he predicts wholesale industrial transfer from West to East, a 'colossal depressive force' on wages in the richer countries, heightened competition spilling over into trade conflict, political instability, public discontent, and the rise of nationalism and fundamentalism in those countries unable to compete. And he – like others – asks whether Marx was not, after all, right.²⁴

By and large, and as one would expect, historians seem more alive to the social risks of globalization than do economists. Thus, noting that while historians tend to be 'agnostics about the future, hence virtual pessimists, economists and business people tend to be optimists,' Landes debunks the assumptions that 'the world will continue to get richer . . . the poor will catch up with the rich . . . islands of growth will become continents . . . knowledge will solve problems and overcome material and social difficulties along the way' – arguing instead that global industrial diffusion will lead to a 'levelling down of wages, increased inequality of incomes and/or high levels of (transitional?) unemployment'.²⁵

And, reminding us that 'other things being equal, it is the rich who poison the earth' he revisits the ecological doom scenarios of the 1970s. Giddens, too, couples ecology with globalization in his list of dilemmas confronting the 'new' social democratic politics of Blair and his counterparts in Germany and France, rehearsing the now familiar scenarios of global warming, resource depletion and food degradation.²⁶ (In the latter case he cites BSE: since Giddens' book appeared public anxiety in the UK has switched to the genetic modification of food, and since the food market is one increasingly international market among many, biotechnology can be added to the list of the mixed blessings of globalization.) The point is made more forcibly by Landes, who credits the Green Revolution of the 1960s–90s with seeing off – for the time being at least – Malthus's (and Ehrlich's) more pessimistic predictions of global famine but asks whether biotechnology can continue to deliver on the promises of its advocates without destroying the environment.²⁷

However, aside from its caution in the face of unguarded economic optimism, the historical perspective on globalization has one crucial advantage over the economic one: it concerns itself first and last with human agency and human consequences. On this basis, as Landes notes, 'if we can learn anything from the history of economic development, it is that culture makes all the difference', and this provides the clue to how the new economic order is, and will be, differently handled in different countries and regions. He contrasts East Asian entrepreneurship with, in post-Soviet Russia, '75 years of anti-market, anti-profit schooling and insider privilege [which] have planted and frozen anti-entrepreneurial attitudes. Even after the regime has fallen people fear the uncertainties of the market place and yearn for the safe tedium of state employment.'28

However, not all the economists are as optimistic as Landes claims. I have referred to Kennedy above. Hutton argues that a global financial market without global financial regulation will spiral out of control, and in turn he cites the testimony of arch speculator George Soros to the US House of Representatives in 1998 that 'financial markets are inherently unstable' and 'the belief that financial markets, left to their own devices, tend towards equilibrium . . . is false'.²⁹ By 1999, there was increasing public concern about the need for financial controls, a concern which New Labour, at least at the time of writing, seemed unprepared to countenance, despite Prime Minister Blair's dismissal of 'naive reliance on markets.'

Other Worlds

Clearly, then a definition or vision of globalization as an economic-cum-informational bonanza is pretty wide of the mark. On this at least, economists and historians agree. It is therefore unfortunate, to say the least, that the more restricted and uncritical view has had such a prominent airing in educational circles.

Perhaps the most comprehensive corrective to naive futurology is provided by Manuel Castells in his formidable trilogy *The Information Age: Economy, Society and Culture*.³⁰ In setting the scene for a searching analysis of the condition of the world at the turn of the millennium Castells presents economic globalization and the IT revolution as two events among many – albeit powerful and pervasive ones – which are transforming our lives and consciousness. His full list includes:

- the technological revolution centred on IT
- economic globalization and interdependence, and the resulting reworking of the relationship between economy, state and society
- the collapse of Soviet statism, the demise of communism, the consequent loss of the historical opposition to capitalism and the transformation of global geopolitics
- the restructuring of capitalism, with increased flexibility, networking and decentralization
- the decline of the power of organized labour relative to that of capital
- increased individualization and diversification of working relationships
- increased participation of women in the workforce, although often under discriminatory conditions
- state intervention to deregulate markets and dismantle the welfare state
- increased global economic competition
- the reshaping of the world's economic blocks with the rise of the Asian Pacific, the consolidation of the European Union, and the decline of the Third World and the former communist bloc
- uneven development not just between the world's north and south but everywhere
- the globalization of organized crime
- the use of the new technology to enable individuals to satisfy hitherto unachievable needs and desires, including those which were formerly illicit or taboo

- the decline of patriarchy, the emergence of gender as a contested domain, and the redefinition of relationships between women, men and children
- the spreading through societies of environmental consciousness, and its consequent hijacking for political advantage
- a crisis of legitimacy for political systems and for politicians vis-à-vis electorates
- the crisis of individual and collective identity resulting from all these changes, especially social, cultural, religious and ethnic identity, the search for new identities through emphemeral social groups and the resurgence of the older identities of religious fundamentalism
- the rise of nationalism, racism and xenophobia
- social fragmentation, social exclusion, the breakdown of communication, the alienation of groups and individuals, all as a consequence of the crisis of identity
- the emergence of millenarism in a variety of guises and through a variety of gurus: technology new age prophets, postmodernists, political and religious extremists.³¹

Much of this Castells summarizes as 'a bipolar opposition between the Net and the Self', or between the 'abstract, universal instrumentalism' of global economic and information networks on the one hand, and those individual and collective identities which are deeply rooted in culture and history.

It is a daunting scenario, and one which engenders precisely the feeling of helplessness in the reader which Castells charts more generally in society, particularly Western post-industrial society. Yet he argues as strenuously against the nihilism and extreme individualism of the postmodernist analysis as he does against the naive technological determinism of the kind I illustrated earlier. Nothing, in his view, is inevitable; humans can and must take control.

From the standpoint of basic education it is clear that to view the challenge of the information age as merely one of making tomorrow's citizens computer literate falls pitifully short of what is needed. Although IT literacy is a necessary tool for survival in the new global/informational economy, and the UK government was right to initiate high-profile developments in this regard,³² the equally pressing and much more taxing problem for education is how to respond to the human and social dimensions of the conditions which Castells and others investigate, especially the crisis of meaning and identity, the growth of individualism, and the loss of social consciousness and cohesion. If today's children and tomorrow's adults cannot relate meaningfully to each other and have no real sense of who they are, where they belong, where they come from or where they are going; if they find their world fragmented, hostile and alienating; if individual and collective morality are meaningless concepts; if they find that their only way of coping is to escape into the virtual reality of the web, downloading more and more information but knowing less and less; then basic education will have failed, and dismally.

Castells' analysis, then, is daunting but not apocalyptic. The warnings he sounds are a proper and inevitable consequence of acknowledging the multi-dimensionality of the economic and information revolutions, and of placing them in some kind of historical and cultural context. And his analysis is shared by others. So, for example, historians David Landes and Eric Hobsbawm, both referred to above, arrive at a similar prospect by a different route;³³ as does sociologist Krishan Kumar;³⁴ and the briefer account of the dilemmas of modern society and polity provided by sociologist and New Labour guru Anthony Giddens devotes a substantial part of his case for the 'third way' to addressing issues such as individual and collective identity, individualism, social solidarity and social inclusion/exclusion. His prospectus combines a reinvigorated and active civil society, a renewal of democracy and a strengthening of family and community, among other ingredients.³⁵

Rather more pessimistic is journalist Melanie Phillips, who focuses on some of the intellectual and social symptoms of the current crisis (for that is how she sees it) - the twin scourges of cultural relativism and postmodernism, the decline of individual and collective morality, the breakdown of the family, the threat to liberal democracy.³⁶ Her explanatory canvas, however, is unacceptably narrow. Despite the fact that what she charts can be treated as part of the wider condition of Western post-industrial society and has international as well as national roots, she deals exclusively with Britain and indeed lays much of the blame at the door of UK state education, its apologists and its 'establishment'. In this sense, although her analysis is useful in its account of some of the conditions which must give educationists cause for concern, it is seriously deficient in its analysis of cause, effect and solution. And although she - like HMCI Woodhead - cites Matthew Arnold in support of the cultural imperative in education ('the best that has been thought and said in the world³⁷) the real genealogy for her polemic is the political scapegoating of the 1960s-70s Black Papers.³⁸ Arnold, of course, although he had a European rather than a merely British consciousness and indeed knew several European education systems at first hand, was addressing not the circumstances of global interconnectedness which we perforce must consider in the 2000s, but those of industrial and bourgeois Britain in the 1860s.

These examples are given to buttress my argument that if we are to rethink basic education for the global era we shall need a perspective on the world which is rather more generous in its apprehension of time, space, social structure, human relations and the connections between them than UK governments in recent years have been prepared to allow. Moreover, although I referred earlier to that majority of the world's population which is disenfranchized by poverty, it has to be said that any account which confines itself to globalization – which is after all essentially a Western invention – runs the risk of ethnocentrism on a grand scale. By way of a very different starting point, therefore, we should inject into the discussion some rather different realities.

So, as an indication of how unlevel is the playing field of the global economy, we might note that the per capita GDP in 1999 ranged from US\$29,010 in the United States to \$410 in Sierra Leone, with the average of \$992 for the least-developed countries against the industrialized country average of \$23,741.³⁹

This is stark enough. However, in its synoptic *The Progress of Nations*, the United Nations Children's Fund (UNICEF) ranks countries not by their position in the economic league table but by the condition of the children. This yields a set of statistics with massive and telling disparities. For example, accurate national

population figures are essential to the planning of social and educational provision, yet while in Europe an average of 98.8 per cent of births are registered, in southern and eastern Asia only 76.5 per cent are. In the USA 89 per cent of children are immunized against measles; the figure for Niger is 21 per cent. The under-five mortality rate varies internationally from 4 to 320 per 1,000 live births and the maternal death rate from 0 to 1,800 deaths per 100,000 live births. As one indicator of the conditions and rights of adolescent girls and women, while in France the number of births for every 1,000 teenage girls is 8, in India it is 109 and in Guinea 229.⁴⁰ And if we take adult literacy as the yardstick for educational progress we can note that although from 1960 to 1990 the number of literate people in the world doubled, this achievement was neutralized by population growth, leaving a staggering figure of 800 million illiterates.⁴¹ Indeed, by other calculations, one-sixth of humanity, and one in four adults in the developing world is illiterate, and the numbers are growing.⁴²

More specifically, we find that primary school enrolment maps closely with GDP, giving an average of 91 per cent enrolment for high income countries (with most Western countries actually at or near 100 per cent), and a 54 per cent average for low income countries. Broken down, this figure yields individual country enrolments as low as 10 per cent for girls and 20 per cent for boys in some of the poorest countries. Worldwide in 1999, 125 million children – equal to the total school-age child population of North America and Europe – never attend school; another 150 million children start primary school but drop out before they can read and write.⁴³ And those children who do enrol, and who stay (low enrolment is often followed by high dropout) are taught in classes averaging 40:1 in low-income countries and 20:1 in high-income countries, although the range is of course much greater, with low-income country averages of 50:1 or 60:1, and individual class ratios in some of these countries frequently over 100:1. In contrast, we find average pupil-teacher ratios of between 12:1 and 25:1 in the richest countries.⁴⁴

These differences are combined within the Human Development Index (HDI) developed from a much larger array of statistical indicators to provide 'a measure of the same level of vulgarity as GNP . . . but a measure that is not as blind to social aspects of human lives as GNP is'.⁴⁵ The HDI 'reflects achievements in the most basic human capabilities – leading a long life, being knowledgeable and enjoying a decent standard of living'. It uses just three variables: life expectancy, education and income. On this basis, Canada heads the list with an HDI value of 0.932 as compared with Sierra Leone's of 0.254 (1997 figures).⁴⁶

From tip-the-iceberg figures such as these it is clear that our interdependent world is also a polarized world. It is polarized in terms of income, life expectancy, health, welfare, gender, class, caste, access to schooling, educational attainment, adult literacy, employment, access to democratic processes, freedom from violence, human rights, and countless other indicators of the real and fundamental inequalities between the world's gainers and losers which make the word 'globalization' so profoundly misleading; especially as, historically, gainers and losers are inextricably linked by the ties of colonialism, exploitation, hegemony and dependency, and both gain and loss are self-reinforcing spirals which are reversed only with difficulty. What helps to drive home the implications of all this for education is to juxtapose two visions for our millennial year 2000 (Figure 1.1). The first contains the six National Education Goals announced by the Bush administration in 1991 (later extended and enshrined in the United States Educate America Act of 1994 which we discuss on pages 104–5).⁴⁷ The second comprises the goals adopted by the 1990 UNICEF-sponsored World Summit for Children.⁴⁸

Goals 2000

- By the year 2000, all children in America will start school ready to learn.
- By the year 2000, the high school graduation rate will increase to at least 90 per cent.
- By the year 2000, all students will leave grades 4, 8 and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history and geography, and every school in America will ensure that all students use their minds well, so that they may be prepared for responsible citizenship, further learning, and productive employment.
- By the year 2000, United States students will be first in the world in mathematics and science achievement.
- By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
- By the year 2000, every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.

Target 2000

- Reduction of infant and under-five child mortality rates by one-third of the 1990 levels, or to 50 and 70 per 1,000 live births respectively, whichever is less.
- Reduction of 1990 maternal mortality rates by half.
- Reduction of severe and moderate malnutrition among under-five children by half of the 1990 levels.
- Universal access to safe drinking water and to sanitary means of excreta disposal.
- Universal access to basic education and completion of primary education by at least 80 per cent of primary-school-age children.
- Reduction of the adult illiteracy rate to no more than half its 1990 level, with emphasis on female literacy.
- Improved protection of children in especially difficult circumstances.

Figure 1.1 Goals for the millennium

Alternatively, we might take the resounding declaration of the 1990 Jomtien World Conference on *Education for All* that basic education should be universalized by 2000 – a declaration that by 1996 was so far from fulfilment that OECD shifted the date to 2015, and even that looked optimistic.⁴⁹ The World Education Forum, meeting in April 2000, stuck to a target date of 2015 for universalizing primary education and added 2005 for achieving equal access for boys and girls.

In sum, although for a country such as the UK globalization demands a rethinking of the educational as well as the economic agenda, that agenda cannot be confined to increasing national economic competitiveness and maximizing informational capacity and skills, necessary although these manifestly are (and I understand fully the reasoning that without these other aspirations may become a luxury). Globalization has human, social and environmental as well as economic and informational consequences – indeed the economic consequences are human, social and environmental or they are nothing – and it is by its nature a force for destabilization which challenges or undermines established identities at every level from individual to collective and national.

Moreover, globalization, even if it is more comprehensively defined, is at best a partial picture of those global realities which demand attention in an interconnected future. On present estimates, the majority of the world's population will be affected by globalization to some degree but will not benefit from it, and indeed many will be positively disadvantaged by it. For every winner in the new global race there could be many more losers, just as there were in the old. These questions, too, demand attention if basic education is to fulfil the promise of universalization. Its agenda is moral as well as pragmatic. A country needs to be civilized as well as solvent.

International Comparisons in Education, Old and New

Placing education in the context of the disparities in human development between the world's richest and poorest nations allows one kind of educational comparison. The 'international horse race'⁵⁰ provoked by the league tables of national test scores in reading, number and science permits another. International comparison between educational systems more generally has a long history, although it is only recently that it has been motivated by concern for others rather than national self-interest. Comparing, of course, is one of the most basic of conscious human activities: we necessarily and constantly compare in order to make choices and to judge where we stand in relation to others and to our own past. In the more specific context of education it is important to distinguish the comparing, importing and exporting of ideas, which is an activity intrinsic to educational development, from the task of attempting to devise rules of and procedures for doing so in a systematic way. In the former context we would place the influence of Greece and Rome on medieval monastic learning and later, rediscovered, on classical humanist education from the Renaissance onwards. We would also locate here the pan-European development of scientific and vernacular education following the Reformation, especially the influence of Bacon, Descartes, Locke and Comenius; here, too, Rousseau, Pestalozzi, Herbart, Froebel and, more recently, Montessori, Dewey and the peculiarly Anglo-Saxon variants of progressivism which emerged in Britain and the United States; or the influence of the American common high school on the development of secondary education in Europe. Likewise – as saw briefly in the Introduction – Matthew Arnold's attempt to broaden the debate about popular education in England with his reports on education in France, Switzerland and Holland. The examples are numerous, for educational ideas have always had strong international currency, and this shows itself at both ends of the macro–micro continuum, in the striking similarities in the education systems of countries that are otherwise very different,⁵¹ and in the fine detail of classroom practice.

There is also a more Olympian justification. By 'making the strange familiar' we 'make the familiar strange' and thus increase our understanding of our own society, culture and ways of educating. At the same time, it must be noted that educational comparison is not merely incidental, a by-product of idle human curiosity as it were. For those who have responsibility for the education of others, be they policymakers, administrators, researchers or teachers, comparison is actually essential to educational progress. Whether we are talking of whole education systems or of the day-to-day encounters of teachers and pupils, education by its nature requires hard choices of both a technical and a moral kind. To make such choices requires an awareness of options and alternatives, together with the capacity to judge what is most fitting in a given set of circumstances. The vocabulary of possibilities is vastly increased and enriched if we extend it beyond the boundaries of one school to others, one region to others, one culture to others and one country to others. Education positively requires, and positively benefits from, a comparative imagination and comparative understanding.

Despite this, comparative education as a more or less systematic intellectual discipline is usually traced back no further than 1817, to Marc-Antoine Jullien's *Sketch and Preparatory Survey of a Work on Comparative Education*, which set down a procedure for assembling and disseminating comparable information on different education systems.⁵² Michael Sadler's work can be placed in this more recent tradition in as far as it entailed comparisons that were consciously disciplined. His accounts at the end of the nineteenth century produced insights and principles which comparativists still quote a century later – and with good reason:

In studying foreign systems of education we should not forget that the things outside the schools matter even more than the things inside the schools, and govern and interpret the things inside . . . The practical value of studying in a right spirit and with scholarly accuracy the working of foreign systems of education is that it will result in our being better fitted to study and understand our own . . . No other nation, by imitating a little bit of German organisation, can thus hope to achieve a true reproduction of the spirit of German institutions. The fabric of an organisation practically forms one whole. That is its merits, and its danger. It must either be taken in all, or left unimitated . . . All good and true education is an expression of national life and character.⁵³

King sees the development of comparative education over the past 200 years as having four phases: to inform the development of particular institutions (universities, schools and so on); to guide the process of universalizing whole sectors such as elementary education; to place the evaluation of national systems in an international context; and to guide national educational policy. This expanding role, then, has been increasingly directed at policy and the solution of policy problems.⁵⁴ In this, comparative analysis can serve a corrective or supportive function in the policy

process, providing, in Phillips' words 'authoritative objective data which can be used to put the less objective data of others (politicians and administrators, principally) ... to the test'.⁵⁵

However, although King is right to point up the instrumentalism which has motivated much educational comparison, he somewhat blurs the distinction I have made, and which I consider it essential to make, between those comparisons which are opportunistic and methodologically unselfconscious and those which, while not necessarily any less instrumental, are framed – as were Sadler's – by a strong sense of the exercise's risks and limitations and its consequent methodological imperatives. Moreover, it certainly cannot be assumed, as Phillips implies, that professional comparativists are by virtue of their job more objective than politicians or administrators. For a start, the latter frequently have access to information to which academics can gain access only with difficulty, if at all; and the comparativist's claims to 'authoritative' objectivity – whatever that is – must be tested no less searchingly than those of politicians and administrators.

In any event, the constituencies are not nearly as clear cut as Phillips suggests. National politicians in the UK – that is to say, Members of Parliament – are, by and large, well-educated and intelligent people; many have good academic backgrounds and some indeed are former academics. There is also a certain amount of interchange between academic and administrative roles, particularly, as it happens, in the international field (the UK Department for International Development and the British Council provide many examples). Not a few academics – this author included – find themselves serving as national policy advisers. And there are both academically inclined politicians and politically motivated academics. The divide, then, is one of outlook, approach and allegiance rather than occupational group.

We now have a context in which the activity of international educational comparison, as it stands at the turn of the millennium, can be situated. The discipline of comparative education continues to develop, and indeed after several decades of relative marginality within the field of educational studies it is experiencing a dramatic revival.⁵⁶ The reasons for this have little to do with the discipline as such, and everything to do with that internationalization of educational discourse that is part and parcel of globalization. Yet there is still a clear fault-line between the 'old' and 'new' comparative education. The former - although it honours the likes of Arnold, Darlington and Sadler who were inspectors and administrators – is first and foremost an academic pursuit which aims to expand the sum of our knowledge and understanding of the educational endeavour and whose policy applications are subsidiary to this aim. The new comparativism is policy-oriented from the outset and sees little virtue in undertaking comparative research unless it addresses directly the agendas of those whom 1990s researchspeak calls 'users' (policy-makers and practitioners) and comes up with solutions to the problems which these constituencies identify. Thus it is probably more helpful to make our distinction not in terms of 'old' and 'new', for academic comparative education has in many respect reconstructed itself to take account of new social science paradigms and methodologies, while – as noted above – there is nothing particularly novel about internationally informed policy, but by differentiating *comparative education* (the discipline) and *policy-directed international educational comparison* (the activity, pursued by whatever means are thought appropriate). Crossley simplifies this to a distinction between 'comparative' and 'international' research.⁵⁷ My caveat would be that some of the latter is too overtly politicized to justify the label 'research'.

This distinction enables us to locate the impatience – and ignorance – of David Reynolds, who during the 1990s became one of New Labour's most influential educational advisers. He writes despairingly of

The frankly inept contribution which the comparative education discipline has made over time . . . the presence of a large body of theories, without any apparent empirical backing . . . a large range of descriptive case studies of individual schools which it is impossible to synchronize together because there are no common measures of outcomes or processes utilized . . . descriptions of the range of educational, political, economic and cultural phenomena within different countries, with no attempt ever made to assess the contribution of the educational system as against that of other factors.⁵⁸

Quite apart from the cavalier inaccuracy of most of these claims, especially the one about evidence, this stance is problematic in other respects, for Reynolds in essence contends that there is no place for speculative theory in our attempts to understand other cultures and how education is conceived of and undertaken within them; that unless individual researchers in different traditions and different countries co-ordinate their activities within a common analytical framework they might as well go home; that educational phenomena can validly be compared only in terms of measurable processes and outcomes; and that political, cultural, economic and educational aspects of a society are not worth studying unless they can be factoranalysed.

In other words, Reynolds does not make a case *against* comparative education so much as one *for* his preferred mode of international educational comparison. On this basis he can safely ignore the kinds of problems that vex comparativists and to which his own study is no less immune than theirs: for example, misinterpretation or over-interpretation of results in a research field whose inherent frailties are compounded by barriers of culture and language; ethnocentrism; selective borrowing.⁵⁹

However, from this book's standpoint the most fundamental weakness in Reynolds' approach, and in the way international educational comparison was being used more generally in the 1990s UK policy context is his – and its – handling of culture. He says (the italics are mine):

We do not . . . know yet what is the exact contribution of the *educational* system and of the *cultural* and *social* systems to the very high levels of educational success enjoyed by other societies, although most observers would credit the system at least as much as the society.⁶⁰

Separating the cultural, educational and social into three apparently independent and free-wheeling 'systems', which can then be translated into a collection of factors for the purposes of statistical correlation, is conceptually untenable. Life in schools and classrooms is an aspect of our wider society, not separate from it: a culture does not stop at the school gates. The character and dynamics of school life are shaped by the values that shape other aspects of our national life. The strengths of our primary schools are the strengths of our society; their weaknesses are our society's weaknesses. Or, as Boyer put it, 'A report card on public education is a report card on the nation. Schools can rise no higher than the communities that serve them'.⁶¹ Culture, in comparative analysis and understanding, and certainly in national systems of education, is all.

The compartmentalization of culture is unsatisfactory not only in a broad conceptual sense. If the argument were only one of how the word 'culture' should be defined it would be hardly worth making, in this context anyway. More important are the educational consequences of this view. At national level it enables governments to legitimate their claim that questions of quality in education can be resolved by attacking pedagogy while ignoring structure and resources. It allows them to deny that a government's broader social and economic policies impact in any way on what teachers do, or can do, in the classroom. (Conversely, it allows teachers to excuse or underplay their own agency and to blame government policy or resourcing levels for matters over which they have more control than they may be prepared to admit.) At classroom level it encourages the view that pedagogy carries no educational messages or values of itself, but is merely a value-neutral vehicle for transmitting curricular content; and it discourages vital questions about the importance of 'fit' between pedagogy, the children being taught, and the knowledge domains from which curriculum experiences are drawn. Effective teaching arises from attention to cultural, psychological, epistemological and situational considerations, not merely organizational and technical considerations.⁶²

Thus, in the context of the interest in primary education in countries that are as culturally different as the UK and Japan, treating culture as an independent variable in a statistical calculation encourages the assumption that an educational strategy can be detached from the values and conditions which give it meaning and ensure its success, transpose it to a context where these may be diametrically opposed, and yet expect it to deliver the same results.

Comparative Education and Educational Comparison

In contrast to Reynolds' waspish rejection of the entire discipline of comparative education, caveats and all, Patricia Broadfoot subdivides its activities into five categories:

- (1) Studies which provide detailed empirical documentation of educational phenomena in a particular, typically national, setting.
- (2) Studies which provide (1) above but which are contextualized in terms of the broader international debates, theoretical frameworks and empirical accounts of the issues.
- (3) Studies which are designed as explicitly comparative, based on a coherent rationale for their selection in order to illuminate 'constants and contexts'.

- (4) Studies in which the contexts being compared are themselves theorized as part of wider social science debates on, for example, the relationships of system and action, power and control, culture and the creation of meaning.
- (5) Studies which use comparative research to inform theory.⁶³

This contrasts with, or complements, Noah's identification of the methodological range of comparative studies as including:

Work that is primarily descriptive... work that seeks to be analytic or explanatory ... work that is limited to just one, or a very few, nations as well as ... work that embraces a wide scope ... work that relies on non-quantitative as well as quantitative data and methods ... and work that proceeds with explicitly-formulated social science paradigms in mind as well as in a less formalised manner.

Noah's methodological spectrum can be systematized as a set of four dimensions which cross-cut Broadfoot's five study types (the order of the last two is reversed to achieve a more logical sequence of decisions):

- (1) *Purpose*: descriptive analytic explanatory.
- (2) Scale: one country a few countries many countries.
- (3) Paradigm: formalized less formalized.
- (4) Methods and data: quantitative qualitative mixed.

Broadfoot's framework, useful although it is in pointing up issues of scale and purpose, does however confirm the fault-line identified above, although from the other side: for here, if comparative education informs anything beyond itself it is theory rather than policy. However, this exclusiveness, although theoretically more coherent than Reynolds', is in its own way as unsatisfactory, for it seems to discourage comparativists from making the effort to tackle real-world educational problems, or from pursuing the relationship between educational analysis and its application. Instead, comparative education remains sealed within its disciplinary confines, dangerously giving comfort to those who portray the academic study of education as a world that talks only to itself. It is a pity that it should be Broadfoot who unintentionally confirms this view, for her own comparative studies of teachers, teaching and assessment in England and France have real-world applications which are as direct as they are significant.⁶⁴

On the other hand, the British comparative education establishment does now seem to have opened its doors to a stance which is economically and politically more engaged. Watson powerfully argues the need for reconceptualization of the entire field in the light of new global imperatives.⁶⁵ Crossley makes a case for a rapprochement between comparative and international research as differentiated above,⁶⁶ and this ought to be encouraged by the establishment of the British Association of International and Comparative Education (BAICE) in 1998 in which – crucially – academic comparativists come together with those closely involved in the politics of educational development, aid and consultancy.

My own stance – although I am conscious that after the foregoing it may sound a trifle sanctimonious – is one of triple commitment within the field of primary education: to the pursuit of understanding, the improvement of policy and the amelioration of practice. These objectives are not incompatible, and like many academics working at the interface between study pure and applied I have always found it deeply unhelpful that in British intellectual life they should be treated as though they are. The amelioration of policy and practice can motivate the work of the educational researcher, but it need not compromise it.

Broadfoot's and Noah's frameworks can be used as a cue for attempting something similar in respect of the comparative counter-culture. If there are five kinds of comparative education, there also seem to be, existing outside the comparative education discipline, five kinds of policy-directed international educational comparison, each classifiable in terms of the four methodological dimensions derived from Noah:

- (1) system-level factual information and databases (descriptive/many countries/no paradigm/mixed quantitative and qualitative data)
- (2) system-level indicators of input, process and output (analytic/many countries/ statistical paradigm/quantitative
- (3) international league tables of educational performance (analytic/many countries/ educational measurement paradigm/quantitative)
- (4) effectiveness studies (explanatory/a few countries/effectiveness paradigm/ quantitative)
- (5) value-for-money studies (analytic/many countries/cost-benefit paradigm/ quantitative.

This is a hierarchy of aspiration. To understand requires that we have, at the very least, information (1). To judge how well we are doing requires us to judge outcomes in relation to input (2). Alternatively, it requires us to be able to compare our outcomes with those of other countries (3). To improve our performance entails knowing which practices are most effective (4). And to do so within budgetary constraints necessitates careful costings of those strategies deemed most effective in order that we can judge which gives best value for money (5).

We have, then, three frameworks for bringing some semblance of order to the field of international comparison in education. I started by distinguishing comparison as a basic human activity from comparison as a discipline pursued in accordance with shared assumptions, rules and procedures. I then differentiated the 'old' and the 'new' comparative education, but found this less helpful than to separate them according to the constituency within which they originated, or which they addressed, or to which they owed their principal allegiance: hence *comparative education* and *policy-directed educational comparison*. Next, I explored study categories, using Broadfoot's classification of studies undertaken within the discipline of comparative education; to this I added my own parallel classification of policy-directed studies; and Noah provided a basis for differentiating the methodological orientations of the studies in both lists. Because Broadfoot's framework can be explicated by reference to the extensive literature of comparative education, I do not need to elaborate it here. My own classification of policy-directed studies, however, does require elaboration: partly because the domain is more recent, partly because the classification is novel, but mainly because this, for the present, is where the political power resides.

Factual information and databases

First, there is the assembling and collating of comparative factual information about different national systems. One example is the work of Eurydice, the Education Information Network of the European Union (EU). One of their publications is a helpful compendium of information and statistics relating to pre-school and primary education in the EU, and covers matters such as the ages and stages of education, the distribution of time during the school year, week and day, the aims, content and time requirements for national curricula, and contingent matters such as textbooks and teaching methods.⁶⁷ This kind of data is now available on compact disc, and through this format the range of information is, potentially and actually, vastly increased. Material from the UK's Qualifications and Curriculum Authority (QCA) and the United Nations Children's Fund (UNICEF) provide data on, respectively, 16 and 80 countries.⁶⁸

However, what may seem to be the lowest common denominator and least contentious area of policy-oriented comparative study – collating information from official documents – is not without its problems and, surprisingly perhaps, needs to treated with the same kind of caution as more obviously questionable kinds of data. For example, the Eurydice document gives us this statement about the school curriculum in the UK:

In England, Wales and Northern Ireland, the Secretaries of State have proposed the following criteria [for the development of the curriculum]: rather than being provided with detailed proposals, schools should be given significant opportunities to develop their educational programme according to their own schemes of work . . . a broad and flexible statutory framework . . . consideration of what has been learned about child development, good educational practice and the results of research.⁶⁹

Bearing in mind that this statement was published in 1994, when the National Curriculum was exerting its tightest grip on schools and teachers, British readers will recognize it for the stunning travesty of the truth that it is. This is not a matter of perspective: the legal position in respect of the curriculum is crystal clear, and dramatically different from that presented above. 'Detailed proposals' are what the National Curriculum is all about; schools do not have anything approaching the degree of flexibility indicated; and educational research, other than that which toes the party line, has been all but banished. One wonders whether this version of the balance of state and school control over the curriculum was the genuine mistake of an out-of-sorts archivist or a piece of deliberate DfEE misinformation. Either way, it should give us pause for thought. If the status of the educational fact at this most basic level is shaky, how do we judge the higher-stakes empirical studies?

The difficulty for this kind of information-gathering is that it is a long way removed from verifiable practice. It is as reliable as the – usually official – providers of the information wish it to be, and both the QCA and UNICEF data reveal examples of statements purporting to represent the truth about a given system which are little more than policy-apologists' spin. This is especially the case when the data are statements of policy rather than statistics. On the other hand, both are also good examples of the strengths and limitations of a typical product of the information age. The data are interactive, and they can be corrected, updated and disseminated much more easily and rapidly than can the print equivalents; yet they require contextual knowledge to be properly understood and interpreted, and – no less important – for their veracity to be tested.

Indicators of input, process and output

Since 1987, the Organization for Economic Co-operation and Development (OECD) has been developing international educational indicators in respect of what it terms inputs, outputs, processes, and resources, the latter being both fiscal and human.⁷⁰ By 1998, this endeavour had produced the fourth edition of the compendium *Education at a Glance*, with its linked volume of statistics.⁷¹ *Education at a Glance* conceives of education in terms of six broad considerations: the demographic, social and economic context; expenditure; student access, participation, progression and completion; the transition from school to work; the learning environment and the organization of schools; student achievement and the labour market outcomes of education. The basic structure of context, input, process and output is similar to that in earlier editions, but with the important exception of the process section each has been progressively refined.

There is no denying the value of the OECD volumes as a resource for comparative research, let alone policy. But what we can get out of such an exercise depends on what has been put into it. Thus, in the 1995 edition, the wide range of outcomes at the primary stage was reduced to a single indicator, reading scores at age nine (education at a glance indeed), while to these was added, in the 1998 edition, the results of the TIMSS comparative study of mathematical achievement at age 11. That, apparently, was as far as primary education went. Similarly, the real-life complexity of school and classroom *processes* is subjugated by reducing them to a collection of indicators whose rationale is either immensely subtle or non-existent: teachers' salaries, teachers' age and gender, intended teaching time, the distribution and balance of power and responsibility as between national government, regional/ local government and schools; and the availability of computers in schools. Education at a Glance gives us a great deal of information about the financial and demographic context of schooling, and in these terms is an excellent resource but it offers precious little insight into schooling itself, let alone teaching and learning, and - a significant omission in this kind of study - only fleeting glimpses of the cause-effect relationship between the various inputs, processes and outputs, arguably the main reason for collating all this information in the first place.

In the volumes dealing in greater detail with indicators of quality for schools, teachers and learning, OECD do go beyond reading and mathematics scores and the distribution of curriculum time.⁷² But because they stay firmly within the bounds of what can be quantified and then measured the focus remains skewed both in terms of what is included and how it is analysed, and this is a particularly serious problem in respect of the content, dynamics and outcomes of teaching and learning, much of which inconveniently resists such treatment. Even time on task, a 'process' indicator much favoured in school effectiveness research as both apparently objective and amenable to calculation, is much more problematic than it may seem. Supposing one can guarantee that when one observes children 'on task' they actually are (for who knows what is going on in children's heads when their eyes are apparently glued to a book?) how does one effect a calculation of the hours per year spent on task? Like this, perhaps:⁷³

Even with knowledge of what the letters in this formula signify, one has to recognize that there is a rather tautologous and self-validating character to enterprises of this kind. They usually start from indicators that have featured in earlier studies, often for no reason other than that such indicators have been shown to be technically feasible. These indicators are then built into new research designs, and thence provide the framework for further research, which in turn consolidates their position. Thus, what happens to be within the bounds of statistical computation comes to define the very nature of teaching itself, and armed with such definitions of 'quality' policy-makers, presumably, can simply touch the relevant input, process or output key and feel they have the entire system under control. Note the way, incidentally, that all the OECD indicator studies have *quality* on their covers but inside are all about *quantity*.

International league tables of educational performance

In 1995–6, OFSTED commissioned a review of internationally comparative studies of educational achievement involving England. The resulting report by Reynolds and Farrell⁷⁴ caused a considerable political and media stir: it highlighted the poor performance of England in relation to several of its economic competitors, and it postulated reasons why this should be so.

The report lists and summarizes the results of the test programmes of the International Association for the Evaluation of Educational Achievement (IEA) and the International Assessment of Educational Progress (IAEP) which started in the 1960s and whose most recent instalment at the time of writing is the Third International Mathematics and Science Study (TIMSS) of 1996–7. It concludes that these justify serious concern about the performance of English children in science and mathematics, especially the latter, and above all in arithmetic.

Alongside the devastating certainty of that judgement Reynolds and Farrell catalogue some of the technical flaws in the IEA and IAEP studies – poor sampling, missing data, excessively variable response rates, and lack of between-country comparability in test items and administration procedures – which are so serious as to make one wonder whether the test results were worth reporting at all. Surprisingly, they do not see their judgement on the state of mathematics education in England as in any way compromised by these flaws.

In advance of its publication, Keys claimed that the TIMSS study would avoid these problems,⁷⁵ and the results as published and analysed do indeed show a dramatic technical improvement. They also dictate a more careful reading than their public reception allowed, for England was close to the top of the league table in science, and while below the international mean in number was above it in geometry and in data representation, analysis and probability.

This key outcome was ignored. When the TIMSS results were published, just before the decisive and dramatic 1997 general election, good news about education was the last thing New Labour wished to hear. Their 'education, education, education' platform was firmly predicated on 18 years of unremitting Conservative failure, and as Margaret Brown noted:

... the rather complex message that science scores had improved as maths scores degenerated would have prevented any simple attributions of blame. It was left to the researchers who conducted the study to point out that since the previous surveys the data showed that pupils were devoting 20 minutes per week less to mathematics and 20 minutes more to science. Thus maybe the unintended side effects of the national curriculum were the real cause of the decline.⁷⁶

If Brown's explanation is correct, then the 1997 UK government's response may guarantee that in the 2004 league tables- to be based on the TIMSS 2003 datathere will be an equally notable difference between performance in mathematics and science at the primary stage, but it will be skewed in the opposite direction. The government's Numeracy Strategy, imposed on all primary schools in England from September 1999, will almost certainly yield improvements in basic number, the aspect of mathematics on which teachers are required to concentrate most. However, since the introduction of the Numeracy Strategy, and its companion the Literacy Hour, are at the expense of the wider curriculum, it is probable that performance in science at the primary level will be depressed from its good showing in TIMSS (whose first test programme was undertaken in 1995, six years after science was made a National Curriculum core subject and thus at the point when the cohort of pupils tested had been taught science as required by the National Curriculum ever since their arrival at school). At the time of writing, the UK government is unwilling or unable to acknowledge that its policies may carry this risk.

Effectiveness studies

From 1997, 'effectiveness' became the adjunct to New Labour's pursuit of higher educational standards. The UK government appointed a Standards Minister and a

Standards Task Force, and established within the DfEE a Standards and Effectiveness Unit. At the same time, a new branch of educational inquiry, school effectiveness research, was making large claims about its potential to deliver answers to the question of what kinds of schooling and teaching have the greatest impact on children's learning. This research would cut through the methodological qualifications and caveats that characterized previous school and classroom research and would thus appeal directly and unambiguously to policy-makers and practitioners.

Thus, by little more than a terminological sleight of hand two agendas merged: a government's proper wish to raise standards, and the legitimate ambitions of a particular group of academics. The result was a degree of intellectual hegemony which, underpinned by tight central political control, frustrated rather than enhanced the development of pedagogy as practice and field of enquiry.

The first wave of school effectiveness research was largely non-empirical. It consisted of territory demarcation and the collating of those few empirical studies that, as defined by school effectiveness researchers themselves, were deemed relevant to the endeavour.⁷⁷ Effectiveness was defined very simply, as a statistical calculation of the gain in output over input:

We define effectiveness in two dimensions [graph shows axes of input and output] . . . The 'quality' dimension is modelled as the average score of each school on output (corrected for input) and is represented by the intercept (each school has a different intercept). The 'equity' dimension encompasses the compensatory power or selective quality of schools. Some schools can better compensate for input characteristics than others. This dimension is represented by the slopes of the within school regression of input on output.⁷⁸

Those studies which conformed to this statistical paradigm were extensively reviewed in the publications of the school effectiveness group which established itself in the UK and then networked across several other countries. In a parallel venture, OFSTED commissioned an extrapolation of the 'key characteristics of effective schools' from school effectiveness research from a group at the University of London Institute of Education.⁷⁹ This came up with 11 factors:

- (1) professional leadership (of head)
- (2) shared vision and goals
- (3) a learning environment
- (4) concentration on teaching and learning
- (5) purposeful teaching
- (6) high expectations
- (7) positive reinforcement
- (8) monitoring progress
- (9) pupil rights and responsibilities
- (10) home-school partnership
- (11) a learning organization.

Each of these was subdivided. Thus 'professional leadership' included 'firm and purposeful', 'a participative approach' and 'the leading professional', while 'purposeful teaching' was explicated as 'efficient organization', 'clarity of purpose', 'structured lessons' and 'adaptive practice'.

Hamilton's devastating critique of this exercise sees it as predicated on a pathological view of schools as sick institutions in need of clear policy prescriptions presented as 'magic bullets or smart missiles'; he faults the methodology of aggregating findings from studies conducted by different methods, at different times and in different countries; and rejects 'the suppositions and conclusions of such research ... as an ethnocentric pseudo-science that serves merely to mystify anxious administrators and marginalize classroom practitioners'.⁸⁰

In my view, the aggregation is not only indefensible (it yields, for example, a model of an all-powerful but collegial school head which, whatever its currency in the UK or USA where most of the reviewed studies were undertaken, makes no sense in those countries, like France, where school heads have more limited jurisdiction); it is also reductionist and banal. Not one of the factors listed above takes us beyond what the common sense of a layperson would have predicted.

Notwithstanding government patronage, the promise of school effectiveness research as defined by its proponents has yet to be realized. The most prominent school effectiveness group has put together an International School Effectiveness Research Project (ISERP)⁸¹ whose statistical paradigm is compromised from the outset by sampling problems – between five and twelve schools, serendipitously identified, are deemed representative of each of the nine countries involved. On the other hand, the project has at least confirmed some of the factors in effective teaching which emerged from other classroom research, notably the importance of organizing classroom time and space as economically as possible, maximizing childrens' opportunity to learn, and generating challenging and focused pupil–teacher interaction. We shall return to these matters in our substantive discussions of pedagogy in later chapters. Meanwhile, I would add the following further reservations to Hamilton's.

First, and perhaps most important given its international and comparative claims, school effectiveness research does not deal more than cursorily with culture. I noted this in my reference to Reynolds' work earlier: Fuller and Clarke represent school effectiveness researchers as 'policy mechanics' in search of discrete, culture-free variables.⁸²

Second, for inherent methodological reasons, school effectiveness research is unable to engage with the purposes, meanings and messages which elevate pedagogy from mindless technique to considered educational act. Teaching is presented as valueneutral and content-free.

Third, there is a degree of arbitrariness in the variables which the paradigm includes and excludes, as can be seen in Creemers' frequently cited model.⁸³ In fact, most are derived from literature searches, so the model – being merely a representation of what other have chosen to write about or investigate – is by no means as comprehensive as it appears or claims.

Fourth, there are obvious technical questions to be addressed in ISERP and related studies: sampling, the use of questionnaires rather than observation as the basis for identifying effectiveness factors, the highly mechanistic approach to such classroom observation as is undertaken. Fifth, there is a spurious absolutism to the terminology of school effectiveness – 'success', 'failure', 'improvement', and of course 'effective' itself, which conceals the technical deficiencies of the research and implies a degree of homogeneity in schools, classrooms and lessons which cannot be sustained empirically.

Sixth, school effectiveness research is unacceptably exclusive and tacitly rejects the principle of cumulation which is vital, in any discipline, to the advancement of knowledge. Its literature makes little or no reference to the much longer and more substantial tradition of pedagogic research that has attempted to address the same question – what teaching makes the most difference – but by different means.⁸⁴

Finally, the claim that this particular branch of educational research is a discipline in its own right is premature. It has little of the internal dialectic of conflicting theories and methodologies which give a discipline the hard edge of scepticism which is essential to its vitality, and this weakness is compounded by the field's resistance to ideas which lie beyond its tightly drawn boundaries. School effectiveness research is not a discipline but a club. Its exclusivity in the context of UK educational policy is not helpful to the cause of educational improvement.

Value for money studies

The least ambiguous application of the input–output approach to shaping policy decisions about educational practice is provided in the context of aid to developing countries. It is relevant here partly because those in donor countries such as the UK have a moral/political as well as a financial interest in knowing how 'aid' is conceived, calculated and distributed on their behalf – Keith Watson of course argues a familiar case⁸⁵ when he writes of aid as a 'two-edged sword' which assists developing countries while maintaining the gap between donor and recipient nations and benefiting the former in tied purchasing of equipment and training by as much as 70 per cent – but more particularly because the aid scenario illustrates in an extreme form some of the problems of policy-oriented comparative research which we are examining here.

In the aid literature, education inputs, processes and outcomes are reduced to their barest essentials as a basis for calculating the cost-effectiveness of particular kinds of intervention. Thus, Lockheed and Verspoor's influential World Bank study of primary education in developing countries identifies five main educational variables – curriculum, learning materials, teaching time, teaching quality and teachability – and divided aid options under these headings into 'promising avenues' for investment and 'blind alleys'.⁸⁶

This is not as far removed from the UK situation as it might seem. Three of the 'blind alleys' identified by Lockheed and Verspoor have their counterparts in political and inspection discourse in the UK during the late 1990s: using the 1995–2000 curriculum moratorium recommended in the Dearing Report⁸⁷ to 'improve' (i.e. to entrench) the National Curriculum rather than 'adjust' or question it, dismissing class size as a factor in educational quality, and advocating initial teacher training courses that cut out all except training in the basics and whole class teaching. However, since no aid agency can conceivably ignore the powerful impact on both education and economic productivity of the human, social and environmental factors which also define a country as 'developing', the educational modelling of donors such as the World Bank reaches much further in its lists of contextual factors than do the 'rich nation' indicators of OECD referred to earlier. We know, for example, how closely in a country such as India the maps of illiteracy, poverty and high fertility coincide, and the way that improved education correlates closely with increased per capita income, health, nutrition and fertility control.⁸⁸ Knowing this should remind us that the argument about the extent to which educational quality and learning achievement are related to non-school factors such as socioeconomic status and income may have been overplayed during the 1950s and the 1960s but is certainly not dead. Rather, successive governments in the UK engineered an education 'debate' that absolved its own social and economic policies from any responsibility and directed blame for failures in the education system at teachers, schools and teacher trainers.

International Comparison and Educational Policy

I have identified two broad domains of international educational comparison. They are different in kind and purpose. The discipline of comparative education originates in academe, goes wherever its participants, individually or collectively, wish it to go, is validated by the criteria of academic research and scholarship, and while in many cases it has - and is intended to have - applications to policy and practice, this is not a necessary condition, for its principal aspiration is the accumulation and refinement of knowledge. In contrast, policy-directed international education comparison, as its label signals, originates in the policy context and/or has policy problems and their solution as its principal focus. It may look to academe for methodological validation but what matters more is the extent to which it is seen by policy-makers to engage with their agenda (and indeed to take that agenda as a 'given' rather than as problematic), and whether it meets policy-driven definitions of relevance. Its principal aspiration is the accumulation not of knowledge which stands the test of verification or falsification, but of information which others will deem useful. Academic comparative education risks abstraction and marginalization; policydirected educational comparison risks trivialization and appropriation. The first is likely not to be taken seriously enough; the second is likely to be taken more seriously than it warrants.

To some extent, the distinction I have made runs through the entire field of educational research at a time when – in the UK at least – educational research is under attack for its supposed ideological bias and irrelevance, and government and its agencies are either (the Teacher Training Agency) seeking to determine its precise course or (OFSTED) to write it out of the script altogether. Clearly, comparativists need to examine how they stand, and how they ought to stand, in relation to policy and practice.

This takes us to the context of policy applications. In the UK during the last decade of the second millennium, international comparison offered policy-makers

the tempting prospect of both plausible explanations and viable solutions. The explanations tended to be monocausal and linear, and to jump incautiously from correlation to causality. Thus, with international league tables of both economic and educational performance now conveniently available, it was assumed that a country's position on one was determined by its position on the other. On this basis, Britain's poor economic performance in relation to certain Pacific and European countries during the 1980s and the 1990s could be put down to the fact that Britain, or at any rate England, also underperformed relative to these countries in the IEA comparative test programmes. The solution was clear: adopt strategies that would raise the average test scores of British children, and Britain's economic future would be assured.

The next stage was to identify the means to raise the test scores, and here again simple correlation provided the basis for the conclusion which was reached. A country wishing to improve its test scores relative to those of its competitors could do so simply by copying the educational practices of those competitors. Since the most striking pedagogical contrast was the much heavier use of whole class teaching in the classrooms of the Pacific Rim and continental Europe, it was assumed that a shift to this method in English primary schools would make the desired difference, reverse years of national decline and simultaneously propel Britain up the league tables of educational and economic performance.

In 1996, when this line of argument became prominent in the UK – a development not unconnected with the imminence of the 1997 general election – it was adopted without reservation by the 'new' educational comparers. HMCI Woodhead insisted on prime-time television that 60 per cent whole class teaching in mathematics and 50 per cent in the rest of the curriculum would do the trick; he, the then Secretary of State Gillian Shepherd, the future Secretary of State David Blunkett and numerous journalists visited primary schools, in Barking and Dagenham, which were implementing a version of the 'interactive' whole class mathematics teaching used in some schools in Switzerland and Germany⁸⁹ and announced that they, too, had found the solution, each striving to out-do the other in their desire to appropriate the ideological territory which up to now the Right had held uncontested, and its associated pathology of progressive teaching methods, neglect of the basics, self-serving and incompetent teachers, ideologically suspect teacher training, and irrelevant research. With this degree of political consensus the outcome was inevitable: an even greater emphasis on reading, writing and number in the primary curriculum, and the imposition, through the Literacy and Numeracy Strategies, of what was termed, somewhat tautologously, 'interactive whole class teaching' (what whole class teaching is not interactive?).

Let us take this argument a stage at a time. Brown, Halsey *et al.* set the current debate in historical context (Halsey writes from a lifetime's experience of charting the relationship between education, the economy and society):

The intellectual history of attempts to chart the link between education and economic productivity has been strewn with good intentions and theoretical and empirical failures . . . it is difficult, if not impossible, to demonstrate a causal relationship between education and economic productivity.⁹⁰

Similarly, Levin and Kelly, writing of the United States – which in the educational league tables does only modestly, yet remains the world's strongest economy:

The general notion that the competitive economic position of the United States can only be sustained if we out-compete students from other countries in scores on achievement tests is naive and hardly supported by the empirical data.⁹¹

More specifically in relation to the TIMSS results, Robinson demonstrates that the relationship between mathematics attainment and per capita GDP is in fact very weak, and that the generally unremarked anomaly of England's good showing in science is perhaps a more significant indicator of future prospects. In any event, he sees the faster economic growth of the Pacific Rim countries as primarily a process of catching up which is unlikely to be maintained.⁹² Indeed, by 1998–9, the foundations of the Asian Tiger miracle were beginning to look decidedly shaky.

If we move to to the pedagogical strand of the argument we encounter similar difficulties. Galton, like Reynolds and Farrell, finds the IEA test programmes to be fraught with problems of consistency and reliability. If, as Keys claimed, these were eliminated in TIMSS, the earlier difficulties effectively prevented TIMSS from being more than a 1995 snapshot and thus weakened the claims of the programme as a whole to chart trends over time.⁹³ The potential usefulness of international league tables of educational performance, the third in my list of policy-directed comparative studies, is considerable. Its actual usefulness at this stage seems more limited.

This compromises one part of the 'new' comparers' pedagogy-performance analysis. The other is damaged by the fact, as I have argued elsewhere, that there is in truth no statistical correlation between whole class teaching and educational performance, since whole class teaching is the most universal of teaching methods in basic education, widely observable in countries at every point on the educational league table, and for that matter in poor nations as well as rich. (Indeed, if we were so minded, we could construct a case *against* whole class teaching on the grounds that it is associated with poor educational and economic performance: the case is not entirely facetious, as we shall see when we consider primary education in India.) There may well be something within the particular versions of whole class teaching deployed in countries such as Germany, Switzerland and Taiwan, but it is more likely to be the generic properties of this teaching mode – for example the structure of lessons and the form of pupil-teacher discourse – than the organizational formula of whole class teaching as such. In any event, single-factor analyses are as pointless in these discussions as are naive correlational claims.⁹⁴ If whole-class teaching is a pedagogical universal, or near-universal, we need to penetrate well beyond its organizational form to discover precisely how it engages children's minds and promotes, or fails to promote, their understanding.

I noted earlier that education, like other fields of human activity, has developed through the comparison, exchange and diffusion of ideas and practices, often and demonstrably across international boundaries. This is a fact of life. But if it is, wherein lies the objection to the particular spate of educational borrowing and lending which the economic circumstances of the 1980s and the 1990s provoked in several of the world's richer countries?⁹⁵

There is indeed no objection to educational borrowing and lending as such: far from it, for without it we are the poorer, intellectually, culturally and – just possibly - economically. The objection concerns the thinking that provokes borrowing as a policy response, and the way the borrowing is done. First, as we have seen, the insistence that British primary schools should copy the educational practices of the country's more successful competitors was based on a suspect testing programme allied to naive correlation and the drawing of unsustainable conclusions about educational and economic cause and effect. The case, then, was never convincingly argued, merely asserted. Second, having been asserted, it was then translated into policy and imposed on the nation's schools as part of a complex agenda which had to do, variously, with discrediting the pre-1997 government, delivering on the 1997 government's election pledges on educational standards, destabilizing the educational establishment, and consolidating the power of the new educational elite in government and its ancillary agencies: the Department for Education and Employment, the Standards and Effectiveness Unit, the Teacher Training Agency, and the Office for Standards in Education.

Five Cultures

The episode I have described is less about educational ideas than about the nature and distribution of power, and indeed about the relationship between education and the state. This is the central theme for the next six chapters. First, however, let us recontextualize the five-nation empirical study that informs the book as a whole.

I mentioned above that the *Five Cultures* project marked the logical next stage in a programme of empirical and theoretical research which I initiated during the late 1970s. This research had a number of preoccupations which I wished to take into the international arena: the relationship between educational policy and practice; the balance of historical change and continuity in the evolution of public education; the context of professional and political power; the values, purposes and content of primary schooling; the nature of teaching and its conceptual and ethical basis; the question of what kinds of teaching are most worthwhile and what classroom practices have the greatest leverage on children's learning. However, going international both enables preoccupations such as these to move into another dimension and allows for new preoccupations to develop and be pursued. I can best make sense of these by returning to the three classification systems I presented on pages 30–1.

The *Five Cultures* research aspires to the third, fourth and fifth categories of Broadfoot's model (page 30). That is, it seeks to identify similarities and differences within and between the five countries' approaches to primary education; it addresses meta-questions such as those I have defined as 'preoccupations' and by so doing it hopes to contribute towards the development of a sustainable and useful theory. In terms of Noah's methodological categories (page 30), the research is somewhat untidy in its purposes since it describes, analyses *and* attempts to explain; its scale is self-evident – five countries; its paradigmatic basis is eclectic and therefore no doubt

impure; and it employs both quantitative and qualitative methods and data. Finally, since it is not a policy-directed study it is congruent with none of the five policy-directed categories listed on page 31. Nevertheless it exploits the data that some of these categories have produced. In any case, the 'five cultures' research, and this book, do not ignore policy or policy applications. On the contrary, policy analysis is a prominent theme and by making it so I would hope that the book may be at least as helpful in the policy arena as those studies which are tied more directly to the policy agenda of this or that government or party.

Why five countries rather than the more usual one or two? There is a numerical answer. To compare two drops us into the polarizing mindset from which it is hard to escape. To compare three invites what Tobin calls the 'Goldilocks effect' (in respect of its primary education this country is good, this one is bad but this one is just right).⁹⁶ To compare five is more difficult but has the vital advantage of enabling one to present similarities and differences as continua rather than as poles. And if the five are sufficiently diverse it makes the uncovering of educational universals, which is a goal of this study, a realistic pursuit.

But why these five? England is there because the condition of primary education in England concerns me most directly. For the rest, the five countries offer similarities, contrasts and intriguing connections.

The countries are well spaced out on a number of global continua: geographical size, population, GNP/GDP and economic development; history and culture. In the educational arena there is the continuum of centralization–decentralization, along which England has moved rapidly and dramatically to the point where from being not far from the United States, the most decentralized of the five, it is now in many respects more centralized than France or post-Soviet Russia; the continuum of position on the international league tables of educational performance; and that of pedagogy, with each country having its distinct place in relation to Anglo-American and central/eastern European pedagogic traditions. In this matter the United States represents one extreme, Russia the other.

The connections are as fascinating as the similarities and differences, although more elusive. In all five countries there are the common legacies of the drive to mass education following the first Industrial Revolution. France and England, although now together in Europe, remain torn between confrontation and co-operation. The United States and India share educational legacies of British colonialism. France, the United States and Russia have ties of revolutions that although different in their form and consequences all had discernibly British connections. Historically all five countries have participated in the lively international trade in educational ideas and practices yet these have been domesticated and acculturated in very different ways.

My final justification takes us back to globalization. We have here five countries and four economic blocks confronting each other in the arena of global competition. That, as we noted, is the way some Western governments choose to represent the world and its future for the purposes of determining educational goals at the turn of the millennium. It is a simple enough view, with simple policy implications: construct a basic education which will maximize national competitive success in the 'basics', whether old (literacy and numeracy) or new (science and information

	Life expectancy at birth (years)	Adult literacy rate (%)	Primary enrolment ratio (% of age group)	Secondary enrolment ratio (% of age group)	Real GDP per capita (\$)	Human development index (HDI) value
France	78.1	99.0	99.9	98.7	22,030	0.918
India	62.6	53.5	77.2	59.7	1,670	0.545
Russia	66.6	99.0	99.9	87.6	4,370	0.747
UK	77.2	99.0	99.9	91.8	20,730	0.918
USA	76.7	99.0	99.9	96.3	29,010	0.927
Developing countries	64.4	71.4	85.7	60.4	3,240	0.637
Industrialized countries	77.7	98.7	99.9	96.2	23,741	0.919
World	66.7	78.0	87.6	65.4	6,332	0.706

 Table 1.1
 Education and human development: five nations and the rest of the world (1997)

Source: United Nations (1999), pp. 134-7, 176-9.

The Human Development Index (HDI) combines three variables: life expectancy, educational attainment and income.

technology), and forget about wider notions of what it means to be educated or at best reduce them to token status. I have argued that if we are serious in our claims about global interdependence this view is unacceptably narrow. Arguably it also attends too exclusively, even by its own definition of what matters, to the short term. But most critically, it leaves out of the calculation of cost and benefit the ethical dimension of both international interdependence and education.

Some who have been aware of the *Five Cultures* research have said that although they understand why the United States and France should feature alongside England, they are baffled by the inclusion of India and Russia except in so far as these countries provide valuable contrasts. That is a sufficient reason, but we should also note that in the year 2000 the condition of children in India or Russia is more globally representative than that of children in England, France or the United States (see Table 1.1). Castells' study of globalization reminds us of 'the complex set of linkages between the characteristics of informational capitalism and the rise of inequality, social polarization and misery in most of the world . . . New information technologies tool the global whirlwind of accumulation of wealth and diffusion of poverty.'⁹⁷ In an interconnected world, as in an interconnected society, the comfort of some and the privation of others are also connected. We are all in this together. On the question of what binds and divides humanity Marx may or may not have been right, but Donne certainly was.